The psychosocial and emotional well-being of oral hygiene students at a South African university: A case study

By

Karin Viljoen

Submitted in accordance with the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

PSYCHOLOGY OF EDUCATION

at the

University of South Africa

Supervisor: Professor K Mohangi

PRETORIA

February 2026

DECLARATION

Name: Karin Viljoen (de Kock)

Student number: 5998670

The psychosocial and emotional well-being of oral hygiene students at a South African university: A case study

I declare that the above thesis is my own work, and all resources that I have utilised or quoted have been indicated and accredited through comprehensive references.

I further declare that I submitted the thesis to originality-checking software. It is submitted in accordance with the requirements for the degree of Doctor of Philosophy in Psychology of Education at the University of South Africa, Pretoria.

I declare that I have not previously submitted this work, or part of it, for any degree or examination in this or any other university.



Signature Date: February 2026

DEDICATION

I dedicate this thesis to my late grandmother, Margarette Elizabeth Petrie-Coetzee.

ACKNOWLEDGMENTS

I would like to express my heartfelt gratitude to my supervisor, Professor Mohangi, for her invaluable guidance and expertise throughout my research. I am profoundly appreciative of her patience and understanding, as well as the exceptional support she provided while I faced various challenges during this journey.

I would also like to extend my sincere thanks to the selected institution of higher education, the Faculty of Dentistry, and the Oral Hygiene Department for facilitating my research activities. I am thankful for the encouragement and positive demeanour exhibited by both the oral hygiene students and the staff members in the department.

Additionally, I wish to acknowledge Dr Suzaan le Roux for her assistance as a language editor, which was instrumental in refining this work.

Finally, I would like to express my gratitude to my husband for his support, which has enabled me to pursue this academic path.

"Soli Deo Gloria" — all glory to God. This thesis could not have been completed without His Grace.

ABSTRACT

This study explored the psychosocial and emotional well-being of students enrolled in the Oral Hygiene programme at a South African university. The aim was to gather qualitative insights into the lived experiences of those undergraduate students, thereby addressing a gap in the existing literature that typically emphasises quantitative findings over personal perspectives. The researcher employed a case study design within a constructivist paradigm, using a positive psychology framework. Various data-collection methods were used, including self-administered questionnaires, semi-structured interviews and focus group discussions. The participants included second- and third-year Oral Hygiene students, full- and part-time teaching staff, and clinical supervisors from the Oral Hygiene Department. A total of 59 students completed the self-administered questionnaires, 28 participated in interviews, and 21 took part in focus group discussions. Nine staff members participated in the semi-structured interviews. Thematic content analysis was used to analyse the data sets, and the results revealed that Oral Hygiene students faced several challenges that affected their well-being, including difficulties adapting to new learning and living environments, social isolation, the loss of a sense of belonging, occupational discrimination, academic pressure, negative experiences in clinical settings, and financial strain and language barriers. The participating students reported a need for emotional, academic and familial support. Notably, their coping mechanisms varied: while most employed positive, problem-oriented strategies, a few resorted to negative coping methods. Despite encountering hurdles in the learning and social environments, the student participants displayed resilience in pursuing their educational goals. The study concluded with several recommendations for the Oral Hygiene Department, including a holistic review of the curriculum to alleviate workload, the appointment of a dedicated wellness officer, a reassessment of student intake processes, and the regular training and calibration of clinical supervisors. A pressing priority for the university and dental faculty is to address current interprofessional discrimination against Oral Hygiene students, destigmatise professional wellbeing support, increase the availability of counsellors and improve student housing conditions.

Key terms: Academic challenges, clinical feedback, coping strategies, emotional wellbeing, learning environment, living environment, Oral Hygiene students, pre-clinical training, psychosocial wellbeing

OPSOMMING

Hierdie studie het die psigososiale en emosionele welstand ondersoek van studente wat ingeskryf was vir die Mondhigiëne-program by ‘n Suid-Afrikaanse universiteit. Die doel was om kwalitatiewe insigte in die lewenservaringe van hierdie voorgraadse studente te verkry en sodoende ‘n gaping in die bestaande literatuur aan te spreek wat tipies kwantitatiewe bevindinge bó persoonlike perspektiewe beklemtoon. Die navorser het ‘n gevallestudie-ontwerp binne ‘n konstruktivistiese paradigma gebruik met behulp van ‘n positiewe-sielkunde-raamwerk. Verskeie data-insamelingsmetodes is gebruik, insluitend self-geadministreerde vraelyste, semi-gestruktureerde onderhoude en fokusgroepbesprekings. Die deelnemers het tweede- en derdejaar-Mondhigiëne-studente, vol- en deeltydse dosente, en kliniese toesighouers van die Departement Mondhigiëne ingesluit. ‘n Totaal van 59 studente het die self-geadministreerde vraelyste voltooi, 28 het onderhoude gevoer en 21 het aan groepbesprekings deelgeneem. Nege personeellede het aan die semi-gestruktureerde onderhoude deelgeneem. Tematiese inhoudsanalise is gebruik om die datastelle te ontleed en die resultate het onthul dat Mondhigiëne-studente verskeie uitdagings in die gesig gestaar het wat hul welstand beïnvloed het, insluitend probleme om aan te pas by nuwe leer- en leefomgewings, sosiale isolasie, verlies aan ‘n gevoel van behoort, beroepsdiskriminasie, akademiese druk, negatiewe ervarings in kliniese omgewings, en finansiële druk en taalhindernisse. Die deelnemende studente het ‘n behoefte aan emosionele, akademiese en gesinsondersteuning gerapporteer. Dit is opmerklik dat hul hanteringsmeganismes gewissel het: terwyl die meeste positiewe, probleemgerigte strategieë gebruik het, het ‘n paar hulle tot negatiewe hanteringstegnieke gewend. Ten spyte van struikelblokke in die leer- en sosiale omgewings, het die deelnemende studente veerkragtigheid getoon in die nastrewing van hul opvoedkundige doelwitte. Die studie het afgesluit met verskeie aanbevelings vir die Departement Mondhigiëne, insluitend holistiese hersiening van die kurrikulum om die werklas te verlig, aanstelling van ‘n toegewyde welstandsbeampte, herevaluering van studente-innameprosesse, en gereelde opleiding en kalibrasie van kliniese toesighouers. ‘n Dringende prioriteit vir die universiteit en tandheelkundige fakulteit is om huidige interprofessionele diskriminasie teen Mondhigiëne-studente aan te spreek, professionele

welstandsondersteuning te destigmatiseer, die beskikbaarheid van beraders te verhoog en studentebehuisingstoestande te verbeter.

Sleutelterme: Akademiese uitdagings, kliniese terugvoering, hanteringstrategieë, emosionele welstand, leeromgewing, leefomgewing, Mondhigiëne-studente, prekliniese opleiding, psigososiale welstand

NKOMISO

Dyondzo leyi yi lavisisile vuhlayiseki bya ntivo-miehleketo na mintlhaveko ya swichudeni leswi tsariseke eka nongonoko wa Vuhlayiseki bya nomu eyunivhesiti ya Afrika-Dzonga. Xikongomelo a ku ri ku hlengeleta vutivi bya xiyimo eka mintokoto leyi hanyaka ya swichudeni sweswo swa tidigiri, hi ndlela yoleyo ku lulamisa xivandla eka matsalwa lama nga kona lawa hi ntolovelo ya kandziyisaka swikumiwa swa nhlayo ku tlula mavonelo ya munhu hi xiyexe. Mulavisisi u tirhisile dizayini ya dyondzo ya xiyimo endzeni ka paradigm ya constructivist kumbe mutivi wa ku aka, hi ku tirhisa rimba ra ntivo-miehleketo lerinene.Ku tirhisiwile tindlela to hambana ta nhlengeleto wa datha, ku katsa na swivutiso leswi tiyimeleke, mimbulavurisano leyi nga hlelekangiki ngopfu na mimbulavurisano ya ntlawa lowu kongomisiweke. Vatekaxiave va katsa swichudeni swa lembe ra vumbirhi na ra vunharhu ra Vuhlayiseki bya Nomu, vatirhi va vadyondzisi va nkarhi hinkwawo na va nkarhinyana, na valanguteri va tliliniki ku suka eka Ndzawulo ya Vuhlayiseki bya Nomu. Nhlayo ya 59 wa swichudeni swi tatile swivutiso leswi ti tiyimiseleke, 28 swi nghenelerile eka mimbulavurisano na 21 swi nghenelerile eka mimbulavurisano ya ntlawa lowu kongomisiweke. Vatirhi va nhungu va nghenelerile eka mimbulavurisano leyi nga hlelekangiki ngopfu.Nxopaxopo wa vundzeni ya nhlokomhaka wu tirhisiwile ku xopaxopa tisete ta datha, naswona mimbuyelo yi paluxile leswaku swichudeni swa Vuhlayiseki bya Nomu swi langutane na mintlhontlho yo hlayanyana leyi khumbeke vuhlayiseki bya swona, ku katsa na swiphiqo swo titoloveta eka tindhawu letintshwa to dyondza na ku tshama, ku tihambanisa na vanhu, ku lahlekeriwa hi ku titwa ka vumunhu, xihlawuhlawu xa ntirho, ntshikilelo wa dyondzo, mintokoto yo biha eka swiyimo swa tliliniki, na ntshikilelo wa timali na swihinga swa ririmi. Swichudeni leswi nghenelekе swi vikile xilaveko xa nseketelo wa mintlhaveko, wa dyondzo na wa ndyangu. Lexi xiyekaka, tindlela ta vona to langutana ni swiyimo a ti hambanile: hambileswi vunyingi byi tirhiseke tindlela letinene, leti kongomisiweke eka swiphiqo, va nga ri vangani va tirhise tindlela to biha to langutana ni swiyimo. Hambi leswi va hlanganeke na swihingakanyo eka tindhawu ta dyondzo na ntshamisano, vatekaxiave va swichudeni va kombisile ku tiyisela eku landzeleleni ka tipakani ta vona ta dyondzo. Dyondzo yi gimete hi switsundzuxo swo hlayanyana eka Ndzawulo ya Vuhlayiseki bya Nomu, ku katsa na nkambisiso lowu heleleke wa kharikhulamu ku hunguta ntirho, ku thoriwa ka muofisiri wa vuhlayiseki loyi a tinyiketeleke, ku

kamberiwa nakambe ka maendlelo ya ku amukeriwa ka swichudeni, na ndzetelo wa nkarhi na nkarhi na ku kalibhara ka valanguteri va tliliniki. Nchumu wa nkoka swinene eka yunivhesiti na fakikhalithi ya meno i ku lulamisa xihlawuhlawu xa sweswi xa le xikarhi ka tiphurofexinali eka swichudeni swa.Vuhlayiseki bya Nomu, ku tekela ehansi nseketelo wa vuhlayiseki bya xiphurofexinali, ku engetela ku kumeka ka vatsundzuxi na ku antswisa swiyimo swa tindlu ta swichudeni.

Marito ya nkoka: Mintlhontlho ya swa tidyondzo, mbuyelo wa swikambelwana swa mavabyi, tindlela to langutana na xiyimo, vuhlayiseki bya mintlhaveko, ndhawu yo dyondza, ndhawu yo tshama, swichudeni swa Vuhlayiseki bya Nomu, ndzetelo wa le mahlweni ka tliliniki, vuhlayiseki bya ntivo-miehleketo

LIST OF ACRONYMS AND ABBREVIATIONS

AAI	Animal Assisted Intervention
AGM	Annual General Meeting
APA	American Psychological Association
BDS	Bachelor of Dental Surgery
BOH	Bachelor of Oral Health
COVID-19	Coronavirus disease 2019
CSSS	Centre for Student Support Services
DASA	Dental Association of South Africa
EI	Emotional Intelligence
ESA	Emotional Support Animal
FAMSA	Families South Africa
FCDA	Federal Council of the Dental Association
HPCSA	Health Professions Council of South Africa
ICHPUC	International Conference on Health Promoting Universities & Colleges
MEDUNSA	Medical University of Southern Africa
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
NSFAS	National Student Financial Aid Scheme
OHASA	Oral Hygiene Association of South Africa
PISA	Program for International Student Assessment
PPE	Personal Protective Equipment
SADAG	South African Depression and Anxiety Group
SADC	Southern African Development Community
SADJ	South African Dental Journal

SAMA	South African Medical Association
SAMDC	South African Medical and Dental Council
SANCA	South African National Council on Alcoholism and Drug Dependence
UNISA	University of South Africa
VIA	Virtue in Action
WHO	World Health Organisation

GLOSSARY

Dental hygienist / Oral hygienist	A professionally trained person registered with a medical council and professional board, who is allowed within the scope of their practice to provide mainly primary prevention of oral disease by means of education and clinical services to individuals and groups in communities (Republic of South Africa, 2021).
Eudaimonia	An ancient Greek concept that implicates happiness, flourishing, reaching full potential, and living a meaningful life. Happiness stems from meaning and fulfilment (Ryan & Deci, 2001).
Government Gazette	A South African certified, legitimately mandated publication by the government to communicate important information, laws, changes to laws, rules, regulations, notices, and proclamations to the public, serving as a vital tool for accountability and ensuring that the citizens of the country are informed about new legislation and government activities (Institute of Law, 2024).
Health Development Agency	In the context of this thesis, it is an organisation in the UK whose efforts are focused on promoting public health, access, equity, and quality in healthcare systems (NHS Health Development Agency, 2004).
Hedonic	Focuses on pure enjoyment, indulgence, pleasure, and a lack of desire to experience pain (Ryan & Deci, 2001).

Okanagan Charter	An international commitment for universities and colleges to embed health and well-being into all aspects of campus life. The charter, established in 2015, requires all universities to provide well-being support structures to their students and staff (International Conference on Health Promoting Universities & Colleges [ICHPUC], 2015).
Ottawa Charter for Health Promotion	The Ottawa Charter for Health Promotion is a 1986 framework from the World Health Organisation (WHO) that guides global health promotion by identifying prerequisites for health and providing nine key action areas: peace, shelter, education, food, income, a stable ecosystem, sustainable resources, and social justice and equity (World Health Organisation, 1986).
Practising with Expanded Functions	An Oral Hygienist with expanded functions is a dental professional who has received accredited tertiary education acknowledged by the Health Professions Council of South Africa (HPCSA) in expanded functions as published in the Government Gazette and may perform advanced tasks beyond their original scope of practice (Republic of South Africa, 2021).
Sefako Makgatho Health Sciences University	Formerly known as the Medical University of Southern Africa (MEDUNSA), it is a medical university in Gauteng Province, South Africa (Sefako Makgatho Health Sciences University, 2025).

Scope of practice of the oral hygienist	In South Africa, an Oral Hygienist's scope of practice includes primary preventative care (scaling, polishing, fluoride, fissure sealants, oral hygiene education) taking x-rays, plus expanded therapeutic roles like taking cytological smears, applying temporary fillings/cements, taking impressions, performing certain orthodontic tasks, vital bleaching, and nutritional counselling and tobacco cessation counselling, with independent practice allowed under specific conditions set by the HPCSA (Republic of South Africa, 2021).

Table of Contents

DECLARATION i

DEDICATION ii

ACKNOWLEDGMENTS iii

ABSTRACT iv

OPSOMMING vi

NKOMISO viii

LIST OF ACRONYMS AND ABBREVIATIONS x

GLOSSARY xii

LIST OF FIGURES xxiii

LIST OF TABLES xxiviv

CHAPTER 1 1

INTRODUCTION AND OVERVIEW OF THE STUDY 1

1.1. Introduction 1

1.2 Background of the study 1

1.2.1 Oral hygiene training 3

1.3 Rationale of the study 4

1.4 Statement of the research problem 5

1.5 The purpose statement 6

1.6 Research questions 7

1.6.1 Primary research question 7

1.6.2 Secondary research questions 7

1.7 Aim and objectives of the study 8

1.7.1 Secondary research objectives 8

1.8 Literature review 8

1.8.1 Well-being defined 8

1.8.2 Approaches to well-being 9

1.8.3 Psychological well-being 9

1.8.4 Social well-being 9

1.8.5 Emotional well-being 9

1.8.6 Students in higher education and well-being 10

1.8.7 Factors that influence the well-being of students in dental training programmes 11
1.9 Research methodology and design 13
1.9.1 Population 14
1.9.2 Sampling 14
1.9.3 Sample size 14
1.9.4 Selection criteria 14
1.10 Data collection methods 15
1.10.1 Self-administered questionnaires 16
1.10.2 Semi-structured interviews 16
1.10.3 Focus group discussions 17
1.11 Data analysis 17
1.11.1 Self-administered questionnaires 17
1.11.2 Semi-structured interviews and focus group discussions 18
1.12 Ethics 18
1.12.1 Confidentiality and anonymity 18
1.12.2 Privacy 18
1.12.3 Ethical considerations 19
1.13 Assumptions of the study 19
1.13.1 Framework of constructivism 19
1.13.2 Foundational assumptions 19
1.13.3 Ontological assumptions (The nature of reality) 20
1.13.4 Epistemological assumptions (The nature of knowledge) 20
1.13.5 Axiological and methodological assumptions (values and process) 21
1.14 Limitations and delimitations of the study 21
1.15 Clarification of key concepts 23
1.15.1 Case study 23
1.15.2 Constructivism 23
1.15.3 Coping mechanisms 24
1.15.4 Emotional well-being 24
1.15.5 Oral hygienist 25
1.15.6 Positive psychology 25
1.15.7 Psychological well-being 25
1.15.8 Psychosocial Well-Being 26
1.15.9 Social well-being 27
1.15.10 Student well-being 27

1.15.11 Well-being 27
1.16 Chapter outline 28
1.17 Summary 31
1.18 Conclusion 31
CHAPTER 2 33
LITERATURE REVIEW 33
2.1 Introduction 33
2.1.1 Conceptual orientation and line of argument 35
2.2 An overview of well-being 35
2.2.1 Defining well-being 36
2.2.2 Approaches to well-being 37
2.2.3 Well-being related to the study 39
2.3 Well-being in higher education 43
2.3.1 Student well-being in higher education 43
2.3.2 Factors that influence undergraduate students' well-being in higher education 44
2.3.3 Social well-being of students in higher education 50
2.3.4 Emotional well-being of students in higher education 53
2.4 Students' coping mechanisms in higher education 54
2.4.1 Problem-focused coping mechanisms 55
2.4.2 Maladaptive coping mechanisms 58
2.5 Student support structures in higher education 59
2.5.1 Social support 59
2.6 Factors that influence the well-being of dental students 62
2.6.1 Accommodation and living arrangements 64
2.6.2 The learning environment 64
2.6.3 Personal factors 70
2.6.4 Gender 71
2.6.5 Future work perspective 72
2.7 Coping mechanisms employed by students in dental training professions 72
2.7.1 Emotional intelligence as a coping strategy amongst students in dental training programmes 73
2.7.2 Relaxation and leisure activities 74
2.7.3 Physical exercise 74
2.7.4 Coping and lifestyle behaviour 75

2.8 Psychosocial and emotional well-being of students during COVID-19 76
2.8.1 Impact of COVID-19 on students following dental training programmes 76
2.8.2 The South African perspective of COVID-19 on students in dental training programmes 78
2.9 Synthesis of the literature and research gaps 79
2.10 Summary 80
2.11 Conclusion 81
CHAPTER 3 82
THE CONCEPTUAL FRAMEWORK 82
3.1 Introduction 82
3.2 Defining the conceptual framework 82
3.3 Theories and models strengthening the conceptual framework 83
3.3.1 Psychological well-being model 83
3.3.2 Social well-being theory 86
3.3.3 PERMA model of well-being 87
3.3.4 Broaden-and-build theory 91
3.3.5 Self-determination theory 93
3.3.6 Hope theory 93
3.3.7 The primary theory underpinning the study 95
3.4 Well-being through the lens of positive psychology 96
3.4.1 Definitions of positive psychology 96
3.4.2 Origins of positive psychology 97
3.4.3 Philosophies of positive psychology 97
3.4.4 Positive psychology interventions 100
3.5 Motivation for applying positive psychology in the current study 100
3.5.1 Positive education and well-being 101
3.5.2 Positive psychology and well-being in the learning environment 101
3.6 Promotion of well-being by institutions of higher education 103
3.6.1 Well-being in higher education 103
3.6.2 Challenges and opportunities advocating well-being in tertiary education 104
3.7 The university as an organisation 106
3.7.1 What is an organisation? 106
3.7.2 Organisational behaviour 106
3.7.3 Organisational culture 107
3.8 Enhancing student well-being: The “Whole-of-University” approach 107

3.9 International view of well-being in dental training programmes 109
3.10 Oral hygiene programmes and the educational environment 110
3.11 Psychological well-being of oral hygiene students from a positive psychology perspective 111
3.12 South African research conducted in the theoretical framework of positive psychology 111
3.13 Conceptual framework: Student well-being framed in positive psychology 112
3.14 Summary 114
3.15 Conclusion 115
CHAPTER 4 116
RESEARCH DESIGN AND METHODOLOGY 116
4.1 Introduction 116
4.2 Paradigmatic perspectives 116
4.2.1 Epistemological paradigm 117
4.2.2 Ontology 117
4.2.3 Axiology 118
4.3 Methodological paradigm 119
4.3.1 Understanding a paradigm 119
4.3.2 Research paradigms 120
4.4 Research methodology and design 123
4.4.1 The research approach 123
4.4.2 The case study 124
4.5 Population and sampling 126
4.5.1 The population 126
4.5.2 Site selection 126
4.5.3 Sampling 127
4.6 Data collection methods 131
4.6.1 Questionnaire 131
4.6.2 Interviews 134
4.6.3 Focus group discussions 138
4.6.4 Researcher journal 140
4.7 Pilot study 140
4.7.1 Piloting of the questionnaire and semi-structured interview questions 141
4.8 Data analysis 142
4.8.1 Analysis of questionnaires 142

4.8.2 Analysis of semi-structured interviews and focus group discussions 143
4.9 Researcher positionality and reflexivity in qualitative research 149
4.9.1 Reflexivity and positionality in the current study 150
4.10 Ethical considerations 151
4.10.1 Informed consent 152
4.10.2 Informed consent as a dialogue 153
4.10.3 Privacy 154
4.11 Ethical considerations regarding the study 154
4.11.1 Ethical issues related to the research problem 155
4.11.2 Ethical issues related to data collection 155
4.11.3 Ethical issues in data analysis and interpretation 156
4.12 Summary 156
4.13 Conclusion 157
CHAPTER 5 158
PRESENTATION OF RESULTS 158
5.1 Introduction 158
5.1.1 Overview of the research questions 158
5.2 Description of themes, sub-themes, and categories 159
5.2.1 Presentation of results 159
5.2.2 Main themes and sub-themes 160
5.3 Summary of Chapter 5 215
5.4 Conclusion 217
CHAPTER 6 218
DISCUSSION OF FINDINGS 218
6.1 Introduction 218
6.2 Discussion of findings 218
6.2.1 Theme 1: Psychological well-being: Determinants of the psychological well-being of students studying oral hygiene at a South African University 219
6.2.2 Theme 2: Determinants of the social well-being of oral hygiene students .. 232
6.2.3 Theme 3: Environmental factors influencing the well-being of oral hygiene students: A focus on living conditions and the learning environment 239
6.2.4 Theme 4: Coping mechanisms students apply during their studies 244
6.3 Summary 252
6.4 Conclusion 252
CHAPTER 7 253

SUMMARY, RECOMMENDATIONS AND CONCLUSION 253
7.1 Introduction 253
7.2 Overview of the study 253
7.3 Overview of the research questions 255
7.3.1 Primary research question 255
7.3.2 Secondary research questions 255
7.4 Addressing the research questions 255
7.4.1 Secondary research question and objective 1 255
7.4.2 Secondary research question and objective 2 260
7.4.3 Secondary research question and objective 3: 263
7.4.4 Secondary research question and objective 4 265
7.5 Primary research question 270
7.5.1 Addressing the primary research question 270
7.6 Revisiting the conceptual framework 272
7.7 Reflecting on the study 276
7.7.1 Researcher reflexivity 276
7.8 Reflecting on the challenges and limitations of this study 277
7.9 Recommendations 279
7.9.1 Recommendations for policy 279
7.9.2 Recommendations for practice 280
7.9.3 Recommendations for future research 282
7.9.4 Contribution of the study 283
7.10 Summary 284
7.11 Conclusion 285
REFERENCES 287
APPENDICES 327
APPENDIX 1: THE ORIGINAL SCOPE OF PRACTICE 1972 – 1986 327
APPENDIX 2: EXPANDED SCOPE OF FUNCTION 2000 329
APPENDIX 3: EXPANDED SCOPE OF FUNCTION 2015 331
APPENDIX 4: EXPANDED SCOPE OF FUNCTION 2021 337
APPENDIX 5: ETHICAL CLEARANCE CERTIFICATE 340
APPENDIX 6: COVER LETTER FOR SELF-ADMINISTERED QUESTIONNAIRE 342
APPENDIX 7: DEMOGRAPHIC DATA AND OPEN-ENDED QUESTIONS 343
APPENDIX 8: LETTER TO THE PROSPECTIVE STUDENT PARTICIPANT 349
APPENDIX 9: LETTER TO THE PROSPECTIVE STAFF PARTICIPANT 354

APPENDIX 10: SEMI-STRUCTURED INTERVIEW SCHEDULE WITH BOH STUDENTS 358

APPENDIX 11: SEMI-STRUCTURED INTERVIEW QUESTIONS FOR PARTICIPATING LECTURERS AND CLINICAL ADVISORS ON THE PSYCHOSOCIAL AND EMOTIONAL WELL-BEING OF ORAL HYGIENE STUDENTS 362

APPENDIX 12: FOCUS GROUP CONSENT AND CONFIDENTIALITY AGREEMENT365

APPENDIX 13: FOCUS GROUP DISCUSSION: POSSIBLE QUESTIONS TO GUIDE THE DISCUSSION 366

APPENDIX 14: EXAMPLE OF ANALYSIS OF THE SELF-ADMINISTERED QUESTIONNAIRE 369

APPENDIX 15: EXAMPLE OF ANALYSIS OF STUDENTS' SEMI-STRUCTURED INTERVIEW 377

APPENDIX 16: EXAMPLE OF ANALYSIS OF STAFF SEMI-STRUCTURED INTERVIEW 387

APPENDIX 17: EXAMPLE OF FOCUS GROUP DISCUSSION..... 397

APPENDIX 18: EXAMPLE OF IDENTIFICATION OF CATEGORIES..... 415

APPENDIX 19: PARTICIPANT CONSENT TO PARTICIPATE IN THE STUDY 417

APPENDIX 20: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT THE UNIVERSITY OF [redacted] 418

APPENDIX 21: PROOF OF SERVICE LETTER FROM LANGUAGE EDITOR..... 420

APPENDIX 22: PROOF OF SIMILARITY REPORT..... 421

LIST OF FIGURES

Figure 3.1 *Conceptual Framework: Student Well-Being Framed in Positive Psychology* 11414

Figure 7.1 *Revisiting Conceptual Frameworks Applicable to this Study* 27575

LIST OF TABLES

Table 3.1 *VIA Virtues and Character Strengths Relevant to Oral Hygiene Education and Practice* 98

Table 3.2 *Action Areas to Promote Student Well-Being* 108

Table 4.1 *Oral Hygiene Students Registered for the BOH Programme (2020 – 2022)* 130

Table 4.2 *Full- and Part-Time Lecturers and Clinical Supervisors (2022)* 130

Table 4.3 *Focus Group Discussion Participants* 139

Table 5.1 *Overview of Theme 1: Psychological well-being -* 1622

Table 5.2 *Overview of Theme 2: Social well-being* 183

Table 5.3 *Overview of Theme 3: Living and Learning Environments* 197

Table 5.4 *Overview of Theme 4: Coping Mechanisms Students Apply During Their Studies* 2066

CHAPTER 1

INTRODUCTION AND OVERVIEW OF THE STUDY

1.1. Introduction

In Chapter 1, the current research topic is introduced by providing a comprehensive background of the study. This is followed by a clear rationale for the study, outlining the problem statement and its purpose. The primary research question and corresponding sub-questions are articulated, followed by the study's overarching aim. A brief overview of the literature review is presented in Chapter 1 to orient readers; a more detailed discussion of the literature relevant to this study is provided in Chapter 2. Subsequently, the research methodology and design employed for this study are delineated. An outline of each chapter is provided, followed by the study's assumptions, delimitations, and limitations.

1.2 Background of the study

This study aimed to identify the factors influencing the psychosocial and emotional well-being of undergraduate oral hygiene students at a South African university. Research indicates that the well-being of university students is vulnerable due to the various changes, challenges and demands they experience during their years of study at higher education institutions. This is particularly relevant to students in the health sciences, who are responsible for providing treatment and patient care while working under stressful conditions (Bugaj et al., 2016).

Students entering higher education transition from living at home to a new living-and-learning environment (Chao, 2011; Leite et al., 2025; Scribner et al., 2020). These transitioning factors may influence the psychosocial well-being of first-year students, including separation from their families, friends, and other support networks. First-year students must adapt to functioning independently as adults and to an environment that differs significantly from their previous school experience. Students need to manage their newfound independence, including their finances and cater for their basic daily needs. Another challenge involves adapting to the university environment and culture, which differs from the familiar school setting (Baker, 2004). Students may experience a longing to be at home, anxiety, depression, fear of failing, or a desire to drop out of university programmes. Additional well-being challenges include academic difficulties, uncertainty about the future, conflicts with friends, and relationship issues (Chao,

2011). Prolonged exposure to such adverse challenges can hurt a student's psychosocial well-being (Dyson & Renk, 2006).

Van Breda (2017), who conducted research in the South African context, determined that students in higher education mostly experience financial difficulties, exposure to violence, sexual assault, and family strife. The aforementioned create challenging learning and living environments for students, affecting their well-being.

Research in the context of dental training programmes confirms that students report higher levels of stress during their years of study than their age-matched peers (Anushri et al., 2014; Bhayat & Madiba, 2017; Harris et al., 2017). Students in dental training programmes report anxiety, depression, obsessive-compulsive behaviour, and being overly sensitive in their interaction with people, which ultimately harms their well-being.

A South African study by Wilson et al. (2015) investigating factors influencing the well-being of dental students found that the most frequently reported challenges were those associated with demands in the learning environment. Students found it challenging to cope with the amount of theoretical work, the acquisition of pre-clinical skills, and patient management. Respondents further mentioned that they did not have sufficient time to relax or take breaks during the day, feared failing their academic year, and that their well-being was affected by how certain clinical supervisors addressed them in clinical settings (Wilson et al., 2015). A study conducted within the South African context by Bhayat and Madiba (2017) corroborated the findings of Wilson et al. (2015). In their research, Bhayat and Madiba (2017) identified several common challenges encountered by dental students, including difficulties with patient procedures, challenges in meeting prescribed clinical quotas, and patient non-attendance at scheduled appointments, resulting in the loss of potential clinical quotas. Students in this study who reported severe levels of stress indicated that they contemplated either dropping out of the dental undergraduate programme or considering committing suicide.

This study cites literature on the well-being of dental students, as literature focusing exclusively on the psychosocial and emotional well-being of oral hygiene students is limited both nationally and internationally (Gorter, 2005; Harris et al., 2017; Lee et al., 2021).

1.2.1 Oral hygiene training

This section provides a brief overview of oral hygiene training and the development of the profession within the South African context. It also clarifies the terminology used internationally and in South Africa and outlines the conditions under which oral hygienists may perform professional activities.

1.2.1.1 Clarification of the term ‘oral hygiene’ in the South African context

The profession is internationally recognised as dental hygiene; however, within the South African context, it is designated as oral hygiene. In South Africa, a student pursuing the Bachelor of Oral Health (BOH) degree is identified as an oral hygiene student, and upon qualification, the graduate is referred to as an oral hygienist. This terminology emphasises that oral hygiene is a more comprehensive, holistic approach to oral health, rather than focusing solely on dental aspects related to hard tissue structures (Potgieter, 2007). The educational framework for students studying oral health in South Africa is grounded in a holistic health perspective that extends beyond dentition alone.

1.2.1.2 Historical overview of the occupation of oral hygiene in South Africa

The establishment of oral hygiene as a profession in South Africa faced significant resistance from the Dental Association of South Africa (DASA), which was primarily composed of qualified dentists. Despite objections, some DASA members advocated introducing a training programme for oral hygienists. An ad hoc committee was formed by the DASA Federal Council to explore training models from countries like the UK and the US.

In 1969, a motion was proposed to permit the training of oral hygienists, who would practise under the supervision of qualified dentists. Following this decision, a curriculum based on United States training modules was developed, leading to the initiation of oral hygiene programmes at Stellenbosch University and the University of Pretoria in 1972, with other universities joining shortly after. Initially, students underwent an 18-month training programme, which was later extended to two years to better cover the curriculum's theoretical and practical components.

The scope of practice of oral hygienists subsequently expanded. An expanded scope was accepted by the Health Professions Council of South Africa (HPCSA) in 1999 and

promulgated in 2000. Independent practice in 2012, with further amendments to the scope of practice in 2013 and 2021.

1.2.1.3 Performance of a professional act

Oral hygiene students are registered with the HPCSA and may perform only health promotion and clinical activities under the supervision of a qualified and registered oral hygienist, dental specialist, dentist, or dental therapist (Republic of South Africa, 2017).

Qualified and registered oral hygienists may practice their profession under supervision or independently, provided that they perform only those activities (Republic of South Africa, 2015). The regulated training and clinical environment, therefore, forms an important part of the academic and professional experience of oral hygiene students.

Refer to Appendices 1 to 4 for detailed insight into the original scope of practice and how the scope expanded over the years.

1.3 Rationale of the study

The motivation for conducting this study was to address the existing gap in research on the psychosocial and emotional well-being of oral hygiene students in the South African context. Most of the literature on the well-being of students following dental training programmes has focused on student groups, such as Bachelor of Dental Surgery (BDS), dental therapy, and oral hygiene students, at the international and national levels. Therefore, a distinct gap remains in research on well-being that focuses exclusively on undergraduate oral hygiene students.

A second rationale for this study is that researchers have predominantly utilised quantitative methods to study students in dental training programmes, yielding numerical statistics rather than qualitative data that capture perceptions, interpretations, and lived experiences. Harris et al. (2017) called on researchers in this domain to conduct further investigation using a qualitative approach that focuses exclusively on the well-being of oral hygiene students. Therefore, a qualitative study will be employed to yield valuable insights into the lived experiences of oral hygiene undergraduates at a selected university in South Africa.

A third rationale is that although thoroughly researched, students in dental programmes continue to report high levels of stress experienced during their years of study (Anushri et al., 2017; Bhayat et al., 2017; Harris et al., 2017). Gambetta-Tessini et al. (2013) reported that although several studies have indicated that dental students experience various stressors, few researchers have conducted further explorations or contributed to identifying solutions to alleviate these stressors. Similarly, research conducted in the South African context did not suggest definite solutions to reduce stressors. Therefore, this study aimed to explore factors affecting the psychosocial and emotional well-being of oral hygiene students at a South African university by employing a qualitative research design through the lens of positive psychology. The findings will benefit the oral hygiene department, faculty, and the broader university by informing the development of strategies, guidelines, and policies to reduce or eliminate factors that harm the overall well-being of the undergraduate oral hygiene students.

1.4 Statement of the research problem

Research focusing specifically on oral hygiene students is limited; however, there has been extensive investigation into the various challenges faced by dental students in their learning environments. Numerous studies highlight that these challenges can adversely affect the students' overall well-being. Noteworthy works by Abu-Ghazaleh et al. (2011), Al-Sowygh (2013), Alzahem et al. (2011), Harris et al. (2017), and Wilson et al. (2015) collectively underscore the importance of understanding these impacts to improve the educational experience for dental students.

In the context of this study, it is important to recognise that, despite differences in curriculum structure and study duration between the BDS and BOH programmes, both groups of students share a common learning environment at the selected university located in South Africa. The BDS programme, which spans five years, includes a mandatory year of community service after graduation and prior to entering practice. In contrast, the BOH programme is a three-year training course that allows graduates to enter the workforce immediately after graduation. The BDS curriculum focuses on the treatment of oral pathology and oral complications, while the curriculum for oral hygiene students focuses on the prevention of oral disease through oral health education and clinical procedures.

Despite these differences, both BDS and BOH students undergo their preclinical training in the same educational facilities, conduct patient treatments within identical clinical settings, attend lectures in the same venues, and are immersed in the same clinical buildings. This shared environment fosters a dynamic in which the experiences, challenges, and pressures encountered by one group can potentially mirror those of the other.

Research conducted by Ebbeling et al. (2018) suggests that the factors influencing the psychosocial well-being of undergraduate dental students are likely to have a similar effect on undergraduate oral hygiene students. This assumption arises from the observation that both groups operate within analogous learning environments.

Given the existing gap in the literature, a focused qualitative investigation targeting oral hygiene students will provide invaluable insights into their well-being challenges. The research will further provide insight into how the students cope and overcome well-being challenges. Such an approach will allow for a deeper understanding of the lived experiences and perceptions of the oral hygiene students regarding their learning and living conditions, which have not been adequately explored in previous studies. Therefore, this research aims to explore the well-being of oral hygiene students within the South African context, providing both depth and specificity to this under-researched area.

1.5 The purpose statement

The primary objective of this study is to conduct an in-depth exploration of the various factors that significantly influence the psychosocial and emotional well-being of students enrolled in the oral hygiene programme at a South African university. By systematically identifying these factors, the research aims to recommend comprehensive solutions to mitigate their adverse effects on students' overall well-being.

The study recognises the importance of understanding both the academic and personal stressors that oral hygiene students encounter throughout their educational journey. This includes examining the pressures associated with the rigorous curriculum, clinical practice requirements, and the emotional burden that may arise from their interactions with patients and the healthcare environment. Additionally, the

research will investigate how social support systems, family dynamics, and financial challenges influence the students' well-being.

The findings from this study are intended to inform targeted interventions that support the overall well-being of oral hygiene students. Early identification of persistent stressors, such as demanding workloads and time constraints across academic, clinical, and personal life, will be crucial to reducing the negative impact of well-being challenges. By addressing these challenges, the study aims to promote an environment that fosters resilience and positive mental health among oral hygiene students.

Ultimately, by providing effective support systems and resources, this research endeavours to enable students to maintain and enhance their well-being throughout their studies. The skills and strategies they develop during their training will be invaluable not only in their academic pursuits but also as they transition into their professional careers. This holistic approach ensures that, once qualified, they are equipped to handle the pressures of their profession while continuing to prioritise their own emotional and psychosocial health.

1.6 Research questions

This study was guided by the following secondary research questions to answer the primary research question.

1.6.1 Primary research question

What are oral hygiene students' perceptions of their psychosocial and emotional well-being at an institution of higher education in South Africa?

1.6.2 Secondary research questions

- What factors do oral hygiene students perceive as influencing their overall well-being?
- How does the learning environment influence the well-being of oral hygiene students?
- How do oral hygiene students cope with and manage the challenges affecting their well-being?
- What are oral hygiene students' views on the well-being support provided by the faculty, and how can it be improved?

1.7 Aim and objectives of the study

This study aimed to determine the factors that influence the psychosocial and emotional well-being of oral hygiene students at a South African university through a positive psychology lens.

1.7.1 Secondary research objectives

- To determine the factors that contribute to the psychosocial well-being of the undergraduate oral hygiene student.
- To identify the coping mechanisms that oral hygiene students consider when managing their perceived stressors.
- To make recommendations to programme directors regarding curriculum design and student support structures in dental training facilities.
- To develop a conceptual framework that can be applied in the learning environment to enhance the psychosocial well-being of students in an undergraduate oral hygiene programme.

1.8 Literature review

The literature review for this study delves into the complex, multifaceted concept of well-being, thoroughly exploring its classifications, types, and prominent theoretical frameworks. This review aims to provide an in-depth understanding of the diverse factors influencing the well-being of undergraduate students, not only in general but also for those specifically enrolled in rigorous undergraduate dental training programmes. A significant emphasis will be placed on understanding the unique challenges students face and the coping mechanisms they use to bolster their mental and emotional well-being. As the study progresses, the literature review will be expanded upon in subsequent chapters, offering a more comprehensive analysis of the topic. Furthermore, the review will incorporate critical scholarly works that articulate the conceptual framework and theoretical foundations pertinent to this investigation, along with a detailed account of the research methodology utilised. Below follows a brief overview and definitions of the key terms used in this thesis.

1.8.1 Well-being defined

Numerous definitions of well-being exist, making it challenging to pinpoint a single, unified understanding of the concept. Jarden and Roache (2023) highlight that, among

the various perspectives, the definition most often cited in research is that of Michaelson et al. (2012). According to Michaelson et al., well-being encompasses how individuals perceive and experience life events, their responses to these events, both socially and individually, and their holistic assessment of well-being.

1.8.2 Approaches to well-being

Chapter 2 presents a literature review examining two primary categories of well-being: the hedonic and eudaimonic approaches. The hedonic approach, as described by Deci and Ryan (2008), emphasises the pursuit of pleasure, enjoyment, and indulgence in life. In contrast, the eudaimonic approach is centred on finding meaning and purpose in life. Originating from Aristotelian philosophy, eudaimonia involves an individual's journey to discover their true potential and live a life that is both purposeful and fulfilling.

1.8.3 Psychological well-being

Psychological well-being, as defined by Ryff (1989), refers to the state in which individuals exhibit characteristics such as self-acceptance, autonomy, mastery of the environment, personal growth, and the ability to foster positive relationships with others and groups.

1.8.4 Social well-being

According to Keyes (1998), social well-being concerns how a person evaluates the environment in which they function. Keyes (1998) presents the social well-being model, which includes the factors of social integration, coherence, contribution, acceptance, and actualisation. These elements of social well-being may act as contributors or inhibitors in an individual's life, depending on the social environment in which the person is situated at a specific time.

1.8.5 Emotional well-being

The World Health Organisation (WHO) defines emotional well-being as the aptitude to recognise one's abilities, cope with the normal stresses of life, work productively and effectively, and contribute to the community (WHO, 2005, p. 2). If a person enjoys emotional well-being, they can be considered joyous, positively oriented, happy, and content. Keyes (2002) states that when an individual enjoys emotional well-being,

such a person is flourishing, whereas languishing is typical of a person bereft of emotional well-being and happiness.

1.8.6 Students in higher education and well-being

According to the guide on “Student Mental Well-Being in Higher Education” (2008), psychological health and well-being include the emotional resilience that enables an individual to enjoy life and cope with disappointments, sadness, and failure. Psychological, social, and emotional well-being allow individuals to engage effectively with others and contribute positively to society. Certain transitions may challenge the psychological well-being of students in higher education during their studies. These transitions can be difficult, and for some students, more demanding than for others.

Such transitional challenges may include relocating from home to university accommodation, changes in lifestyle, leaving family and childhood friendships, making new friends, adjusting from school to university, and language barriers (Chao, 2011; Leite et al., 2025; Scribner et al., 2020; Student Mental Well-Being, 2015). Several research studies, such as those conducted by Bantjes et al. (2023), Carton and Goodboy (2015), Eisenberg et al. (2007), and Eisenberg et al. (2013), have found that higher education is increasingly associated with mental health issues, including depression, anxiety, eating disorders, psychological stress, and self-harm, more than in previous years. Students being exposed to the above well-being challenges often experience psychological stress and feel hopeless, exhausted, and worthless. Students facing psychological challenges tend to isolate themselves, lack a sense of belonging, and have low self-confidence.

One of the many challenges for students is related to language. When the language policy of a learning environment differs from students' mother tongues or native languages, it can pose additional challenges, making students academically and socially vulnerable. These students may struggle to understand lecture content, become hesitant to participate in discussions, and may experience social isolation, which ultimately affects their well-being (Coetzee, 2016; De Clercq et al., 2017). Students transitioning from secondary school to university may find themselves academically and socially underprepared, making it difficult to meet the demands of an undergraduate programme (Morule et al., 2023). Moving from home to campus residences can also impact students’ well-being, particularly when the accommodation

does not meet expected living standards. In the South African context, Pretorius and Blaauw's (2020) study found that student housing directly influences holistic well-being. Literature found that financial difficulties significantly impact students' overall well-being (Chan et al., 2012; Walker, 2019). Ruswa and Gore (2021) explain that students who are financially burdened often struggle to meet basic needs, such as food and accommodation, leading to poor physical health, academic difficulties, and social isolation. These financial constraints can leave students physically and psychologically vulnerable, increasing the risk of dropping out of university.

Many students at tertiary institutions have a strong desire to be included and accepted by their peers and lecturers. Peacock and Cowan (2019) highlight the importance of belongingness among university students. Those who experience a sense of acceptance and belonging generally enjoy better well-being (Gopalan et al., 2021). Böke et al. (2019) confirm that loneliness directly affects students' holistic well-being, often resulting in unhealthy lifestyle choices that can impair academic performance. First-year students entering university have many opportunities, both formal and informal, to build new relationships; however, some find this challenging, leading to feelings of loneliness and social isolation. Ellard et al. (2023) warn that loneliness can lead to depression and further social isolation, which pose additional threats to the student's social and emotional well-being.

1.8.7 Factors that influence the well-being of students in dental training programmes

The following section highlights the distinct stressors that impact the well-being of students enrolled in dental training programmes. These stressors encompass the transition into unfamiliar pre-clinical and clinical environments. The challenges associated with pre-clinical training and the advancement into the clinical setting also pose significant difficulties, including interactions with patients, feedback from clinical teachers, and the scarcity of resources. Additionally, extensive training hours limit opportunities for students to engage with their peers or participate in extracurricular activities.

1.8.7.1 Stress in dental education

Research by Al-Sowygh (2013) and Bhayat and Madiba (2017) indicates that undergraduate dental students encounter a variety of stressors that contribute to both

physical and psychological challenges, including depression, anxiety, and substance abuse. Uraz et al. (2013) further identified time constraints and inadequate opportunities for relaxation as additional factors affecting students' overall well-being.

Additionally, Alzahem et al. (2011) identified five key factors influencing the well-being of students enrolled in dental training programmes: academic, clinical, educational, personal, and living accommodation factors. These five factors will be explored in greater detail in the subsequent chapters.

With reference to living accommodations, in the study by Al Omari (2005), oral hygiene students reported that moving away from home, followed by difficult living conditions, was the stressor with the highest individual score. These findings can be explained by the challenges female students often experience, such as adapting to living on their own, increased independence, and the need to manage their own lives. In contrast, dental and oral hygiene students who lived with their parents did not indicate “living conditions” as a significant stressor (Al-Omari, 2005).

Research conducted by Deeb et al. (2018), Oderinu et al. (2024), and Pyle et al. (2006) concluded that the learning environment in dental faculties is often challenged by resource scarcity and infrastructural decline due to the over-exhaustion of scarce resources. Pillay and Moodley (2023) confirmed that resource scarcity limits the clinical exposure and experience of dental and oral hygiene students, ultimately having a negative impact on their well-being as they become stressed and are unable to complete clinical procedures and meet quotas.

Hopcraft et al. (2008) found that historically, dental students have discriminated against oral hygienists. This act of occupational discrimination may affect the well-being of oral hygiene students while studying and continue once they have qualified.

Academic performance is another factor cited as affecting students' well-being. Research by Elani et al. (2014) and Harris et al. (2017) determined that dental and oral hygiene students experience a significant amount of stress due to academic demands and expected performance.

Research studies confirm that the stressors experienced by dental and oral hygiene students during pre-clinical and clinical training include learning complex clinical skills, receiving negative and derogatory feedback from clinical supervisors, and falling into

self-doubt about their abilities (Gordon et al., 2016; Harikiran et al., 2012; Paudel et al., 2013).

1.8.7.2 Coping mechanisms employed by students in dental training professions

Adaptability is crucial for university students facing stress. Research has found that students with high emotional competence are better at maintaining their well-being throughout their studies (Henning et al., 2018). Therefore, it can be reasoned that emotional competence contributes to subjective well-being in higher education, mediated by intrapersonal and interpersonal mechanisms (Zeidner et al., 2011), and can be considered a positive coping mechanism.

Physical activity can play an important role in both the physical and mental health of individuals. Kamdar (2018) states that, as a dental professional, the body posture is continuously exposed to muscle tension and stress; therefore, it is recommended to regularly engage in gym and exercise activities, such as aerobic classes and weightlifting, to increase muscle tone and strength, as well as practising relaxation techniques such as yoga. However, research by Harrison et al. (2016) found that students in dental programmes engage in little physical exercise and relaxation due to time constraints.

Coping mechanisms employed by students in dental training programmes are discussed in greater detail in Chapter 2.

1.9 Research methodology and design

A case study design was selected for this study. The motivation for selecting a case study design was that the data collected generate rich descriptions of a specific situation. A second motivation was that a wide-ranging problem could be focused on in a narrow setting.

The study follows a qualitative approach. The researcher intended to collect data in the participants' natural setting. The natural setting for this study was situated on campus, within the Faculty of Dentistry of a South African university, in the learning environment where students function each day.

This study focuses on personal experiences, perceptions, and interpretations of the factors influencing participants' psychosocial well-being during their studies as oral

hygiene students. A qualitative data approach facilitated the collection of first-hand information directly from participants, communicated in their own words. Adopting a qualitative research strategy addressed the existing gap in the literature regarding the psychosocial well-being of undergraduate oral hygiene students. As highlighted by Harris et al. (2017), prior quantitative studies have not substantially contributed new insights to the research domain concerning the psychosocial well-being of this student population.

1.9.1 Population

The population comprises undergraduate oral hygiene students and oral hygiene staff members within the Faculty of Dentistry at a South African university.

1.9.2 Sampling

Considering the case study, a purposive sampling strategy was selected. The reason for employing the purposive sampling technique was to collect information-rich data from oral hygiene students and staff who had lived through and experienced factors they perceived as influencing students' well-being.

The oral hygiene students and staff would be considered knowledgeable and informative about the phenomena being researched through their lived experiences (McMillan & Schumacher, 2006).

1.9.3 Sample size

The sample comprised all Bachelor of Oral Health (BOH) II and BOH III registered students for the 2020, 2021 and 2022 academic years, as well as all full- and part-time staff members in the oral hygiene department and clinical supervisors (n = 9) at a selected South African university. Data collection spanned from 2020 to 2022 (refer to Tables 4.1 and 4.2).

1.9.4 Selection criteria

The study's population consisted of undergraduate students enrolled in the Bachelor's Degree programme in Oral Health, as well as all oral hygiene staff members within the department. Details regarding the inclusion and exclusion criteria are outlined in the section below.

1.9.4.1 Inclusion criteria

All students registered for their second or third year of the BOH undergraduate programme were invited to participate in the study and had an equal opportunity to participate.

All lecturing staff and clinical supervisors in the Department of Oral Hygiene had an equal opportunity to take part in the study.

1.9.4.2 Exclusion criteria

First-year oral hygiene students, all dentistry students, and all other postgraduate students registered at the Faculty of Dentistry were excluded from the study. The exclusion of first-year BOH students was due to their lack of lived experience in the university environment, particularly regarding social and learning experiences. First-year oral hygiene students did not attend lectures on campus until 2021 due to the COVID-19 pandemic and therefore lacked the lived experience of the learning and living environment.

BDS students were excluded because the focus was on oral hygiene students, given the lack of qualitative research on their well-being in the South African context.

All other staff members in the Faculty of Dentistry, including administrative, support, and nursing staff, as well as lecturers and clinical supervisors from departments outside the oral hygiene department, were excluded from the study.

1.9.4.3 Site selection

Site selection is the process of choosing a site to locate people involved in a particular event. Site selection is preferred when the research focuses on a complex micro process (McMillan & Schumacher, 2006).

The research was carried out within the Faculty of Dentistry at a specific South African university that offers a BOH undergraduate program. This site was intentionally chosen because it provided the researcher with participants well-equipped to offer insights relevant to the research problem.

1.10 Data collection methods

The data collection methods for this study included a self-administered questionnaire, semi-structured interviews, and focus group discussions.

1.10.1 Self-administered questionnaires

One of the data collection methods utilised in this study was a self-administered questionnaire designed to gather comprehensive information from participants. This questionnaire featured a series of open-ended questions specifically designed to align with the study's aims and objectives, allowing respondents to provide detailed and nuanced answers. In addition, the questionnaire collected demographic information about the students.

1.10.2 Semi-structured interviews

Semi-structured interviews involve open-ended questions posed by the interviewer to participants to obtain data on how individuals perceive and experience their world and how they explain or make sense of the important events in their lives (McMillan & Schumacher, 2006).

In this study, the data from the semi-structured interviews are verbatim accounts of what was communicated and what became apparent during the session. Voice recordings ensured that the researcher captured verbal communication and provided a means to assess reliability.

The BOH II and BOH III students and staff who attended the information sessions and were willing to participate in the semi-structured interviews had to contact the researcher to schedule an interview. These participants signed a letter of informed consent before the semi-structured interview commenced. Before the interview, the researcher informed the participant about the procedures, confirmed the participant’s consent to the session being recorded, and assured the participant of privacy and confidentiality. Although anonymity was not possible during the semi-structured interview, it was guaranteed in writing the report. This discussion on privacy and non-disclosure of identity was conducted with each participant before the interview started. After the discussion, the participant had the option to continue with the interview or withdraw from the study. Once the participant agreed to proceed with the interview, a letter of informed consent was signed. Thereafter, the interview commenced. Each interview continued for at least one hour. Participants had the opportunity to verify the recording's content after the session concluded.

1.10.3 Focus group discussions

A variation of the semi-structured interview format is the focus group discussion, which helps researchers gain a more comprehensive understanding of specific phenomena. Focus groups are frequently employed by researchers to gather qualitative data through in-depth, semi-structured interviews to corroborate findings obtained through other data collection methods (McMillan & Schumacher, 2006).

In this study, participants who expressed willingness to participate in focus group discussions were asked to contact the researcher to arrange an appropriate meeting time. Participants were thoroughly informed about the nature of focus group discussions, and the ethical considerations as well as limitations were explicitly addressed. Before participation, participants were required to sign an informed consent letter. This letter stated that, while anonymity cannot be guaranteed during focus group discussions, the researcher is committed to safeguarding the identity of all participants in the subsequent report. It was emphasised that all data collected from the discussion will be treated as private and confidential. When reporting the data, neither the identities of participants nor those of the institution would be disclosed or linked to the data. Participants were reminded that they would not be referred to by name during the discussion; instead, each participant was assigned a unique number.

1.11 Data analysis

According to Braun and Clarke (2006), thematic analysis underpins qualitative data analysis. In this study, thematic analysis was employed to analyse the various datasets, which could be successfully applied to semi-structured interviews and focus group discussions.

1.11.1 Self-administered questionnaires

Braun and Clarke (2013) confirm that it is acceptable in qualitative research to collate open-ended questionnaire responses into a Word document. Due to the large volume of data collected in this study through self-administered questionnaires, the responses to the open-ended questions were entered into an Excel spreadsheet. Thereafter, a similar process of data analysis was followed to that used for the semi-structured interviews, involving reading through the data several times to identify codes and patterns using colour coding. The results from the self-administered questionnaires were included in the presentation of results chapter.

1.11.2 Semi-structured interviews and focus group discussions

For the semi-structured interviews and focus group discussions, Braun and Clarke's (2013) analysis was followed. The first step involved listening to the recordings to become familiar with the content (Braun & Clarke, 2013). Next, the recordings were transcribed verbatim. The recordings were replayed and checked against the transcriptions to ensure their accuracy. Step two entailed generating codes. This was accomplished by using colour-coding in the "Review" mode of the Word function on the computer, searching for similar words or phrases, and applying a specific colour code for each. The third step of the data analysis involved progressing from coding to identifying possible themes. During Step 4, the identified themes were reviewed and refined. During Step 5, themes were confirmed, and names were assigned to each theme. Step 6 included interpreting the data and writing up the report.

1.12 Ethics

Adhering to ethical principles and guidelines in research is essential to protect participants' rights, privacy, and identity through measures such as anonymity. Ethical research necessitates a strict commitment to the principle that researchers must not inflict harm upon participants. The following section elaborates on the ethical principles relevant to the current study, which will be discussed in greater detail in Chapter Four.

1.12.1 Confidentiality and anonymity

Confidentiality means that the researcher will not disclose any information obtained from an interviewee, whether deliberately or accidentally, or in a way that might identify an individual. The setting in which the research takes place and the participants should not be identifiable at any stage of the data analysis, discussions or at any point in the process. Places, settings, and names of people were assigned codes by the researcher to protect participants' anonymity and maintain confidentiality (McMillan & Schumacher, 2006).

1.12.2 Privacy

Protecting research participants' right to privacy requires respect for their autonomy, their right to self-determination, and their general welfare. The need for privacy is a function of generally accepted social norms and individual expectations about what information about oneself should—and should not—be known to others (Resnick, 2018). For qualitative researchers, such as those using interviews, maintaining

respondent confidentiality while presenting rich, detailed accounts of social life can be challenging.

1.12.3 Ethical considerations

Upon the University of South Africa (UNISA) approving the proposal, it was imperative to notify the Deputy Dean of Research of the proposed research to be conducted at the designated research site. This notification was intended to secure authorisation from the university authorities, thereby facilitating access to the study site and its participants. The original proposal, alongside the ethical clearance documentation, was submitted to the Research Committee of the Faculty of Dentistry, where the research was to be conducted. The Committee acknowledged the documentation and subsequently forwarded it to the Senate of the specified research site. The researcher was permitted to enter the research site only upon receiving formal letters of permission from the Dean of the Faculty of Dentistry, the Deputy Dean of Research, the Faculty Manager, and the Head of the Department of Oral Hygiene.

1.13 Assumptions of the study

An assumption is a situation, circumstance, perception, or opinion that the researcher takes for granted (Leedy & Ormond, 2015). The assumptions for this study are expanded upon below.

1.13.1 Framework of constructivism

In a constructivist study examining psychosocial and emotional well-being, the most important assumption is that well-being is not a static or detached reality that the individual experiences. It is continuously changing and shaped by an individual's interpretation, language, culture, and social interactions (Leedy & Ormond, 2015).

1.13.2 Foundational assumptions

The foundational assumptions that underpin this perspective can be categorised into two primary dimensions: philosophical and methodological.

Philosophical perspectives guide the holistic approach to and interpretation of the subject matter, encompassing the underlying beliefs and theoretical frameworks that inform an individual’s understanding of their reality, knowledge, and existence. This encompasses the study's ontology, which explores the nature of existence and the fundamental aspects of reality. Additionally, it includes an examination of

epistemology, which investigates the nature and extent of knowledge and the methodologies by which it can be acquired.

The methodological component refers to the systematic procedures and techniques employed in research and analysis. This includes the choice of research design, data collection methods, and analytical strategies, all of which are influenced by the researcher's philosophical beliefs. Together, these dimensions form a cohesive framework that informs both the theoretical and practical aspects of the perspective being discussed.

1.13.3 Ontological assumptions (The nature of reality)

For the purposes of this study, the ontological assumptions would include multiple realities or experiences, experiential construction, and context-dependent truth. The assumption is that there are multiple realities of lived experience. Well-being manifests differently for each individual; numerous, equally valid realities coexist within each individual's perception.

Relevant to this study, experiential construction assumes that people develop their own definitions of reality. In this study, psychosocial and emotional well-being are shaped by the individual's distinct personal histories, lived distress, and experiences. The truth for the individual is context-dependent, implying that psychosocial well-being is time-, location- and circumstance-dependent for each person.

1.13.4 Epistemological assumptions (The nature of knowledge)

Subjective knowledge refers to the understanding and meaning that arise from an individual’s unique cognitive processes and emotional responses. This personal interpretation is deeply influenced by one’s experiences, beliefs, and emotions, making the generation of meaning a profoundly individual attempt. As a result, the inherent variability in how different people perceive and process information renders objective measurement of this knowledge nearly impossible. This complexity highlights the significance of personal context in shaping our understanding, suggesting that what is true or meaningful for one person may not hold the same significance for another. For this study, the nature of knowledge and the epistemological assumptions influence the participants’ and the researcher’s interpretation of information. The knowledge component implies that participants’ current emotional states are interpretations of what they think they experience, and

that the researcher’s interpretation is shaped by how participants experience it. This process takes place through the dynamic interaction between the researcher and the participant. Language, as a tool in this study, significantly influences psychosocial and emotional well-being, as the words individuals use actively reflect their emotional realities in the moment.

1.13.5 Axiological and methodological assumptions (values and process)

Value-bound inquiry: The researcher recognises that his or her own values, biases, and cultural background will inevitably impact the data analysis.

Inductive reasoning: The study posits that theories of well-being should naturally emerge from participants' narratives rather than be imposed by predefined psychological frameworks.

1.14 Limitations and delimitations of the study

In research, a limitation is a potential imposed restriction or constraint beyond the researcher's control that may affect the validity and generalisability of the study's findings. These limitations are based on the study’s methodology and design (Miles,2017). Limitations stem from various sources, such as inadequate sample sizes that may not represent the population, time constraints that may limit the depth of the study, or reliance on self-reported data, which can introduce bias and affect the accuracy of the results. Additionally, factors such as funding limitations, access to resources, and external pressures can create constraints that must be acknowledged. Ultimately, recognising these constraints is essential for providing a comprehensive analysis of the research outcomes and for understanding how these factors may influence the interpretation and applicability of the findings in real-world settings (Theofanidis & Fountouki, 2019).

In qualitative research, one notable limitation is the risk of selection bias. Utilising purposive or convenience sampling can result in a participant pool that may not accurately reflect the diverse spectrum of experiences within the overarching demographic context. This can lead to findings that are not generalisable and may overlook critical variations in perspectives and contexts.

Below are the limitations of the current study:

- **Researcher bias/subjectivity:** Qualitative data relies heavily on researchers' interpretations and relationships with the participants, which can introduce unavoidable personal or methodological biases.
- **Social desirability bias:** Students may feel pressured to report higher levels of happiness or resilience because the study is explicitly framed around "positive psychology".
- **Self-reporting inaccuracy:** Well-being fluctuates daily; student responses during interviews may reflect their immediate mood more than their overall long-term emotional state.
- **Lack of generalisability:** Qualitative findings from a small group of students cannot be generalised to all students globally, as specific institutional environments and cultural settings deeply influence well-being
- **Context-bound nature**: Sudden external stressors (e.g., upcoming exam weeks, clinical assessments, or conducting interviews after examination times) can skew participant well-being metrics during the data collection window.

Delimitations are deliberately set and controlled by the researchers. Delimitations of the study include the study's aim and objective, the research questions, and the data analysis (Theofanidis & Fountouki, 2019).

Delimitations (intentional boundaries) are expanded upon below:

- **Positive psychology lens**: Intentionally focusing on assets, coping mechanisms, and thriving, with a lesser focus on deficits, mental challenges, or pathology.
- **Academic level**: Selecting a specific group of students (e.g., only undergraduate BOH II and BOH III university students), lecturers, and clinical supervisors, and excluding BOH I and BDS students, as well as administrative staff and support staff such as sterilisation staff, booking officers, office managers, and executive faculty managers.
- **Geographical and Institutional Setting**: The institutional setting was limited to a single university and a specific dental faculty in the South African context.

1.15 Clarification of key concepts

1.15.1 Case study

According to Coombs (2022), a case study is a rigorous methodological research approach designed to provide a comprehensive understanding of contemporary issues or phenomena within a specific, defined context. This research method requires an in-depth investigation of an individual, group, organisation, or event to gain a thorough understanding of a particular real-life phenomenon or situation. Typically employed in fields such as the social sciences and humanities, case studies are particularly valuable for exploring complex issues that may not be easily captured through quantitative research alone. By employing qualitative methods, case studies provide rich, contextual insights into the intricacies of specific phenomena, allowing researchers to uncover underlying patterns, relationships, and dynamics. A well-conducted case study often involves triangulating multiple data sources. This may include in-depth interviews with relevant participants, direct observations of behaviours and interactions, and analysis of pertinent documents or artefacts. By synthesising information from diverse perspectives and sources, researchers can build a holistic understanding of the case subject.

The primary goal of case study research is to achieve a detailed and nuanced understanding of the case being examined, which may lead to the formulation of new theories, insights, or frameworks. By examining specific instances, case studies can illuminate broader trends and advance knowledge in the respective field. Yin (2018) states that the case study design is ideal to employ as a research method when questions such as “how”, “why” and " what" are investigated by the researcher.

1.15.2 Constructivism

Honebein (1996), as referenced in Adom et al. (2016), articulates the constructivist philosophical paradigm as a framework that accentuates the idea that individuals actively construct their own understanding and knowledge of the world. This construction of knowledge occurs through personal experience and the individual’s reflection on that experience. Therefore, according to constructivism contextualised to the learning environment, the learning process is not the passive assimilation of information but an active process in which the person engages with their environment, making connections and integrating new insights into their existing knowledge. This

reflective practice allows individuals to form unique interpretations and insights, ultimately shaping their understanding of reality.

1.15.3 Coping mechanisms

Lazarus and Folkman (1984, p. 141) describe coping as “a constantly changing cognitive and behavioural effort to manage specific external and/or internal demands that are perceived as taxing or exceeding the individual’s resources.” They categorised coping mechanisms as either problem-focused or emotion-focused. Problem-focused coping aims to limit the source of distress, while emotion-focused coping focuses on how the individual can change their emotions when responding to the stressor. Problem-focused coping involves cognitively engaging with the situation and environment to resolve the stressor. Problem-solving strategies include resolving conflict, achieving goals, and gathering information about stressors (EBSCO, 2024). With emotion-focused coping mechanisms, the individual experiencing stress may reflect on how they perceive the situation or experience and may change how they think about or respond to the stressor (EBSCO, 2024). Emotion-focused coping includes the expression of emotions, such as crying, as well as avoiding situations, denying, and self-soothing. Self-soothing refers to when an individual practises relaxation techniques, deep and controlled breathing, massage therapy, and cognitive processes such as reframing a stressful situation or environment (Olasehinde, 2025). A more recent definition is provided by Yu et al. (2020), who defined coping mechanisms as the intentional efforts by individuals to employ psychological and behavioural actions to limit, reduce, or endure challenging and stressful situations in their lives.

1.15.4 Emotional well-being

Keyes (2002, 2010) states that positive mental health comprises three elements: emotional well-being, psychological well-being, and social well-being. Keyes (2002) notes that individuals with emotional well-being are flourishing, whereas those lacking it often experience languishing, reflecting a deficiency in emotional health and happiness. The WHO (2005, p. 2) defines emotional well-being as the capacity to recognise one’s strengths, effectively manage the normal stresses of life, work productively, and contribute positively to the community. An individual who possesses emotional well-being may be characterised as joyful, positive, happy, and content.

1.15.5 Oral hygienist

The Health Professions Council of South Africa defines the role of the oral hygienist in the South African context as follows: Oral hygienists are healthcare professionals dedicated to preventing disease and enhancing public health. They deliver primary oral health care to the community through educational, clinical, and therapeutic services. Their primary focus is on preventing oral diseases, thereby contributing to the overall health and well-being of society. The educational, therapeutic and clinical scope of practice is detailed in Appendix 4 (Republic of South Africa, 2021).

1.15.6 Positive psychology

The origins of positive psychology can be traced back to Aristotle's Nicomachean Ethics, which emphasised the pursuit of a virtuous and meaningful life. The modern introduction of positive psychology was presented by Martin Seligman during the 1998 Presidential Address of the American Psychological Association (APA), titled "Building Human Strengths: Psychology's Forgotten Mission" (Kim et al., 2012).

In their seminal work, Seligman and Csikszentmihalyi (2001) defined positive psychology as the scientific examination of the factors that contribute to optimal human functioning. This field seeks to identify the conditions under which individuals experience the greatest happiness, foster personal growth and development, and ultimately enable both individuals and communities to flourish.

Positive psychology emphasises the positive dimensions of life, including well-being, happiness, and personal growth. It encompasses positive aspects at three levels: subjective, individual, and group. The subjective level focuses on an individual's emotions, such as life satisfaction and joy. The individual level encourages individuals to strive to be good people by emphasising virtues and character strengths. Meanwhile, the group level highlights the importance of traits like tolerance, social responsibility, and humanity. As noted by Seligman et al. (2005), 'positive psychology' can be viewed as an overarching term for the study of positive emotions and characteristics.

1.15.7 Psychological well-being

Keyes (2010) explains that psychological well-being, also referred to as positive psychological functioning, can be considered when an individual displays self-acceptance of both the positive and negative aspects of their self, maintains a positive

attitude toward themselves, strives for personal growth, seeks challenges, but also acknowledges their potential, finding purpose in life and the meaning of their existence. The individual's ability to make decisions and select environments suited to their needs is referred to as environmental mastery. Autonomy is the ability of an individual to be guided and held responsible by their own morals, values, and standards. Positive relationships with others indicate the individual's ability to establish and maintain significant connections.

1.15.8 Psychosocial Well-Being

Psychosocial well-being encompasses both psychological and social dimensions, influenced by a variety of factors. These include an individual's physical health, economic status, social connections, mental condition, emotional health, and cultural and spiritual values. A person's overall well-being reflects their ability to manage stress and their awareness of their potential as a contributing member of society (Kumar, 2020; Larson, 1996).

According to the East African Community (2019), as cited in Kumar (2020), psychosocial well-being is defined as the enhancement of emotional, cognitive, and spiritual capacities among individuals, their families, and various communities. This development aims to foster holistic and positive social relationships, promote harmonious interactions with the environment, and empower individuals to make constructive choices that inspire hope for the future.

This study will focus primarily on students' psychological, emotional and social well-being. Several factors influence students' psychosocial health during their academic journey, including experiences of exclusion and various forms of discrimination (WHO, 2018). Additionally, aspects such as the risk of poor academic performance, difficulties in social functioning, financial constraints, and accommodation challenges significantly contribute to reduced psychological and social well-being (Negovan, 2010). Students with compromised psychosocial health may become vulnerable to conditions such as depression and anxiety, which could lead them to make detrimental lifestyle choices, including substance abuse as a coping mechanism.

This study explores and contextualises the relevant theoretical framework established by Ryff and Keyes in relation to the well-being of oral hygiene students.

1.15.9 Social well-being

Keyes (2010, p. 19) refers to the three-way structure and specific dimensions reflecting positive mental health and stipulates that social well-being entails five elements: 1) social acceptance, which includes positive attitudes towards other individuals and acknowledges their existence and differences; 2) social growth, which recognises that individuals, groups and societies have the capacity to develop; 3) social contribution that implies that an individual's daily efforts can be useful and appreciated by others; 4) social coherence that implies that an individual is interested in their environment and the society in which they function; and 5) social integration that implies that an individual has a sense of belonging and receives support from the community in which they are situated.

In the context of education and considering the elements of social well-being outlined by Keyes (2010), the Programme for International Student Assessment (2015) supports the notion that a strong sense of belonging within the school community significantly enhances students' social well-being. This sense of belonging is nurtured through the development of supportive and meaningful relationships among students, educators, and peers. Furthermore, active involvement from parents is essential in this process; they not only reinforce the importance of education but also contribute to creating a collaborative atmosphere. Together, these elements foster a vibrant and inclusive learning environment that promotes the overall development and success of every student.

1.15.10 Student well-being

Govorova et al. (2020) adapted the definition of well-being from the Program for International Student Assessment (PISA) theoretical framework, defining student well-being as students' capacity to attain their personal, academic, or social goals. This encompasses cognitive, psychological, physical, and social aspects of a student's experience. Such well-being can be evaluated through objective and subjective assessments of students' competencies, perceptions of their environment, experiences within their living conditions, and their expectations.

1.15.11 Well-being

The WHO (2001) defined well-being as a positive mental state in which individuals recognise their abilities, manage the normal stresses of life, work productively, and

contribute to their communities. In 2012, during a target-setting meeting, the organisation developed a working definition of well-being that consists of two dimensions: subjective and objective. This definition encompasses both an individual's personal experience of life and the comparison of their circumstances with societal norms and values (WHO Regional Office for Europe, 2013).

According to the American Psychological Association (n.d.), well-being is characterised by happiness and contentment, reflected in low levels of distress, good physical and mental health, and a positive outlook, all of which contribute to a high quality of life. Jarden and Roache (2023) point out that a clear and definitive definition of well-being remains elusive due to differing perceptions of what it entails. Some definitions focus on the overall quality of life experienced by an individual, while others emphasise aspects such as personal happiness, minimal stress, and the enjoyment of good physical and psychological health, along with a favourable quality of life (American Psychological Association, 2023).

1.16 Chapter outline

Chapter 1

Chapter 1 provides an overview of the background of the study, research problem, primary research question and sub-questions, and the rationale, purpose and objectives of the study. The chapter includes a summary of the literature review, which provides a brief overview of the theories related to well-being, including the two main approaches to well-being and well-being challenges students experience when attending university. The chapter continues by discussing the research methodology, which encompasses the research approach and the positive psychology lens through which the study was conducted. The sample selection and data collection methods, such as self-administered questionnaires, semi-structured interviews, and focus group discussions, as well as a brief introduction to the data analysis, are discussed. Research ethics are described, and the limitations and delimitations are outlined.

Chapter 2

Chapter 2 focuses on the literature review. Well-being is defined, and the types of well-being that relate to the primary research question are identified. The two broader categories of well-being are discussed, followed by the well-being theories appropriate to the current study. The literature review examines existing literature on student well-

being and the factors that influence well-being in general, followed by the factors that influence students' well-being while enrolled in dental training programmes. The focus thereafter shifts to the Coping mechanisms students at university apply to manage the challenges they experience. The chapter addresses the significance of both formal and informal support structures for students in higher education, highlighting their contributions to overall well-being.

Chapter 3

Chapter 3 presents a comprehensive examination of the conceptual framework and theories of well-being, including the PERMA and PERMA-V models, which serve as the overarching model for this framework. This framework is supported by psychological well-being theory, Keyes' Social well-being theory, the broaden-and-build theory, self-determination theory, and hope theory, all of which underpin this study. The investigation of well-being among oral hygiene students within the South African context is approached through the lens of positive psychology. This chapter further elaborates on the relevant literature pertaining to positive psychology, encompassing definitions, historical origins, philosophical foundations, and interventions to consider. The rationale for applying positive psychology is articulated, alongside its implications for educational settings. The chapter concludes with an in-depth exploration of the origins and evolution of the oral hygiene profession.

Chapter 4

Chapter 4 delineates the paradigm underpinning this study, with a particular emphasis on constructivism. The discussion transitions to the research approach, which employs a case study design supplemented by a qualitative approach. Additionally, the section elucidates the population and sampling techniques employed, as well as the criteria for participant selection and exclusion. Thereafter, the chapter addresses the ethical considerations pertinent to the study, such as validity, reflexivity, informed consent, and privacy, as well as ethical issues directly related to the study, alongside an overview of the data collection methods utilised, including self-administered questionnaires, semi-structured interviews, and focus group discussions. Finally, the procedures for data analysis are articulated in detail, adhering to Braun and Clarke's thematic analysis framework.

Chapter 5

In Chapter 5, the findings are presented in accordance with the analysis of the various data sets, organised by the themes identified through thematic analysis. Four key themes were discerned from the analysis. Theme 1 addresses the determinants of the psychological well-being of students enrolled in the oral hygiene programme at a South African university. Theme 2 examines the determinants of the social well-being of oral hygiene students within the contexts of university and daily life. Theme 3 focuses on the environmental factors that influence the well-being of oral hygiene students, with particular attention to living conditions and the learning environment. Finally, Theme 4 explores the Coping mechanisms that students employ throughout their studies. The results are systematically presented according to these four primary themes, along with their respective sub-themes. The presentation of the data is supported by direct quotations obtained from the various data sets.

Chapter 6

Chapter 6 elucidates the findings presented in Chapter 5 by correlating them with the literature review in Chapter 2, the theoretical frameworks examined in Chapter 3. The discussion follows the themes and sub-themes identified in Chapter 5.

Chapter 7

Chapter 7 is dedicated to answering the research questions. The sub-questions are answered, followed by answering the primary research question. The conceptual framework is revisited, as well as reflections on the study. The challenges and limitations of the study are discussed, along with recommendations derived from the collected data. Policy recommendations and practical suggestions are provided for faculty management and the oral hygiene department's consideration. The contribution of the study is highlighted Followed by comments on future and further research on the psychosocial and emotional well-being conclude the chapter and the thesis.

1.17 Summary

Chapter 1 provided an overview of the study's context, accompanied by the rationale and problem statement regarding the psychosocial and emotional well-being of oral hygiene students. Subsequently, the primary and secondary research questions were outlined, followed by the aims and objectives of the study. A preliminary, concise literature review was conducted, which focused on definitions and categories of well-being, as well as on existing literature on factors influencing the well-being of university students. The latter section of the literature review concentrated specifically on the factors affecting the well-being of students enrolled in undergraduate dental training programmes. Furthermore, the literature review explored the coping mechanisms utilised by students to navigate the obstacles they encounter during their dental training. Thereafter, the research methodology and design, alongside the processes of data analysis and interpretation, were discussed. Ethical considerations in conducting qualitative research were addressed, including trustworthiness, privacy, and anonymity. Moreover, the chapter outline was presented in conjunction with the study's delimitations and limitations.

1.18 Conclusion

Chapter 1 provided an overview of the research topic, emphasising the main research question and its related sub-questions. It discussed the criteria for selecting relevant and accessible literature that supports the study. Additionally, the chapter outlined the research methodology and study design, including the ethical principles followed

throughout the research process. Chapter 2 presents a comprehensive literature review.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Chapter 2 establishes the conceptual and empirical basis for this study by moving from broad understandings of well-being to the specific psychosocial experiences of oral hygiene students in a South African dental education context. The principal argument is that student well-being cannot be reduced to the mere absence of stress or psychological difficulty. Rather, it should be understood as a multidimensional, contextually shaped phenomenon encompassing psychological functioning, social connectedness, emotional regulation, coping, and the capacity to flourish within demanding educational environments.

The literature reviewed spans South African and international scholarship, with particular attention to studies on higher education, dental education, oral hygiene education, coping, positive psychology, psychosocial well-being, and the effects of the COVID-19 pandemic. The chapter deliberately distinguishes between what is known about students in higher education generally, what has been established about dental students, what limited evidence exists regarding oral hygiene students, and what remains underexplored in the South African context.

The chapter is structured to build this argument progressively. First, it clarifies the concept of well-being by discussing hedonic and eudaimonic traditions and by focusing on psychological, social, and emotional well-being. This conceptual foundation is essential, as this study is not limited to distress, stress, or well-being pathology; it concerns how oral hygiene students perceive, sustain, and make meaning of their well-being within a demanding professional training programme.

Secondly, the chapter reviews student well-being in higher education. This section establishes that students' well-being is shaped by transitions, academic demands, financial pressures, accommodation, language, support systems, loneliness, and coping. These factors are particularly relevant in South Africa, where inequalities in access, resources, funding, accommodation, and support continue to shape students' educational experiences.

Thirdly, the chapter narrows its focus to students in dental education programmes. Due to the limited number of well-being studies specifically on oral hygiene students, research on dental students is often cited in the literature as a comparison group, as dental and oral hygiene students share aspects of their educational environment, including theoretical instruction, pre-clinical skills training, clinical supervision, patient management, assessment pressures, and resource limitations. However, the chapter does not treat dental and oral hygiene students as identical groups. Instead, the dental literature is used to contextualise the broader learning environment and to emphasise the importance of understanding oral hygiene students on their own terms. The third section explores existing literature relating to the well-being of students enrolled in undergraduate dental programmes. While this study primarily focuses on oral hygiene students, it also incorporates relevant insights concerning the well-being of dental students. This approach was adopted due to the limited research available at the outset of the study that specifically addressed the well-being of oral hygiene students, as noted by Harris et al. (2017), and supported by Ebbeling et al. (2018), who remarked that oral hygiene and dental students share similar learning environments.

To highlight the lack of research on the well-being of oral hygiene students, Lee et al. (2021) conducted a literature review examining the overall mental health and well-being of undergraduate students in dental training programmes. Their search yielded 39 articles on the topic; however, only two articles specifically addressed well-being. of oral hygiene students, both of which employed quantitative methods.

In order to contextualise the limited research dedicated to the well-being of oral hygiene students within the South African landscape, the literature searches conducted for this study uncovered the following findings: Gordon et al. (2016) executed a quantitative study focusing exclusively on oral hygiene students; Madiba et al. (2022) conducted a qualitative study involving both dental and oral hygiene students; Morule et al. (2023) carried out a mixed-methods study encompassing both groups; and Pillay and Moodley (2023) addressed both dental and oral hygiene students by employing a mixed-methods approach. Thus, only one article focuses on oral hygiene students in the South African context.

The chapter continue to highlight the limited body of research focusing specifically on the well-being of oral hygiene students. Existing studies indicate that oral hygiene students experience academic workloads, clinical quotas, patient-related pressures,

feedback-related stress, financial concerns, and challenges linked to professional identity. However, much of this work is quantitative or mixed-methods, and it focuses on stressors rather than on students' own meaning-making about psychological, social, and emotional well-being.

Fifthly, the chapter explains why the COVID-19 pandemic is relevant to the study. The pandemic did not merely interrupt teaching and learning as a historical event; it intensified existing pressures in dental education by restricting access to pre-clinical and clinical practice, disrupting social connections, increasing uncertainty, and undermining students' confidence in their developing competence. The discussion of COVID-19 is therefore integrated into the chapter as part of the broader argument about psychosocial well-being, self-efficacy, coping, and the conditions that support or undermine flourishing.

2.1.1 Conceptual orientation and line of argument

The conceptual thread running through this chapter is that well-being is complex and multifaceted. In this study, psychosocial well-being refers to the interaction between students' inner psychological and emotional experiences and the social, academic, institutional, and clinical environments in which they study. The implication is that stress, coping mechanisms, the need for belonging, confidence in the learning environment, the student's experience of feedback, resource availability, and professional identity should not be examined in isolation. These are interrelated dimensions of students' lived experience in the oral hygiene programme.

This psychosocial perspective highlights the importance of positive psychology. A positive psychology approach does not deny the existence of stress, anxiety, burnout, or systemic constraints; it seeks to understand how students experience and cultivate strengths such as resilience, hope, meaning, belonging, emotional intelligence (EI), self-efficacy, and coping skills amid these challenges. This approach is vital as the majority of existing literature in dental and oral hygiene focuses on stressors, while fewer studies examine how students perceive and maintain their well-being.

2.2 An overview of well-being

Sections 2.2.1 to 2.2.3 below focus on the definitions of well-being, approaches to well-being, and the contextualisation of well-being in the current study.

2.2.1 Defining well-being

While numerous definitions and explanations of well-being exist within the literature, only a select few are highlighted in the following sections.

The Oxford South African Concise Dictionary (2013, p. 1276) defines well-being as the state of being comfortable, healthy, or happy. The Oxford English Dictionary (1989, p. 112) indicates that this term entered English under the influence of the French expression 'bien-être,' which translates as 'good being' or a sense of well-being, itself derived from the modern Latin phrase 'bene esse.'

In scholarly literature, Shin and Johnson (1978), as referenced by Felce and Perry (1995), describe well-being as a comprehensive assessment of an individual's quality of life based on personal criteria and shaped by an individual's perception of their circumstances and future expectations (Felce & Perry, 1995). The World Health Organisation (2001) defines well-being as a positive state of mind in which individuals are aware of their abilities, effectively manage normal life stresses, work productively, and contribute meaningfully to their communities. Furthermore, Keyes (2002) articulates well-being as an individual's capacity to enhance opportunities and achieve life goals. Huppert (2009) expands on existing definitions by asserting that well-being encompasses not only emotional and affective components but also cognitive aspects. An individual experiencing high levels of well-being, characterised by positive emotions, happiness, and satisfaction, is positioned to reach their potential, maintain control over their life, preserve a sense of purpose, and cultivate positive relationships.

Although the literature lacks a universally accepted definition of well-being, it is generally acknowledged that well-being is often associated with positive emotions such as contentment, happiness, life satisfaction, fulfilment, and positive functioning (Diener, 2000; Huppert & So, 2013; Keyes, 2002). Moreover, well-being encompasses individuals' thoughts and feelings about their lives, the quality of their interpersonal relationships, their resilience, a realistic awareness of their potential, and overall life satisfaction. Hence, Ryan and Deci (2001) assert that individuals who perceive their lives positively and regard themselves as functioning well are deemed fully functional.

A contemporary view proposed by Burns (2016) characterises well-being as an individual's subjective experience, reflecting their understanding, happiness, and engagement with family, work, and community. Jarden and Roache (2023) indicate in

their study that the most frequently cited definition of well-being originates from Michaelson et al. (2012), which describes well-being in terms of how individuals feel and respond to life events both individually and socially, alongside a holistic assessment of their well-being. Recently, Lee et al. (2021) conducted a systematic review focusing on the well-being of undergraduate dental students, concluding that well-being serves as the foundation for emotions, cognition, communication, resilience, and self-esteem.

2.2.2 Approaches to well-being

The literature on well-being identifies two broad categories: hedonic and eudaimonic approaches. Both concepts originated from ancient times. A brief explanation of each is presented in sections 2.2.2.1 to 2.2.2.4 below.

2.2.2.1 Hedonic approach to well-being

The hedonic approach to well-being originated with Aristippus (n.d.) in the 4th century BC and primarily focused on affective experiences. Deci and Ryan (2008) stated that the traditional view of hedonic well-being is characterised by the mere pursuit of maximum enjoyment, self-indulgence, an abundance of happiness, and pleasurable experiences as the essence of life, while minimising negative experiences. However, Kahneman et al. (1999) challenged the traditional view of hedonic well-being, arguing that it should encompass both positive and negative affective experiences, as well as subjective well-being. The question arises: What is subjective well-being? Subjective well-being can be defined as a person's cognitive and affective evaluations of their life, including appraisals of emotions and cognitive judgments of life satisfaction and fulfilment. Diener et al. (2005) argued that subjective well-being, associated with the hedonic approach, does not consist solely of an emotional component and that recognition should be given to the existence of a cognitive aspect as well. Conversely, Huta (2015) supports the idea of a smaller divide, stating that theories of well-being are rarely found to belong purely and precisely to either the hedonic or the eudaimonic approach. A more contemporary view is that well-being is multifactorial and includes aspects such as cognitive development, physical and psychological health, spiritual life, and interactions with other individuals and societies (Myers & Sweeney, 2005).

2.2.2.2 Eudaimonic approach to well-being

The eudaimonic approach originates from Aristotle's works on the Nichomachean Ethics, written in 350 BC (Ryff & Singer, 2008). Whereas the hedonic approach focused on enjoyment and pleasure in life, the eudaimonic approach focused on a more meaningful life. Eudaimonia can further be described as being interested in activities that contribute to what is worthwhile in life, allowing personal growth, having a purpose in life, flourishing, and supporting the individual to become the best version of themselves (Huta & Waterman, 2014; Myers & Sweeney, 2008; Ryff & Singer, 2008).

2.2.2.3 Eudaimonia versus hedonia

According to Huta (2016), a person's orientation to life, whether eudaimonic or hedonic, depends on what they value most. An individual with a eudaimonia-oriented life perspective typically demonstrates qualities such as caring and understanding toward others, contributing to society, and producing work of the highest standard and quality. They are committed to volunteering, attentive, caring, and show gratitude.

In contrast, the hedonic perspective is centred around the concept of the "self." Characteristics of a hedonistically oriented individual include a focus on personal enjoyment and the pursuit of pleasure for its own sake. This approach emphasises individual satisfaction, often without regard for the well-being of others.

Eudaimonia stands in direct contrast to the hedonistic way of life, in which individuals seek only pleasurable experiences. Individuals with a eudaimonic life orientation tend to be self-connected, authentic, and trustworthy, and to experience a life with purpose and meaning. This contrasts sharply with the hedonistic orientation that prioritises fulfilling one's own needs and desires.

2.2.2.4 The shift from hedonism to eudemonia-oriented

Durayappah (2011) asserts that over the decades, numerous definitions, theories, and models have emerged to explicate the concept of subjective well-being; however, there is, notably, no single, comprehensive definition that encapsulates its holistic nature. Therefore, Durayappah (2011) proposes developing the 3P model of subjective well-being, which contextualises an individual's holistic subjective well-being in terms of the past, present, and prospects (the future). This model emphasises

the significance of an individual's thoughts, which are described as fluid and capable of transitioning seamlessly among the past, present, and potential future scenarios.

The present: A significant portion of an individual's thoughts is centred on their present circumstances. According to the traditional works of Bradburn (1968) and Caplovitz (1965), as cited in Durayappah (2011), these present-time thoughts can encompass both positive and negative elements. Individuals may become so deeply engaged in their current experiences that they lose awareness of their surroundings. This intense concentration and immersion in the present are referred to as a state of "flow" (Csíkszentmihályi, 1990). During the state of flow, an individual is wholly absorbed in the present, with neither past nor future considerations intruding upon their current experience (Csíkszentmihályi, 2016). According to Csíkszentmihályi, a person in a state of flow is internally motivated, and the reward for such an individual lies in performing the action itself, not in an external reward once the action is completed.

The past: Kahneman and Riis (2005), as discussed in Durayappah (2011), highlighted the importance of past memories, which may include fleeting moments of joy as well as enduring, significant recollections. Subjective well-being is influenced by positive, meaningful thoughts and a sense of self-efficacy.

The future: The future aspect of subjective well-being encompasses aspirations, goal achievement, and an overarching sense of purpose in life. Kasser and Ryan (1993, 1996), as cited in Durayappah (2011), assert that genuine subjective well-being is positively correlated with intrinsic aspirations and motivations, such as goal attainment, whereas it is negatively correlated with extrinsic factors, such as the accumulation of material possessions.

2.2.3 Well-being related to the study

This study investigates the psychological, social, and emotional well-being of oral hygiene students and their perceptions thereof within the Faculty of Dentistry at a South African university. A crucial question is why students' well-being is considered significant during their years of tertiary education. To answer the question, it is worth noting that students face various challenges when transitioning from school to university, including adjusting to new environments and responsibilities, which can impact their well-being (Smith et al., 2017). Antaramian et al. (2010) found that

experiencing positive well-being influences various aspects of students' lives, such as the ability to develop and sustain positive interactions with others, achieve good academic results, and maintain physical health.

Following the discussion of the two main categories of well-being, this section continues to focus on the three types of well-being relevant to this study: psychological, social, and emotional well-being.

2.2.3.1 Psychological well-being

In a systematic literature review, Dhanabhakyam and Sarath (2023) highlighted that no single, universally accepted definition of psychological well-being currently exists. When considering psychological well-being, it is important to reflect on Bradburn's (1968) seminal work. Bradburn's (1968) research indicated that happiness is closely linked to high levels of positive well-being, a perspective that has been further explored by contemporary researchers in the field.

Ryff (1989) identified individuals with psychological well-being as those who experience self-acceptance, autonomy, environmental mastery, personal growth, and positive relationships with others. Seligman and Csikszentmihalyi (2001) described psychological well-being as being involved in meaningful activities and experiencing positive emotions. Similarly, Huppert (2009) defined psychological well-being as life going well, a combination of feeling good and functioning effectively. However, prolonged negative experiences or intense negative emotions can hinder an individual's ability to manage everyday life. Huppert (2009) further notes that contemporary theorists emphasise that humans reach optimal development by actively utilising their abilities, which aligns with Ryff's (1989) characterisation of psychological well-being; however, this view challenges the Aristotelian view that equates well-being solely with ethical and moral living (Eid & Larson, 2008).

This prompts the question: Why is psychological well-being important in higher education? Internationally, the psychological well-being of students has become a key focus of discussion in higher education. As a result, recent years have seen an increased emphasis on institutions prioritising their students' well-being and developing initiatives that support the holistic wellness of all students in higher education (International Conference on Health Promoting Universities & Colleges, 2015).

2.2.3.2 Social well-being

Keyes (1998) made notable contributions to the concept of social well-being by clearly defining the term and creating a comprehensive model to illustrate it. Social well-being, according to Keyes (1998), refers to the way individuals perceive their environment and interact within society. Keyes' (1998) social well-being model encompasses five essential elements: social integration, coherence, contribution, acceptance, and actualisation. Chapter 3 will examine social well-being theory in greater detail under the theories that support the main conceptual framework. To provide context to social well-being in higher education, it is important to recognise that students are challenged by a new and unfamiliar environment when entering university (Chao, 2011; Student Mental Well-being, 2015). Entering the tertiary learning environment necessitates establishing new social relationships with peers and faculty members. Therefore, Selvam and Selvasivasankari (2025) highlight the critical importance of social acceptance among peers and other influential individuals for university students to enjoy social acceptance. Being socially accepted, students feel included, valued as individuals, and able to make meaningful contributions to society. Such social inclusion and recognition significantly enhance students' self-image, ultimately fostering their holistic well-being.The significance of social well-being in higher education is underscored by the challenges students face as they transition from school to university life. As these learners often find themselves distanced from their parents, families, and longstanding childhood friendships, they may have difficulty establishing new social connections in an unfamiliar context. Additionally, social estrangement can arise when students, confronted with both social and academic pressures, opt to withdraw from their peers, thereby exacerbating their sense of isolation (Leite et al., 2025; Morule et al., 2023; Wahid et al., 2023).

A more recent definition of social well-being is provided by Baby et al. (2022), which describes it as the ability of an individual to establish and sustain positive relationships with family, friends, colleagues, and neighbours, and to demonstrate the ability to act in a socially responsible manner towards other individuals and the societies in which they function.

2.2.3.3 Emotional well-being

Keyes et al. (2003) explain that emotional well-being is a steady balance between what is pleasant and unpleasant, as well as the individual's assessment of their overall life satisfaction. Several organisations have added to Keyes's explanation of emotional well-being. The National Health Service (NHS) Health Development Agency (2004) describes emotional well-being as a holistic, subjective state in which an individual experiences a balanced range of emotions. When enjoying emotional well-being, the individual displays characteristics such as being energetic, confident, happy, calm, and caring towards others (NHS Health Development Agency, 2004). According to WHO's definition, emotional well-being occurs when an individual recognises their abilities, copes with everyday stresses, works productively and effectively, and contributes to the community (WHO, 2005). The WHO's (2005) definition underpins the idea that a person with positive well-being is flourishing, whereas those with negative mental health are languishing (Keyes, 2002). Therefore, emotional well-being can be viewed as a concept derived from positive mental health, in which the individual is happy, joyful, content, high-spirited, blissful, and experiences positive affect. Keyes (2002) claims that when an individual exhibits elevated levels of emotional well-being, they are said to be flourishing. Conversely, low or absent good mental health can be described as languishing (Keyes, 2002). According to Keyes (2002), emotional well-being encompasses two factors: the presence or absence of positive feelings and individual experiences. Langeland's (2014) view of emotional well-being does not focus solely on an individual's current emotional state; it also includes past experiences and an emotional orientation toward future expectations, such as hope and optimism. Langeland's (2014) view of emotional well-being is compared with the view of Durayappah (2011) and the general theory of subjective well-being that includes the present, the past and the future.

2.2.3.4 Summary or synthesis of definitions and concepts

This section of the chapter reviewed the primary and secondary research questions to orient readers to the literature review. The literature review commenced with a search for a universally accepted definition of well-being. In search of such a definition, it became apparent that multiple definitions exist; however, none qualified as all-embracing. The focus of the literature review thereafter shifted to the two broader categories of well-being, namely hedonia and eudaimonia. The hedonia principle

focuses on pure enjoyment, happiness, and self-indulgence, while eudaimonia focuses on a life worth living and on individuals reaching their full potential. Following a discussion of the differences between hedonia and eudaimonia, the focus shifted to the well-being concepts in the primary research question: psychological well-being, social well-being, and emotional well-being. Clarification of each well-being concept was accomplished by stating its definition, orientation, and contextualisation thereof in life. The next section focuses on the well-being of students in higher education, specifically those in oral hygiene.

The preceding conceptual discussion established that well-being is multidimensional and psychosocial. The next section applies this conceptual foundation to higher education by showing how the transition into university, academic demands, social belonging, institutional support, and coping resources shape students' psychological, social, and emotional well-being.

2.3 Well-being in higher education

To substantiate the current research and answer the primary research question and sub-questions, the literature review in the following section focuses on contextualising the well-being of students in higher education, factors that influence the well-being of students in higher education, well-being support provided by tertiary institutions, as well as how students cope with the challenges experienced in higher education. The focus of the literature review thereafter shifts to students in undergraduate dental programmes and, more specifically, students studying oral hygiene.

2.3.1 Student well-being in higher education

Douwes et al. (2023) stated that although there are numerous definitions of student well-being, it would be advisable to adopt a more holistic and general approach. The holistic definition of students' well-being should encompass the physical, psychological, and social dimensions (Stanton et al., 2016).

International studies conducted by Eisenberg et al. (2007), Eisenberg et al. (2013), the WHO (2014), Carton and Goodboy (2015), Douwes et al. (2023) and Kaminer and Shabalala (2019) determined that students attending institutions of higher education are now, more than in the past, presenting with increased well-being challenges. These well-being challenges include depression, anxiety, eating disorders, thoughts of self-harm or suicidal ideation, feelings of hopelessness, and worthlessness. These

well-being concerns stand in contrast to the expectations students have when entering university. Piorkowski (2023) states that students assume their university years will be the best time of their lives. This statement by Piorkowski (2023) is consistent with earlier research by Negovan (2010, p. 86), in which students reported that they aspire to experience the “good life” as they continue higher education studies. However, Negovan (2010) notes that although students at university have expectations of living the “good life”, they should be made aware of the high academic demands and their effects on their holistic well-being. The reality is that academic and personal issues can challenge students' well-being. The number of students presenting with well-being challenges is increasing; therefore, universities are urged to find ways to sustain and care for students' well-being (Carton & Goodboy, 2015).

The promotion of holistic health in higher education institutions originated from the Ottawa Charter for Health Promotion. The Ottawa Charter advocated that being holistically healthy is co-dependent on the individual and their natural environment in which the person functions, interacts, works, and relaxes (Ottawa Charter for Health Promotion, 1986). Due to increased well-being issues among students at higher education institutions, the Okanagan Charter (International Conference on Health Promoting Universities & Colleges, 2015) made two appeals. The first appeal was that universities should adopt a holistic approach to health and well-being across all aspects of campus activities, including administrative processes, degree programmes, and other educational activities. The second appeal was that all institutions of higher education become pioneers of health promotion (International Conference on Health Promoting Universities & Colleges, 2015).

2.3.2 Factors that influence undergraduate students' well-being in higher education

The increased need for student well-being support for students studying at tertiary education institutions can be attributed to several stress-related factors. These stress-related factors include adjusting to new learning and living environments, academic pressure, separation from parental and peer support, complex relationships, building new social connections, adapting to independent living and its associated responsibilities, and facing financial challenges (Scribner et al., 2020).

The impact of these stressors can significantly impair students' ability to concentrate, leading to increased fatigue, work-life imbalances, poor nutrition, sleep disturbances, and persistent anxiety (Ludban & Gitimu, 2015).

Academically, students may struggle with different learning styles than in high school, as well as with the pressure to achieve or maintain high grades (Siddiqui et al., 2023). Baik et al. (2019) confirmed that these factors can create psychological challenges such as stress, depression, and anxiety, which may subsequently affect students' academic performance, ultimately affecting their emotional and social well-being. Therefore, given growing concerns about students' deteriorating mental health, universities have been encouraged to develop policies that promote students' health and well-being (Kaminer & Shabalala, 2019).

2.3.2.1 Psychological stress and student well-being

In the guide "Student Mental Well-being in Higher Education" (2008), psychological health and well-being are defined as the emotional resilience that enables an individual to enjoy life and overcome disappointments, unhappiness, and failure. In the section hereunder, the focus shifts to detailing the various factors that may influence students' well-being while studying at institutions of higher education.

2.3.2.2 Factors that significantly impact students' well-being in higher education

Sections 2.3.2.2.1 to 2.3.2.2.4 below expand upon the factors that influence the well-being of students in higher education.

2.3.2.2.1 Transitional challenges and Student well-being

This section focuses on the transitional challenges students experience when entering tertiary education.

An important well-being challenge in higher education is the transition from secondary school to the tertiary learning environment (Chao, 2011; Knapp, 2010; Leite et al., 2025; Morule et al., 2023; Scribner et al., 2020; Student Mental Well-being, 2015; Wahid et al., 2023). Transitional difficulties students experience include relocating from their familiar home and school environment to the unfamiliar university environment. This transition involves first-year students leaving their families and friends to adapt to new living arrangements, such as campus residences or student

housing. Social challenges students face include making new friends and being introduced to new cultures and traditions. Academic transition challenges include adjusting to new teaching and learning environments and philosophies, new learning styles and methods that vary across schools, and language challenges.

Language challenges become reality for students when lectures and study material are presented in a second or third language (Chao, 2011; Coetzee, 2016; De Clercq et al., 2017; Knapp, 2010; Student Mental Well-being, 2015). Coetzee (2016) confirmed that the language of tuition at most universities is usually English. Students who have English as a second or third language and are not well-versed may struggle to understand lecture content. Such students become ashamed and hesitant to ask questions in class, become isolated from their peers, and lose their sense of belonging (Coetzee, 2016), thereby affecting their social well-being. According to Coetzee (2016), students who struggle to understand the language of instruction become despondent and find it difficult to motivate themselves to continue their studies. These students may decide to drop out of university. Language barriers, therefore, negatively impact students' academic and holistic well-being.

Regarding social isolation, earlier research by LaNasa et al. (2007) found that students living on campus are more likely to participate in on-campus and co-curricular activities than those living off campus.

Given the social isolation that language barriers create (Coetzee, 2016), these students would benefit from residing in on-campus housing, where they can easily participate in extracurricular activities. Such participation can positively impact their overall well-being by facilitating interaction and socialisation with fellow students (LaNasa et al., 2007). Research has found that social isolation when starting university is not limited to students entering university directly from school; mature students entering the tertiary learning environment have also reported experiencing social isolation. The study by Hayman et al. (2024) found that mature students entering or re-entering higher education face transitional challenges. These challenges included social, academic, and financial difficulties. Socially, participants reported feeling excluded, isolated, and not belonging on campus. This could explain the results of earlier research by Mallman and Lee (2017), which found that adult learners often rely more on family support during their years of study than on peer or institutional support.

Henning et al. (2012) focused on international students and found that those who move between countries to pursue their education are particularly at risk of compromised well-being and quality of life. According to Henning et al. (2012), international students face additional challenges when entering university, including developing new social relationships, relocating to an unfamiliar country, adapting to unfamiliar customs and cultures, and learning and studying in a foreign language. Research by Gordon et al. (2016) at a South African university concurs with Henning et al. (2012) in finding that international students may face greater challenges when adapting to university life. In the South African context, Gordon et al. (2016) found that students from outside the country often face discrimination in addition to the challenges mentioned by Henning et al. (2012), which affect students' holistic well-being.

2.3.2.2.2 Academic-related concerns and student well-being

This section focuses on academically related concerns that students in higher education experience and their effects on their well-being.

Morule et al. (2023) determined that the academic concerns students most often reported were a challenging curriculum, increased workload, ineffective time management, preparing for multiple assessments and tests, and the long hours required to prepare for assessments. Studies by Coetzee (2016) and Morule et al. (2023) further found that the secondary school environment did not adequately prepare learners for a successful transition to tertiary education. Not being suitably prepared ultimately creates academic challenges for these students once they enter the tertiary learning environment. Morule et al. (2023) found that university students had difficulty maintaining a healthy work-life balance due to increased workloads. Students mentioned that the expectations of lecturers versus what students could produce or achieve were considered challenging due to the heavy curriculum workload. Morule et al. (2023) therefore advised that lecturers plan assessments well, communicate with other lecturers to determine assessment schedules, and provide their students with timely details on summative assessments, assignment guidelines, and submission dates.

2.3.2.2.3 Living arrangements and student well-being

Students attending university have various accommodation options, including residing at home, on campus in student hostels, in communal-style student housing or privately

owned accommodations, such as a flat or townhouse. Kobue et al. (2017) state that student accommodation and living conditions can ultimately influence students' academic performance. Thus, arguing that it is the responsibility of the university and those responsible for on-campus student housing to cultivate an acceptable standard of a learning environment which is well-maintained and affordable. In the South African context, Pretorius and Blaauw (2020) agree with Kobue et al. (2017) that students' well-being is directly influenced by their living arrangements during their studies at university. Pretorius and Blaauw (2020) found that students living in on-campus student hostels or within walking distance of campus were often dissatisfied with their accommodation. These students mentioned feeling unsafe on campus premises and experiencing overcrowding in the student hostels. Having a sense of belonging in residence at university is important for students' emotional and social well-being. Both Coetzee (2016) and Pretorius and Blaauw (2020) found that students' holistic well-being was harmed when they felt unsettled and lacked a sense of belonging. Mofokeng et al. (2023) state that campus residences worldwide are deemed unsafe due to criminal activity and urge universities to take responsibility for ensuring that their campuses and other student residences are safe places for students to reside and study. Research on determining the ideal characteristics of student residences and the amenities they should offer included the following: student residences should be well-maintained to ensure the health and safety of their occupants, and emphasis should be placed on hygiene standards in students' hostels on campus (Chong et al., 2019). Kobue et al. (2017) suggested that student residences should meet students' needs by providing accommodation near campus and lecture venues, with reliable and safe transportation available.

A recent study by Morule et al. (2023) confirms that students favour living closer to campus in order to alleviate the stress associated with long commutes to university. Transportation emerged as a significant factor that students identified as influencing their well-being. Similarly, Hersi et al. (2017) found that long hours spent travelling to and from campus contributed to heightened stress levels among students.

2.3.2.2.4 Finances and student well-being

Students face numerous financial responsibilities while studying at tertiary institutions. Expenses include registration and tuition fees, administrative costs, housing and accommodation, living costs, and transportation (Hayes et al., 2017). These financial

burdens can be affected by limited financial support and poor financial management skills, which may ultimately impact the student's overall well-being (Chan et al., 2012; Walker, 2019). Pretorius and Blaauw (2020) explicitly referred to the detrimental impact of insufficient financial support on students' subjective well-being in the South African context. Ruswa and Gore (2021) concurred in their research with Walker (2019), reporting that students who experience financial constraints have well-being challenges due to the stress and the burden of adverse health issues, reduced academic performance, loss of dignity, social exclusion, food insecurity, inability to participate in extracurricular activities, homelessness, and a damaged credit history. Therefore, given financial challenges, the likelihood of dropping out of university increases, negatively affecting their well-being (Walker, 2019).

Earlier research by Ludban and Gitimu (2015) found that participants with consistent financial support exhibited better psychological well-being. For example, students living with their parents experience lower financial stress than those living independently. A study conducted by Hayes et al. (2017) concluded that economically stable students possess a greater capacity to manage their circumstances and exert control over various other external factors, thereby fostering positive psychological well-being. Ruswa and Gore (2021) concluded from their study in the South African context that most university students are financially supported by the National Student Financial Aid Scheme (NSFAS). These students usually have little additional financial support and could be considered academically, socially, emotionally, and psychologically vulnerable. In an earlier study, Coetzee (2016) argued that although students in South Africa could be supported financially by NSFAS, it did not, in all aspects, meet the financial reality of students' everyday living costs. Coetzee (2016) therefore concluded that students are often still challenged by food insecurity or a lack of personal and academic resources, despite being supported by NSFAS. Ruswa and Gore (2022) added a further aspect that affected the holistic well-being of students due to limited finances: the affordability of quality medical care. Due to financial constraints, the lack of high-quality health care was identified as a significant factor affecting students' academic success and holistic well-being.

2.3.3 Social well-being of students in higher education

Sections 2.3.3.1 to 2.3.3.2 below expand upon the social well-being of students in higher education, focusing on belongingness and loneliness

2.3.3.1 The importance of a sense of belonging and interaction involvement

Maslow's (1943) hierarchy of human motivation identifies five fundamental needs essential for individuals to thrive. These needs are arranged in ascending order, starting with the most basic physiological requirements: water, food, and sleep. Next in the hierarchy are safety needs, which emphasise the importance of a secure environment. Followed by interpersonal needs, which include the desire for belonging, love, and esteem, encompassing self-confidence, personal worth, self-respect, and the need to be respected by others. At the pinnacle of the hierarchy is self-actualisation, defined as the realisation of one's full potential (Maslow, 1943).

The relevance of Maslow's hierarchy, especially the aspect related to the sense of belonging, is particularly evident for undergraduate students at institutions of higher education. University students often feel a strong desire to connect and gain acceptance within the learning environment, particularly among classmates, lecturers, and peers (Hurtado et al., 2007; Peacock & Cowan, 2019). Peacock and Cowan (2019) observed that higher education settings provide students with opportunities for both collaborative engagement and socialisation. Interactions may be both formal and informal, which are perceived by students as being included and accepted in their environment. Feeling accepted and included fosters a sense of social belonging. Research by Gopalan et al. (2021) suggested that a stronger sense of belonging in an environment can be positively linked to improved well-being. The factors of social integration, acceptance, and actualisation are further underpinned in Keyes' (1998) social well-being theory.

Knifsend et al. (2020) claim there is a connection between interaction involvement in an individual's environment and their sense of belongingness. Interaction involvement refers to the level of an individual's participation in their social context, which, for the purpose of this current study, is considered the university or tertiary education environment. Frymier (2005) found that students who actively engage in classroom activities are more likely to respond to lecturers, ask questions when appropriate, and demonstrate attentiveness and awareness during teaching and learning activities.

Students who are actively involved in classroom activities benefit from more effective learning, heightened motivation, greater satisfaction with their educational experience, and improved academic outcomes. Moreover, Knifsend et al. (2020) found that students participating in various activities reported greater involvement and belonging, leading to lower levels of stress and anxiety during educational tasks. Carton and Goodboy (2015) concluded that students facing depression and stress in the learning environment encountered significant challenges in attention and responsiveness. Anxiety, in this context, was negatively associated with a learner's attentiveness, participation, and sense of belonging, therefore influencing their social well-being.

Dost and Smith (2023) found that a sense of belonging is supported not only on campus, through relationships with educators and peers, but also off campus, through support systems provided by spouses, partners, and children. Therefore, it can be concluded that the dynamics between students, their instructors, and their families play a crucial role in shaping students' perceptions of the tertiary learning environment. These interactions could improve their sense of belonging and positively affect their social and emotional well-being. The opposite can be said of students who experience rejection and poor support from their environments (Dost & Smith, 2023).

The relevance of the PERMA-V model is particularly evident in the relationships element, as students entering university are required to establish new connections with peers, lecturers, clinical supervisors, and support staff. These relationships are central to students' sense of belonging, social integration, and emotional security within the university environment. When students are unable to form meaningful social and academic connections, they may become vulnerable to loneliness, exclusion, and social isolation. Keyes's social well-being theory is therefore applicable as a supportive theoretical lens, particularly through the dimensions of social integration, social acceptance, and social contribution. Together, PERMA-V and Keyes's theory help explain how the absence or presence of supportive relationships influences students' psychosocial and emotional well-being, especially in relation to the social isolation and integration challenges experienced during the transition to higher education.

2.3.3.2 Loneliness and university students

De Jong-Gierveld (1987) described loneliness as an individual's psychological challenge related to maintaining social interactions and relationships. Prohaska et al.

(2020) defined loneliness as the feeling of being isolated from others or having fewer social interactions than one desires. The American Psychological Association (APA, 2020) defines loneliness as feeling socially isolated or alone, even when surrounded by others. The significance and context of loneliness experienced by students in higher education are expanded below.

While many students have opportunities to integrate into their new university environment, some experience feelings of exclusion and loneliness (Holzer et al., 2023; Thomas et al., 2020; Zahedi et al., 2022). The reason is that students relocate from their familiar family and social environment to an unfamiliar university setting. Long-standing relationships, family, and peers are left behind. The expectation is that new relationships will be established during the years of studying (Yung et al., 2021). However, students face changing learning and living environments, have to reconnect socially, and face academic pressure to overachieve, which can result in loneliness and isolation that affect their emotional and social well-being (Holzer et al., 2023).

Research by Thomas et al. (2020) and Zahedi et al. (2022) found that first-year students transitioning from high school to university initially experience loneliness, which typically decreases in subsequent years of their studies. According to Thomas et al. (2020), students who successfully establish friendships during their first year of study are at lower risk of feeling lonely in their senior years.

According to Ellard et al. (2023), loneliness harms a person's emotional and social well-being, which could lead to poor holistic well-being, which, in turn, could result in depression. Depression may lead to further withdrawal from social interactions, exacerbating feelings of loneliness. The study by Zahedi et al. (2022) highlighted that feelings of loneliness were often observed in students who smoked and lived in campus hostels compared to those who were non-smokers and lived at home. Furthermore, female students were identified as the group most frequently reporting feelings of loneliness. According to Böke et al. (2019), loneliness directly affects students' social and emotional well-being, ultimately leading to poor academic performance and unhealthy lifestyle choices such as alcohol consumption, smoking, and illicit drugs. Universities should therefore be attentive to students who are lonely or isolated, providing support to enhance their social and emotional well-being. A systematic review by Ellard et al. (2023) examined the interventions universities used to support students who feel lonely. These included group discussions and activities

designed to promote social connection. Ousman and Nazir (2023) claimed that lonely students could gain from peer support. Peer support could provide comfort and open-minded listening, without being judgmental. Additionally, lonely students should be encouraged to engage in physical activities by joining university sports clubs, taking up hobbies, or participating in campus social activities.

2.3.4 Emotional well-being of students in higher education

Morales-Rodríguez et al. (2020) state that it is essential to maintain cognitive, emotional, and behavioural equilibrium, as an imbalance in one sector may lead to a discrepancy in another. University students are challenged by the constant changes in their learning environment. Either internal or external factors pressure them to excel academically, plan for future employment, and develop personally, which may, in turn, influence their emotional well-being (Carreño-Flores et al., 2024). In a study by Estrada et al. (2021), a positive association was found between EI and learners' academic success. Earlier studies by Scherer (2007) proposed that the term "emotional intelligence" should be replaced with "emotional competence."

Section 2.3.4.1 below focuses on emotional competence in student well-being and the benefits thereof in higher education.

2.3.4.1 The role of emotional intelligence and emotional competence in student well-being

Mikolajczak et al. (2015) align with Scherer (2007) in positing that the concept of emotional competence (EC) is more fitting and pragmatic than the notion of emotional intelligence (EI), particularly because it can be developed and refined through education and experience. In contrast, EI is often viewed as an innate quality.

EI can be interpreted through two distinct frameworks: the Ability model and the Trait model. The Ability model defines EI as an individual's capacity to accurately assess and articulate emotions, tap into and generate emotional experiences, comprehend emotional nuances and knowledge, and effectively manage emotions to foster both emotional and intellectual development. This model emphasises the skills involved in understanding and responding to emotions in oneself and others, which can promote personal growth and interpersonal relationships.

Conversely, the Trait model characterises EI as a collection of emotional self-perceptions that exist at the fundamental levels of personality hierarchies (Henning et

al., 2018). This approach suggests that emotional competence is more about the inherent attributes and self-assessments of individuals regarding their emotional experiences than about their skills in navigating them.

Research indicates that emotional competence displays a positive correlation with positive feelings and a negative correlation with negative feelings. Accordingly, Henning et al. (2018) propose that, theoretically, higher levels of emotional competence are linked to reduced negative emotions and increased positive emotions. This relationship is critical because it can significantly enhance an individual's subjective well-being, contributing to their overall happiness and life satisfaction.

Regarding emotional competence, Henning et al. (2018) argue that individuals with high levels of emotional competence are likely to employ more adaptive strategies to cope with stress and regulate their emotions in challenging situations. These strategies are considered vital as they play a crucial role in determining a person's well-being.

To contextualise these findings within the realm of higher education, it is important to recognise that university students often encounter a range of stressful experiences throughout their academic journey. However, students who exhibit high emotional competence tend to use adaptive coping mechanisms and emotional regulation strategies effectively. By doing so, they are better equipped to maintain, sustain, or even enhance their subjective well-being despite the pressures and demands of their studies (Henning et al., 2018). With specific reference to the current study, EI as a coping strategy amongst students in dental training programmes will be discussed in section 2.7.1.

Section 2.4 below highlights literature available on the definitions, categories, and types of coping mechanisms employed by students in undergraduate studies.

2.4 Students' coping mechanisms in higher education

Coping was defined by Lazarus and Folkman (1984, p. 141) as "a constantly changing cognitive and behavioural effort to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person". Carver and Connor-Smith (2010, p. 685) defined coping as "the behavioural or cognitive response by an individual to assist in reducing or preventing stress…" Lazarus and Folkman (1984) categorised coping as problem-focused or emotion-focused. Kim and

McKenzie (2014) explain that problem-focused coping involves searching for information or assistance to address a problematic situation, while emotion-focused coping refers to expressing emotions and altering expectations or reactions. Hatunoglu (2020) defines adaptive coping as problem-focused coping with a positive long-term outcome. Emotion-focused coping involves blaming, venting, denying, avoiding problems, or discussing feelings with friends or family members. Hatunoglu (2020) describes emotion-focused coping as a non-adaptive strategy that may provide short-term relief but may have a negative effect on well-being. Another coping category is maladaptive coping. Maladaptive coping includes abuse of alcohol and drugs, and self-injury or harming others. Carver and Connor-Smith (2010) argued that emotion-focused coping is not always negative and can have a positive effect as a coping mechanism. On a more positive note, effective emotion-focused coping may assist in improved problem-focused coping. This is achieved by evoking positive emotions, which lead to a clear, calm mindset, allowing the individual to reflect on the situation.

While numerous coping mechanisms are available, Hatunoglu (2020) emphasised the importance of physical activities and echoed the findings of Donovan et al. (2017). According to Donovan et al. (2017), engaging in leisure activities is regarded as a beneficial coping strategy because it creates opportunities to form new connections. Hatunoglu (2020) further noted a positive correlation between the coping strategies employed by students and their resilience throughout their academic journey.

Sections 2.4.1 and 2.4.2 below discuss the various categories and coping mechanisms of students studying in undergraduate programmes

2.4.1 Problem-focused coping mechanisms

This section discusses problem-focused coping mechanisms, including positive life balance and self-care, physical exercise, leisure activities and hobbies, interaction with pets, as well as religion and spirituality.

2.4.1.1 Positive life balance and self-care

A study by Ehsan et al. (2024) among first-year students found that students' ability to practice self-care enhanced their coping with stressful work- and study-related environments. Self-care practices identified in the study of Ehsan et al. (2024) included being mindful of healthy diet options, getting enough sleep, taking part in exercise and

physical activities, avoiding risky substances, being aware of a sense of purpose, practising religion, spirituality, positive thinking, and engaging regularly in positive social interactions with family and peers. The study by Ehsan et al. (2024) concurs with previous studies by Hatunoglu (2020), Kim and McKenzie (2014), and Penedo and Dahn (2005).

2.4.1.2 Physical exercise

Physical activity plays a vital role in both the physical and mental health of individuals. A literature review by Penedo and Dahn (2005) on the effects of physical activity on college students found that students experienced reduced anxiety and depression when participating in physical activity. Additional benefits of physical exercise include improved fitness, stamina, strength, weight management, and the prevention of chronic lifestyle medical conditions such as high blood pressure. Physical activity, according to Molina-García et al. (2011), has a positive effect on an individual's overall well-being. A study by Kim and McKenzie (2014) examining the impact of physical exercise on stress, coping, and well-being of university students supported the findings of Molina-García et al. (2011) and Penedo and Dahn (2005). The results of the study conducted by Kim and McKenzie (2014) indicated that students who engaged in physical exercise and took time to relax experienced improved holistic well-being. Students frequently mention financial constraints and time limitations as significant barriers to their participation in physical exercise. This assertion is supported by research conducted by Henning et al. (2018), which found that students reported being unable to afford gym memberships due to financial constraints.

Additionally, the study revealed that students identified their academic workload and limited time as further obstacles to integrating physical activity into their daily routines. Rodríguez-Romo et al. (2022), in a more recent study investigating the impact of physical activity on the well-being of undergraduate students, found that students with mental health or well-being challenges were mostly leading inactive lifestyles. Rodríguez-Romo et al. (2022) differentiated among occupational physical activities, commuting physical activities (including walking and running), and leisure-type physical activities, and found that moderate occupational-type physical activities and high leisure-type physical activities, including commuting-type physical activities, best enhanced well-being. In contrast to the positive effects of physical activity, Davoren et

al. (2013) found that lower levels of physical activity were associated with improved mental health and well-being, particularly among male students.

2.4.1.3 Leisure activities and hobbies

Caldwell (2005) defines leisure as an intrinsically motivating and self-endorsed activity in a person's life, pursued for enjoyment, self-expression, and meaningful engagement. Leisure activities strengthen autonomy, improving social relationships and optimism (Hatunoglu, 2020). The aforementioned factors contribute to enhanced coping mechanisms for dealing with stress and improving personal well-being. Individuals who enjoy leisure activities often experience more positive emotions, which reinstate hope or self-esteem and act as a buffer against the negative effects of stress. Students who were physically active and had more leisure time applied effective coping mechanisms to stressors, displayed superior problem-solving strategies, and demonstrated proactive behaviour in problem-solving during stressful situations. Hatunoglu (2020, p. 1334) found that planned leisure, as a stress-coping method, is positively associated with "mastery-oriented goals" and successful time management, whereas the avoidant coping style is negatively associated with the achievement of mastery-oriented goals and successful time management. The benefits of leisurely activities, as concluded by Hatunoglu (2020), are associated with psychological well-being, as described by Ryff (1989).

2.4.1.4 Interaction with pets

Historically, the value of pets in enhancing human well-being has been highlighted by researchers such as Bossard (1944), Levinson (1962), and, more recently, Endries (2024). Pets that provide companionship, such as cats, dogs, and birds, can significantly aid well-being. Animal-Assisted Therapy (AAT) and Emotional Support Animals (ESA) are specialised animals trained to assist individuals under the guidance of professionals like psychologists.

Kamioka et al. (2014) noted that Animal-Assisted Interventions (AAIs) effectively reduce depression and anxiety in various patient groups, including children and cancer patients. In the context of higher education, Dell et al. (2015) noted that students often do not utilise available counselling services due to demanding schedules. They suggested that AAI could be an effective alternative for addressing students' well-being challenges.

Recent studies by Peel et al. (2023) and Howell et al. (2022) confirmed that animals positively impact students' learning and socialisation, contributing to their overall well-being. Chute et al. (2023) found that AAI helped students facing stress, anxiety, and feelings of isolation, including first-year students and those experiencing discrimination. They recommend that universities explore AAIs to alleviate stress and anxiety while considering the diverse needs of the student population.

2.4.1.5 Religion and spirituality

Ano and Vasconcelles (2005) state that spirituality and religiousness can serve as significant enablers of well-being, including those of students and staff in higher education. Religion serves as a coping mechanism, encompassing adaptive, problem-focused strategies. However, religious coping can lead to negative outcomes and may be comparable to maladaptive avoidant strategies like denial and blaming (Henning et al., 2018). Research by Krageloh et al. (2012) focused on university students and found that an individual's level of spirituality and religiousness influences how religion is used in conjunction with other coping strategies. Students experiencing high levels of stress might turn to religious coping methods, such as prayer and meditation, to confront their problems. Conversely, students with lower stress levels may rely on religious coping more as a form of avoidance. Positive religious coping includes seeking spiritual support, practising religious forgiveness, and engaging in collaborative religious practices. Negative religious coping strategies, however, involve underlying spiritual tensions that are maladaptive and potentially harmful. Such individuals may perceive challenges and stressors as punishment from God or as demonic influences, viewing stress as an act of the devil (Henning et al., 2018).

2.4.2 Maladaptive coping mechanisms

This section examines high-risk lifestyle behaviour as a maladaptive coping mechanism, focusing on how students in dental training programmes apply these mechanisms.

2.4.2.1 High-risk lifestyle behaviour

Patterson et al. (2004) reviewed literature on the effect of nicotine on college students' mental health and determined that there was a strong correlation between nicotine dependence and mood and anxiety disorders. Blanco et al. (2008) concluded from

their study that heavy alcohol abuse leads to risky behaviour amongst students, such as reckless driving, sexual assault or misconduct, and promiscuous behaviour. In a more recent systematic literature review by Florence et al. (2023), it was concluded that students' well-being was adversely affected by tobacco use, alcohol consumption, a sedentary lifestyle, poor dietary habits, and disrupted sleep patterns. The conclusion of the systematic literature review undertaken by Florence et al. (2023) therefore advises that universities take firm action to promote a healthy lifestyle and advocate for health promotion on campuses.

2.5 Student support structures in higher education

The literature reviewed in this study shows that both formal and informal support play important roles in students' well-being. Formal support provided by higher education institutions includes professionally trained counsellors, psychologists, faculty support, and mentoring programmes. Conversely, informal support comes from family members, spouses, life partners, siblings, and classmates. The following section will focus on the relevant literature on the support provided and its impact on student well-being.

2.5.1 Social support

Brown et al. (1987), as cited in Chao (2011), defined social support as the match between an individual's personal needs and the social resources available to meet those needs. In the context of students and their environment, social support ought to buffer the relationship between perceived stress and students' psychological well-being, and moderate and mediate this relationship through problem-focused coping strategies. Chao (2011) further claimed that students who reported poor social support experienced less positive psychological well-being and often engaged in less favourable or harmful activities. These activities included alcohol misuse, anti-social behaviour, sleep disorders, overall dissatisfaction with life, and self-harm ideation. Confirming the importance of support during the years of studying, research conducted by Basson and Rothman (2019), Diener and Seligman (2002), and Ludban and Gitimu (2015) confirmed that students with social support systems and social interactions exhibited greater psychological well-being compared to students with fewer social interactions and support structures. Participants in the study by Ludban and Gitimu (2015) reported that having someone to depend on during difficult times provided relief

and reduced stress. Chao (2011) emphasised that social support was one of the most critical factors contributing to students' well-being as they adjusted to university and campus life. Social support included family, friends, peers, and significant others. Studies by McIntyre et al. (2018) found that parental support can significantly improve students' well-being. Both studies mention that students who experience negative parental support and traumatic experiences face an increased risk of suffering from depression, anxiety, and engaging in self-harm. The systematic review conducted by Campbell et al. (2022) found that university students who experienced abuse or neglect during childhood are more vulnerable to mental health issues during their years of study. Considering the positive impact of parental support, Tus (2021) found that parental support, understanding, and a loving environment benefit university students' academic success. Tutor et al. (2020), cited in Dag-um et al. (2024), highlighted the vital role of parents with tertiary education qualifications as enablers. Parents play a crucial role in supporting their children and helping them realise the benefits of further education. A study conducted by Amoabea et al. (2020) examined the supportive role of mothers of female university students who balance studies while caring for their young children. The findings indicated that female students with children received significant support from their mothers, who assumed responsibility for caring for their grandchildren.

Additionally, Pretorius and Blaauw (2020) found that in the South African context, many students are the first generation in their families to attend university, often facing limited support from parents or other family members who may lack understanding of the demands and challenges of furthering higher education. Pretorius and Blaauw (2020) therefore emphasised the vital role of peer support in the South African higher education system, where students do not receive adequate support from parents or significant others.

2.5.1.1 Spousal support

Married students face the challenge of balancing academic responsibilities with family obligations (Freedman, 2019). Research by Dag-um et al. (2024) focused on the Coping mechanisms married students considered to manage and balance their studies and family life. The research by Amoabea et al. (2020) determined that female students pursuing further tertiary education and qualifications are traditionally tasked with multiple roles they have to fulfil over and above their academic demands, such as

being the caregiver to their families and extended families (in-laws), as well as taking the lead in household responsibilities and children. Although some female students in the study of Amoabea et al. (2020) reported occasionally receiving assistance from their spouses with household duties, the majority had to balance housekeeping and academic tasks without spousal support. Female students with children reported not trusting hired help and often considered asking their mothers to assist them with caring for their children while they were at university.

2.5.1.2 Lecturer support

The important role of the lecturer as a support person and contributor to the student's well-being has probably been overlooked in the past (Eloff et al., 2021). Research confirms that positive relations between lecturers and students can improve academic performance and students' sense of belonging (Bailey & Phillips, 2016).

Komarraju et al. (2010) concluded that more frequent positive professional discussions between lecturers and their students may contribute to the well-being of these students. These frequent professional interactions with lecturers included students contacting lecturers for face-to-face discussions, which allowed dialogue on issues of academic importance (Komarraju et al., 2010). In a study conducted by Eloff et al. (2021), the role of the lecturer in student well-being determined that the positive characteristics that foster discussions between lecturers and students are those who are typically sincere, act respectfully towards students, are available over and above formal scheduled lecture time, and those who are experts in their subjects, can transfer the knowledge to their students, are reasonable with regards to workload, are well organised and structured in their presentations, as well as having a positive work attitude, contributing to positive student well-being.

2.5.1.3 Peer support

Although the definition of peer support has not been clarified, Pointon-Haas et al. (2023) reported that peer support in higher education can be characterised by students assisting one another. This peer support is provided by students to other students who have experienced similar situations or are currently in similar situations. Peer support may be informal or formal. Informal support occurs when people in similar situations within the same environment who face the same challenges support each other without it being an organised effort (Guliver & Byrom, 2014). Formal peer support is

planned activities to bring together people who live and experience similar challenges. Peer mentoring can be considered as a more senior student assisting a junior student (Pointon-Haas et al., 2023).

Therefore, to address the increasing demand for professional well-being services at universities, Pointon-Haas et al. (2023) recommended exploring the value of peer support in student well-being. However, it is important to note that the literature review by Pointon-Haas et al. (2023) determined that results from several studies were inconclusive regarding the impact of peer support on student well-being. Although the value of peer support for well-being is inconclusive, the literature review suggests that peer learning is effective in reducing anxiety, while peer mentoring helps to lower stress levels among students.

The study by Coetzee (2016) may point towards a more positive contribution of peer support than the literature review by Pointon-Haas et al. (2023), as Coetzee (2016) determined that, although hesitant at the start, students preferred discussing their issues with fellow student supporters rather than with qualified well-being staff.

2.6 Factors that influence the well-being of dental students

This section focuses on factors that influence the well-being of students in dental training environments. When referring to students in dental education programmes, the literature on dental, dental hygiene (oral hygiene) and dental therapy students is included. The motivation for including literature on three programmes in dental training was the scarcity of studies focusing on the well-being of oral hygiene students, as well as the similarities in the learning and teaching environment (Harris et al., 2017).

Stress is defined as the occurrence of an event or situation that surpasses an individual's perceived capacity to manage external pressures (Palmer & Cooper, 2013). The characteristics of dental education may serve as a significant source of stress for undergraduate students enrolled in dental programmes. Numerous studies have indicated that students pursuing dental education experience higher levels of stress compared to the general population (Alhajj et al., 2018; Anushri et al., 2017; Stormon & Christopher, 2020). The initial evidence of stress among dental students was reported by Moore (1962), followed by research conducted by Davis (1989), Grandy et al. (1984), and Lloyd and Muster (1985). Multiple research studies by Abu-Ghazaleh et al. (2011), Al-Sowygh (2013), Alzahem et al. (2011), Dewan et al. (2022),

Gordon et al. (2016), Harris et al. (2017), Humphris et al. (2002), and Wilson et al. (2015) have confirmed that dental undergraduate students face various stressors. These stressors may lead to adverse outcomes such as depression, anxiety, sleep disturbances, eating disorders, and substance abuse. In a recent study by Rotaru et al. (2024), dental students were most anxious when situations directly affected their self-image, which in turn influenced their well-being. Rotaru et al. (2024), however, determined that if dental students are repeatedly exposed to similar stressors in their learning environment, the negative impact thereof becomes less over time. Bhayat and Madiba (2017), within the South African context, determined that dental students experience higher stress levels and exhibit increased rates of depression, obsessive-compulsive behaviours, and interpersonal sensitivity compared to age-matched peers not engaged in dental studies. The stressors most often mentioned by Bhayat and Madiba (2017) were fear of failing assessments, not being able to complete expected tasks, anxiety about feedback on completed work, and financial responsibilities incurred by their studies.

Due to the similar theoretical, preclinical, and clinical training environments (Ebbeling et al., 2008), oral hygiene students may be positioned in a similarly stressful educational environment to undergraduate dental students. Oral hygiene students are exposed to a substantial and comparable theoretical workload, combined with early exposure to pre-clinical training and subsequent clinical sessions involving patient treatment (Ebbeling et al., 2008). Consequently, they experience similar clinical demands regarding patient and procedure quotas, time constraints, and scarce resources as dental students.

The various categories of stressors that students studying to become dental professionals experience during their years of study are discussed in sections 2.6.1 to 2.6.5 below, within the parameters of the domains identified by Al-Omari (2005) and Alzahem et al. (2011).

Al-Omari (2005) identified the perceived sources of stressors that dental, oral hygiene, and dental technology students experience in the following domains: the students' living environment, personal factors, the educational environment, academic work, and pre-clinical and clinical factors. Similarly, Alzahem et al. (2011) determined that the stressors faced by dental students can be divided into five primary domains, namely: accommodation, the teaching and learning environment, personal factors,

academic performance, and clinical sessions. The discussion that follows will focus on each of the five domains mentioned by Al-Omari (2005) and Alzahem et al. (2011).

2.6.1 Accommodation and living arrangements

A study by Harikiran et al. (2012) determined that students residing in campus residences experienced more stress than those living at home. Students mentioned that the lack of homeliness in campus residences and not having enough time and opportunities for recreational activities contributed to their stress levels. Students entering university for the first time reportedly found it challenging to establish new friendships, which affected their social well-being (Holzer et al., 2023; Yung et al., 2021).

Oral hygiene students reported that moving away from home, followed by unfamiliar and challenging living environments, was among the highest contributing stress factors (Al-Omari, 2005). The research findings by Al-Omari (2005) can be explained by the challenges students often experience when moving away from home, such as adapting to and coping with the increased responsibilities of independent living. Harris et al. (2018), who conducted a similar study to Al-Omari (2005) and included dental hygiene and dental therapy students, concluded, however, that living accommodations during their years of study were not perceived as particularly stressful.

2.6.2 The learning environment

Results from the literature review, which examined various factors within the learning environment that influence the well-being of students in dental training programmes, highlighted several key aspects. These include the physical and structural characteristics of the facilities and buildings, the clinical environment, the availability of resources, and overcrowding within teaching and learning spaces. Furthermore, occupational discrimination against oral hygiene students, the transition from pre-clinical laboratories to the clinical setting, providing treatment to patients, and receiving feedback were noted as stressors affecting well-being. Assessment policies driven by quotas rather than competency-based evaluations were also identified as significant stressors impacting students' well-being in the dental training environment. The subsequent paragraphs further explore the factors in the learning environment that affect student well-being.

2.6.2.1 Resource scarcity

Haden et al. (2006) identified three critical spheres that significantly influence students' learning experience: the physical learning environment, the contextual factors within which learning occurs, and the prevailing culture of the learning environment. Haden et al. (2006) argue that these three factors directly affect how the curriculum is delivered to students and shape the expectations that lecturers and students hold of one another. Similarly, Bhayat and Madiba (2018) found that students' perceptions of their learning environment are influenced by physical infrastructure, the nature of clinical activities, accompanying supervision, and the overall atmosphere created by individuals within that environment.

Deeb et al. (2018) indicate that dental and oral hygiene students face various challenges throughout their educational journey, which may expose them to negative emotional states. Some of these challenges are entrenched in the educational environment within dental schools, including limited training resources, a lack of clinical and pre-clinical laboratory space, a shortage of dental materials, and a scarcity of human resources. The aforementioned is primarily due to the high number of students admitted into dental programmes (Deeb et al., 2018; Oderinu et al., 2024; Pyle et al., 2006). The overutilisation of faculty resources contributes to a detrimental learning environment, affecting the well-being of students. Notably, the excessive demand placed on human resources, such as lecturers and clinical supervisors, poses significant challenges to the effective transfer of knowledge and skills to students (Pyle et al., 2006). In the South African context, research conducted by Pillay and Moodley (2023) amongst dental therapy and oral hygiene students concurs with the studies by Deeb et al. (2018) and Pyle et al. (2006) that, due to dental faculties allowing increased student numbers into the dental programmes, it decreases the clinical experiences and opportunities of students.

When viewed through the lens of psychosocial and positive psychology, the factors within the learning environment serve not only as external stressors but also as influences on fundamental aspects of psychological and social well-being. For instance, resource scarcity can diminish students' sense of environmental mastery and competence, as they may feel unable to meet clinical requirements despite their best efforts. Additionally, inconsistent or unsupportive feedback can undermine a student's feelings of autonomy, self-acceptance, and confidence. Overcrowded clinics,

unequal access to patient care, and interprofessional discrimination can hinder social cohesion and foster uncertainty regarding fairness and individual progress, ultimately impacting self-esteem. Therefore, the dental learning environment shapes not only students' actions but also their perceptions of clinical competence, mastery, belonging, and future professional identity.

2.6.2.2 Occupational discrimination in the learning environment

Hopcraft et al. (2008) stated that, historically, dental students and dentists have discriminated against oral hygiene students and qualified oral hygienists. According to Brame et al. (2015), dental schools do not always integrate students from the various dental programmes. This results in undergraduate dental and oral hygiene students lacking the necessary insight and understanding of each other's curricula, the depth of training, and the scope of practice of each dental profession. Research conducted by Reinders et al. (2017) revealed that dental students perceived oral hygiene students as equivalent to dental assistants and being merely there to assist, support, or serve them. Oral hygiene students in the same research study lacked information to interpret the integrated role in functions between the oral hygiene scope of practice and the dentist's scope of practice. Oral hygiene students perceived themselves as functioning independently of the dentist during their training and once qualified. Recent research by Henesey et al. (2024) aligns with Reinders et al. (2017) in its findings regarding dental and oral hygiene students' opinions and perceptions of their professions and scope of practice. Kersbergen et al. (2019) stated that due to this misinterpretation and being ill-informed about the scope of oral hygienists, dental students, once qualified, perform clinical services that should and could be performed by oral hygienists. Ultimately, this results in the underutilisation of the oral hygiene scope of practice. Considering the above, Reinders et al. (2017) advised dental training schools to combine the training of dental and oral hygiene students, as such collaborative and integrated learning may resolve the problem of role and task confusion identified in the research conducted by Henesey et al. (2024) and Reinders et al. (2017). The collaborative and integrated learning mentioned by Reinders et al. (2017) was further investigated by Henesey et al. (2024). Collaborative and integrated learning is defined as interprofessional learning, which entails students from two or more dental training programmes working and learning together to ultimately provide quality patient care (Henesey et al., 2024). Although the concept of collaborative and

integrated learning is a novel idea (Henesey et al., 2024), the authors found that although oral hygiene students were mostly positive about this learning initiative, dental students were less interested in collaboration.

2.6.2.3 Study level and stressors

Research results confirm that perceived stress increases as dental students progress to their senior years (Alhajj et al., 2018; Harikiran et al., 2012; Kamdar, 2018). The specific stressor mentioned by students in Gambetta-Tessini et al.'s (2013) study was the transition from pre-clinical to more senior clinical years, when students are expected to provide and manage patient care. Similar findings were reported by Anushri et al. (2014), who found that senior students providing clinical treatment to patients contributed to higher stress levels**.** Lugassy et al.'s (2025) results concur with those of Anushri et al. (2014) and Gambetta-Tessini et al. (2013), indicating that students in their fifth and sixth years of training experienced considerable stress due to the increased complexity of treatment procedures they had to perform on patients. In the same study by Lugassy et al. (2025), fourth-year students found pre-clinical sessions to be the most stressful during manual skills training, affecting their overall well-being.

2.6.2.4 Assessment policies

Harikiran et al. (2012) advocate reviewing dental school assessment methods, emphasising the need to prioritise the quality of students' work over the quantity of procedures completed. Preoteasa et al. (2016) found that regular assessments during pre-clinical years are significant stressors, leading to a decline in dental students' well-being as the academic demands increase. Their study further determined that students tend to experience heightened stress and fatigue during assessment periods. Their research demonstrated that students who start the semester with higher well-being are more inclined to maintain their academic achievements.

2.6.2.5 Academic performance

International studies conducted with undergraduate dental students have identified examinations and the pursuit of academic excellence as significant contributors to stress (Harikiran et al., 2012; Uraz et al., 2013). These findings align with systematic reviews, which consistently confirm that writing examinations and assessments, the grades obtained, workload, and patient care are among the primary factors causing

stress in individuals pursuing dental programmes (Harris et al., 2017). An earlier systematic literature review conducted by Elani et al. (2014) revealed that dental students experience considerable stress throughout their training. The stressors identified are predominantly associated with both academic and clinical challenges.

Oral hygiene students mentioned the demanding course workload as a major contributing factor to stress and to the inability to catch up on work should they fall behind for any reason (Gordon et al., 2016; Harris et al., 2017; Olson et al., 2019). In a study conducted by Pascoe et al. (2020), oral hygiene students reported that the greatest burden was the responsibility for completing tasks, which aligns with the study by Harris et al. (2017) on high-level stressors in dental hygiene programmes.

The clinical aspect and associated challenges are discussed in sections 2.6.2.6 and 2.6.2.7 below.

2.6.2.6 Pre-clinical and clinical sessions

Dental students in their junior years of study are introduced to the technical skills they should acquire through pre-clinical training in skills laboratories. Alshamrani and Alshalan (2021) reported that students enrolled in dental training programmes perceive the acquisition and assessment of pre-clinical skills as a significant source of stress. Stressors included challenging pre-clinical and clinical training, mastering complex technical skills, concerns regarding self-efficacy, and the atmosphere within pre-clinical and clinical facilities, including unsatisfactory interactions with clinical supervisors during feedback sessions (Divaris et al., 2008; Harikiran et al., 2012; Paudel et al., 2013). Uraz et al. (2013) recognised that a significant factor influencing the well-being of dental students was the insufficient time allocated to complete clinical work. In more recent research, Jowkar et al. (2020) concurred with earlier studies by Harikiran et al. (2012), Paudel et al. (2013), and Uraz et al. (2013) that the clinical environment can contribute to the stress undergraduate dental students experience during their studies.

Factors contributing to these clinical stressors included difficulties in sourcing patients for specific clinical procedures and patients arriving late for scheduled sessions. Such delays adversely affected students' time management, while patients failing to attend appointments resulted in lost clinical time, ultimately impacting their clinical quotas and skills development (Jowkar et al., 2020). A literature review by Mary et al. (2023)

corroborated the above findings and revealed that students commonly identified the clinical environment and patient management as primary stressor-inducing factors during their training. From a South African perspective, research by Bhayat and Madiba (2017) revealed that students experienced considerable stress during the transition from pre-clinical to clinical environments, particularly with respect to administering local anaesthetics and performing restorative procedures. With specific reference to oral hygiene students, Olson et al. (2019) reported that entering the clinical environment and progressing from pre-clinical to clinical activities with patients contributed to significant stress. Olson et al. (2019) concluded that clinical-associated stress decreases with more senior years of study.

Literature reviews often report the important role of feedback from clinical supervisors in pre-clinical or skills laboratories, or in clinics during patient treatment. The following section focuses on the effect of feedback on students' well-being.

2.6.2.7 Pre-clinical and clinical feedback

Ebbeling et al. (2018) determined that feedback from clinical supervisors and lecturers significantly contributes to stressors in the learning environment. When clinical supervisors focused solely on pointing out students' mistakes without suggesting how to improve, students experienced negative emotions that harmed their well-being. Additionally, negative feedback made by clinical supervisors in the presence of their patients and peers, as well as the inconsistent application of assessment criteria, added to students' stress. Students preferred discreet feedback that provided clear guidance on how to correct their mistakes away from patients and peers. Students further emphasised the importance of clinical supervisors understanding each student's individual nature. Ajjawi and Boud (2018) emphasised the importance of encouraging students to seek feedback and actively participate in discussions, pointing out that clinical supervisors and lecturers should be mindful of how their feedback may affect a student's emotional well-being. Therefore, clinical supervisors are reminded to allocate enough time for meaningful feedback conversations with students (Ajjawi & Boud, 2018). Additionally, Ebbeling et al. (2018) determined that students often felt uncomfortable, scared, and embarrassed during pre-clinical and clinical sessions, which hindered their ability to ask questions or seek help. This was attributed to some clinical supervisors and lecturers having a demeanour that was

perceived as unapproachable, rendering the feedback process unproductive and ineffective.

This discussion is important for the current study because feedback is both an educational and a psychosocial encounter. Constructive feedback may strengthen students' environmental mastery, self-efficacy, and sense of growth, whereas public, inconsistent, or unclear feedback may undermine confidence, heighten anxiety, and reduce students' willingness to seek help. Emotional competence is therefore central to understanding how students interpret, process, and respond to clinical feedback. Students who can regulate emotional reactions, reflect on criticism, and seek clarification may be better placed to use feedback as a learning resource; however, this individual capacity must also be supported by respectful supervisory practices and a psychologically safe clinical environment.

2.6.3 Personal factors

Alzahem et al. (2011) determined that ongoing stress in the dental education environment is concerning, as it affects individuals' holistic well-being. The long-term effect of persistent stress is burnout, which Maslach et al. (1996) defined as a combination of emotional exhaustion, depersonalisation, and a reduced sense of personal achievement. Deeb et al. (2018) and Gorter et al. (2008) specifically highlighted the risk of burnout and determined that it is not exclusive to qualified dentists but has become more apparent among undergraduate dental students. In addition, it has been reported that dental and dental hygiene students exhibit depression and suicidal ideation. Research by Gorter (2005) concluded that dental hygienists faced a higher risk of burnout compared to other professions. The high burnout rate among practising oral hygienists could be attributed to demanding patients, time restrictions when working on patients, and limited support in the clinical environment (Barnard et al., 2020). Deeb et al. (2018) found that nearly half of oral hygiene and dental students reported experiencing burnout. Due to the workload inherent in health care training, students are more vulnerable to burnout syndrome, and it has been confirmed that suicidal thoughts among dental and oral hygiene students were linked to a lack of personal achievement (Deeb et al., 2018). These findings of Deeb et al. (2018) concur with earlier findings by Gorter (2005) and are important for addressing chronic stress in dental and dental hygiene students. The stressors most often cited include a heavy workload, peer competition, peer pressure,

fear of making mistakes during patient treatment sessions, frustration brought on by the curriculum, limited family time, and insufficient rest. Such stressors can result in sleep disturbances, a decline in academic performance, difficulties concentrating in class, risky behaviour, depression, dysfunctional social relationships, and poor physical health (Costa et al., 2014). With reference to oral hygiene students, it was determined that third-year dental hygiene students scored highly in the domain of "personal factors" that contribute to stress (Al-Omari, 2005). Factors identified as particularly stressful included inadequate relaxation time due to fewer holidays, suggesting they lacked sufficient time to relax and unwind (Al-Omari, 2005). This is supported by a study on oral hygiene students, which determined that a lack of relaxation time contributed to their stress (Olson et al., 2019). However, the study by Harris et al. (2018) stands in contrast to Al-Omari (2005) and Olson et al. (2019), as oral hygiene students reported that personal factors did not significantly contribute to their stress levels.

A study conducted by Barnard et al. (2020) noted that oral hygiene students do not receive the necessary guidance on how to practice self-care and manage stress during their studies, which has an impact once they are qualified. Barnard et al. (2020) advise that training institutions incorporate stress management competencies into their curricula, as this could prevent burnout and well-being challenges of qualified oral hygienists. This concurs with the recommendations of Carreño-Flores et al. (2024) that emotional education should be included in university curricula.

2.6.4 Gender

The research conducted by Anushri et al. (2014) established a significant disparity in stress scores between male and female students, with female students exhibiting higher stress levels than their male counterparts. Consequently, this difference suggests that psychological well-being is considerably higher among males in comparison to females. In contrast, the study by Al-Omari (2005) did not reveal a significant difference in how male and female students experienced stressors; however, it did confirm that females reported higher levels of stress than their male peers. The stressors identified by female participants included short vacation periods, examinations, uncertainty regarding future career paths, and criticism in the workplace (Al-Omari, 2005). The prevalence of significant stressors perceived by students raises concerns, as female students may experience greater pressure to succeed compared

to their male counterparts (Al-Omari, 2005). Furthermore, the findings of Preoteasa et al. (2016) indicated that female dental students experienced a more pronounced decline in well-being throughout the semester compared to male students, who demonstrated more stable well-being.

2.6.5 Future work perspective

Research conducted by Costa et al. (2014) determined that students' well-being was influenced by their career expectations. Students who had little or no career aspirations for the future, those who did not enjoy the course or programme, and those who reported feeling stressed were mostly associated with well-being challenges. A study by Paudel et al. (2013) found that third-year dental students reported the greatest uncertainty about their future before and after graduation. Concern for their future became less of a stress-bearing factor during their fourth year and towards their final year of study. Paudel et al. (2013) reason that their results can be interpreted against the backdrop that senior students are gaining more self-confidence and therefore, the future becomes less stressful (Paudel et al., 2013).

2.7 Coping mechanisms employed by students in dental training professions

According to Kowalczuk et al. (2021), suitable coping mechanisms can help reduce the effects of stressors experienced by an individual. Considering the stressors that undergraduate students in dental training programmes experience, it is essential to identify the coping mechanisms dental and oral hygiene students most often apply. In the South African context, a study by Bhayat and Madiba (2017) found that most students in dental training programmes experienced moderate to severe stress. Ford (2021) determined that oral hygiene students reported disturbed sleeping patterns and nightmares, indigestion issues, and eating disorders due to stressors associated with their years of study. While Knipe et al. (2018) suggest that students should be encouraged to identify stressors and be able to apply positive coping mechanisms, they should also know when and how to seek professional help.

Sections 2.7.1 to 2.7.4 below focus on the coping mechanisms students apply during their studies.

2.7.1 Emotional intelligence as a coping strategy amongst students in dental training programmes

More than a decade ago, Salovey and Mayer (1990) introduced the concept of EI, defining it as a form of social intelligence that encompasses an individual's capacity to monitor their own emotions and those of others, and to use this information to influence behaviour in specific contexts. They subsequently refined the definition of EI to encompass the following elements: the ability to perceive, appraise, and express emotions accurately; the capacity to access and generate emotions that facilitate cognitive processes; the understanding of emotional concepts and knowledge; and the ability to regulate emotions to foster emotional and intellectual growth (Mayer & Salovey, 1997, p.10).

Stern et al. (2005) further characterise EI as the ability to assess and manage one's own emotions, as well as those of others. They identified four fundamental elements of EI: the first element is self-awareness, which entails an individual's recognition of their current emotional state and its impact on those around them. The second element, self-management, refers to the capacity to regulate behaviour by reflecting before taking action or expressing emotions. The third element is social awareness, which involves an understanding and empathy for others' emotions and situations. Lastly, the fourth element, relationships, pertains to how individuals manage emotions in their interactions with others.

The significance of EI in dental training programmes is underscored by the findings of Pau et al. (2004), who concluded that dental students exhibiting higher EI scores demonstrated superior coping skills compared to their counterparts with lower scores. Students with diminished EI often resort to health-damaging behaviours, such as anger and frustration, to cope with stress. This deficit may adversely affect how dental students engage with their patients and the quality of care they provide. Consequently, Pau et al. (2004) highlight the necessity of cultivating EI as a problem-oriented coping strategy for students in dental programs.

Recent research conducted by Partido et al. (2020) explored the relationship between EI and the professional conduct of oral hygiene students in a training environment. Their findings revealed a significant correlation between EI and professionalism, with the majority of students demonstrating moderate levels in both domains. Based on

these results, Partido et al. (2020) advocate integrating EI into the broader curriculum, suggesting that this approach may enhance students' professionalism and improve the quality of their clinical experiences, rather than focusing solely on meeting quotas.

2.7.2 Relaxation and leisure activities

This section discusses various relaxation and leisure activities that could improve the well-being of undergraduate students in dental degree programmes. Several leisure and relaxation activities are worth considering, as they may benefit students' well-being. However, research on students studying in dental health professions indicates that participants often find it challenging to engage in leisure pursuits due to long hours in lectures and clinics, academic demands extending into the evening, a heavy coursework load, limited opportunities for socialising, and financial constraints (Alshamrani & Alshalan, 2021; Van Merriënboer & Sweller, 2005). A study by Jenkins et al. (2019) found that students who participate in hobbies and relaxation activities tend to experience better work-life balance and enhanced overall well-being compared to their peers who do not. Research by Dewan et al. (2022) found that dental students mostly engaged in social interactions and turned to hobbies as coping mechanisms. A small number of students sought professional help to address their well-being issues. One reason why dental students may hesitate to seek professional well-being assistance is that such support is considered taboo or unacceptable in many religions, cultures, and societies (Dewan et al., 2022).

2.7.3 Physical exercise

The advantages of exercise for undergraduate dental students and dental professionals are significant, as functioning effectively in the dental environment necessitates physical endurance, flexibility, and coordination—all of which can be improved through regular physical activity (Kamdar, 2018). However, Harrison et al. (2016) discovered that students enrolled in dental training programs often do not engage in adequate exercise. Given that dental professionals frequently experience musculoskeletal stress, incorporating aerobic exercises, relaxation techniques, and muscle-strengthening activities is crucial as preventive measures (Kamdar, 2018). Oral hygiene students reported experiencing stress-related health issues such as headaches, muscle pain, back pain, and neck pain (Ford, 2021). Therefore, it could be useful for students in dental training programmes to consider practising yoga for

relaxation, as it provides the added benefit of exercise. Yoga can be defined as a practice rooted in ancient Indian disciplines that comprises physical postures, breathing techniques, and meditation, as well as ethical principles aimed at creating holistic well-being. Yoga integrates the body, mind, and spirit and strives to enhance physical, mental, and spiritual well-being. In recent years, several studies have focused on the role of yoga in contributing to the well-being and academic performance of students in higher education (Narragatti et al., 2023). In the context of training undergraduate students in dental programmes, the study by Alire et al. (2020) is relevant as it investigated the value of yoga as a leisure activity to promote the holistic well-being of oral hygiene students. Results indicated that, after following a yoga programme, oral hygiene students showed improved emotional, behavioural, and physical well-being and reported better social connections. Furthermore, participating in the yoga programme improved their posture, which could prevent pain and discomfort caused by ergonomic challenges associated with the oral hygiene occupation. Oral hygiene students who participated in the research reported increased mindfulness and emotional awareness, which contributed to their holistic well-being (Alire et al., 2020; Narragatti et al., 2023).

2.7.4 Coping and lifestyle behaviour

Research conducted by Anushri et al. (2014) found that students who ate breakfast at the start of the day and those who exercised exhibited lower stress levels. Similar results were found by Peltzer and Pengpid (2017) in their study on the health and psychological benefits of healthy lifestyle habits such as eating breakfast, which concurred with the results of Anushri (2014).

Students presenting with higher levels of stress had reported smoking and consuming alcohol as coping mechanisms. This is confirmed by the study of Sugiura et al. (2005), which concluded that it is crucial to advise dental students to change their poor lifestyle habits and specifically emphasise the health risks of smoking. Other stress-reduction and coping techniques observed in the study by Paudel et al. (2013) included watching movies at home or in cinemas, sleeping, talking to friends and family, and engaging in physical activities. Gambetta-Tessini et al. (2013) identified that dental students predominantly utilised positive adaptive coping strategies. These included seeking social support, maintaining a positive outlook on experiences, and accepting their

circumstances. In contrast, the use of maladaptive coping mechanisms, such as alcohol abuse and taking illegal drugs, was observed to a lesser extent.

2.8 Psychosocial and emotional well-being of students during COVID-19

This section addresses student well-being during the COVID-19 pandemic, particularly focusing on students in dental training programmes who, according to literature, usually experience high stress during their training (Alzahem et al., 2011; Deeb et al., 2018; Gordon et al, 2016; Harris et al., 2017; Wilson et al., 2015). The impact of the COVID-19 pandemic on oral health students is therefore noteworthy, as this study commenced during the pandemic.

The first case of the coronavirus was documented on February 26, 2020, leading to the WHO declaring a pandemic on March 11, 2020. South Africa implemented a strict lockdown policy from March 26, classified as “Alert Level 5,” followed by “Alert Level 4” and “Alert Level 3,” which included closing all academic institutions.

Challenges for students in South African higher education included the cancellation of all campus activities and the closure of campus accommodation. This decision by higher education institutions resulted in students having to return to their family homes, irrespective of where they originated. All students and staff had to transition to online teaching and learning. Research conducted by Eloff (2021) and Visser and Law-van Wyk (2021) revealed significant negative impacts on students' well-being across various dimensions during lockdown. Students reported feelings of isolation and stress, alongside issues like food insecurity, safety risks, and exposure to violence.

2.8.1 Impact of COVID-19 on students following dental training programmes

Akinkugbe et al. (2021) focused on the impact of COVID-19 on the well-being of dental and oral hygiene students, specifically the abrupt interruption of teaching and learning activities.

The first factor which impacted students was the global shutdown of all dental training institutions. In their study, Akinkugbe et al. (2021) noted that the rapid shift from face-to-face teaching to unfamiliar online platforms posed challenges for both students and lecturers, many of whom lacked experience or lacked resources. Iosif et al. (2021) determined that students experienced difficulties with online learning due to unfamiliarity with the technology. However, Hung et al. (2020) determined that most dental students felt comfortable adapting to the online delivery mode of lectures. Their

concern, however, was that they were not convinced the online lectures were of the best standard.

2.8.1.1 Lack of pre-clinical and clinical training

Due to the discontinuation of all pre-clinical and clinical activities, students in dental training programmes expressed concerns about their ability to complete their studies, master clinical skills, and take their final dental board exam (Garcia et al., 2021; Hung et al., 2020; Van Doren et al., 2020).

Research conducted by Iosif et al. (2021) supports the findings of Garcia et al. (2021) and Van Doren et al. (2020), indicating that the greatest concern reported by dental students was the lack of opportunities to practice their clinical skills. Iosif et al. (2021) noted that there are no substitutes for clinical training in dentistry; compulsory hands-on training is essential for developing manual dexterity and fine motor skills needed to master the expected clinical competencies.

2.8.1.2 Psychological implications of disrupted clinical training

From a positive psychology perspective, the suspension or delay of pre-clinical and clinical training during the COVID-19 pandemic posed a direct threat to students' self-efficacy. In dental and oral hygiene education, confidence develops through repeated practice, constructive feedback, correction, and gradual mastery of fine motor and patient-care skills.

When these learning opportunities were removed or delayed, students may have become less confident in their competence as future practitioners. The disruption, therefore, affected more than technical skills development; it also had implications for psychological well-being, particularly students' sense of environmental mastery, autonomy, purpose, and personal growth.

2.8.1.3 Mental health well-being during COVID-19

Students have reported feeling a lack of control over important issues in their lives and struggling to cope with the high demands of their studies, leading to feelings of anger, depression, and stress (Hung et al., 2020). Students expressed anxiety about post-pandemic uncertainties, with concerns about housing and family safety during COVID-19 (Yildirim & Atas, 2021). Social isolation was highlighted, with some students reporting feelings of loneliness, and junior students expressing more concerns about

well-being than seniors (Hung et al., 2020). Stress levels varied by year, with final-year students experiencing higher stress due to limited clinical opportunities and pandemic-related fears (Akinkugbe et al., 2021; Yildirim & Atas, 2021). Alrashed et al. (2021) found that 34 per cent of students were affected by COVID-19, leading to sleep issues, depression, and hopelessness. Overall, the challenges for dental training students have intensified during the pandemic (Hung et al., 2020).

2.8.2 The South African perspective of COVID-19 on students in dental training programmes

Studies in South Africa examining dental and oral hygiene students highlighted the psychosocial effects of the national lockdown and their shift to online learning (Basson et al., 2022; Moodley et al., 2022). Basson et al. (2022) determined that parents, friends, and social media were key support structures, while challenges included heavy workloads, household responsibilities, and maintaining part-time jobs. Moodley et al. (2022) reported similar findings regarding students transitioning from campus to their family homes and taking on additional chores. Financially, junior students primarily relied on NSFAS and managed during the lockdown, with a few facing food security issues. Given the high-risk nature of dental work, students expressed fears of contracting COVID-19 and potentially endangering their families, aligning with international research by Garcia et al. (2021), Hung et al. (2020), and Yildirim and Atas (2021).

Dental and oral hygiene students in the study by Basson et al. (2022) reported feeling depressed, fearful, restless, and angry, which concurred with the studies of Eloff (2021) and Visser and Law-van Wyk (2021). Online learning challenges included adapting to and working with new technologies without formal training, scarce technological resources, and a lack of data. In the study by Moodley et al. (2022), students indicated that although they coped with new learning technologies, they preferred synchronised online lectures and demonstrations to asynchronous learning, as they did not always grasp the content presented in online lectures. Senior students reported feeling anxious about losing valuable clinical time. South African studies concur with international studies by Garcia et al. (2021), Hung et al. (2020), and Van Doren et al. (2020), which reported concerns about the loss of clinical time. Although dental and oral hygiene students reported being faced with daily challenges, as mentioned above, during the COVID-19 national lockdown, the majority of students

reported that they could at least continue studying online (Basson et al., 2022; Moodley et al., 2022).

2.9 Synthesis of the literature and research gaps

The literature reviewed in this chapter shows that student well-being has been widely discussed in higher education and dental education. International and South African studies consistently identify academic workload, transition, finances, accommodation, social isolation, support structures, clinical demands, feedback, and coping as important influences on students' well-being. However, the evidence base is uneven. Much of the literature focuses on stress, distress, anxiety, depression, or burnout, while fewer studies examine well-being as a positive, multidimensional, and psychosocial phenomenon.

A first gap is that oral hygiene students remain underrepresented in the literature when compared with dental students. Dental students' experiences are better documented, but oral hygiene students occupy a distinct position in dental education, with their own scope of practice, professional identity, clinical expectations, and experiences of recognition or marginalisation. Consequently, evidence from dental students cannot simply be transferred to oral hygiene students without critical consideration.

A second gap concerns the South African context. South African studies point to important contextual issues such as financial insecurity, dependence on NSFAS, accommodation concerns, language, transport, unequal access to resources, and the continuing effects of social and educational inequality. Nevertheless, limited research has explored how oral hygiene students themselves describe the psychological, social, and emotional dimensions of well-being within these local realities.

A third gap is methodological. Several studies on dental and oral hygiene students rely on quantitative surveys that measure stressors, burnout, or mental health indicators. While these studies are valuable, they offer limited insight into how students make sense of well-being, interpret their experiences, and identify the resources that enable them to cope and flourish. A qualitative approach is therefore needed to understand students' perceptions in depth.

A fourth gap relates to the theoretical framing of well-being. Existing dental education literature often lists clinical and academic stressors without consistently linking them to psychological, social, and emotional well-being concepts. This study addresses that

gap by using a psychosocial and positive psychology orientation to examine how oral hygiene students understand well-being in relation to belonging, coping, confidence, emotional competence, environmental mastery, and flourishing.

Taken together, these gaps justify the current study. The study contributes by foregrounding oral hygiene students' own perceptions of psychological, social, and emotional well-being within a South African dental faculty, while also considering how the COVID-19 period shaped their educational and psychosocial experiences.

2.10 Summary

Chapter 2 presented relevant literature on well-being to frame and address the primary research question. The discussion began with various definitions of well-being; however, a universally accepted definition remains elusive. Two broad categories of well-being, hedonia and eudaimonia, were identified, highlighting the differences between the two concepts. The discussion continued to contextualise well-being in the current study, identifying three types relevant to this research: psychological, social, and emotional well-being. Each type was explored in terms of its origins, definitions, components, and everyday functions.

The literature review further examined students' well-being in tertiary education environments and the factors that may influence it, particularly the challenges faced by dental faculty students. Key factors identified included academic concerns, living arrangements, the learning environment, and financial issues. The review continued by surveying existing research on the well-being of oral hygiene students and concluded that the body of research in this area is limited. To address the secondary questions, the focus shifted to literature providing insights into the coping and support mechanisms that students, in general, and those in dental training programmes specifically, use to navigate various challenges with resilience, ultimately striving to achieve their goals.

This research project commenced during the COVID-19 lockdown, which led to all institutions of higher education entering lockdown. As a result, all face-to-face and campus activities were discontinued indefinitely. Campuses and faculties were evacuated, and online teaching commenced. Therefore, this literature review included the impact of the lockdown on students' well-being during and after the pandemic.

2.11 Conclusion

In Chapter 2, the literature review revealed that definitions of well-being are often ambiguous, and the broader classification of well-being categories should not always be treated as distinct entities. Additionally, the review aimed to present research findings relevant to the current study, which explores the psychosocial and emotional well-being of oral hygiene students at a South African university. The existing literature provides insights into the typical challenges students face when transitioning to higher education, as well as the unique obstacles encountered in dental education settings. Furthermore, the review emphasised the Coping mechanisms students utilise to manage well-being challenges throughout their academic journey, particularly among dental undergraduate students. This literature review laid the groundwork for addressing the primary research question and its associated sub-questions.

Chapter 3 discusses the conceptual framework and theories related to this study, including the origin, development and progress of the Oral hygiene occupation.

CHAPTER 3

THE CONCEPTUAL FRAMEWORK

3.1 Introduction

Chapter 2 reviewed the literature to define and categorise the concept of well-being. Furthermore, the factors that affect students' well-being in higher education programmes were outlined, with specific reference to students enrolled in an oral hygiene programme. The discussion continued with a focus on the coping mechanisms students apply to navigate challenges during their university years.

Chapter 3 presents the conceptual framework underpinning this study. The PERMA-V framework, situated within positive psychology and positive education, was selected as the primary lens for understanding the psychosocial and emotional well-being of oral hygiene students. Its value lies in its integrative structure, which enables key dimensions of well-being—positive emotions, engagement, relationships, meaning, accomplishment, and vitality—to be examined within the academic, clinical, and social contexts of oral hygiene education. Complementary theories, including Ryff's psychological well-being model, Keyes' social well-being theory, self-determination theory, the broaden-and-build theory, and hope theory, are used selectively to clarify specific aspects of autonomy, belonging, resilience, coping, and goal-directed behaviour. These theories, therefore, strengthen, rather than compete with, PERMA-V as the organising conceptual foundation of the study.

3.2 Defining the conceptual framework

According to Ravitch and Riggan (2016), the conceptual framework serves as a map for researchers to follow during their study, providing guidance on how the study contributes new information to a specific research domain. Ravitch and Riggan (2016, p. 153) view the conceptual framework as a "…visual representation of a study's main theoretical tenets or concepts…" This framework is presented as a visual representation, such as a map or schema, that indicates the most important concepts of the study and their relationships, using arrows as directional indicators. Miles et al. (2018) argue that the conceptual framework is adaptable throughout the study and may be modified as the researcher's insights deepen.

3.3 Theories and models strengthening the conceptual framework

This study utilised and examined various theories, approaches, models, and concepts to establish a conceptual framework deemed most appropriate for investigating the factors that influence perceptions of and the impact on the psychosocial and emotional well-being of students pursuing oral hygiene at a South African university.

The literature review on well-being reveals that researchers have recognised and explored several theoretical perspectives. Notable theories include those proposed by Ryff (1989), Keyes (1998), Seligman (2002), and Fredrickson (2004). These theories can be divided into two main approaches: the hedonic perspective, which emphasises the pleasurable aspects of life, and the eudaimonic perspective, which focuses on living a good and meaningful life (Butler & Kern, 2016).

The relevant theories of well-being in this study are Ryff's psychological well-being theory (1989), Keyes's (1998) Social well-being theory, Seligman's PERMA model (2002), and PERMA-V (2014), Fredrickson's broaden-and-build theory of positive emotions (2004), and Snyder's Hope Theory. The fundamentals of each of these theories are outlined in the section below, along with their significance to higher education and the current study.

3.3.1 Psychological well-being model

Ryff (1989) developed the Psychological Well-being Scales, which include the following elements of positive functioning: self-acceptance, positive relations with others, personal growth, purpose in life, environmental mastery, and autonomy.

Sections 3.3.1.1 to 3.3.1.6 below explain and contextualise the significance of each of the aforementioned elements to the current study.

3.3.1.1 Self-acceptance

Self-acceptance refers to a person’s ability to recognise their strengths and weaknesses, reach their full potential, and avoid blaming others (Hijrianti & Taqiyah, 2024). According to Hurlock (2002), self-accepting individuals respect themselves and others, have realistic expectations, and manage their emotions effectively during challenging situations.

These qualities are vital for oral hygienists, who are ethically required to treat patients with respect and be aware of the socioeconomic and biophysical factors that affect

patient care. They also need to maintain emotional well-being in patient-clinician relationships and their work environment. Fostering these traits should begin in tertiary education.

3.3.1.2 Positive relationships

Positive relationships are fundamental to Ryff's (1989) concept. Oral health care professionals must engage constructively with their patients, colleagues and communities in which they function. Attributes emphasised by the faculty and university for oral hygiene graduates include professionalism, responsibility, and accountability, particularly in inter-professional settings. Graduates are expected to communicate effectively with individuals, communities, and other professionals, sharing information accurately. Collaboration with other professionals is essential for improving oral health across various populations. Developing soft skills is crucial and should be integrated into the oral hygiene curriculum.

3.3.1.3 Personal growth

Personal growth involves an individual's development towards self-actualisation and heightened self-awareness, particularly in a university setting. It helps students recognise their values, strengths, and limitations (Tan & Andriessen, 2021). This growth encompasses skill development, knowledge acquisition, and participation in relevant activities such as placements, community service, and research (Kim & Ra, 2020). For oral hygiene students, personal growth means learning and applying new theoretical knowledge to practical skills during their studies. These skills include intra-personal and interpersonal skills, as well as skills directly related to the oral hygiene profession. In their senior years, students engage in community outreach and observe various dental practices, enhancing their understanding of diverse practices, beliefs and customs. This experience aids their social interactions and their ability to cope with challenges in different environments.

3.3.1.4 Purpose in life

Purpose in life, as defined by Ryff (1989), involves setting both long- and short-term goals that provide guidance and a sense of meaning. Research indicates that university students with a strong sense of purpose are more likely to persevere in achieving their goals (Hill et al., 2016). These students tend to perform better academically and maintain positive social interactions compared to those lacking

purpose (Pfund et al., 2021). In the context of this study, having a sense of purpose is crucial for students in the oral hygiene program, as it helps them establish clear goals for their future, such as enhancing their lives by obtaining a qualification and pursuing further education.

In the context of the current study, a sense of purpose in life is essential, as it provides students with a clear direction and fosters goal achievement. Most students entering the oral hygiene programme have clear long- and short-term goals, such as improving their own and their families' lives once qualified. Some qualifications may lead to better work opportunities, while others consider undergraduate studies as a stepping stone to further postgraduate studies.

3.3.1.5 Environmental mastery

Achieving environmental mastery means the ability to adapt to new and challenging circumstances, transforming them into positive experiences. Individuals with strong environmental mastery remain unaffected by changes and feel confident in their ability to succeed (Chakraborty et al., 2018).

For oral hygiene students, this concept is vital as they encounter unfamiliar and challenging settings from their first year onward. They must transition from theoretical knowledge to practical skills in pre-clinical and clinical environments, which includes patient communication and decision-making (Koole et al., 2014). Mastering these challenges prepares them for professional relationships and adaptability in their future careers and the communities they serve.

3.3.1.6 Autonomy

Autonomy refers to an internal locus of control, in which individuals prioritise their internal needs over external demands from society or the work environment (Cullen & Oppenheimer, 2024). In education, autonomy allows students to make decisions about their learning, including assessment types, deadlines, and resources. For oral hygiene students, this means participating in academic year planning, engaging in curriculum discussions, and contributing to faculty committees. They should also have a voice in pre-clinical and clinical feedback sessions and logistical planning for clinical rotations. Ntoumanis et al. (2021) found that an autonomous learning environment can lead to improved academic performance, reduced anxiety, and better overall health.

3.3.2 Social well-being theory

Keyes' (1998) model of social well-being outlines five fundamental components essential to understanding the social dimensions of individual wellness: social integration, social estrangement, social acceptance, social contribution, and social actualisation. These components are expanded upon in sections 3.3.2.1 to 3.3.2.5 below.

3.3.2.1 Social integration

Social integration refers to the degree and quality of an individual's connections with the wider community or society in which they live. This element emphasises not only the number of relationships a person forms but also the depth of those relationships, assessing how well individuals connect with others who share similar values, beliefs, and experiences. The extent to which individuals feel included and accepted within their social circles plays a crucial role in their social well-being.

3.3.2.2 Social estrangement

Social estrangement refers to circumstances in which an individual perceives a significant disconnect or alienation from the society or community that they are expected to navigate. This can occur due to various factors such as socioeconomic status, cultural differences, or personal experiences that make one feel isolated or marginalised. The feeling of estrangement can lead to increased mental health challenges and a reduced sense of belonging. Understanding these feelings is essential for addressing broader social issues.

3.3.2.3 Social acceptance

Social acceptance embodies an individual's willingness to trust others and demonstrate kindness, which facilitates the nurturing of meaningful relationships within their community. This component demonstrates openness to engaging with diverse individuals and groups, fostering a supportive environment that enhances social cohesion. The ability to accept and connect with others also plays a vital role in building community resilience and positive social interactions.

3.3.2.4 Social contribution

Social contribution evaluates how individuals perceive their own value to society. Those who regard their contributions as significant often feel a deep sense of

belonging and purpose within their community. This aspect underscores the importance of individuals recognising their unique skills and abilities that can benefit others, thereby enhancing their psychological well-being. When individuals believe they are actively making a difference, it reinforces their identity as integral members of their social network.

3.3.2.5 Social actualisation

Social actualisation involves assessing potential and future trajectories of society, reflecting on possibilities for growth and improvement within the community. In conjunction with this, social coherence pertains to an individual's perception of the structure, quality, and organisation of their social environment, providing insight into how individuals interpret their community's functionality. Keyes (1998, p. 123) posits that these various components of social well-being can be viewed either as obstacles or as assets that contribute to one's overall social health. The interpretation of these components is significantly shaped by the circumstances and societal context in which an individual finds themselves at any given time. Understanding this dynamic can inform strategies to enhance social well-being and address societal challenges (Keyes, 1998).

The significance of social well-being in higher education is underscored by the challenges students face as they transition from school environments to university life. As these learners often find themselves distanced from their parents, families, and longstanding childhood friendships, they may have difficulty establishing new social connections within an unfamiliar context. Additionally, social estrangement can arise when students, confronted with both social and academic pressures, opt to withdraw from their peers, thereby exacerbating their sense of isolation (Leite et al., 2025; Morule et al., 2023; Wahid et al.,2023)

3.3.3 PERMA model of well-being

Seligman (2011), the founder of the PERMA model of well-being, proposed five elements of well-being: positive emotion, engagement, relationships, meaning and purpose, and accomplishment. The first element, positive emotions, refers to feeling good and may contribute to better work performance, improved health, the formation of supportive relationships, and a sense of hope and positivity about the future. Engagement refers to the state in which an individual is involved, attached, and deeply

focused on a specific task. The activity may be work-related or a leisure activity, such as a hobby. The individual becomes so immersed in the activity that the sense of time and the self become immaterial. Relationships refer to the basic human need to be accepted, loved, and included in groups and societies. Therefore, it is human nature to form meaningful connections with other people, such as family and friends, to fulfil the need to belong. Meaning and purpose imply that humans need a sense of purpose and therefore want to devote time to others by participating in community activities, investing time to improve their environment, and engaging in religious activities. Accomplishment implies that each human being needs to feel they have achieved a specific goal in life. This accomplishment provides a sense of achievement to the individual (Seligman, 2011). It is important to note that there are similarities between the PERMA model of Seligman and components of Maslow's (1943) hierarchy of needs, such as the need to establish relationships that demonstrate the need to belong and to be acknowledged by others, to have purpose in life, and goal achievement, which could be related to self-actualisation.

The five building blocks of the PERMA model of well-being can also be considered the building blocks for flourishing. Flourishing can be described as circumstances in which people experience positive emotions and demonstrate positive psychological functioning and positive social functioning, all within an optimal range of human functioning. Flourishing individuals generally experience positive affective and effective functioning, which is associated with positive well-being and positive mental health (Huppert & So, 2013).

A sixth component, vitality (V), was added to the PERMA model in 2014 by Emiliya Zhivotovskaya and, from here onwards, is referred to as the PERMA-V model. The vitality component prioritises physical health through proper nutrition, adequate sleep, and regular exercise, recognising that physical energy is foundational for mental and emotional well-being.

3.3.3.1 Contextualising the PERMA-V model to higher education and oral hygiene training

The PERMA-V model of well-being can be applied to the higher education environment, as expanded upon in sections 3.3.3.1.1 to 3.3.3.1.4 below.

3.3.3.1.1 Positive emotions

Elements that enhance positive emotions among learners in higher education include being accepted by fellow students and instructors, which fosters a sense of belonging, and feeling safe and secure in the learning environment (Kovich et al., 2023). These aspects can be linked to fundamental human needs as outlined in Maslow's hierarchy, such as the desire to feel safe, loved, and accepted (Maslow, 1943).

In the context of the current study, students entering university may have difficulty adapting to their new environment (Leite et al., 2025; Morule et al., 2023; Scribner et al., 2020). Entering the new learning environment, oral hygiene students should feel a sense of belonging on campus, acceptance by their peers and other undergraduate students, and safety on campus and in campus residences. Research by Gopalan et al. (2021) suggested that a stronger sense of belonging in an environment can be positively linked to improved well-being.

3.3.3.1.2 Engagement

When considering the element of engagement in higher education, several factors are crucial for promoting students' well-being, including engaging with coursework, focusing fully, achieving a state of flow while working on academic assignments, and engaging with peers. Providing support and guidance to fellow students, as well as participating in extracurricular activities and events, can be important factors in students' full engagement within the academic and campus environment (Kovich et al., 2023). The state of engagement as an oral hygiene student may require that students become deeply and fully focused on acquiring pre-clinical and clinical skills, the critical application of theory during procedures, completing treatments on patients, as well as completing assessments and assignments without interruptions.

3.3.3.1.3 Relationships

In the academic environment, professional relationships with faculty members, clinical staff, clinical supervisors, lecturers, and peers are considered important (Pointon-Haas et al., 2023). As Eloff et al. (2021) noted, the importance of lecturer support should not be underestimated or neglected. Such lecturers, who are experts in their fields of instruction, are considered supporters who contribute to the well-being of students (Eloff et al., 2021). In the context of the current study, maintaining positive relationships with lecturers, clinical supervisors, and peers is important for the well-being of oral

hygiene students. Lecturers and clinical supervisors provide substantial support in acquiring theoretical knowledge and clinical skills, and contribute to students' well-being. Although academic relationships are important as described in the preceding section, positive relationships with family, friends, siblings, and spouses can also be valuable (Chao, 2011; McIntyre et al., 2018; Tus, 2021).

3.3.3.1.4 Meaning

Meaning refers to the tertiary learning environment where students experience what actually contributes to the meaning of their lives. What provides meaning in life is considered eudaimonia. Examples include participating in community projects and delivering service to those in need. In addition, meaning in life for students includes participation in extracurricular activities such as cultural events, enjoying social interactions with peers, and attending occasions.

The essence of the oral hygiene profession is to enable and serve individuals and communities toward improved oral health through a holistic care perspective. Assisting communities in achieving optimal holistic health should foster a sense of meaning in life for these students. Oral hygiene students during their years of training are involved in numerous community outreach projects, which include oral hygiene and prevention by means of providing information, education, and clinical services to a wide range of groups, to mention only a few, such as geriatric care facilities, early childhood development centres, special needs schools, and patients with life-threatening conditions.

3.3.3.1.5 Accomplishment

Accomplishment in the tertiary educational environment is linked to academic excellence, high marks, and the selection of challenging, highly acclaimed, and prestigious degree programmes (Kovich et al., 2023). As noted by Bailey and Phillips (2016), lecturer support can positively influence students' academic achievement and sense of belonging. Academic achievement and a sense of belonging can be nurtured by lecturers who exhibit noble characteristics and contribute to their students' academic accomplishment and overall well-being (Eloff et al., 2021).

In the context of the current study, accomplishment in the oral hygiene programme is not defined exclusively by academic acclaim and clinical skill. Achievement in the oral hygiene programme is also reflected in the way students present themselves

professionally when interacting with lecturers, clinical supervisors, peers, patients, and the various communities they serve. Accomplishment refers to the ability to make autonomous and clinically responsible decisions. Furthermore, achievement in the oral hygiene programme can be measured against the criteria of the university's graduate attributes and the HPCSA.

3.3.3.1.6 Vitality

Vitality encompasses students' sense of energy, health, and restfulness, as well as their capacity to engage meaningfully in the learning process. In the context of oral hygiene education, vitality assumes particular significance, as students are tasked with managing academic workloads, clinical sessions, patient care, travel challenges, assessments, and personal responsibilities. Fatigue, inadequate rest, and prolonged pressure can diminish students' ability to participate actively, cope effectively, and respond constructively to feedback. Thus, incorporating vitality into the educational framework strengthens the connection among well-being, the demands of clinical training, and students' potential to thrive throughout their academic journey.

3.3.4 Broaden-and-build theory

The broaden-and-build theory originated in research by Isen (2001), who found that individuals who experience positive emotions most of the time likely have different thought patterns than those who experience negative emotions most of the time. Fredrickson (2004) agreed with Isen (2001) and confirmed that individuals with mostly positive experiences were more creative, had flexible reasoning skills, exhibited a greater ability to integrate thoughts, and were cognitively better prepared to accept new information and inspire a person to take action and display a broader spectrum of behavioural options. The opposite was observed in individuals who mostly experience negative emotions (Fredrickson, 2004). Hence, the broaden-and-build theory posits that broadening an individual's thought processes creates opportunities to acquire new skills and resources that contribute to overall well-being.

A positive aspect of the broaden-and-build theory is the undo hypothesis. This undo hypothesis claims that even though an individual might have had numerous negative experiences in the past, if followed by consistent or consecutive positive emotional experiences, it may cancel out the negative experiences. Conversely, if the individual consistently has negative experiences, it may affect not only their psychological well-

being but also their physical health. The potentially harmful effects of negative emotions may be corrected by exposing the individual to positive experiences.

The broaden-and-build theory refers to the ability to cope with and continue experiencing positive emotions during periods of negative experiences, which is a form of resilience. Coping mechanisms of resilient individuals include maintaining their sense of humour during challenging times, taking time for self-care, being creative, and practising positive thinking. These coping mechanisms cultivate hope for the future, allowing the person to be satisfied with their circumstances and to continue enjoying life. Therefore, resilient people cultivate positive emotions within themselves and may nurture resilience in others. Finding the positive in negative experiences may have an accumulative effect on well-being, contributing to resilience and enhancing an individual's emotional well-being. Fredrickson (2004, p. 1374) states that "...broadening people's mindsets and building their enduring resources can alleviate human languishing and seed human flourishing."

3.4.1 Broaden-and-build theory applied to the tertiary learning environment

Li et al. (2020) discovered that students operating in high-demand, stressful academic environments can benefit from maintaining positive emotions. Their findings align with the broaden-and-build theory, which posits that positive emotions promote well-being and enable students to adapt to and manage the challenges they encounter throughout their academic journey, ultimately demonstrating resilience. In a recent study by Kaunaite and Harris (2025), which focused on resilience among undergraduate dental and oral hygiene students, various contributors and barriers were identified. Key contributors included viewing challenging situations as opportunities for growth, fostering a positive mindset, understanding that mistakes do not equate to failures, and valuing peer support and shared goals, such as obtaining their degrees and qualifications. Conversely, factors that posed challenges to resilience in dental training encompassed inconsistencies in feedback and guidance from clinical supervisors during clinical sessions, stress associated with commuting to campus, online lectures, and an imbalance between academic responsibilities and personal life. The study by Kaunaite and Harris (2025) identified several factors that can enhance or foster resilience in undergraduate dental students: maintaining a healthy lifestyle, ensuring adequate sleep, engaging in spirituality (which includes prayer and meditation), practising effective time management, allocating time for

breaks, mindfulness, and nurturing healthy relationships. In relation to the current study, it is crucial to recognise the significance of developing resilience during the undergraduate years of dental training programs and to integrate this focus into the current curriculum (Kaunaite & Harris, 2025).

3.3.5 Self-determination theory

The self-determination theory, developed by Edward Deci and Richard Ryan, is based primarily on humanistic theories (Legault, 2017). According to humanistic theories, individuals spontaneously strive to improve themselves by engaging in unexplored experiences and seeking to satisfy their desires, needs, and interests. According to self-determination theory, individuals are not merely manipulated by their environment but can choose how to respond to situations in their immediate environment, thereby satisfying their needs (Deci & Ryan, 1985). The environment may promote or prevent the individual's urge to grow, develop, and become motivated to the extent that it meets the individual's basic psychological needs. The basic psychological needs are autonomy, relatedness, and competence. In the context of self-determination, the theory of autonomy concerns individuals' ability to decide on and perform their own actions. This is similar to the element of autonomy Ryff refers to in the psychological well-being model. Legault (2017) indicated that the self-determination theory, developed by Deci and Ryan (1985), serves as a metatheory of human motivation and personality development, a compilation of several theories of motivation and functioning. The first theory within self-determination theory is the cognitive evaluation theory, followed by the organismic integration theory, the causality orientations theory, and the basic psychological needs theory. For this study, the self-determination theory will be folded into the PERMA-V model.

3.3.6 Hope theory

Snyder et al. (1991, p. 287) define hope as a positive motivational state based on an "…interactively derived sense of successful (a) agency (goal-directed energy), and (b) pathways (planning to meet goals) …" Initially, hope was seen as the achievement of an individual's goals. Snyder, the founder of hope theory, argues that there is much more to hope than simply fulfilling goals (Snyder et al., 2002). Research by Snyder et al. (2002) aimed to explore the complexity of goal achievement and hope and found that participants often mentioned goal-oriented thought pathways and intervention.

Therefore, hope in life is a way of thinking, a cognitive process. Hopeful thoughts involve the belief that one can find pathways to achieve desired goals and are motivated to utilise these pathways (Snyder et al., 2002). These cognitive pathways reflect individuals' ability to create possible and realistic routes to reach set goals. Usually, more than one line of thinking is implemented to achieve a goal. During this process, internal motivation plays a key role. Without motivation, an individual may choose not to pursue the goal. Nonetheless, certain conditions support goal achievement, whether short- or long-term. These include the goal being important enough to occupy one's thoughts for an extended period, being realistically achievable, and involving some degree of uncertainty in its achievement. Hope exists in achieving goals when interim successes can be achieved. Individuals with high levels of hope tend to be more creative in devising pathways to reach their goals and often develop multiple alternative strategies (Irving et al.,1998).

Although Snyder et al. (2002) emphasised the cognitive aspect of the hope theory, it is important to recognise that emotional factors are also linked to the cognitive process. Farran et al. (1995) explained that emotions could act as a driving force behind maintaining hope, even in seemingly desperate or challenging situations. Egan et al. (2008), who considered the hope theory in education, noted that successful goal achievement often results in positive emotions, whereas failure leads to negative emotions. Reasons for goal failure may include an individual's inability to generate alternative cognitive pathways or a lack of problem-solving skills. Such an inability may lead to negative emotions, which can reduce well-being. Conversely, research by Baumgartner et al. (2008) claims that negative emotions can significantly influence goal-directed behaviour.

3.6.1 Hope theory in the educational context

According to Snyder et al. (1995), as cited in Egan et al. (2008), hope can be reinforced by positive feedback loops or diminished by negative feedback loops. Positive feedback loops occur when goal-oriented individuals recognise various ways to achieve their goals and choose the most suitable option. Achieving a goal in this context strengthens self-belief, motivating the individual to pursue subsequent goals. Conversely, negative feedback loops occur when discouraging feedback diminishes motivation and hampers progress.

In educational settings, teachers, lecturers, and supervisors are encouraged to remember the power of encouragement, which could inspire students to achieve their goals. Conversely, a single negative comment can place a student into a downward spiral of negative feedback, potentially undermining motivation, reducing the chances of achieving goals, and affecting overall well-being. Therefore, educators must be aware of the profound influence that positive encouragement and negative feedback can have on student motivation and well-being.

Contextualising the hope theory in the current study, it is essential to consider the findings of Ebbeling et al. (2018), who reported that one of the primary stressors in dental training is the feedback students receive from clinical supervisors. During feedback sessions, the clinical supervisor often provides only negative feedback and no encouragement. Negative feedback places the student in a negative feedback loop, leaving them with no hope for the future and ultimately harming their well-being. Ajjawi and Boud (2018) request that clinical supervisors be thoughtful about the manner in which they provide feedback to students. The demeanour of the clinical supervisor may significantly impact the student's well-being and often determines whether the student has hope.

3.3.7 The primary theory underpinning the study

After an extensive review of positive psychology theories and concepts, the PERMA-V framework was selected as the overarching framework for interpreting students' perceptions of well-being. The PERMA-V model is adopted as it accommodates students' experiences of positive emotion, engagement, relationships, meaning, accomplishment, and vitality. These dimensions provide a coherent structure for exploring how oral hygiene students understand and experience well-being within a demanding clinical learning environment.

Where theories had similar foundational elements, they are merged into the PERMA-V theoretical model. A brief explanation follows to provide the motivation for considering each as a supporting theory in this study: Self-determination theory aids in understanding, and learning helps in the interpretation of how the learning environment supports or constrains students' autonomy, competence, and relatedness, while the broaden-and-build theory facilitates the interpretation of coping, resilience, and feedback-related experiences. Snyder's hope theory is incorporated as

a supporting perspective. Notably, Ryff's concepts of psychological well-being include several elements that overlap with Seligman's PERMA-V theory. As a result, Ryff's theory is encapsulated within the PERMA-V framework; while it is referenced briefly, it is not treated as a separate or parallel model. Instead, it is integrated into the PERMA-V discussion, particularly in areas concerning meaning, relationships, accomplishment, autonomy, and personal growth. The supporting theories perform specific analytical functions. Broaden-and-build theory helps explain how positive emotions, encouragement, supportive feedback and coping strategies may broaden students' perspectives and build resilience over time.

3.4 Well-being through the lens of positive psychology

The following section highlights the various definitions of positive psychology, followed by a comprehensive discussion of its origins. This section outlines the philosophical underpinnings that support positive psychology. Additionally, the theory of virtue and its relevance to the field of oral hygiene, which operates within established ethical principles and guidelines, is examined in greater detail. Furthermore, the role of positive psychology in education is elucidated, along with an explanation of why this study was contextualised within this framework.

3.4.1 Definitions of positive psychology

The literature offers numerous definitions of positive psychology; therefore, only a few are quoted.

Gable and Haidt (2005) defined positive psychology as the study of circumstances and incidents that contribute to the flourishing or optimal functioning of individuals, within groups or institutions. While Duckworth et al. (2005, p. 630) defined positive psychology as the study of "…positive experiences, positive individual characteristics and the institutions that facilitate their development…". Seligman (2010) described positive psychology as complementing traditional psychology and focusing on an accomplished life. Seligman (2010), during the Tanner Lectures in October 2010, states that the goal of positive psychology is to develop mediations that provide enabling conditions, rather than simply interventions that reduce unhappiness. Biswas-Diener et al. (2011) referred to positive psychology as the study of human flourishing, while Linley et al. (2006, p. 6) defined positive psychology as the "…scientific study of optimal human functioning…" At the meta-psychological level,

the aim is to amend the imbalance in psychological research and practice by focusing on the positive aspects of human functioning and experience, instead of the negative. At the pragmatic level, the focus is on the sources of processes and strategies which lead to positive outcomes.

3.4.2 Origins of positive psychology

Although positive psychology may be perceived as a contemporary or novel approach, various philosophical traditions—such as utilitarianism, virtue ethics, hedonism, and eudaimonic philosophy—have referenced the concept of positive well-being in their works, with roots tracing back to Aristotle (Lambert et al., 2015). While positive psychology has a historical foundation, it has only recently received the interest and recognition it deserves. The aforementioned is largely due to researchers' lack of interest in framing their work within the realm of positive psychology (Snyder & Lopez, 2002).

3.4.3 Philosophies of positive psychology

There are four basic philosophies of positive psychology. The eudaimonia philosophy concerns an individual's well-functioning, and the hedonic philosophy concerns the pleasure an individual experiences. Both the eudaimonic and the hedonic philosophies were discussed in detail in Chapter 2. The Virtue philosophy focuses on building character strengths and abilities of the individual, while the Utilitarian philosophy focuses on social relationships and positive organisations (Lambert et al., 2015). Due to the relevance of the Utilitarian and Virtue philosophies to this study, a brief discussion follows in sections 3.4.3.1 and 3.4.3.2 below.

3.4.3.1 Theory of utilitarian tradition

Utilitarian philosophies of Jeremy Bentham (1748 – 1832) and John Mill (1806 – 1873) focused on the “greatest happiness for the greatest number” (Lambert et al., 2015, p. 311). Translating the utilitarian philosophy into positive psychology implies that happiness should be capitalised on, or experienced to the maximum, within groups of situated people. The utilitarian view is supported by the thinking of positive psychologists such as Seligman and Csikszentmihalyi (2001). Both Seligman and Csikszentmihalyi emphasise the importance of positive well-being within institutions where large numbers of individuals are grouped, such as corporate institutions (Lambert et al., 2015).

3.4.3.2 Theory of virtue

The origins of the Virtue philosophy proposed that an individual's typical personality strengths should be developed to sustain and cultivate happiness. Such individuals benefit from positive experiences and enjoy life. The Virtue philosophy is associated with Aristotle's concept of "virtues as traits", which characterises the "good person living the good life" (Lambert et al., 2015, p. 312). Peterson and Seligman (2004) proposed the Virtue in Action (VIA) model. The purpose of the VIA model was to balance the focus on negative or pathological well-being with an emphasis on what makes an individual flourish. The six main virtues included wisdom and knowledge, courage, humanity, justice, temperance, and transcendence. Each of these virtues included positive characteristic strengths as indicated in Table 3.1 below (Peterson & Seligman, 2004). Seligman (2011) states that although the above virtue characteristics have been challenged, research confirms that intensifying and developing an individual's strengths and abilities contribute to life contentment and enhance the frame of mind of those with negative well-being challenges (Vázquez & Chaves, 2016).

The theory of Virtue is important to the current study and is contextualised in Table 3.1 below.

Table 3.1

VIA Virtues and Character Strengths Relevant to Oral Hygiene Education and Practice

Elements of the Theory of Virtue	Ideal character strengths of oral hygienists	Relevance to the study
Wisdom and knowledge	Includes creativity, curiosity, critical thinking, passion to learn, counselling others, and having a perspective on issues.	Institutional graduate attribute: Critical thinking Scope of practice of an oral hygienist Counselling patients on health behaviours such as smoking cessation, diet, and oral health-promoting strategies

Elements of the Theory of Virtue	Ideal character strengths of oral hygienists	Relevance to the study
Courage	To be brave, speak the truth, and persevere in passion for life.	Occupation guided by HPCSA Ethics Speaking the truth Do no harm
Humanity	Kindness towards others, close relationships, and social intelligence.	Occupation guided by HPCSA Ethics Beneficence Institutional graduate attribute Collaboration
Justice	Being fair towards individuals and groups, treating each the same, taking leadership in groups and communities and following through with such activities, being loyal in the work environment, and in other interpersonal relationships.	Institutional graduate attribute Advocacy Taking leadership positions in communities Collaboration
Temperament	Being modest about achievements, applying self-regulation, and being able to forgive others.	Institutional graduate attribute Professionalism Supports professionalism, emotional regulation, appropriate responses to criticism, careful clinical judgement and respectful conduct in academic and clinical settings.
Transcendence	Excellence Quality	Institutional graduate attribute Communication with patients and colleagues Acknowledging the skills and excellence of colleagues. Supports meaning, hope, gratitude, appreciation for professional excellence, and resilience during academic,

Elements of the Theory of Virtue	Ideal character strengths of oral hygienists	Relevance to the study
		clinical, and community-based learning experiences.

Note. Table 3.1 represents the virtues and character strengths relevant to oral hygiene education and practice, which were sourced from the university yearbook of the research site and the expected graduate attributes of oral hygienists qualifying from the institution, referring to professionalism, critical thinking, and ethical professional conduct.

3.4.4 Positive psychology interventions

Positive psychology interventions primarily focus on the positive functions of a positive system and are developed to advance well-being rather than to repair what has contributed to psychological unwellness (Parks & Biswas-Diener, 2013). Research conducted by Emmons and McCullough (2003), Lyubomirsky et al. (2011), and Seligman et al. (2005) confirmed that well-being can be improved by taking intentional positive actions such as writing letters of appreciation and expressing thankfulness, deliberately applying a lifestyle of positive attitude, showing kindness towards others, and being helpful.

3.5 Motivation for applying positive psychology in the current study

Well-being studies conducted in dental training programmes and in training environments mainly focus on identifying aspects of mental health challenges or mental ill-health during training (Alzahem et al., 2011; 2014; Gorter et al., 2008; Harris et al., 2018). Well-being studies conducted in the dental environment are mainly quantitative (Alzahem et al., 2011; Elani et al., 2014); however, quantitative research methods and studies focusing on mental ill health do not provide solutions to dental training facilities or their students on how to deal with, reduce or prevent stressors and well-being challenges. Should researchers focus on positive psychology and a qualitative research approach, students in dental training programmes could benefit, as this approach can yield information on how to minimise and prevent well-being

challenges. Thus, this study investigates the psychosocial and emotional well-being of oral hygiene students at a South African university through a positive psychology lens, using a qualitative research approach.

3.5.1 Positive education and well-being

Positive education is built on the foundations of positive psychology. Seligman et al. (2009, p. 293) define positive education as an approach that combines the learning of traditional skills with the skills of happiness. White and Murray (2015) state that positive education is a broad term for programmes derived from positive psychology that positively impact students' well-being. Oades et al. (2011) define positive education as the development of learning environments that enable learners to engage with time-honoured syllabi to gain knowledge and skills to support their own well-being and that of others.

3.5.2 Positive psychology and well-being in the learning environment

Educators are often challenged with various negative experiences in the teaching and learning environment (White & Kern, 2018). Challenges include poor literacy and mathematical skills among students, high rates of absenteeism, divided attention, low engagement in class activities, and a high dropout rate from school programmes (White & Kern, 2018). Therefore, researchers proposed six reasons for implementing positive psychology in educational settings: philosophical, social, cognitive, economic, professional, and cultural. Philosophical reasoning is based on Aristotle's views on well-being and the virtues of ethical living. Well-being, according to the Aristotelian view, is the pathway to flourishing. White and Murray (2015, p. 3) assert that educational institutions should be recognised as the "first line of defence" in safeguarding students' mental well-being. The report by the World Health Organisation (2017) elaborates on the rationale for positioning schools as the primary entities responsible for implementing strategies to prevent well-being challenges faced by young learners. The report indicated that people from the low- to middle-income groups between the ages of 20 and 25 have the highest suicide rate. The age groups and the rate of depression reported by students at higher learning institutions' well-being could be considered at high risk. It could be argued that depression and anxiety might have negative future effects on young individuals and the society within which they function (White & Kern, 2018). Earlier research by Durlak et al. (2011) suggested

that schools should promote and advocate for the development of social and emotional skills among their learners. Durlak et al. (2011) confirmed that such programmes could help learners develop positive relationships with others, learn to manage their own emotions, experience improved academic performance, and demonstrate the ability to take responsibility and make rational decisions.

Social reasons for early implementation of a positive learning environment include promoting interaction with others and enjoying a sense of belonging. A sense of belonging refers to the degree to which learners feel accepted, included in learning activities, and supported in the learning environment (Allen et al., 2018). A sense of belonging can be cultivated in the learning environment by communicating to learners that they can perform well academically and that teachers have high expectations of learners (Kiefer et al., 2017).

Teachers should cultivate a classroom environment that is both caring and welcoming for students. Additionally, the curriculum should be relevant and linked to the learners' surroundings, including their home, community, and cultural context (Darling-Hammond et al., 2017). Educators who promote cross-cultural engagement and show respect for the diverse communication styles of their students create an inclusive atmosphere that encourages participation from all learners (Claro et al., 2016). Furthermore, teachers who emphasise that hard work and effort in studying lead to greater understanding help foster a growth mindset among their students (Robinson, 2017). Concluding on the aspect of the importance of the need to have a sense of belonging, Allen and Kern (2017) and Allen et al. (2018) stated that a sense of belonging could have a significant impact on an individual's academic performance, psychological status, social interaction, and behaviour in general.

The Institute of Educational Sciences emphasises the importance of a student's sense of belonging and states that there are important cognitive reasons for promoting well-being and positive education in learning environments, which include positive engagement in activities and learning. Positive engagement requires that learners pay attention during learning activities and enjoy a sense of belonging and acceptance. Learners who are uninvolved and disinterested in the learning environment are often absent from lectures, are at risk of dropping out of the programme they registered for, and could exhibit unacceptable social behaviour (Cook et al., 2017). Positive

psychological interventions, such as practising mindfulness, may improve learners' attention, memory, and problem-solving skills (Creswell & Creswell, 2017).

From an economic point of view, the cost of mental ill-health amongst young people could have a considerable impact on the economy (White & Kern, 2018). This is considering the cost to treat conditions such as depression and anxiety, as well as the loss of life due to poor mental health, and possibly dropping out of their studies. Although preventive measures may have an initial cost implication, they may prevent mental health issues among young people and a life lost to suicide (White & Kern, 2018).

3.6 Promotion of well-being by institutions of higher education

The following section examines the significance of fostering the holistic well-being of students enrolled in higher education institutions. The central inquiry is how universities can enhance students' overall well-being and what types of support can be provided to facilitate a positive experience. Educational institutions may wish to consider the guidelines set forth by the Okanagan Charter for Health Promoting Universities, which offer a framework for promoting holistic well-being. Well-being initiatives implemented and endorsed by universities have the potential to create valuable opportunities; however, they frequently face various challenges.

3.6.1 Well-being in higher education

The severity of mental health issues among students has increased over time (WHO, 2017). Larcombe et al. (2014) found that one in four students reported experiencing severe levels of stress. Severe stress is often associated with sleep disturbances, exhaustion, and concentration problems. Eisenberg et al. (2013) claim that merely being a student and engaging in academic studies could harm well-being. Considering the above statements, two questions could be posed, namely, how could institutions of higher education contribute to improving the psychological well-being of students, and secondly, what type of support could be provided by these institutions to promote students' well-being?

In answering how institutions of higher education can contribute to improving the well-being of their students and what type of support should be provided, universities and other tertiary educational institutions responded by adopting the Okanagan Charter for Health Promoting Universities, held in Canada in 2015 (Stanton et al., 2016). The

Okanagan Charter (International Conference on Health Promoting Universities & Colleges, 2015) is an international charter that encourages institutions of higher learning to integrate health promotion into their vision and mission statements and into their strategic planning.

3.6.2 Challenges and opportunities advocating well-being in tertiary education

Considering the Okanagan Charter (International Conference on Health Promoting Universities & Colleges, 2015), Baik et al. (2019) determined the following regarding the position of tertiary learning institutions and students' well-being: In reality, not all students at university experience positive well-being during their years of study. Although universities employ strategies and provide services to improve students' well-being, not all students are included in or reached by university well-being support structures (Baik et al., 2019). The first "Healthy Minds Study" project, conducted in 2005, reported that poor mental health among student populations could be associated with dissatisfaction with their academic environment, a lack of motivation, and a perception of low self-efficacy (Eisenberg et al., 2013). In addition, students may feel excluded from the learning environment (Houghton & Anderson, 2017). These perceptions of exclusion harm students' well-being and, in turn, lead to a high dropout rate from their studies. Students who suffer from psychological distress may also have a negative influence on their fellow students and academic staff (Brooker et al., 2017). Baik et al. (2019) explain that universities have a responsibility to support students in achieving positive psychological well-being while studying. Therefore, universities should prioritise their students' holistic well-being and ensure that their graduates are well-balanced. Therefore, Baik et al. (2019) emphasise that universities should not merely graduate students who meet some theoretical knowledge and practical skills criteria but also enable them to enjoy and maintain their well-being in the future (Baik et al., 2019).

Student feedback from the study by Baik et al. (2019), which investigated how the university could assist students in achieving better well-being, indicated that academic teachers play a significant role in students' well-being. Characteristics of academic teachers who foster well-being in their students include being approachable, showing empathy towards students, and having an engaging communication style. This teaching style embraces a variety of learning activities and provides frequent

feedback. Research conducted by Eloff et al. (2021) concurs with the findings of Baik et al. (2019) regarding the characteristics of a supportive lecturer.

According to Baik et al. (2019), students reported that university well-being support and other support structures should be reviewed. Students requested that more thought be given to the learning environment, the institution's culture, and communication within it. Students reported that universities should be cognisant of the fact that students are multitasking between university, work, and family responsibilities. These realities included parenting, working after hours to earn income, supporting families, and travelling long distances to attend lectures. Students suggested that institutions should be aware of these challenges, consider hosting workshops that focus on stress management and mindfulness, provide spaces for students to relax, and offer well-equipped, dedicated study areas.

Barnett (2007) reported that the major factors that create fear in students during their studies include failing an assignment or task, fear of rejection, and fear of not being accepted or of being excluded. One of the most prominent fears experienced by students in higher education is being judged, which harms their well-being (Guliver & Byrom, 2014).

Arriving underprepared from the school environment can negatively affect students' well-being. Consideration should be given to students who register for less popular programmes, do not align with their first career choice or option, or have to register at a tertiary institution they did not initially want to attend. These factors may result in students being less motivated to study. Universities should therefore provide clear career and programme guidance to prevent students from selecting courses or programmes they are not interested in.

Larcombe (2015) considers the importance of the degree programme and suggests that student well-being should be addressed by reviewing curriculum design, teaching strategies, and assessment types. According to Steuer and Marks (2005), there are five ways to incorporate well-being into a curriculum: connectedness, physical activity, continuous learning, noticing or being cognisant, and giving. The five ways include promoting connectedness with staff and administrators, having a friendly demeanour, peer support, providing opportunities for students to be physically active during and between lectures, taking notice of the relevance of the learning content (the theory)

and reality (the practice), and making students aware of opportunities where they can give back by supporting peers and giving back to their communities. Service learning is an example of an opportunity to serve communities while gaining valuable experience.

3.7 The university as an organisation

Dooris and Doherty (2010) refer to universities as institutions that aim to create a learning environment that enhances the health, well-being, and sustainability of their community and empower individuals to reach their full potential. Therefore, it is important to shed light on what an organisation is and the behaviour and culture it embodies.

3.7.1 What is an organisation?

Organisations, as Hodge et al. (2003) state, preside over all aspects of our lives. Organisational theories aim to assist individuals in understanding what organisations are, how to function successfully within them, and how to initiate change. Hodge et al. (2003) state that there are two major types of organisational theories: descriptive and normative. Descriptive theories attempt to explain the qualities of the relationships between various systems within an organisation. Normative theories, also referred to as prescriptive theories, suggest how managers or leaders should address certain issues.

3.7.2 Organisational behaviour

“Organisational behaviour is a field of study that investigates the impact that individuals, groups and structure have on behaviour within organisations, and hence forward to apply such knowledge towards improving an organisation's effectiveness…” (Robbins, 2009, p. 7). An organisation's environment plays an important role, and its management should take cognisance of it.

How effective an organisation will be in years to come depends on its ability to take note of the environment surrounding it, in which it functions and the changes that occur. Organisations should take note of clients' needs, legal requirements, the current economic climate, and technological advancements (Robbins, 2009). Given that universities are considered organisations, university and faculty management should be aware of the behaviour of individuals and groups attending, such as students and employees. University management should recognise the important role the campus

environment plays, as well as the ever-changing demands and expectations of their clients, who, in the context of this study, are the students. Universities and other tertiary education institutions should be able to determine their needs through a needs assessment and adjust accordingly to the current educational, political, and economic climate in which they operate (Robbins, 2009).

3.7.3 Organisational culture

Schein (1985) defined organisational culture as the values, beliefs, and norms shared by people within an organisation. Cross et al. (2016) support this view, describing organisational culture as a configuration of shared values and belief systems that shape behaviour. The organisational climate reflects how individuals experience their environment. Healthy organisations foster support, participation, and open communication, while unhealthy cultures stifle employee voice and decision-making. Positive influences on employee perception include support, trust, autonomy, and recognition (Cross et al., 2016).

New employees learn the organisational culture through socialisation, which involves understanding its values and beliefs. Greenberg (2011) identified strong cultural traits as a clear philosophy, effective communication of values, recognition of symbols and traditions, and careful selection of new members to fit the culture. Oldham and Cummings (1996) emphasise the importance of renewal in organisations, which can be achieved by promoting autonomy, enhancing intrinsic motivation, and supporting diversity and creativity. The above applies to the university environment as it is considered an organisation with values, norms, beliefs, and traditions that are embedded from one generation to the next, whether among its leaders, lecturers, or students.

3.8 Enhancing student well-being: The “Whole-of-University” approach

A "healthy university" is defined as an institution that aims to create a learning environment that enhances the health, well-being, and sustainability of its community, enabling individuals to reach their full potential (Dooris & Doherty, 2010). The framework for promoting student mental health and well-being consists of five action areas. It draws on the Ottawa Charter for Health Promotion, the Healthy Universities framework, and the “Mind Matters” framework. The Whole University framework, as

shown in Table 3.2, promotes student mental health and well-being, addressing five key action areas.

Table 3.2

Action Areas to Promote Student Well-Being

Action area	Recommended action
1) Engaging curricula and learning experiences	The mental health and well-being of higher education students improve with a flexible curriculum that promotes social connections, competence, and intrinsic motivation. Educators who understand their learners and implement supportive teaching practices create engaging curricula that require regular reviews of learning outcomes and essential skills.
2) Cultivate a supportive social, physical, and digital environment	Students facing social isolation risk mental health issues, making it crucial for higher education institutions to foster environments that promote social interactions and healthy relationships. This can be achieved through extracurricular activities and regular assessments of physical spaces for learning and relaxation. Institutions should proactively identify students at risk of social isolation or discrimination and offer supportive interventions.
3) Strengthen community awareness and action	Mental health and well-being are supported when students have the information and skills necessary to make informed choices. Action area three could be achieved through university campaigns that emphasise the importance of mental health and help destigmatise related challenges. Additionally, universities could provide mental health resources online and in print for students and staff.
4) Development of students' mental health knowledge and self-regulatory skills	Students in higher education should develop knowledge and skills related to mental health and well-being within their programmes. The demands of university can make it challenging to manage time and set goals, so guidance in these areas is essential. Learning when and where to seek help is also crucial for students. These skills not only benefit their academic life but are also transferable to the workplace after graduation.
5) Ensure access to effective services	Universities should provide accessible support services for students with mental health challenges and ensure necessary academic adjustments are made. All support services should be well-publicised, and consultations should remain discreet and confidential. Students should also be encouraged to evaluate the effectiveness of the support provided.

Note. Table 3.2 presents the five action areas for promoting student well-being, drawn from the Ottawa Charter for Health Promotion, the Healthy Universities framework, and the “Mind Matters” framework.

Chen (2020, p. 33) states, “If a university can become a truly positive organisation, the people associated with it will become more engaged, use their strengths, experience more positive emotions, and achieve higher levels of academic achievement”.

3.9 International view of well-being in dental training programmes

According to Paudel et al. (2013), dental students report high levels of stress during their studies. Students following dental training programmes report that they suffer from depression, obsessive-compulsive disorders, and experience difficulties with interpersonal relationships (Saunders & Lushington, 2002). Research studies further indicate that students who follow dental training programmes often experience general health problems and turn to substance abuse due to perceived stressors during their studies. Paudel et al. (2013) note other stressors related to the training environment, including uncertainty about career prospects in dentistry, questioning their competence and skills, fear of failing examinations, and the possibility of unemployment upon graduation. Institutional stressors included general faculty procedures and university administration. High-rated stressors identified in dental programmes included workload, being criticised for clinical procedures performed, and being assessed in the clinical environment (Harris et al., 2017). Stress related to patient treatment includes finding suitable patients for clinical procedures, contracting transmissible diseases from patients, and sourcing patients, examinations, falling behind in studies and not being able to catch up, financial problems, lack of study areas that are conducive to study, and expected compulsory attendance (Paudel et al., 2013).

Research on the stressors experienced by students in dental training programmes concluded that dental faculties should review their curricula and teaching and learning methods. In an attempt to investigate the effects of a curriculum change, Ahmad et al. (2017) studied the well-being of students under two curriculum designs. They found that switching from a subject-based to a case-based curriculum significantly increased stress levels among both medical and dental students. While students in the case-based curriculum felt more stressed due to increased classwork, they appreciated

better communication with lecturers and closer contact with facilitators. In contrast, those in the subject-based curriculum lacked direct interaction with instructors. Ultimately, the study concluded that case-based students reported more stressors compared to their subject-based peers, due to the increased workload associated with case reports. Therefore, Ahmad et al. (2017) suggest that medical and dental educators should be cognisant of the various types of stressors perceived by students and assist them in managing the stressors, as they may impact their academic performance.

3.10 Oral hygiene programmes and the educational environment

Fourth-year oral hygiene students in a study by Al-Omari (2005) reported experiencing more stress in the educational environment than fifth-year dental students. Oral hygiene students reported that receiving criticism relating to their academic or clinical work contributed to their perceived stress. Students reported that one of the single greatest stressors was that of not having lectures delivered in their home or first language, as well as “discrimination between students relating to gender, religion or race” (Al-Omari, 2005, p. 6). The latter statement regarding discrimination concurs with the findings of Gordon et al. (2016), which were conducted in the South African context. In contrast, a study by Harris et al. (2018) in the United Kingdom determined that dental hygiene and dental therapy students did not perceive their educational environment as stressful. However, the educational environment was considered a contributing stressor for Australian students (Harris et al., 2018). Both second and third-year Australian dental hygiene students reported criticism of their clinical and academic work as a stressor. The Australian report concurs with the results of the South African study conducted by Gordon et al. (2016).

The study by Harris et al. (2018) shows differences in perceived stressors between dental hygiene and dental therapy students in the United Kingdom and Australia. The question is why? A first contributing factor could be the demanding schedule of the Australian programme and the short summer vacation between the end of their second year and the start of their third year. According to feedback from students in the study, they may have started their third year of study feeling tired and depleted. Starting the academic year not well-rested and exhausted may have negatively influenced students' perceptions of feedback from academic staff. Dental hygiene students in the United Kingdom, however, have longer vacations between their second and third

years of study and gain most of their clinical experience at the same teaching platform. In the South African context, where this current study was conducted, students have a longer summer vacation from mid-December to mid-January. The April and September vacations are usually a week each; however, students usually have assignments and tasks to complete during the shorter vacation periods.

The Australian curriculum places a “strong focus on clinical experience”, in which students are placed in a variety of rural settings (Harris et al., 2018, p. 80). These rural-setting placements could leave students concerned regarding patient treatment in an unfamiliar setting and could contribute to their perceived stress.

3.11 Psychological well-being of oral hygiene students from a positive psychology perspective

Harris et al. (2018) conducted one of the few qualitative studies on the well-being of dental hygienists, focusing on positive well-being. Results show that although dental hygiene students experienced similar stressors to dental students, their psychological well-being scores were indicative of positively functioning individuals. Dental hygiene students responded positively to stressors, arguing that the successful completion of their studies is more important than the stressors. Harris et al. (2018) revealed that students scored highly on measures of personal growth, purpose in life, and positive relationships with others. The aforementioned are the typical attributes a competent clinician should present at the end of their study years, also referred to as graduate attributes. Although feedback from academics on clinical and academic work was perceived as stressful, it provided students with the opportunity to learn and develop (Harris et al., 2017; 2018). In the study of Harris et al. (2018), none of the dental hygiene or dental therapy students reported significant levels of depression or stress. Levels of agency hope and pathway hope were measured as high, providing a sense of meaning in life. Students who scored high on the hope factor were more focused on achievement and success than on failure. High-hope students focus on goal setting and achievement despite experiencing stress and challenges (Harris et al., 2018).

3.12 South African research conducted in the theoretical framework of positive psychology

Coetzee and Viviers (2007) conducted a study of publications in the South African context and within positive psychology, confirming that very few studies have been

conducted on groups and institutions from a positive psychology perspective. Only three per cent of the research undertaken from the positive psychology perspective was qualitative. South African studies employing a positive psychology approach were predominantly non-experimental and quantitative in nature. This amounts to about 65 per cent of the studies. Coetzee and Viviers (2007) encourage researchers to conduct qualitative research, as it provides an ideal framework for explorative studies. Furthermore, most well-being research conducted in the South African context before 2000 focused on coping mechanisms, followed by research that examined character traits, skills, and virtues (Wissing, 2000, cited in Coetzee & Viviers, 2007). Wissing (2000), as cited in Coetzee and Viviers (2007), proposed that future well-being research in the South African context should focus on processes that could be implemented to facilitate well-being.

This void in the research directly addresses the primary research question of this study: What are oral hygiene students' perceptions of their psychosocial and emotional well-being at an institution of higher education in South Africa? To address concerns raised by researchers such as Wissing (2000) and Coetzee and Viviers (2007), this study adopted a qualitative approach from a positive psychology perspective.

A literature search on the well-being of undergraduate oral hygiene students and the effect of positive education on well-being in the South African context, from a positive psychology framework, yielded limited results. International research focusing on the well-being of oral hygiene students from a positive psychology perspective is limited (Harris et al., 2017; 2018). There are, however, a few studies that address the factors contributing to ill health and, to a limited extent, the Coping mechanisms that oral hygiene students apply during their studies. Therefore, the significance of this study lies in its focus on the well-being of oral hygiene students through a positive psychology framework by using qualitative data collection methods.

3.13 Conceptual framework: Student well-being framed in positive psychology

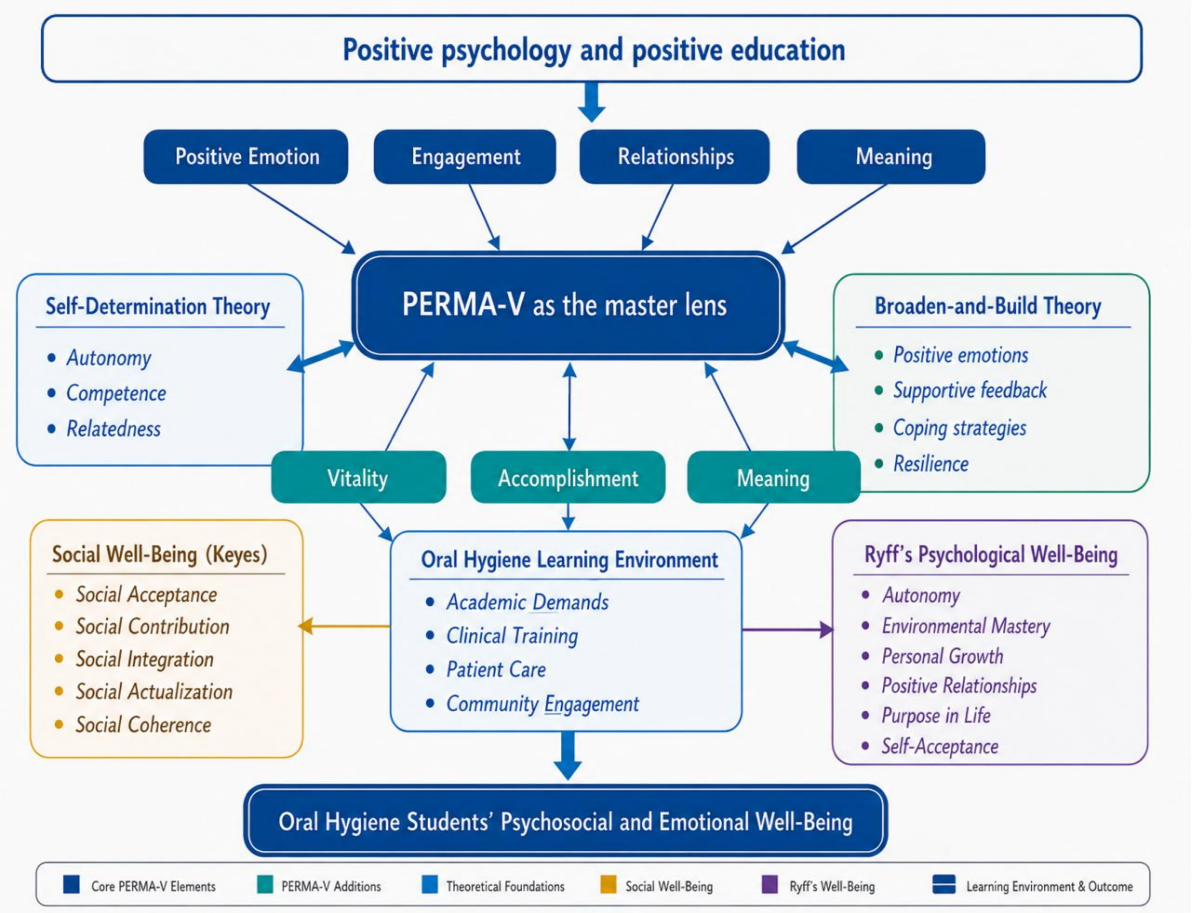
The study is framed within the context of positive psychology to determine the factors influencing the psychological, social, and emotional well-being of oral hygiene students at a South African university. The revised conceptual framework is structured around PERMA-V as the master lens. Self-determination theory explains how the learning environment may support or constrain students' autonomy, competence, and

relatedness. Broaden-and-build theory explains how positive emotions, supportive clinical feedback, and coping strategies may broaden students' perspectives and build resilience. Together, these lenses provide a focused framework for interpreting students' perceptions of well-being, the influence of the learning environment, and the coping mechanisms used during oral hygiene training.

Figure 3.1 illustrates the conceptual framework guiding this study. The framework is located within positive psychology and positive education and positions PERMA-V as the central organising lens for understanding oral hygiene students' psychosocial and emotional well-being. The six PERMA-V elements—positive emotion, engagement, relationships, meaning, accomplishment, and vitality—represent the main dimensions through which students' well-being is explored. Self-determination theory supports the framework by explaining how the learning environment may influence students' autonomy, competence, and relatedness. Broaden-and-build theory further supports the framework by explaining how positive emotions, supportive feedback, and coping strategies may broaden students' thinking and build resilience over time. Together, these theoretical lenses provide a focused structure for interpreting students' perceptions of well-being, the influence of the oral hygiene learning environment, and the coping mechanisms students use during their training.

Figure 3.1

Conceptual Framework: Student Well-Being Framed in Positive Psychology



Note. Figure 3.1 presents the main theory and supporting theories applied to the current study. The overarching theory is the PERMA-V model, and the supporting theories include the broaden-and-build theory, Keyes's social well-being theory, Ryff's psychological well-being theory, and Snyder's self-determination theory, all of which are relevant to oral hygiene students.

Image generated by the author and re-generated with ChatGPT, July 20, 2026, OpenAI.

3.14 Summary

Chapter 3 presented a focused conceptual framework for the study. PERMA-V was positioned as the central framework for interpreting oral hygiene students' psychosocial and emotional well-being. Self-determination theory was retained as a supporting theory for understanding the learning environment, particularly autonomy,

competence, and relatedness. Broaden-and-build theory was retained as a supporting theory for understanding coping, resilience, and the role of positive emotions in students' responses to academic and clinical challenges.

The chapter further contextualised the framework in positive education, higher education support, oral hygiene training, and the clinical learning environment. Peripheral and overlapping theoretical material was reduced so that the chapter more clearly functions as an analytical tool for answering the research questions.

3.15 Conclusion

Research focusing on the well-being of oral hygiene students, particularly through the lens of positive psychology, remains sparse, especially within the context of South Africa. This study aims to address this significant gap by employing the PERMA-V model, an established framework that encompasses positive emotions, engagement, relationships, meaning, accomplishment, and vitality as the core perspective for examining students' perceptions of their overall well-being.

In addition, the study integrates self-determination theory to analyse how the learning environment affects students' motivation and autonomy, providing insights into their educational experiences. Furthermore, the broaden-and-build theory is utilised to understand the mechanisms of coping and resilience among these students, highlighting how positive emotions can enhance their ability to manage stressors and challenges associated with their studies.

Chapter 4 provides a detailed overview of the research design and methodology employed in this study, outlining the approaches and techniques used to gather and analyse data.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

Chapter 4 examines the research design and methodology used to address the research question. This chapter starts with a discussion of the research paradigm concept, followed by a brief overview of its four fundamental elements: ontology, epistemology, methodology, and axiology, along with their application in this study. Next, the main research paradigms are outlined: positivism, post-positivism, interpretivism, and constructivism. It was determined that constructivism is the most suitable paradigm for the current study. The study uses a qualitative approach and a case study design. Additionally, Chapter 4 provides a detailed discussion of data collection methods, strategies used, data analysis processes, and the ethical considerations that guided the study.

4.2 Paradigmatic perspectives

The term ‘paradigm’ originates from the Greek language and means ‘pattern’. In the context of research, a paradigm refers to the ‘worldview’ of the researcher or the lens through which they observe their environment (Mackenzie & Knipe, 2006). It is essential to distinguish between the paradigm and methodology, as the paradigm represents the philosophical foundation that guides the research process (Žukauskas et al., 2018) and encompasses the abstract beliefs and principles through which the researcher interprets the context or world they inhabit (Kivunja & Kuyini, 2017).

According to Rehman and Alharti (2016), the paradigm comprises the foundational belief system, while the theoretical framework serves as the basis of the research. Researchers operating within a specific paradigm adhere to common guidelines, rules, and standards when conducting their research. Kuhn (1962), as cited in Žukauskas et al. (2018), provided a framework supported by the scientific community. The importance of the research paradigm lies in its guidance of the ‘what’ and the ‘how’ of the phenomena being studied at a specific time. The paradigm guides the researcher in analysing and interpreting the data derived from the research.

4.2.1 Epistemological paradigm

Epistemology is the authentic basis of knowledge; it includes how knowledge is acquired and communicated. Epistemological postulations refer to the methods of research and inquiry into the nature of reality (Cohen et al., 2011). The epistemological assumption guides the researcher in selecting the most applicable methodology for a specific research study. The methodology guides the researcher towards the appropriate data collection strategies. For this study, a constructivist approach was employed. Epistemology, considered within the constructivist paradigm, is that of subjective epistemology (Kivunja & Kuyini, 2017). In subjective epistemology, the researcher interacts with participants by questioning them, conducting interviews, listening to their responses, and recording interviews and discussions. The motivation for selecting this methodology was to explore the factors that influence the psychosocial and emotional well-being of oral hygiene student participants through their personal experiences, perceptions, and interpretations. Therefore, the data collection methods for this study included individual semi-structured interviews, focus group discussions, and self-administered questionnaires with mainly open-ended questions.

4.2.2 Ontology

Ontology is the study of ‘being’ and is concerned with ‘what is’, i.e., the nature of existence and structure of reality as such (Crotty, 1998) or what it is possible to know about the world (Snape & Spencer, 2003). Assumptions of ontology are concerned with the natural world or the real meaning of a social occurrence. The question posed is whether social reality is an occurrence encountered from the external environment where the individual is situated, imposing itself on their consciousness, or is it the creation of the person’s perception? Is reality an objective or a subjective encounter? These questions derive from the nominalist-realist debate. The view of nominalism-realism is that “objects of thought are merely words and that there is no independently accessible feature constituting the meaning of a word” (Cohen et al., 2011, p. 5). The ontology of this study refers to what participants interpret as their reality or a creation of their own perception. To answer the research question from an ontological perspective, several data collection methods were employed to identify similarities in participants' experiences and interpretations. The analysis of the research data guided the researcher in determining the participants’ lived experiences and the perceptions

they held, which were situated in their own minds and could be distanced from reality. The current study, therefore, employed a relativist ontology, which implies that the researcher accepted that numerous truths could be investigated through the interactions between the researcher and the participants (Chalmers et al., 2005).

4.2.3 Axiology

The axiology of the paradigm refers to the ethical and moral issues in the research. Axiology requires researchers to be aware of their values, beliefs, and the basis for the design, conduct, and interpretation of research projects (Pretorius, 2020, p. 2700). How did the researcher conduct the research activities while maintaining the respect and rights of all participants? What were the moral, cultural, and institutional issues that were considered and respected at all times by the researcher? How did the researcher ensure that no physical or emotional harm was inflicted on any participant in the study?

In this study, participants were assured that all information they provided would be kept confidential and that their anonymity would be maintained during the semi-structured interviews and their transcription. The researcher assured the participants that she was the only person with access to the recorded semi-structured interviews, interview transcripts, side notes taken during the interviews, and completed self-administered questionnaires. Privacy was upheld throughout the study, as the researcher was the only person with access to the letters of consent and intent from participants who were willing to be interviewed. Interviews were scheduled so that it would not be obvious to other students or staff that the student was entering the venue for an interview related to the study.

The following procedures were followed regarding consent: Voluntary consent to participate in the study was obtained by providing participants with a letter of informed consent for each data collection method. Informed consent letters were distributed only after the potential participant had a thorough understanding of the study's purpose and had been informed in detail about what was expected from them during the data collection process. Thereafter, if they agreed to participate, each participant would sign the letter of consent before commencing the various data collection procedures. The participant detached the signed informed consent letter and placed it in a sealable

container themselves. The letters of consent were kept separate from any other documentation that could link the identity to the data of a specific participant.

A request for an ethical clearance document was submitted to Unisa's Ethical Committee (refer to Appendix 5). This document provided the Ethical Committee with a detailed research framework in which the researcher declared a commitment to maintaining anonymity and privacy, and protecting research participants from any physical or emotional harm.

The axiology for the constructivist paradigm is balanced and presumes that the report on the data will reflect the researcher's ethical norms and values.

4.3 Methodological paradigm

The following section elucidates the origin and concept of the term "paradigm." Subsequently, the discussion shifts to an exploration of various types of paradigms. For this study, the selected paradigm is that of constructivism. The discussion will address constructivism as a paradigm and articulate its relevance to the current study. Additionally, the strengths and limitations inherent in constructivism will be discussed.

4.3.1 Understanding a paradigm

Thomas Kuhn (1962), as cited in Žukauskas et al. (2018), coined the term 'paradigm' and revolutionised the way scientists approach research methodology. Kuhn (1962) defines a paradigm as a way of viewing or investigating phenomena, a worldview, a perspective on what constitutes accepted or correct scientific knowledge, or a way of working—an accepted model or pattern. Cohen et al. (2011) defined a paradigm as a way of seeking, investigating, and acquiring knowledge; it includes an agreement on how research problems should be explored, providing a clearer understanding of how to research problems. Cohen et al. (2011) further indicated that a paradigm is a perspective on a phenomenon, a worldview of what constitutes accepted scientific knowledge or a way of working with an accepted model or pattern (Cohen et al., 2011). Meanwhile, Kivunja and Kuyini (2017) declare that the paradigm guides the interpretation of the collected data. Denzin and Lincoln (2000) explain that paradigms are human constructs that reflect the philosophy or core beliefs of the researcher. Paradigms influence the "what" should be studied and the "how" the research problem should be explored, including how data should be interpreted. Therefore, a paradigm is a shared belief system or fixed consensus on philosophy and on a method for

acquiring knowledge, with an agreement on what issues to address, how to investigate them, and how to find solutions.

Researchers' stance toward different paradigms influences how they reveal the knowledge of social behaviour through research. The various assumptions that researchers hold about the social milieu influence their choice of methodology when conducting their investigations. Objectivists or positivists hold that the social environment is real and that it has an external effect on the individual. These researchers select a traditional research method, such as a survey or an experiment, to collect data, which is a typical practice in quantitative research. On the other hand, researchers with a subjective view of the social environment acknowledge that individuals have personal experiences and interpretations of the environment in which they are situated.

Researchers with a subjective view of the social environment apply emerging research methods, such as participant observation and personal theories (Cohen et al., 2011). The methodology of the paradigm includes the research design and the methods used to collect and analyse the data (Crotty, 1998). The methodology, therefore, directs the researcher through the various research processes to achieve valid results and should be logical and systematic for answering the research question.

4.3.2 Research paradigms

Although several research paradigms exist, the present study was situated within constructivism because it focused on how participants understood and interpreted their own experiences. Positivist and post-positivist approaches were less suitable because the purpose was not to test hypotheses, measure variables or establish objective causal relationships. Transformative and pragmatic approaches were also not selected as the primary paradigm because the central intention was not political advocacy or problem-solving through mixed methods, but rather an in-depth understanding of participants' lived realities in a bounded educational context.

4.3.2.1 Positivism, post-positivist and transformative paradigms

Auguste Comte applied the term 'positivism' to describe the paradigm that focuses on understanding human behaviour through observation and reasoning, and that all authentic knowledge is based on the experiences of the senses and can be determined by observation and experiment (Cohen et al., 2011).

The post-positivist paradigm represents traditional research and is often referred to as the ‘scientific method’ or ‘post-positivist research’ (Creswell & Creswell, 2018). Post-positivism challenges the notion of absolute truth in knowledge and acknowledges that scientists cannot be certain about the outcomes of their research when observing and studying human actions and behaviour.

Researchers who hold the transformative worldview believe that research should be interconnected with politics to challenge social oppressions. Examples of these categories include racial and ethnic minority groups, women, the elderly, individuals with physical and intellectual challenges, and individuals with diverse gender orientations (Creswell & Creswell, 2018).

Researchers following pragmatism are concerned with finding solutions to problems. Pragmatism focuses on the research problem at hand and does not adhere to a specific research methodology; instead, it considers all available research methods and applies both qualitative and quantitative approaches (Creswell & Creswell, 2018).

4.3.2.2 Constructivism

Honebein (1996), as cited in Adom et al. (2016), describes the constructivist philosophical paradigm as an approach that asserts people construct their own understanding and knowledge of the world through experiences and reflecting on those experiences. According to Cashman et al. (2008), as cited in Adom et al. (2016), constructivism is based on the assumption that people perceive their world and learn through their experiences.

Constructivism as a paradigm is associated with the qualitative research approach (Adom et al., 2016). The researcher, employing the constructivist paradigm, uses various data collection techniques during the study to understand participants' perceptions and interpretations of their experiences and environments. The researcher analyses the data obtained from the participants and assesses their true meaning thereof. Furthermore, the researcher could become part of the participants' environment and participate to gain first-hand experience of the phenomenon (Adom et al., 2016). In addition, constructivist researchers often explore the interactions between individuals and the processes underlying them within the contexts in which they function. These investigations aim to understand how cultural and historical contexts shape the behaviour of individuals and groups. Researchers employing

constructivism as a paradigm strive to understand how individuals experience and interpret their world. These researchers acknowledge that their frame of reference influences the interpretation of the research environment and information derived from the collected data. Constructivists do not enter the research environment with a theory or hypothesis; instead, they generate information and then develop a theory or a pattern of meaning (Creswell, 2014). Navon (2001, p. 624) claims that “for a rationalist, the mind unveils reality; for post-modernists, the mind invents reality, whereas for constructivists the mind *creates* reality and claims that facts are produced by human consciousness”.

For this research, a constructivist paradigm was followed. The motivation for selecting this paradigm was the researcher’s aim to understand the factors influencing the psychosocial and emotional well-being of BOH students. The research design was that of a single case study. Seeking answers to the research question, the researcher investigated the case through in-depth, semi-structured interviews, focus group discussions, and open-ended questionnaires with participants who had lived experience of the learning environment and the potential to provide rich information.

4.3.2.2.1 Strengths of the constructivist paradigm

According to Adom et al. (2016), constructivism offers strengths such as the ability to observe participants in their natural environments, thereby making findings relevant to their specific social and cultural contexts. Researchers can adjust interview schedules by adding or modifying questions to enhance the depth and richness of the data. This framework acknowledges multiple interpretations of reality, influenced by factors like social context, individual perspectives, language, and culture, all of which contribute to how individuals perceive their reality (William, 2024).

4.3.2.2.2 Limitations of the constructivist paradigm

Adom et al. (2016), however, remind researchers that constructivism as a paradigm has some limitations, including the fact that researchers' subjectivity, perceptions, and beliefs can influence their observations of participants, which may influence the study. Data analysis could become complicated when analysing large amounts of rich, qualitative data, which can become time-consuming and complex. Furthermore, researchers must apply reflexivity, which involves contemplating their own prejudices

and conventions, to avoid assuming their own truths and instead seek the truth that lies in the collected data (William, 2024).

4.4 Research methodology and design

This section outlines the research approach and design used in the study. A qualitative research approach was adopted, and the study design was a single case study. The section provides the rationale for selecting a qualitative approach and case study design, discusses the strengths and limitations of case studies, and explains the sampling strategy and site selection relevant to the study.

4.4.1 The research approach

Given the research objectives, purpose, and research questions, the researcher opted for a qualitative approach. This decision was underpinned by the researcher's intention to gather data in the specific context where participants encounter factors influencing their well-being in a natural setting. The designated natural setting for this single-case study was the dental faculty of a selected university, encompassing environments where participants attend lectures, clinical sessions, interact with lecturers and supervisors, and engage in both formal and informal collaborations with peers. Consequently, the environment comprises students' learning and teaching contexts, alongside their social and living circumstances, all of which are integral to their daily functioning and constitute their natural setting.

During this study, the researcher focused on the participants' personal experiences, perceptions, and understanding of the factors that affected their psychosocial and emotional well-being during their studies. Qualitative data gathered from the participants were reported verbatim. By adopting a qualitative research approach, the researcher aimed to address the scarcity of detailed information regarding the psychosocial well-being of undergraduate oral hygiene students at a South African university.

The qualitative orientation further aligned with the constructivist paradigm adopted in the study, as both emphasise meaning-making, context, and the existence of multiple realities. The methodological choices were therefore appropriate because they enabled the researcher to access participants' own accounts, compare information across different data sources and develop an in-depth understanding of the case rather than produce statistically generalisable findings.

4.4.2 The case study

Yin (2018) advises researchers to consider selecting a case study design when their research questions are mostly focused on ‘why’ and ‘how’ types of questions, when the type of research being conducted is current, and when the researcher does not have much control over the displayed behaviour in a specific setting.

In the research domain, a case study can focus on one individual, a small group of people, an institution, an organisation, a community or the inhabitants of a country (Miles et al., 2014). The case study allows the researcher to conduct an in-depth investigation in the field of interest while maintaining the natural environment in which the research takes place (Yin, 2018). Yin (2018) further warns researchers that a case study design is challenging because the research requires rigour and should not be confused with non-research case studies, or with merely arriving at generalisable conclusions.

4.4.2.1 Definition of a case study

According to Miles et al. (2014), a case study entails a comprehensive and in-depth analysis of a specific occurrence, circumstances, group or social unit. Merriam (1989) defines a case study as an examination that includes three key elements: 1) the unit, the specific case or situation being analysed; 2) the process, the actions taken by the researcher; and 3) the product, the outcome of the study. A case study can investigate a particular situation to gather information that is not accessible through quantitative data collection (Cohen et al., 2011). This approach allows researchers to utilise various data collection methods and multiple sources of evidence (Yin, 2018). Case studies can explore real-world situations and establish cause-and-effect relationships by investigating interactions and human behaviour in their natural context.

4.4.2.2 Types of case studies

Coombs (2022) identifies three types of case studies: the single or instrumental case study, the collective or multiple case study and the intrinsic case study. In a single case study, the researcher identifies a research topic of interest and selects a bounded case to explain the phenomenon. In a multiple case study, the researcher selects multiple cases to observe a specific phenomenon. In a multiple-case study, the researcher aims to determine if similar patterns exist across the different cases.

Intrinsic cases are phenomena which are unique to themselves. The researcher aims to understand the uniqueness of the case and does not attempt to generalise the findings to other situations or cases. (Coombs, 2022; Yin, 2018). In this research study, a single, exploratory case design was followed. The motivation for a single-case study was that participants could be studied in depth and were available on-site (Rule et al., 2011). The motivation for adopting an exploratory case design was that previous research studies focused on quantitative data collection, which did not contribute much in-depth information to the research field of interest (Harris et al., 2017).

4.4.2.3 The rationale for selecting a case study design

A case study design was selected for this research project. The motivation for selecting a case study design was that the data collected generate rich descriptions of a specific situation. A second motivation was that a wide-ranging problem could be focused on in a narrow setting. The third motivation for a case study design is that it would cast light on other comparable situations, providing the researcher with some extent of transferability (Rule et al., 2011). To address the first reason, conducting a single case study provided the researcher with the opportunity to collect qualitative data that offers richer information than a quantitative study. Addressing the second reason for selecting a single case study is that the study focused on a narrow setting, such as a specific dental faculty at a specific university, and the focus was on a selected group of students. The third reason is that the results of the current study can provide valuable information for similar settings to reduce or address the factors that impact the well-being of oral hygiene students.

4.4.2.4 Strengths of a case study design

One of the strengths of a case study design is its intense nature. Case studies may not be extensive; however, they are focused, specific, and to the point. The case study permits the researcher flexibility, allowing various research methodologies, data collection methods, and approaches to data analysis. A case study can be successfully combined with other research designs, providing much more insight into a particular research question (Rule et al., 2011). A case study can provide the researcher with an in-depth perspective of the workings of an institution or organisation. According to Schoch (2020), the results derived from a case study are comprehensive and provide researchers with an insightful understanding of the

bounded unit under study. With regard to transferability, it is possible to apply knowledge gained from a particular case study to a situation or case that is equivalent to the current case study.

4.4.2.5 Limitations of the case study design

Limitations of case study designs include that the findings of one case study cannot be generalised to similar cases. Furthermore, the researcher's biases may have a direct and negative influence on the data collected. Insider knowledge and prior beliefs of the researcher could contribute to bias. In multi-case research, the researcher may intentionally seek similarities and ignore the differences between the two case studies. The researcher may ignore the unique context of each case in the pursuit of generalisation. Furthermore, conducting a precise replication of one study in the second study could be challenging (Rule et al., 2011).

4.5 Population and sampling

This section explains what a research population is and identifies participants who took part in this study. The site selection is described, followed by an explanation of the sampling strategies, including probability and non-probability sampling, as well as the sampling employed for this study. Non-probability sampling techniques include quota, purposive, theoretical snowball, and convenience sampling (Denscombe, 2008). For this study, purposive sampling was employed.

4.5.1 The population

A population is a group of individuals, cases, or events with definite criteria to which researchers generalise research outcomes. The population group is also referred to as the target population or the universe (McMillan & Schumacher, 2006).

The study's designated population comprised second- and third-year undergraduate students enrolled in the BOH programme, along with faculty members from the oral hygiene department of a dental school at a South African university (refer to Tables 4.1 and 4.2).

4.5.2 Site selection

Site selection is the process of choosing a location for an event involving a specific group of people. Site selection is preferred when the research focuses on a complex micro process (McMillan & Schumacher, 2006). The research site was a South African

University that offered the BOH undergraduate programme. The site was purposefully selected as it provided the researcher with participants best suited to provide information relating to the research problem.

In addition, the selection of this specific research site was motivated by the following factors: Candidates registered for the BOH at the selected dental faculty and university represented most of the South African provinces. The dental faculty accommodates candidates from the Southern African Development Community (SADC) countries, including Angola, Botswana, the Democratic Republic of Congo, Lesotho, Swaziland, Madagascar, Malawi, Mauritius, Mozambique, Zambia, and Zimbabwe. The candidates registered for this programme represent diverse cultures, languages, and socioeconomic backgrounds. The research population consisted of second- and third-year oral hygiene students enrolled in the BOH degree programme from 2020 to 2022.

4.5.3 Sampling

There are two main categories of sampling: probability and non-probability (see sections 4.5.3.1 and 4.5.3.2 below), which should be considered when selecting a sample from a population group.

4.5.3.1 Probability sampling

The probability sampling technique ensures that each member of the population has an equal chance to participate in a research study. This sampling technique is often used when the researcher wants to generalise from the data collected. Probability sampling reduces the risk of bias, although it cannot be excluded. There are various probability sampling methods, including simple random sampling, stratified random sampling, and stage sampling (Cohen et al., 2011).

4.5.3.2 Non-probability sampling

The non-probability sampling technique focuses on a specific group; however, the participants are not representative of the wider population. The participants represent only themselves. In non-probability sampling, each member of the research population does not have an equal chance to participate in the research. Researchers in non-probability sampling deliberately select only a specific part of the total population. The researcher collects data with the purpose that the information obtained represents only a specific group and has no intention to generalise the research findings. Non-

probability samples are the sampling method of choice when conducting research in a case study (Cohen et al., 2011).

The advantages of non-probability sampling are that it is less complex to conduct, more affordable, and provides sufficient evidence in situations where the researcher has no intention to generalise findings to other groups. Non-probability sampling can be applied to pilot a study. Non-probability sampling allows the selection of one of the following: convenience sampling, which entails that the researcher selects the individuals who are conveniently nearby and will continue the process up to a point where the necessary sample size has been acquired; and quota sampling, which attempts to embody the significant characteristics of the broader population in the proportions they are found in the wider population. Quota sampling enables the researcher to do sampling by assigning proportional weights to selected factors present in the broader population (Cohen et al., 2011).

Purposive sampling is selected for a specific purpose and is often implicated in qualitative research. Researchers select cases, groups, or individuals to participate in a study because they possess specific characteristics that will help answer the research question. Purposive sampling is often used when the researcher seeks rich, in-depth information from well-informed individuals. The main goal of purposive sampling is not to generalise but to acquire in-depth information (Cohen et al., 2011). Teddlie and Tashakkori (2009) provide a classification of six different types of purposive sampling to attain representativeness or comparability: typical case sampling includes the most typical cases of a group or population in the study; extreme or deviant case sampling entails that the most extreme cases in a population are studied with the purpose to provide the most significant causes of a particular issue being researched; intensity sampling entails where the sample provides distinct examples of the matter being researched; maximum variation sampling typically entails examples being selected that portray a wide array of characteristics regarding a specific research question; homogeneous sampling entails that participants are selected for their similarity, which enables the researcher to conduct contrastive analysis or comparison with maximum variation groups or intensity sampling of other groups; and reputational case sampling entails that the researcher select key informants on the advice of others, or the researcher is cognisant of the participant's specific qualities (Cohen et al., 2011).

For this case study, a purposive sampling strategy was selected. The motivation for employing purposive sampling was to conduct an in-depth study of information-rich cases and increase the value of information obtained from the small sample of participants. These samples are chosen because they are likely to be "…knowledgeable and informative about the phenomena the researcher is investigating…" (McMillan & Schumacher, 2006, p. 319). Furthermore, employing purposive sampling in this study facilitated the collection of rich qualitative data by capturing participants' individual lived experiences and circumstances, enabling the researcher to address the research problem.

4.5.3.3 Sample size

Data collection spanned from 2020 to 2022 (refer to Tables 4.1 and 4.2). The profile of oral hygiene students registered for the 2020 academic year was as follows: BOH I had a total of 29 candidates, including 20 female students and 9 male students. BOH II had 36 candidates, comprising 23 females and 14 males, and BOH III had 24 students, comprising 21 females and 3 males. The BOH I students were excluded from the study due to their limited experience in the learning environment. Because of the COVID-19 pandemic, the BOH I students only entered the physical learning environment in 2021. The BOH I group of 2020 attended lectures exclusively online.

The profiles of students registered in 2021 were as follows: BOH I, with 20 females and 12 males; BOH II, with 19 females and 9 males; and BOH III, with 23 females and 14 males. In 2022, the BOH I students numbered 20 females and 12 males; BOH II had 19 females and 9 males; and BOH III consisted of 19 females and 9 males. The profile of full-time and part-time lecturers between 2020 and 2022 comprised eight females and one male.

Table 4.1

Oral Hygiene Students Registered for the BOH Programme (2020 – 2022)

	BOH 1		BOH 2		BOH 3	
Year	**Gender**	**Total**	**Gender**	**Total**	**Gender**	**Total**
2020	M	9	M	14	M	3
2020	F	20	F	23	F	21
2021	M	12	M	9	M	14
2021	F	20	F	19	F	23
2022	M	11	M	10	M	9
2022	F	18	F	20	F	19

Note. Table 4.1 presents demographic information on gender and the number of students registered for the BOH programme from 2020 to 2022. BOH I students were excluded from the study because of limited exposure to the learning environment.

Table 4.1

Full- and Part-Time Lecturers and Clinical Supervisors (2022)

Full-time	Part-time	Total
5 Females	3 Females	8
0 Males	1 Male	1

Note. Table 4.2 presents demographic information on gender and the number of full-time and part-time lecturers and clinical supervisors in the oral hygiene department during the data collection period.

4.5.3.3.1 Inclusion criteria

All students registered for their second or third year of BOH studies, as well as all full-time and part-time lecturers and clinical supervisors in the oral hygiene department, were included in the research and had an equal opportunity to participate.

4.5.3.3.2 Exclusion criteria

First-year oral hygiene students, all dentistry students, and all other postgraduate students registered within the dental faculty of the selected university were excluded

from the research study. First-year BOH students were excluded because they lacked lived experience in the university environment, particularly regarding social and learning experiences.

4.6 Data collection methods

The subsequent section identifies the data collection methods utilised in this study and outlines the theoretical underpinnings of each method. The data collected encompassed semi-structured interviews with both student and staff participants, focus group discussions with students, and a self-administered questionnaire featuring mainly open-ended questions distributed to students. A discussion of each of these components is provided in sections 4.6.1 to 4.6.4, as well as the relevance of each in the context of this study.

4.6.1 Questionnaire

Sections 4.6.1.1 to 4.6.1.6 provide an in-depth examination of a self-administered questionnaire, including its strengths and limitations. It discusses the rationale for using this data collection method in the context of this study. Furthermore, the discourse offers comprehensive insights into the role of self-administered questionnaires within a qualitative research framework.

4.6.1.1 What is a self-administered questionnaire?

A questionnaire is a research instrument that is designed to collect information from research participants. The questions could focus on a specific topic, opinions, or a combination of both (Denscombe, 2010). The researcher collects factual demographic data and information from open-ended questions.

For the current study, open-ended questions included: how the language of tuition affects participants; whether they participated in extracurricular activities and, if so, the type of activity; students' perceptions of their general and psychological well-being; their perceptions of available counselling; and the coping mechanisms they rely on to maintain well-being. The questionnaire was administered in hard copy format to eligible participants who had provided written informed consent. The purpose was to generate participant-generated textual data to complement the semi-structured interviews and focus group discussions.

4.6.1.2 Advantages of a self-administered questionnaire

The advantages of questionnaires include that they are economical, relatively easy to distribute, that questions are standardised, and that respondents' answers are not influenced by the researcher or interviewer (Denscombe, 2010). In qualitative research, however, responses to open-ended questions require interpretation. To manage interpretive bias, the researcher read and reread the responses, compared them with data from interviews and focus group discussions, retained participants' original wording where appropriate, and applied the same thematic analysis process across the datasets.

4.6.1.3 Limitations of a self-administered questionnaire

A limitation of self-administered questionnaires is that pre-coded questions can be frustrating for respondents and may prevent them from participating. A second disadvantage is that pre-coded questions can lead to biased findings in favour of the researcher's opinion. A third disadvantage is that questionnaires provide limited opportunities for the researcher to monitor participants' honesty in their answers (Denscombe, 2011). Although the self-administered questionnaire utilised in this study was anonymous, students might believe their answers could be linked to a code and that they might be identifiable. Such a perception could lead students to omit answers or provide ones they think will please the researcher.

4.6.1.4 Motivation for employing a questionnaire in qualitative research

The question is, why would the researcher consider conducting a questionnaire survey, which is associated with quantitative research, in a qualitative case study?

The reason for employing a questionnaire as one of the data collection instruments in this qualitative research study was that the data it yielded could complement those from other methods used in this study. Rule et al. (2011) motivate the use of questionnaires in qualitative research by stating that demographic information, as well as responses to open-ended questions, could enrich a case study.

4.6.1.5 Self-administered questionnaires in qualitative research

Braun and Clarke (2013) explain that there are multiple ways of collecting qualitative data, for example, textual data. Textual data can be considered primary data because

the participants write it and contribute to the current qualitative study. It is important to note that textual data collection via a self-administered questionnaire is only one of the methods employed in this study.

In this study, textual data collection included a self-administered questionnaire, with a primary focus on open-ended questions related to the research objectives. The self-administered questionnaire was used to verify information derived from other data collection methods, such as individual face-to-face semi-structured interviews and focus group discussions. According to Braun and Clarke (2013), information obtained directly from participants in written format is participant-generated and considered a primary source. Asking open-ended questions in the questionnaire allowed participants to share information related to the study while maintaining anonymity and privacy.

The open-ended questions could help address the aims and objectives of the research study. The information collected for this study from textual data relates to objective entities such as accommodation and financial situations while studying, students' ability to engage in extracurricular activities, and their coping strategies. The aforementioned adds information to the concept of well-being. Campion et al. (2007) considered factors that could negatively affect well-being, such as unsatisfactory housing conditions, unemployment, inadequate education, physical and emotional challenges, stigmatisation, and discrimination. Obtaining data on the aforementioned factors through self-administered questionnaires supported the research process by providing complementary data to answer the research question and to confirm the data collected from the semi-structured interviews and the focus group discussions.

The researcher asked all BOH II and BOH III students to assemble at their lecture venue and verbally informed them of the research project she was conducting. She explained the purpose of the study and that three data collection methods were utilised during the research period: self-administered questionnaires, semi-structured interviews, and focus group discussions. Students could decide whether to participate in the study and which data collection method they were willing to contribute to. Students were informed that participation was voluntary. Students who indicated their willingness to participate in the self-administered questionnaire data collection phase were asked to meet after a specific lecture on campus. Before the self-administered questionnaires were distributed, the researcher provided each participant with an

information sheet stating the researcher's name, research title, and the purpose of the study. Students signed a consent form agreeing to participate voluntarily. Only participants who were willing to complete the self-administered questionnaires received an informed consent form to sign and return. The consent forms were collected and sealed in a container. The questionnaires were distributed only after the informed consent forms were collected and sealed in a container. This was done to maintain the anonymity of the information shared in the questionnaires.

4.6.1.6 Advantages of self-administered questionnaires in qualitative research

Braun and Clarke (2013) state that self-administered questionnaires in qualitative studies have the advantage that the process of data collection is faster than with interviews or focus groups, and more affordable; more responses can be generated, questions are standardised, and answers are more focused. This study utilised a self-administered questionnaire to collect data (refer to Appendices 6 and 7).

4.6.2 Interviews

Interviews are a vital data-collection method that facilitates the exchange of perspectives between individuals on topics of shared interest. Kvale (1996) highlights the significance of human interaction in knowledge production and underscores the social context of research data. During interviews, both the participant and the interviewer engage in a dialogue, sharing their unique lived experiences and insights. This method allows for the interpretation of both verbal and non-verbal cues, yielding rich, in-depth information.

Interviews can be structured in different ways to achieve varying objectives. A predetermined interview schedule involves a specific set of questions asked in a consistent order to all participants, promoting data standardisation and comparability. In contrast, a semi-structured interview allows for pre-determined questions, followed by additional inquiries shaped by participants' responses, offering greater flexibility for deeper exploration. Researchers should ensure that participants provide voluntary consent and understand that their responses are recorded, regardless of the medium used, whether face-to-face, over the phone, or through digital platforms like Skype or Zoom. Denscombe (2017) emphasises that interviews involve particular assumptions and understandings that distinguish them from casual conversations.

4.6.2.1 Advantages of interviews

The one-to-one interview is considered the most frequent type of interview conducted by researchers. This type of interview comprises a meeting between one researcher and one participant at a time (Denscombe, 2017). There are several advantages associated with one-to-one interviews. They are relatively easy to arrange and conduct, and opinions and information come from one interviewee at a time. A third advantage is that a one-to-one interview is relatively easy to control. The researcher conducted semi-structured interviews with each participant in this study.

According to Denscombe (2017), the advantages of interviews include their in-depth nature, and the data they yield can provide valuable insights based on the quality of information collected from participants. Additionally, the equipment needed to conduct interviews is relatively straightforward to use. The interview process respects the informant's priorities. The interview is a preferred method for researchers aiming to collect data on participants' main concerns, valued opinions, and specific ideas. Moreover, interviews are the most flexible data collection method. An additional benefit is that the researcher can easily adjust the “lines of inquiry” during the interview to obtain valuable information (Denscombe, 2017). Sometimes the interview could be of therapeutic value. Scheduling an appointment is reasonably easy to conduct and usually has a high response rate.

4.6.2.2 Limitations of interviews

The researcher may identify a specific location for the interviews that is not the participant’s natural setting. Being “out of” their natural setting may influence the interviewee. An additional limitation to consider is that the researcher's presence during the interview may result in a biased response or render it unreliable. A third limitation to consider is that some participants may not be equally capable of expressing themselves well in interview settings. Furthermore, the interview may be a time-consuming method of data collection. Interviewer fatigue may obstruct the interview process and data collection. During the interview, the interviewee's anonymity is forfeited (Cohen et al., 2011). Denscombe (2017) mentions that some participants may be intimidated by being recorded. Participants may perceive that their privacy is being invaded during the interview. The reliability of the data may be subject

to scrutiny, as there exists the potential for a discrepancy between participants' reported behaviours and their actual behaviours.

The participants for this study were interviewed in an environment familiar to them. All interviews with participants, students, and staff were conducted in the same venue and training site. The participants were guaranteed anonymity during the recording, transcribing, and reporting phases. At no point would any information collected during this study be revealed that would compromise the participant's identity.

4.6.2.3 Semi-structured interviews

Adams (2015) states that a semi-structured interview is conducted with one person at a time and may include a combination of open- and closed-ended questions that focus on a specific topic, followed by 'who' and 'what' questions. The conversation in the semi-structured interview may remain focused on the topic or wander off in different directions. During semi-structured interviews, the researcher poses open-ended questions to obtain information on how these individuals perceive their world and explain or make sense of important events in their lives (McMillan & Schumacher, 2006). The primary data of qualitative interviews are verbatim accounts of what is communicated and what becomes apparent during the session. Voice recordings ensure that the researcher accurately captures verbal communication and provide a method to assess reliability; however, they do not eliminate or replace the need to take notes during the interview. The reason is that note-taking may assist in reformulating a question and in capturing notes of non-verbal communication, which aids in data analysis (McMillan & Schumacher, 2006).

The data collection tool selected for this research was semi-structured interviews. The focus of these interviews was to address the main research question and its sub-questions (refer to Appendices 8 – 11).

4.6.2.4 Advantages of semi-structured interviews

An advantage of semi-structured interviews is that scheduling an interview is relatively easy. The researcher can focus on a single participant at a specific time and progress through the interview process. Opinions and personal views communicated during the interview derive from a single participant (per interview); therefore, the researcher can link a specific view or opinion to a specific interviewee. Recording and transcribing verbal cues, as well as noting non-verbal cues, are easier during a semi-structured,

face-to-face interview with a single participant. The researcher has the advantage of observing non-verbal cues in a face-to-face situation, which contribute to the meaning of verbal communication (Denscombe, 2008, 2017). Adams (2015) noted that the semi-structured interview is the ideal technique when a researcher requires data on the perception of individuals regarding a certain incident, environment, or experience.

4.6.2.5 Limitations of semi-structured interviews

A limitation of semi-structured interviews is that factors such as the researcher's or interviewer's age, gender, and cultural background may affect how much information a participant is willing to share. Denscombe (2008, 2017) suggests that the data collected may be influenced by the researcher's identity and the sensitivity of the topic under discussion. Participants might provide answers they believe the researcher wants to hear, which can compromise the integrity of the data collected. Cohen et al. (2011) cite Cicourel (1964), who states that a lack of mutual trust and social distance may undermine the interview process, ultimately affecting the data gathered.

Another limitation is that both the interviewer and the interviewee may interpret the questions and the information provided in different ways. Additionally, semi-structured interviews can be time-consuming, generating a large volume of data that needs to be analysed. This method also requires skilled interviewing techniques and a knowledgeable researcher to ask the right questions (Adams, 2015).

In this study, students willing to participate in the semi-structured interview data collection phase were asked to contact the researcher to schedule an interview. In the current study, participants who expressed willingness to participate in the semi-structured interviews were requested to sign an informed consent form. This form stated that the interviews would be voice-recorded and that the researcher would transcribe the information collected from the recordings. Although anonymity cannot be guaranteed between the participant and the researcher during the session, the researcher protected the participant's identity when writing up the report; thus, the researcher guaranteed that the data collected would be kept private and confidential at all times. During the semi-structured interviews, no participant's name was mentioned during the recording. When the researcher reported on data collected through the semi-structured interviews, the data did not identify any participant or link

it to any participant or institution. The duration of each interview was approximately 90 minutes.

Data collection continued until the researcher judged that sufficient depth and breadth of information had been obtained. This judgement was based on the repetition of key issues across interviews, focus groups, and questionnaires, the absence of substantially new themes in later data collection, and the extent to which the data addressed the main research question and sub-questions. Interviews with participants continued until no more candidates volunteered. Saturation was therefore understood not only as the point at which no additional volunteers came forward, but also as the point at which recurring patterns were evident across the datasets.

4.6.3 Focus group discussions

A focus group discussion is an interaction and dialogue among participants in a research study. A focus group is a small group of individuals, typically comprising six to nine participants, who take part in a single discussion. The purpose of the focus group discussion is to investigate the attitudes, perceptions, feelings, and ideas regarding a specific topic (Denscombe, 2008). The focus group discussion usually continues for 90 to 120 minutes per session.

The decision to use focus group discussions as a data collection method in this study was to verify the information collected by other instruments. Focus group discussions are valuable for gathering views on a specific topic from participants who meet the inclusion criteria (Rule et al., 2011). Focus group interviews assist the researcher in gaining a better understanding of a particular phenomenon. Collecting information through focus group discussions is often used by researchers to verify data obtained from in-depth interviews (McMillan & Schumacher, 2006).

The researcher can conduct the focus group discussion, or a facilitator can ask questions to start and guide the discussion. Sessions are voice-recorded and supplemented with handwritten notes, similar to the face-to-face, semi-structured interviews. In the current study, participants who expressed a willingness to participate in the focus group discussions had to sign an informed consent form. This form explained that although anonymity cannot be guaranteed during the discussion, the researcher would protect all participants' identities in the report; thus, data collected would be kept private and confidential. During the focus group discussions, no names

were mentioned. Participants had to use numbers to identify themselves, which were determined before the discussions started. When the researcher reported on the data collected through focus group discussions, the data did not reflect participants' identities or link them to any participants or institutions. The same process of recording, note-taking, transcribing, and reporting was upheld as for the individual semi-structured interviews previously discussed (refer to Appendices 12 and 13).

In this study, four focus groups were conducted (see Table 4.3). Group I had six participants, Group II had seven, Group III had five, and Group IV had three. Two participants from Group IV withdrew due to unforeseen personal circumstances.

Table 4.2

Focus Group Discussion Participants

Focus Group	Male	Female	Total
Focus Group I	4	2	6
Focus Group II	1	6	7
Focus Group III	3	2	5
Focus Group IV*	1	2	3

Note. Table 4.3 presents demographic information for males and females participating in each group discussion, as well as the number of group discussions held in this research project.

4.6.3.1 Advantages of a focus group discussion

Focus groups are successfully employed in qualitative research to elicit varied responses related to a specific topic or issue. During focus group discussions, it is possible to identify which participants' points of view are influential and who becomes suppressed or considered unimportant. The researcher has the ability to direct the discussion in such a way that both the suppressed and the influencer's comments can be further explored. A further advantage is that such group discussions provide the researcher with the shared views of a specific group regarding a particular issue (Denscombe, 2011).

4.6.3.2 Limitations of a focus group discussion

Focus group discussions could become expensive and time-consuming to conduct. Logistical problems should be considered as the researcher may find it difficult to arrange a time suitable for all focus group members to meet at a specific time and place (Denscombe, 2011).

4.6.4 Researcher journal

A reflective journal is a record kept by the researcher, in which the research process is continuously documented. The journal includes documentation of decisions the researcher made during the research, justification for the information collected at a specific time and place, as well as changes and challenges experienced in the field. The journal contains assessments of the trustworthiness of each dataset collected. The researcher records thoughts, ideas, and personal reactions throughout the research process (McMillan & Schumacher, 2006).

For this study, the researcher attempted to keep an accurate reflective journal by making notes during the semi-structured interviews and focus group discussions. It is important to note that semi-structured interviews were conducted during relaxed COVID-19 restrictions; however, interviewees maintained a distance of at least 3 meters during individual semi-structured interviews and focus group discussions and wore full personal protective equipment (PPE). Full PPE was required in the dental environment and throughout the building (while in the clinical environment, stricter PPE protocols were followed), including a KN95 mask, a surgical facial mask, a facial screen, and gloves. Audibility became difficult, as well as capturing non-verbal communication cues, such as facial expressions and finer nuances of paralanguage, due to the protective wear. The researcher reported in the reflective journal how participants responded to the questions, their emotional responses, and any hesitations in their responses.

4.7 Pilot study

A pilot study, as noted by Van Teijlingen and Hundley (2001), is a small-scale preliminary study aimed at assessing the feasibility of a larger research project and evaluating measuring instruments. It involves participants who share characteristics with the target population and helps identify potential issues before the main study begins. While it can highlight whether a study might fail or if instruments are

inadequate, it does not guarantee success. A significant risk is contamination, which can occur if pilot study data are included in the main results or if the same participants are involved in both the pilot study and the main results. This is especially challenging in smaller populations, whereas qualitative research often mitigates this concern since repeated interviews are common. Holloway (1997) argues that piloting focus groups is not essential, as researchers can improve their questions by analysing recordings and transcripts.

4.7.1 Piloting of the questionnaire and semi-structured interview questions

A pilot study typically includes a small sample of participants. Comments from pilot participants could concern the clarity of the questions, the instructions for completing the questionnaire, and the time allowed (Cohen et al., 2011). Piloting the questionnaire provides the researcher with information through an informal critique of individual items on the questionnaire (McMillan & Schumacher, 2006). Participants in the current study were allowed space on the pilot questionnaire to write suggestions or comments to the researcher. Piloting of a questionnaire was conducted to determine the clarity, validity, and reliability of the items included in the questionnaire. Participants indicated that the questionnaire was clear and the time allocated to complete the questionnaire was adequate.

Considering the piloting of the semi-structured interviews, it is essential to monitor for bias regarding the questions, the process, and the interviewer. During the pilot test of the interview questions, the exact process should be followed as with the research study to be conducted later. The researcher would take notes on participants' reactions during piloting of the interview questions, such as when they felt uncomfortable answering a question or when it was clear they did not understand a question. Once the pilot interview concludes, the participant may evaluate the questions and provide feedback to the researcher on their intent and clarity, as well as the duration of the interview (McMillan & Schumacher, 2006).

In 2020, all BOH II and BOH III oral hygiene students (n = 60) were invited to participate in the interview and piloting phase of the study. The first three students who volunteered participated in pilot interviews. These interviews were included in the final dataset because no substantive changes were made to the semi-structured interview schedule after the pilot phase, and the participants met the same inclusion criteria as

those in the main study. Including these interviews was therefore appropriate in the context of a small qualitative population. The pilot study confirmed that the questions were clear, relevant, and capable of generating information related to the research objectives. Participants indicated that the questionnaire covered important issues that could influence their well-being and that the questions were easy to understand. The researcher also remained mindful of possible interview fatigue and monitored the duration and flow of the interviews accordingly.

Semi-structured interviews were conducted with lecturers and clinical supervisors in the BOH programme, following a process similar to that previously used to pilot the interviews with the student participants. Feedback was positive, highlighting that the questions were thorough and the information requested was pertinent to their roles in the study.

4.8 Data analysis

The next section presents a comprehensive analysis of data collected from multiple sources. Various data collection methodologies were employed to ensure a robust, thorough understanding of the subject matter. These methods included self-administered questionnaires, which encouraged participants to provide candid and thoughtful responses. Semi-structured interviews were conducted to facilitate in-depth conversations with student and staff participants, enabling the exploration of nuanced perspectives and insights. Focus group discussions were employed to foster dynamic interactions among participants, encouraging them to share experiences and opinions in a collaborative environment. Each of these approaches contributed unique dimensions to the dataset, enriching the overall analysis and interpretation of the findings.

4.8.1 Analysis of questionnaires

According to Braun and Clarke (2013), questionnaires for qualitative analysis consist mostly of open-ended questions that participants respond to in writing and are directly related to the research question. There are three methods for distributing these questionnaires to participants. This could be in the format of a hard-copy or paper-based survey, or an e-mailed or online survey.

The researcher opted for a hard-copy, paper-based approach. This decision was informed by research indicating that the response rate for online questionnaires in the

field of education is approximately 44 per cent (Wu et al., 2022). By providing printed copies of the questionnaire to students willing to participate, the researcher anticipated a higher response rate. Participants provided their answers to open-ended questions in writing. To become familiar with the collected data, the researcher reviewed the responses by reading and re-reading them before entering them into an Excel spreadsheet. This study adopted a comparable data analysis process for the self-administered questionnaires, similar to that used for the semi-structured interviews and focus group discussions. The results were reported, with participants' responses incorporated into the results chapter. According to Braun and Clarke (2013), using a Word document format to compile the open-ended responses is an acceptable alternative (refer to Appendix 14).

4.8.2 Analysis of semi-structured interviews and focus group discussions

In this study, thematic analysis was employed to analyse the various datasets. Qualitative data analysis is a relatively systematic process involving coding, categorising, and interpretation of data to explain a single phenomenon of interest (McMillan & Schumacher, 2006). The process of analysing qualitative data comprises overlapping phases: data collection, coding and categorisation, and pattern seeking within the data (McMillan & Schumacher, 2006). According to Braun and Clarke (2008), thematic analysis forms the foundation of qualitative data analysis. Boyatzis (1998), as cited in Braun and Clarke (2006), views thematic analysis as a tool applicable across various research approaches and datasets to identify recurring information that can be considered patterns. These datasets may include interviews, focus group discussions, and scripts. Recognising patterns may become apparent to the researcher early in the data collection process. Once data collection is complete, the researcher continually reviews the datasets, moving between them to identify patterns. The process usually concludes with the writing of the report, where the meaning of patterns, categories, and subcategories is identified, explained, and discussed.

Braun and Clarke (2006, 2013, 2022) explain that the steps suggested for thematic analysis should be considered guidelines rather than rules. These steps are expanded upon below.

Step 1: Familiarisation with the data. Once data collection was completed, the researcher must become familiar with the content of the various data sources (Braun & Clarke, 2008). This implies that researchers repeatedly read through the datasets, immersing themselves in the information. Transcribing data from recordings into text is considered an engaging and immersive way to engage with the data. Bird (2005) considers the transcription of data an important phase during which the researcher interprets the data and locates meaning.

Contextualising Step 1 for the current study: The researcher reviewed the interview notes and repeatedly listened to each participant's voice recording to familiarise herself with the data. This process was repeated after each interview. After listening to the full recording of each interview, the interview was transcribed verbatim. The nuances and subtleties, including non-verbal cues such as intonation, silences, and pauses, were noted during the interviews and considered during this phase. No computerised programmes or third parties were involved in transcription or any other data analysis processes related to the current study. Once the semi-structured interviews were transcribed, the researcher listened to the audio recordings while following the transcripts, ensuring accuracy in what the interviewee said and related nuances.

Step 2: Coding. During the second phase, coding may start (Braun & Clarke, 2008). Coding is the process of organising material into chunks or segments of text before bringing meaning to the information.

Contextualising Step 2 for this research: During this process, all interview transcripts from student and staff participants were reviewed again while listening to the recordings to verify accuracy. Thereafter, the Microsoft Word Review function was used on the researcher’s laptop. The process followed is an accepted method, as mentioned by Braun and Clarke (2013). During this process, the researcher used different colours to highlight similar and repeated words or chunks of similar sentences in the Word document, including thoughts and perceptions expressed during the semi-structured interviews with the participants. In the right-hand margin, notes were made corresponding to the different colour text highlighters. This process was repeated for each interview (refer to Appendix 15).

Step 3: Identifying themes. The next step in the data analysis process is to progress from coding to identifying themes. Themes are derived from a more detailed analysis of the dataset and codes and consist of the main ideas. Themes usually contain valuable information that may help answer the research question (Braun & Clarke, 2013). Braun and Clarke (2013) state that progressing from codes to themes is an active process of grouping codes that have similarities, overlap or commonalities. It is important to acknowledge that themes may change, develop or be discarded as data analysis progresses.

To contextualise Step 3 for this research, codes and sentences, or small chunks of information, were grouped under broad, provisionally identified themes that reflected the main ideas emerging from the data and contributed to answering the research question.

Step 4: Reviewing the themes. This step involves reviewing the initial themes. During this step, the themes originally developed or identified from the coded data are reviewed. The researcher may decide during this phase of thematic analysis that some themes are redundant or that others should be refined and renamed.

To contextualise Step 4 for this study, the researcher reviewed the initial themes and categories and, after discussion with the supervisor, concluded theme identification by selecting four themes.

Step 5: Refining, defining, and naming themes. Once the themes are identified and confirmed, each theme is defined, and the parameters are clearly demarcated, with categories reflected.

To contextualise Step 5 for this study, the main themes, sub-themes, definitions of each theme, and the categories are presented in tabular format in Chapter 5. Four significant themes were identified, each of which is examined in detail in the results section. These themes provide a thorough understanding of the key findings and insights from the study, highlighting the underlying patterns and trends.

Step 6: Writing the report. The write-up of the data is the interpretation of the various data sets. The data collected and the analysis thereof should provide information that answers the research question and links it to information derived from the literature review. Findings from the data analysis were presented in a narrative format. In the narrative discussion, participants' feedback and the data collected were coded.

During this phase of data analysis, the researcher focused on interpreting the data presented in Chapter 6 of this study. The researcher compared the existing information from qualitative and quantitative literature reviews with the data collected during this study.

Refer to Appendix 15 for an example of an analysis of students' semi-structured interviews, Appendix 16 for an example of staff semi-structured interviews, and Appendix 18 for an example of the development of the coding, identification of themes and sub-themes, and categories.

4.8.2.1 Trustworthiness

In qualitative research, validity is not a fixed, absolute outcome; rather, the research is expected to be trustworthy. Qualitative research that addresses trustworthiness can claim that the individual reading the work will be certain or confident in what the researcher has reported (Stahl & King, 2020). According to Lincoln and Guba (1985) and Ahmed (2024), credibility, transferability, dependability, and confirmability are key elements in enhancing the trustworthiness of a qualitative research study. Each of these elements is discussed in more detail below.

4.8.2.2 Credibility

Enhancing the credibility of a study through triangulation is usually considered by researchers in qualitative enquiries. Triangulation implies that the researcher has employed multiple data collection tools for the same study and research field and can consistently identify the same patterns across the different data sources (Stahl & King, 2020). Member checking is another method to help ensure the trustworthiness of a qualitative study. It can be carried out by participants, in which the researcher provides a copy of the verbatim transcription before publication and asks them to confirm its accuracy. According to McMillan and Schumacher (2013), member checking can also be conducted during the interview, when the researcher asks the participant to explain certain aspects further or confirm whether the researcher’s interpretation of the information or observation is correct.

During interviews, the researcher summarised key points and asked participants whether the interpretation reflected what they intended to communicate. Where a participant disagreed with an interpretation or wished to clarify wording, the participant’s explanation was accepted and reflected in the notes and analysis.

Participants were also informed that they could request a follow-up discussion if they wanted to add, amend or withdraw information.

4.8.2.3 Transferability

A second method of establishing trustworthiness in qualitative research is transferability. Transferability refers to the extent to which the research findings can be generalised to other situations or contexts. Although the focus of the qualitative enquiry is not to aim for replicability, researchers believe the patterns and descriptions derived from research in one context may apply to another similar context or research field. The researcher does not employ the transferability of the study, but rather by another researcher who wishes to compare situations or contexts with one another. Transferability is only possible if the researcher provides detailed descriptions of the research, which are “thick descriptions that are rich enough”, making it possible to apply to another similar situation or context (Stahl & King, 2020, p. 27). These rich descriptions should reflect detailed information on the research field, the methodology employed, the time frame during which the researcher collected the data, and the duration the researcher spent in the research field.

4.8.2.4 Dependability

According to Lincoln and Guba (1985), the third aspect of trustworthiness is dependability. Dependability includes peer debriefing or peer scrutiny. The aforementioned contribute to the trustworthiness of the study. Peer debriefing entails the researcher who conducted the interviews requesting that another researcher review the fieldnotes and the researcher's own interpretations. Should the peer debriefing have a similar interpretation of the research, it could be considered dependable. Peer debriefing helps the researcher be sensitive to how the observations and interviews are written. A further contribution to trustworthiness is reflexive auditing, which focuses on involvement in the research field (Stahl & King, 2020).

4.8.2.5 Confirmability

The fourth dimension of trustworthiness is confirmability, which necessitates that researchers uphold objectivity and minimise bias in their work (Lincoln & Guba, 1985). This requirement entails the employment of precision and accuracy in research findings, alongside an invitation for peer scrutiny of the outcomes. To enhance confirmability and, consequently, the overall trustworthiness of the research, it is essential to implement specific practices. These practices include maintaining audit trails, keeping a reflexive journal, and archiving raw data for subsequent analysis and interpretation. Audit trails consist of records that document the raw data acquired through various data collection methods, the reduction of large datasets, and the analysis and synthesis of results. A reflexive journal contains the researcher's personal notes and reflections throughout the research process. Codes and emerging themes were reviewed through supervisory discussion, and the researcher moved repeatedly between the raw data, coded extracts, and developing themes to ensure that interpretations remained traceable to participants' accounts.

4.8.2.6 Linking the current study to trustworthiness

Trustworthiness was achieved in the current study through triangulation, which involved using several data collection instruments and methods, including semi-structured interviews with student and staff participants, focus group discussions, and self-administered questionnaires with both open- and closed-ended questions. The reason for including staff participants was to confirm whether they share similar perceptions of what students report experiencing.

During the semi-structured interviews with students and staff, although limited by the need to wear PPE, notes on non-verbal cues were taken and included during the transcription. The researcher allowed participants in the semi-structured interviews and focus group discussions to confirm the accuracy of the information provided. Participants in the semi-structured interviews were invited to schedule an appointment if they wished to add or withdraw any information they had provided, had forgotten to add, or had withheld. A similar procedure was followed with the focus group discussions.

When the researcher had to adapt the semi-structured interview due to a participant's unique circumstances, those thoughts were directly included in the interview notes and considered part of the audit trail.

A third data collection instrument was a self-administered questionnaire containing both open- and closed-ended questions.

4.9 Researcher positionality and reflexivity in qualitative research

Hellawell (2006) distinguishes between two types of researcher positionality: insider researchers who are embedded within the group they study, and outsider researchers who observe from outside that group. This distinction is particularly significant within qualitative research, as noted by Berger (2013) and Hellawell (2006). The relevance of researcher positionality in qualitative research stems from the direct interactions that occur between the researcher and the subjects of the study (Corbin Dwyer & Buckle, 2009).

One notable advantage of being an insider researcher is the shared background with participants, which may include common language, culture, values, and norms. Insider researchers often originate from the same community under study, or possess familiarity with it, thereby facilitating easier access to participants (Berger, 2013). Consequently, participants may demonstrate a greater willingness to disclose their genuine experiences and perceptions to an insider researcher.

Conversely, insider researchers may encounter challenges in distinguishing between their roles as group members and as objective researchers. Questions regarding their objectivity may arise, leading to potential biases in participant selection based on personal motivations (Corbin Dwyer & Buckle, 2009). Participants might also withhold certain information, assuming the researcher is already privy to it.

Outsider researchers are considered more objective, regarding participants as experts of their own lived experiences and knowledge pertaining to the research topic (Corbin Dwyer & Buckle, 2009). However, being an outsider presents its own disadvantages, such as challenges in accessing participants and a lack of comprehensive awareness regarding the context and circumstances affecting them. Both Berger (2013) and Hellawell (2006) assert that researchers often navigate between insider and outsider

positionality, as no research group is identical across all aspects. Thus, the researcher's positionality may reside in a continuum (Corbin Dwyer & Buckle, 2009).

The concept of researcher positionality is fundamentally linked to reflexivity (Berger, 2013). Reflexivity entails the critical and intentional examination of one's beliefs, values, norms, biases, and the influence of one's power dynamics on participants' willingness to share authentic experiences and perceptions (Berger, 2013). Pillow (2003) describes reflexivity as recognition of the self, personal awareness, recognition of others, and the gathering of the truth. According to McMillan and Schumacher, reflexivity is the rigorous self-inspection by the researcher throughout the entire research process and is an important procedure for establishing credibility (McMillan & Schumacher, 2013). The researcher must rise above their subjectivity and cultural context to provide accurate reporting of the research conducted (McMillan & Schumacher, 2006). According to McMillan and Schumacher (2013, p.356), qualitative research depends on the interpersonal skills of the inquirer, such as building trust, maintaining good relations, being non-judgmental, and respecting the norms of the situation. Researchers in qualitative research utilise their personal experiences and capabilities, while balancing the analytical and creative aspects by being empathetic and understanding towards the participants, and fostering absolute respect for their perspectives (McMillan & Schumacher, 2006). How the qualitative research project progresses is often primarily dependent on the relationship between the participant and the researcher. Data obtained from participants are valid even if they may present particular views of the researcher or have been influenced by the researcher's presence. However, such data are problematic only if they are claimed to be representative beyond the specific context in which they were collected. Potential researcher bias can be reduced or minimised when the researcher spends sufficient time in the field and makes use of multiple data collection strategies to support the findings (Berger, 2013; McMillan & Schumacher, 2006).

4.9.1 Reflexivity and positionality in the current study

Relating to this study and reflexivity, the researcher has been a lecturer at the dental facility for the past 34years and is therefore well known within the oral hygiene training programme. The researcher has been the coordinator of the second-year oral hygiene students for the past fifteen years and has built a solid professional relationship with

the students attending the programme. Furthermore, the researcher serves as the clinical advisor/mentor to several first-, second-, and third-year students. In this capacity, the researcher is expected to meet with students every quarter, or more often if required, to discuss academic progress and non-academic challenges that affect their academic performance. During these sessions, the privacy and confidentiality of each participant were respected. The researcher maintains close contact with professional support structures on campus to assist students with well-being challenges. Often, students prefer that the researcher be their primary point of contact during crisis management before considering or approaching professional support on campus. The researcher, however, will always guide the student to seek professional intervention. The researcher has built a reputation among her students as reliable, trustworthy, and respectful of students and their privacy, treating all information dealt with as confidential. It is therefore fair to conclude that the researcher is well aware of the similarities between the participant group under investigation and the researcher's norms and values. For this study, the researcher has spent sufficient time in the research field and has implemented several data collection techniques. The researcher also reflected on her positionality, relationships with participants, and potential influence on the research process.

In terms of positionality, the researcher has taken on the role of an insider-outsider when conducting interviews with student participants and staff members. While the researcher shared some commonalities with the participants, an outsider perspective was consciously maintained during the data-gathering period to ensure objectivity and prevent researcher bias, beliefs, and personal experiences from influencing the research process.

4.10 Ethical considerations

Ethics are the moral principles that are embraced by a society or a specific community. Ethics further reflects the norms and the rules for acceptable behaviour (Rule et al., 2011). Research ethics refers to a set of principles and guidelines that researchers embrace during their research (Arafat, 2024). The basic research principles include: autonomy, non-maleficence (not harm), beneficence (for the public good), and the protection of participants' privacy, confidentiality, respect, and anonymity at all times (Arafat, 2024). Researchers are required to obtain permission from ‘gatekeepers’ to enter research environments and informed consent from participants. The researcher

should ensure that no participant is harmed in any way during the research study. Once the data is analysed, the researcher must provide feedback to the participants, communities, and organisations. In the discussion below, the following ethical considerations will be explored: informed consent, confidentiality, anonymity, and specific ethical issues related to data collection.

4.10.1 Informed consent

Informed consent is the process by which the researcher informs the potential participant or respondent about the key aspects of the research, as well as the potential benefits and risks of the study (Nijhawan et al., 2013). The purpose of informed consent is to protect the human rights of individuals participating in research (Arellano et al., 2023).

According to the Nuremberg Code, it is vital that participants who decide to take part in a research project do so with voluntary consent (Shuster,1997, p.1436). Voluntary consent implies that the individual is free to choose without anyone else trying to persuade them to participate. The person participating must be capable of giving consent.

The researcher has the obligation to explain, face-to-face, what the research study entails to the potential participant clearly and understandably, using language that the participant understands. Therefore, the participant must have autonomy to decide if they want to participate. The individual should be able to understand what the research is about. Informed consent should include three elements, namely information, voluntariness, and understanding. With reference to the comprehension element, it is important that information is provided in detail about the research, not rushed, organised, allowing the potential participant to process the information at their own pace and time to ask questions.

Furthermore, participants may have the right to withdraw from the study at any time without being penalised for their decision. In situations where a minor or a person does not have the capacity to provide consent, a legal authority or a parent may give consent. Assent must be considered where a minor child or person is asked to participate in a research study (Arellano et al., 2023). Once the researcher has verbally informed potential participants about the research, it should be presented to them in written format. Denscombe (2014) mentions two reasons for having a written consent

form. Firstly, it is to provide the participant with ample information about the study to which they are invited. The second reason for a written consent form is that it provides the researcher with a legal document indicating that the participant is prepared to participate voluntarily in the study. The written format should include an invitation to participate in the study, an explanation of why the person is considered eligible to participate, and a statement that participation is voluntary. The information should be provided in writing to inform participants that they may withdraw from the study at any time without penalty or loss of benefits or opportunities. Potential participants must be informed about whether there are any sponsors for the study, any financial contributions, and that the research proposal will be submitted to an ethics committee or ethics board for approval before the research study may commence (Arellano et al., 2023).

The consent form (refer to Appendix 8 and Appendix 9) includes the purpose of the research study, the procedures to be followed, and the researcher conducting the study. The information to be included regarding the researcher is as follows: the researcher's name, contact details, and affiliation with the organisation (Denscombe, 2014). The consent form must clearly outline what is expected of the participant and specify the time commitment required for their participation (Arellano et al.,2023). Denscombe (2014) emphasises that participants should know exactly what is expected of them; for example, will the research require them to participate in interviews, answer questionnaires, or participate in laboratory experiments? The participants should be informed of any costs they will incur for participating in the study and whether they will be compensated by the researcher (Denscombe, 2014).

Regarding confidentiality, the document must explain how confidentiality, privacy, and anonymity will be protected. The consent form must be written in a language and at a level that the potential participants can comprehend. Once the participant has been informed of the above and has had sufficient time to review the informed consent form or letter, the form should be signed and dated by the participant who agrees to participate in the study.

4.10.2 Informed consent as a dialogue

The researcher assured participants in this study of confidentiality and anonymity. The researcher informed the participants of the intended use of the data. The researcher

compiled a letter of informed consent for each data collection method. Each participant was individually requested to sign a consent form (McMillan & Schumacher, 2006). With this informed consent letter, the researcher acknowledged that participants' rights would be protected during data collection.

4.10.3 Privacy

Protecting research participants' right to privacy requires respect for their autonomy, their right to self-determination, their general welfare, and their right to decide to partake in the research. According to Cohen et al. (2011), privacy in research includes all information about individuals' physical and psychological condition, personal situation, and social interactions with others, except for information that individuals have previously shared in the public domain. The right to the protection of privacy in research provides participants the right to decide what information they are willing to declare or divulge. The need for privacy is a function of generally accepted social norms and individual expectations about what information about oneself should—and should not—be known to others.

For qualitative research, such as interviews, maintaining participant confidentiality while presenting rich, detailed accounts of social life could be challenging. Privacy, however, can be renounced by the participant by voluntarily granting the researcher access to sensitive information.

4.11 Ethical considerations regarding the study

Once UNISA approved the proposal, the researcher was expected to inform the Deputy Dean of Research of the intended study at the identified research site. The reason for informing the Deputy Dean of Research at the intended research site was to obtain permission from the university authorities, which would grant access to the study site and the participants (refer to Appendix 20). The original proposal approved by UNISA, and the ethical clearance documentation were forwarded to the Research Committee of the dental faculty, where the intended research was to be conducted. The Research Committee reviewed the documentation and forwarded it to the Senate of the university research site. The research site may only be entered once the Dean of the Faculty of Dentistry of the intended research site has provided the researcher with a letter of permission to enter the research site and its participants.

4.11.1 Ethical issues related to the research problem

Considering ethical issues, the researcher shall not harm, discriminate against, or marginalise any participant at any stage of the research. According to Creswell (2009), researchers may consider conducting a pilot study to establish trust and respect with participants, allowing inquirers to detect any marginalisation before the study commences. All undergraduate oral hygiene students had an equal opportunity to participate in the study. The proposed research study was communicated to all second- and third-year undergraduate oral hygiene students registered in the programme. The researcher compiled an informed consent letter that each participant signed before participating in the research. The informed consent form acknowledges that the rights of all participants will be protected during data collection (Creswell, 2009). A similar process for obtaining consent was followed for the self-administered questionnaires, semi-structured interviews with lecturers and clinical teachers, as well as for the focus group discussions.

4.11.2 Ethical issues related to data collection

The researcher should respect the research site and minimise being disruptive to the physical setting (Creswell, 2009). The researcher did not interfere with participants' scheduled lectures, pre-clinical, and clinical sessions or lunch breaks. Furthermore, the researcher did not disturb the scheduled daily activities. Students could have an elective session once a week, during which data collection could be conducted. The researcher discussed the suitability of utilising such sessions to introduce the research problem to the students, collect data by means of a self-administered questionnaire, and conduct interviews and focus group discussions.

In qualitative research, the interview is seen as a moral inquiry. It is therefore important that the interviewer considers how the interview will improve a participant's situation and contribution to knowledge (Creswell, 2009). The researcher was aware that an interview could be stressful for the participant, particularly regarding the way the interview and questions are structured, how the information is interpreted, and the consequences that could follow. The researcher, therefore, conducted interviews in a neutral, non-intimidating environment, isolated from other participants, and ensured that no information divulged would be held against the participant or shared with any

other person. The researcher is responsible for all collected data and holds exclusive ownership of it.

When harmful or private information was disclosed during the interview, the researcher protected the privacy of the participant and conveyed this protection to all participants in the study.

4.11.3 Ethical issues in data analysis and interpretation

The data collected were reflected on and discussed in detail in this thesis. The privacy and anonymity of all participants were respected throughout the research process, from data collection and interpretation to data presentation and answering the research question and the study's sub-questions.

The researcher consistently sought to provide an accurate account of the collected data. To ensure the accuracy of the collected data and its interpretation, the researcher employed various validity strategies. One of the strategies was to employ different data collection methods. A second strategy was to determine the accuracy of findings extrapolated from the data. This included presenting sections of the data, themes that emerged from the data, and the final report to participants. Participants could be requested to engage with the information and comment on the findings (Creswell, 2009).

Participants taking part in this study were debriefed immediately after each interview to verify the accuracy of the data collected. Students were informed that they are welcome to schedule a follow-up interview if they wish to add information. Participants were informed that if the researcher needed to conduct a follow-up discussion, they would be contacted.

4.12 Summary

Chapter 4 provided a detailed discussion of the research design methodology. The chapter began by defining what a research paradigm is, followed by an identification of the various research paradigms. A discussion of the characteristics of positivism, anti-positivism, post-positivism, constructivism, the transformative paradigm, and pragmatism followed. The researcher then identified constructivism as the guiding paradigm for this study.

The research aim, objectives, and research questions were outlined. This study adopted a qualitative research approach and employed a case study design. The study population consisted of BOH students, selected for their ability to provide details of lived experiences relevant to the research problem being investigated and lecturers and clinical supervisors from the oral hygiene department.

The inclusion and exclusion criteria were specified: second- and third-year students enrolled in the BOH degree were included in the study, while first-year oral health students, those enrolled in dentistry, and postgraduate students were excluded. Additionally, staff involved in teaching the BOH programme within the oral hygiene department, such as lecturers, pre-clinical teachers, and clinical supervisors, were included as participants in the study.

The chapter detailed the data collection methods, including self-administered questionnaires, face-to-face interviews with students and staff, and focus group discussions. The researcher provided a thorough explanation of how each data collection method would be implemented and analysed. Moreover, the researcher addressed important issues regarding validity, credibility, and trustworthiness, underscoring their significance in qualitative research and in this study. The chapter addressed essential ethical considerations, including informed consent, privacy, confidentiality, and anonymity. It further outlined the ethical standards pertinent to data collection, interpretation, and reporting.

4.13 Conclusion

Constructivism was established as the guiding paradigm for this study. A qualitative research approach was adopted, utilising a case study design that focused on a specific group of students enrolled in the Bachelor's in Oral Health programme at a chosen institution of tertiary education. Data collection methods included self-administered questionnaires featuring open-ended questions, semi-structured interviews, and focus group discussions. Ethical principles relevant to qualitative research were upheld throughout the study. Chapter 5 presents the findings from the collection and analysis of data using thematic analysis. The presentation is structured according to the four key themes that emerged from the data patterns, along with their sub-themes.

CHAPTER 5

PRESENTATION OF RESULTS

5.1 Introduction

Chapter 4 detailed the methodology utilised in this case study to address the primary research question and its associated sub-questions. The data collection process involved self-administered questionnaires emphasising open-ended responses, semi-structured interviews, and focus group discussions with second- and third-year BOH students. Additionally, semi-structured interviews were conducted with academic staff, pre-clinical teachers and clinical supervisors who volunteered to participate in the study.

Chapter 5 presents findings from the collected data, organised into themes identified through thematic analysis. Four key themes emerged from the data patterns, each accompanied by relevant sub-themes. To strengthen the evidence, direct quotes from participants were included across all data collection methods, ensuring a thorough presentation of the various data sets.

5.1.1 Overview of the research questions

Chapter 5 presents data framed by the main research question and the related sub-questions of this empirical study. The primary research question and associated sub-questions are as follows:

Primary research question: What are oral hygiene students' perceptions of their psychosocial and emotional well-being at an institution of higher education in South Africa?

Secondary research questions:

- What factors do oral hygiene students perceive as influencing their overall well-being?
- How does the learning environment influence the well-being of oral hygiene students?
- How do oral hygiene students cope with and manage the challenges affecting their well-being?
- What are oral hygiene students' views on the well-being support provided by the faculty, and how can it be improved?

5.2 Description of themes, sub-themes, and categories

The themes, sub-themes, and categories identified through thematic data analysis are discussed in the following section. Each theme, along with its sub-themes and categories, will be presented in a table to provide a clear visual overview before the detailed data presentation at the beginning of each section.

5.2.1 Presentation of results

The original datasets included biographical information and responses to open-ended questions collected via self-administered questionnaires, semi-structured interviews with students and staff, and focus group discussions with students. From the original datasets, several themes emerged, which were organised into four main themes. Sub-themes related to these main themes were identified, and the categories supported the sub-questions outlined in earlier chapters. In Chapter 5, the main themes, sub-themes, and categories identified are presented and substantiated with direct quotes from the thematic analysis.

The codes used for presenting direct quotations in this chapter are as follows:

Quotations from the open-ended questions in the self-administered questionnaires are indicated as QR followed by a number. Here, QR stands for “Questionnaire Respondent,” and the number refers to the specific questionnaire. It is important to note that the numbers were assigned only after data collection was completed, and the questionnaires were securely submitted into a closed container. The researcher assigned these numbers only once data processing commenced, ensuring the respondents' anonymity was fully maintained.

For direct quotations from semi-structured interviews with student participants, the format used is SP followed by a number. In this case, SP stands for “Student Participant,” and the number indicates the specific interview.

Similarly, quotations from semi-structured interviews with lecturer participants are marked as LP, followed by a number. Here, LP stands for “Lecturer Participant,” and the number indicates the specific interview.

Quotations from focus group discussions are coded as FG, P, where FG represents “Focus Group” followed by a number reflecting the group’s sequence. The letter P indicates the individual participant within that focus group, and the number assigned

after the P helps maintain their anonymity once the data have been analysed and presented. For this study, four focus group discussions were conducted.

5.2.2 Main themes and sub-themes

Theme 1: Psychological well-being: Determinants of the psychological well-being of students studying oral hygiene at a South African university

- **Sub-theme 1.1: Curriculum demands.** The curriculum demands included high workloads, long preclinical and clinical sessions, and the teaching and learning approach.
- **Sub-theme 1.2: Curriculum impact.** The impact of the curriculum examined how these demands affected the psychological well-being of oral hygiene students, with reports of unbalanced lifestyles leading to insufficient time for meal preparation, poor eating habits, sleep deprivation, depression, anxiety, and social isolation.
- **Sub-theme 1.3: Personal factors.** The impact of personal factors highlighted issues such as adjustment to a new university environment, concerns about family matters, language barriers, and financial challenges, all of which affect students' psychological well-being.

Theme 2: Social determinants of the social well-being of oral hygiene students: University and daily life contexts

- **Sub-theme 2.1: Personal relationships**. Relationships with family and friends during the years of study.
- **Sub-theme 2.2: Peer relationships**. Relationships with peers from the BOH and BDS programmes.
- **Sub-theme 2.3: Professional institutional** relationships during the years of study.

Theme 3: Environmental factors that influence the well-being of oral hygiene students: A focus on living conditions and the learning environment

- **Sub-theme 3.1: Living environments:** The impact of the residential environment on the well-being of students during the years of study, with a focus on university, private, and home living environments.
- **Sub-theme 3.2: Learning environments**: The impact of the learning environment on the well-being of students during the years of study, with a

focus on the various campus and clinical environments and the perception of discrimination against the oral hygiene programme.

Theme 4: Coping mechanisms students apply during their studies

- **Sub-theme 4.1**: **Positive physical recreational** coping mechanisms activities, which include recreational activities that assist students in coping with challenges.
- **Sub-theme 4.2: Positive non-physical recreational** coping mechanisms such as effective time management, planning, internal motivation, practising self-care, and spiritual orientations that assist students in coping during challenging times.
- **Sub-theme 4.3: Negative coping mechanisms** include pharmaceutical interventions, stimulants, and recreational drugs.

A detailed discussion of each theme and sub-theme follows below.

5.2.2.1 Theme 1: Determinants of the psychological well-being of students studying oral hygiene at a South African university

This study aimed to identify factors influencing the psychological well-being of students enrolled in oral hygiene programmes at a South African university. The sub-themes supporting the main theme were derived from the collected data. Three key sub-themes emerged: the high demands of the BOH programme, the impact of these demands on students, and the influence of personal factors on students' psychological well-being.

The sub-theme ‘Curriculum demands’ encompassed high workloads, long pre-clinical and clinical sessions, and a flipped classroom learning approach. The sub-theme ‘BOH curriculum impact’ examined how these demands affected the psychological well-being of oral hygiene students, with reports of unbalanced lifestyles leading to insufficient time for meal preparation, poor eating habits, sleep deprivation, depression, anxiety, and social isolation.

The third sub-theme, ‘Impact of personal factors’, highlighted issues such as adjustment to a new university environment, concerns about family matters, language barriers, and financial challenges affecting students' psychological well-being (see Table 5.1).

Table 5.1

Overview of Theme 1: Psychological well-being

<table>
<tr><td colspan="3">THEME 1: Psychological well-being
Determinants of the psychological well-being of students studying oral hygiene at a South African university
Description of the theme: Factors influencing the psychological well-being of students studying oral hygiene at a university in South Africa.
Sub-themes: The investigation examined both negative and positive factors influencing students' psychological well-being. Negative influences included curriculum demands, the impact of the oral hygiene programme, the impact on the students' lifestyle, and the personal challenges students are confronted with during their studies. In contrast, positive contributors are personal growth, development, purpose, drive, internal motivation, and resilience.</td></tr>
<tr><td colspan="3">Inclusion criteria: All information that relates to factors that influence the psychological well-being of oral hygiene students at a South African university.</td></tr>
<tr><td colspan="3">Exclusion criteria: Information that does not relate to the factors that influence the psychological well-being of oral hygiene students studying at a selected South African university.</td></tr>
<tr><td>Sub-theme 1.1: Curriculum demands
Description: Demands of the BOH programme on students’ psychological well-being</td><td>Sub-theme 1.2: Curriculum impact
Description: The impact of the BOH programme on students’ psychological well-being</td><td>Sub-theme 1.3: Impact of personal factors
Description: Personal factors that influence students’ psychological well-being during their studies</td></tr>
<tr><td>Categories:
Risks and challenges that impede well-being
1.1.1 Curriculum workload assignments and assessments
1.1.2 Lengthy hours spent in pre-clinical studies, clinics, and lectures.
1.1.3 Pre-clinical and clinical training
1.1.3.1 Clinical feedback
1.1.3.2 Inconsistent feedback
1.1.3.3 Clinical supervisors
1.1.4. Teaching and learning approach
1.1.5 Transport</td><td>Categories:
Risks and challenges that impede well-being
1.2.1 Lifestyle balance
1.2.1.1 Sleep deprivation
1.2.1.2 Poor nutrition
1.2.1.3 Depression, anxiety, and social deprivation</td><td>Categories:
Risks and challenges that impede well-being related to personal life
1.3.1 Adjusting to the unknown environment
1.3.2 Family matters
1.3.3 Language barriers
1.3.4 Financial challenges</td></tr>
</table>

Opportunities: 1.1.6 Positive contributors 1.1.6.1 Personal growth 1.1.6.2 Sense of purpose	Opportunities: 1.2.2 Internal motivation	Opportunities: 1.3.5 Positive personality development 1.3.6 Resilience

Note. Table 5.1 presents Theme 1, which outlines the themes, sub-themes, and categories influencing the psychological well-being of oral hygiene students. Sub-themes include curriculum demands, curriculum impact and the impact of personal factors.

This section discusses the three sub-themes that emerged from the main theme and supports them with direct quotes from the collected data.

5.2.2.1.1 Sub-theme 1.1: Curriculum demands

In the section on sub-theme 1.1, curriculum demands include the high workload of the BOH curriculum, long hours spent attending lectures, pre-clinical training in skills laboratories, and providing treatment to patients in a clinical environment. The unfamiliar environments of pre-clinical and clinical training require students to acquire new skills and apply them in patient care.

Curriculum workload, assignments and assessments

Participants reported that the workload of the oral hygiene programme was excessive and impacted their well-being. Most students found both the second and third years of their studies overwhelming. Some participants made particular reference to the workload in the second year. For example, Student Participant (SP) 11, during the interview, noted that the heavy and demanding workload and the numerous assessments were especially challenging and stated as follows:

> *In the second year, my psychological well-being was a bit hectic; it was very stressful, as we wrote constant tests. I don't know how I got through the second year; it was so hectic. (SP11)*

Participants in the third year indicated that their course load posed similar challenges. Student Participant 16 mentioned during the interview that the third year was particularly overwhelming due to the number of assignments and elaborated on this point:

Everyone said the second year is the worst, but I must say that the third year is a lot worse than the second year. (SP16)

The faculty's assessment policy aims to help students plan by requesting lecturers to list all tasks and assignments in the module guides at the beginning of the academic year. However, student interviews revealed that lecturers do not consistently follow this policy, leading to dissatisfaction with the announcement and introduction of unscheduled tasks, particularly in the final stages of their third year.

When we started with it (mentions the module), there was no word of a big project, and then suddenly, this project was added. (SP16)

Participants in Focus Group 1 discussion (FG01) confirmed during the interview that the workload was exceptionally high during the third year and mentioned that lecturers had expectations that could not always be met. Focus Group 1, Participant 5, explained the situation as follows:

My mental well-being was going down. In the third year, I felt we had a lot of workload. …we were only busy with assignments. We had a lot of assignments to submit and clinics, and we also did theory and clinics at the same time. (FG01, P05)

Lengthy pre-clinical, clinical, and lecture hours

Oral hygiene students participate in pre-clinical, clinical, and lecture activities from Monday to Friday, 8:00 am to 4:30 pm, with limited breaks. Clinical sessions often cut into lunch breaks due to administrative tasks and complex patient cases. Student Participant 24 noted that second-year students spend longer hours in clinics because they struggle to complete treatments in one session and need more support from clinical supervisors:

In the beginning, in the clinics, it was difficult; I had to manage a patient and manage time, and those two were really affecting me. (SP24)

Lecturer Participant 5 expressed concerns about final-year BOH students' clinical time management, as sessions often exceed the allocated two hours per patient. The lecturer emphasised the importance of students taking breaks between patients, which will allow them the opportunity to socialise and relax with their peers. The lecturer elaborated as follows:

Most of the students leave the clinics late. It is sad, though. The opportunity for our students to relate to other students is not there. (LP05)

Lecturer Participant 4 voiced a similar concern and advised that clinical supervisors should teach students effective time management. The participant added that such long clinical hours in the long term will impact the physical and psychological well-being of students and said:

As clinical supervisors, we must ensure that our students leave the clinical setting on time to take a break. I have only recently discovered that … when I reached burnout, it was not sustainable working from 6 am to 6 pm without a break. (LP04)

The majority of students expressed dissatisfaction with their inability to participate in extracurricular activities due to the heavy academic load, long clinical hours and lectures ending late in the afternoon. Student Participant 8 noted during the interview:

I don't play sports at the moment because I do not have time to do any extracurricular activities. There is no time, really no time; we finish off around 4 pm and wait for a shuttle that only comes at 5 pm and get to the main campus late, but besides hockey, I enjoy swimming, but the pool closes at 4 pm or 5 pm, then we are still here at the faculty. (SP08)

Questionnaire Respondents (QRs) wrote the following statements on taking part in extracurricular activities:

I do not have time; I need to travel home after school, arrive home late, clean, help with food, study, then I study or spend time with my family on weekends. (QR1)

There is absolutely no time; some days I feel guilty for even sitting down to eat or sleep. (QR29)

I do not have time with all the university assignments and studying for tests. (QR30)

Pre-clinical and clinical training

Clinical supervisor feedback

Oral hygiene students receive intensive pre-clinical training before progressing to patient care. In the pre-clinical and clinical environments, a multitude of factors

influence students' experiences and perceptions of their training environment. Clinical training factors frequently mentioned by participants that impacted their well-being included the type of supervisor feedback received, anxiety about performing certain procedures on patients, first patient interactions, unrealistic expectations from patients and supervisors, internal pressures to perform well, and limited facility resources.

Receiving negative feedback from the clinical teacher was the most frequently mentioned factor affecting students' well-being. Participants mentioned that it was the tone of voice or manner in which the clinical teacher spoke that made feedback intimidating. Focus Group 3, Participant 4, pointed out that:

> *Clinics can be very stressful, specifically the critique you get back from the clinical supervisors and the way the critique is given. (FG03, P04)*

Participant 5 from Focus Group 2 echoed a similar opinion as Participant 4 from Focus Group 3, confirming that feedback from clinical supervisors caused the participant to become stressed, anxious, depressed, and question the career choice made. The participants' perception of the clinical sessions was as follows:

> *I was, in the beginning, very nervous when I had to work on patients, and I went in like positive; however, if someone said something that did not sit well with me, I would sit in the bathroom and cry or be emotional throughout the whole day, and I would think is this (referring to the course) for me, or am I not competent? (FG02, P05)*

Focus Group 3 discussion, Participant 5, added during the interview that the clinical environment is stressful, as numerous factors need to be taken into consideration for each patient before treatment may commence and said:

> *There are so many factors we have to take into consideration, like in the clinics, for example, we have to think of all the factors that influence the diagnosis and the treatment plan. (FG03, P05)*

Unrealistic expectations from clinical supervisors were an additional factor that challenged students' psychological well-being. Participants claimed that they are often shown a procedure only once or twice and expected to master and perform it on patients. Participant 4 of Focus Group 1 discussion stated during the interview:

Especially in clinics, we are only shown how to do something once or twice, and then we must do the procedure (FG01, P04).

Inconsistent feedback

Inconsistent feedback from clinical supervisors negatively affected students' psychological well-being. Participants reported becoming confused about which treatment would be suitable for the patient due to conflicting advice from supervisors. They noted that feedback often depended on the supervisor's personality, with one student emphasising the need to adapt to supervisors to achieve a successful and less stressful session. Student participant 18 stated during the interview:

Supervisors come in different forms. You have to study the different personalities of the supervisors. I have mastered all the supervisors. I think I have adapted now to everyone. That used to frustrate me a lot, but I have learned to adapt. For this supervisor, I have to do this, and for that supervisor, I have to do that. (SP18)

This observation was confirmed by Focus group 1, Participant 5:

The big thing is that each supervisor wants something different, so you have to adapt to each one's style. Supervisors prefer different things, in clinics, even the way you arrange your treatment plan. (FG01, P05)

A further stress factor mentioned was the discrepancies between junior and senior clinical supervisors. Student Participant 14 elaborated as follows during the interview:

The clinical experience can be better. Let me start here: we have the senior and the junior clinical supervisors. The opinion is that the senior staff are old-school and know the fundamentals, and there needs to be an integration of information and knowledge they are passing on. (SP14)

Clinical supervisors

The role of clinical supervisors is to provide chairside teaching and supervision to students during their pre-clinical and clinical training. Most clinical supervisors are full-time lecturers in the BOH programme, while some are part-time contract staff.

Second-year oral hygiene students are usually competent to commence patient treatment from the second semester. Asking student participants about their clinical experiences and the support from clinical supervisors, responses varied. A few student participants indicated that the clinical days were the best days of the week, while

others felt confused, unsure, and belittled. A positive response was noted from student Participant 27, who perceived clinical sessions as positive and explained:

> *The clinics are the best; the clinical supervisors make everything easier, and every day is just learning. This is why I am very happy with the supervisors; they make it fun, and there are days they have to provide a critique. (SP27)*

Some participants preferred junior clinical supervisors, finding them more understanding and motivating. Student Participant 1 explained in the interview that junior supervisors praised achievements and were more accommodating than senior staff.

> *I would say that in the clinics, it would be more of the younger oral hygiene supervisors who are very motivating. Sometimes the older staff will also, but they do not always see what you have done; the older staff want everything done at once. (SP01)*

Teaching and learning approach

The teaching and learning approach followed by the Faculty of Dentistry during the interviews was the flipped classroom model. The flipped classroom approach required students to prepare for the next day by reading lecture material, watching video clips, and completing pre- and post-classroom tasks. In addition, students had to prepare for theoretical or clinical assessments, assignments, and tasks for the following day.

In response to the workload and the learning and teaching approach at the time of the interviews, Student Participant 25 stated that there was no time for any other activities except work and explained the situation as follows:

> *If I come back from the clinic at 18:00, then I will sleep for an hour, cook, wash dishes, and do an assignment, so it is like a constant routine. If I did sneak more things in here and there, I would feel I am running myself out of breath. (SP25)*

Transport

Transport issues were identified as a significant stressor affecting students' well-being. Daily travel between residences, home, and training sites often involved unreliable public transport. Participants mentioned that they became anxious about being late for lectures and clinical sessions.

In Focus Group 1, Participant 6 mentioned that the faculty transport between training platforms and university residences was unreliable. The participant indicated that the bus, at times, overlooks BOH students at clinical and lecture sites and collects them after 18:00. This results in students returning to their residences unacceptably late. The student complained that:

> *Sometimes, they (the bus company) forget about us … it then becomes 6 pm, and they do not come to fetch us, and then we have to call the transport facilitator. (FG01, P06)*

The safety and reliability of public transport were identified as additional factors influencing participants' well-being. Several students travel to campus by public transportation. Student Participant 1 confirmed this, noting that public transport was one of the greatest challenges affecting psychological well-being. Student Participant 1 explained the situation as follows:

> *We do not have a car, so I have to take public transport. The transport is not always consistent, so I have to wait for a taxi, and then I stress a lot because the supervisor is not going to understand why I am late for clinics. (P01)*

Students who do not have private transportation reported that they must take public transportation by at least 6 am to be on time for the first session. This resulted in an exceptionally long and tiring day for students. Student Participant 11 mentioned:

> *Due to public transport, my day starts at 6 am, and I come home late. (SP11)*

5.2.2.1.2 Sub-theme 1.2: BOH curriculum impact

The subsequent discussion of Sub-theme 1.2 centres on the influence of the BOH curriculum on students pursuing oral hygiene. This section addresses the challenges of achieving a balanced, healthy lifestyle and the implications for overall well-being.

Lack of lifestyle balance

Student participants reported that the heavy workload of the BOH curriculum harmed their holistic well-being by mentioning that they suffer from increased anxiety, depression, sleep deprivation, and poor nutrition.

Sleep deprivation

Students reported experiencing sleep deprivation due to the demanding curriculum. Student Participant 24 explained:

> *My well-being is affected. I do not get a lot of sleep, and that is due to the workload. (SP24)*

A similar comment was made by Student Participant 28, who suffered sleep deprivation, anxiety, depression, and social isolation due to the impact of the curriculum and said:

> *I was studying all the time with no sleep, and also sometimes I had panic attacks. Then, I would also stay in my room. I was 24/7 in my room (studying). Even my mother said I could not do that to stay in the room all day, every day. (SP28)*

This lack of sleep adversely affected students' psychological well-being, leading to feelings of anxiety and guilt over unfinished work. Student Participant 24 commented:

> *I cannot sleep when I have work to do; even when I do sleep, I'm still thinking about it. (SP24)*

Questionnaire data indicate that students face mental well-being challenges due to excessive workload, which affects their sleep patterns, as Questionnaire Participant 46 wrote:

> *I have been diagnosed with anxiety and depression just after I began my studies. My mental health has not gotten better. I suffer from insomnia. (QP46)*

Questionnaire participant 21 confirmed:

> *Sleep is a luxury; four hours of sleep a night. (QP21)*

Impact on diet

The heavy workload impacted the participants' ability to maintain a healthy diet. Student Participant 17 explained:

> *At the beginning of the week, it is fine, but when I have an assignment, it is not good. Then I will just eat bread. (SP17)*

Participants in Focus Group 1 admitted that they often skipped breakfast due to early morning lectures. Participant 4 of Focus Group 1 confirmed:

Definitely, yes, sometimes you have to skip meals because of clinics. We will eat 2-minute noodles just to get back to work; it is normally not a healthy option just to get back to studies. (FG01, P04)

Depression, anxiety, isolation and social deprivation

Participants often expressed feelings of isolation, depression, and social deprivation due to the demanding nature of the BOH programme. Some participants struggled to manage the workload, while others mentioned that the transition from university to first year and from first to second year triggered anxiety, depression, and feelings of isolation. Student Participant 6 stated that isolation served as a way of reflecting on academic demands, helping them to focus on their studies. The participant explained during the interview why social isolation became a means of survival:

Last year, I distanced myself from my friends, and I was alone most of the time. I felt I needed to be alone… to be able to think properly, without people telling me. (SP06)

Student Participant 5's response concurred with Student Participant 6, who explained why social isolation was an option during the second year of the BOH programme. Participant 5 tearfully explained during the interview:

I think last year was a heavy knock; I did not know if I was going to make it or not. My stress level was extremely high, and I stopped talking to others. (SP05)

Participants in Focus Group 1 noted that the demands of the BOH programme limited social interaction. The group expressed feelings of isolation, as friends often did not understand the challenges of studying towards a BOH degree. Student Participants 1 and 4 highlighted these issues during discussions.

We do not have time to socialise. They (friends) do not understand; they study for other degrees. They don't understand that our degree takes up the whole week, and in the other courses, students go to class maybe two days a week. (FG01, P04)

Student Participant 1, Focus Group 1, concurred with Student Participant 4:

They (the friends) would tell us we need balance in our lives, and would invite me, "Come and play soccer with us", then I would have to say, "But I cannot, I have to submit an assignment". No one will know how physically and mentally

exhausting this course can be (participants laugh all the time while communicating; they were in a jovial mood). (FG01, P01)

From the interviews with the student participants, the researcher observed that students experience anxiety related to their workload. Many reported experiencing both anxiety and depression during their studies, influenced by personal factors unique to each individual, which will be addressed further in Sub-theme 1.3.

5.2.2.1.3 Sub-theme 1.3: Personal factors that influence students' psychological well-being

Student participants in this study articulated several factors that individually influenced their psychological well-being. The factors identified included challenges in adapting to unfamiliar environments, concerns regarding separation from loved ones and family members, language barriers, being underprepared for university and financial difficulties. Mature students involved in this study exhibited distinct factors that impacted their psychological well-being during their academic pursuits. Notably, these factors included concerns about their cognitive capacity for study and the loss of a stable income.

The unknown environment

Participants reported several personal challenges transitioning from the known environment to the unfamiliar university environment. Factors included the unfamiliar campus environment and adapting to the new social, learning, and living environments. Student Participant 6 of Focus Group 2 explained:

The first year was quite stressful. You do not know what to expect your first time at university, what you are going to learn, or whether you will cope with your studies. (FG02 P06)

Some of the challenges mentioned referred to being academically underprepared for the tertiary educational environment. Student Participant 8, who spoke during the interview about entering university straight from school, found the transition difficult and struggled academically:

Mam, firstly, the transition from high school to university was hard, and secondly, I feel the degree is very stressful. (SP08)

Participants noted that the study methods they successfully applied at school were inadequate at university. Student Participant 24 said:

> *I thought that the way I learned at school, I could learn at university, but it is different, and I had to adapt to the learning. (SP24)*

Mature students in the BOH programme faced similar and other unique challenges compared to recent high school graduates. Mature students had to leave their occupations, financial stability, homes, and families to pursue a higher education qualification. Integration with younger students was difficult, as they were uncertain about their academic abilities and social acceptance. This concern was highlighted by Student Participant 2 from Focus Group 2 during the discussions.

> *Like for me, everything felt fine, super excited, but in three months, everything fell apart. I lost my salary, I felt I had to just give up, and go back home. I gave up my house, then had to move into a small bedroom at residence, sharing with a person like 10 years younger than me, all of that had a negative impact on me. (FG02, P02)*

During the focus group discussions, Student Participant 3, Focus Group 2, agreed:

> *I would definitely say I felt intimidated. I am a mature student coming back. This is my second qualification, and then coming back to students who are just out of school. (FG02, P03)*

A further challenge mentioned by the mature students was their concern about their cognitive ability to study. Student Participant 3, Focus Group 2, nervously admitted:

> *I thought … can I do this? Getting back into studying took a while, and to find what worked for me. Once I found it, then I struggled to just adapt to that, so it took a while. (FG02, P03)*

Student Participant 24, during the interview, confirmed that being out of school for more than 15 years was a challenge and doubted having the cognitive abilities to study at this level. The participant responded as follows, admitting:

> *So, when I came here, the lecturer would say you did this in matric (grade XII), then I would think, "O Lord, Matric was in 2008. If they say a big word, then I try to figure out the meaning of the word, then I am far behind." (SP24)*

Family matters and concerns

Some participants had to move away from their families to attend university. They mentioned that they often take on family responsibilities when at home. Participants from single-parent households assumed responsibility for caring for the remaining parent and siblings. Living apart from their families affected their well-being, as they were worried about them. Student Participant 2, during the interview, who felt responsible for taking care of a parent and siblings, appeared stressed and acknowledged that:

> *Yes, because you are not at home all the time, you tend to become a little bit more worried ... You worry more. It is my own fault; I have taken it upon myself to make sure things are perfect for the family. (SP02)*

Some participants were concerned about the health of their immediate family members. Student Participant 27 acknowledged being concerned about a parent with health problems:

> *My mom went through her illness, and she survived. It was very tough for the family. She had chemo, and we could see she was giving up… my dad and sister were there, but I was not there…I was not able to see her. I could only see her after 6 months. I was constantly phoning her. (SP27)*

A similar statement was made in Focus Group 1, Student Participant 6, who indicated during the focus group discussion that the participant's well-being was affected because one of the parents was involved in a work-related accident. The participant became emotional and cried.

> *Last year… my mom was in an accident; she had to go to the hospital… I am here, and my mom was alone. I felt I was not there for her, and it influenced my studies, yes, it did. I called, but the doctor did not allow me to speak on the phone with my mom … (FG01, P06)*

Language barriers

The difficulty of adjusting to a new environment was intensified by the faculty's policy that English was the only medium of instruction across all teaching and learning platforms. Participants who were not fluent in English found it difficult to cope in the learning environment and to socialise. Student Participant 10 acknowledged struggling

to understand the lectures and learning the dental terminology in English, as Afrikaans was the participant's home language. Student Participant 10 explained:

> *At first, I had to learn to speak in conversational proper English. Dentistry is basically a new language, and I had to learn it in English as well. My home language is Afrikaans. (SP10)*

Student Participant 24's statement concurred with that of Student Participant 10 and explained during the interview:

> *…coming from an Afrikaans environment, speaking English was also a barrier to socialising. English is affecting my learning a bit, so you have to remember all your work in English…(SP24)*

Information from the interview with Student Participant 1 concurred with that of the previous participants, Student Participants 10 and 24. Student Participant 1 mentioned that coming from an Afrikaans environment quadrupled the workload, as they had to translate lectures to understand them.

> *In my first year, what contributed to my workload was the language barrier (the student is Afrikaans), so I had to translate everything… (SP01)*

Respondents answered open-ended questions similarly to the Student Participants in the interviews, as stated by Questionnaire Respondent 26.

> *At the beginning, it was quite challenging to translate the English being spoken to in class to your home language to understand, but with time, it got better. (QR26)*

Data from the open-ended questions indicated that students with isiXhosa and isiZulu as a first language experienced fewer challenges with the English language of tuition. Questionnaire Respondent 25 was one of the isiZulu-speaking respondents and stated:

> *The English language does not influence my learning experience that much because I completely understand English. (QR25)*

This view was confirmed by Questionnaire Respondent 37, whose first language is Sepedi.

I can comprehend my lectures with ease as I was taught how to read, write and speak in English from a young age. (QR37)

Financial challenges

Student participants indicated that limited financial resources significantly impacted their ability to meet basic needs and overall well-being. They noted that insufficient funds restricted access to online study resources and to diet and lifestyle choices. Many felt the need to manage their finances independently to alleviate stress on their families, leading some to work part-time or collaborate with peers. A strong sense of camaraderie was observed among BOH students, who provided mutual financial, emotional, and physical support.

Student Participant 9 was one of the participants who did not want to be an added financial burden on parents and mentioned:

I would like to relieve the burden on my mother, as she has worked a lot. That is why, ma'am, I worked for a job that might be small, but it means she does not have to give me groceries at the end of the month. (SP09)

Although students indicated in interviews that they did not have time for part-time work, open-ended responses revealed that some students managed to supplement their income. Questionnaire Respondent 5 indicated:

I am selling clothes online to supplement my finances (QR5).

Questionnaire Respondents 12 (QR12), 21 (QR21), and 23 (QR23) worked part-time as dental assistants; Questionnaire Respondent 15 worked in retail (QR15); and Questionnaire Respondents 27 and 29 worked as sales assistants.

Financial constraints affect students' basic daily needs, including the ability to purchase food. From the questionnaires, Questionnaire Respondent 26 indicated not always having food and stated:

Yes, I drink water then and try not to think about it. (QR26)

Student Participant 18 experienced administrative challenges applying for NSFAS and did not receive support for the academic year, which resulted in harsh financial difficulties, and admitted:

For a whole year, I did not have money for food. So, I also had to ask back home. It was tough on tough; I know the situation at home, and I cannot keep on asking. (SP18)

Lecturer Participant 4 knew about the plight of some students not receiving NSFAS due to administrative errors and suggested:

It is the tedious process of getting approval for it (NSFAS) or being rejected because of a document that was not correctly filled out. (LP04)

Lecturer Participant 4 continued by saying that the Oral Hygiene Department consistently went the extra mile by providing necessities, such as food and toiletries, to students in need.

What I have seen is that staff in this department always go the extra mile; if a student does not have food, the department is always rallying to help. If we look at the well-being of the student from that aspect, that is what the department is doing. (LP04)

The adult learners' financial challenges included affording their studies, accommodation, and daily living expenses, while continuing to support their families back home. Comments during the focus group discussions from Focus Group 2 verified their financial plights and explained in the group how it contributed to their stress levels:

Definitely on top of the list is finances; how was I going to cope financially? I was battling to cope. (FG02, SP03)

Impact of the BOH programme on psychological well-being

Positive contributions

The previous section explored the negative factors that affect students' psychological well-being in the BOH programme. However, participants highlighted several positive aspects that enhanced their well-being during their studies. These included developing a sense of purpose, being motivated to build a better future, increased self-confidence and assertiveness, and cultivating meaningful relationships. Moreover, students mentioned that the BOH programme provided them with a broader perspective, fostering consideration and sensitivity towards others' viewpoints. The participants voiced their gratitude towards the Oral Hygiene Department for creating these

opportunities for personal growth. Student participants agreed that although there were challenges, the overarching goal of studying and obtaining a qualification had a positive influence on their learning experience.

Personal growth and sense of purpose

Student Participants 15 and 25 noted during the interviews that the BOH programme has given them a sense of purpose and encouraged personal growth. Students were motivated to continue and complete their degrees as this would enable them to apply for job opportunities, resulting in a brighter financial position and the ability to care for their families.

> *Since I have come to varsity, yes, it gives me purpose; it gave me great purpose. Although it is very stressful, I am working towards something; this is my door to getting myself a better life. I have to prove to the whole world that I can. (SP15)*

Student Participant 25 indicated that one positive aspect was becoming more self-confident. The participant commended the oral hygiene department for allowing students to grow as professional oral healthcare practitioners and said during the interviews that:

> *Going into clinics, I am more confident. I know why I am here and what I need to do, and I know how to deal with patients; patients can ask me any question, and I can answer them as I know. It is exciting to see the transition. The institution and especially the faculty have a lot in place to promote well-being; it is up to the students to take the opportunities. (SP25)*

Student Participant 11 expressed gratitude for attending the BOH programme, highlighting its exposure to diverse perspectives and social environments. The participant found this experience broadening, especially in contrast to her parents' traditional and narrow-minded views. Student Participant 11 expressed that these experiences were invaluable:

> *If I had not studied here, I don't know how I would have been as a person at this point in my life … My father is stuck in the past. (SP11)*

Motivation

Student participants indicated that the BOH programme had a high motivational impact on their well-being. Student participants highlighted their desire and internal motivation

to succeed, excel academically, and be highly driven to achieve self-actualisation. Student Participant 12 referred to the curriculum structure, specifically how the oral hygiene lecturers motivate students to achieve their academic goals. The student expressed gratitude and determination as follows:

> *Studying BOH was very rewarding; it pushed me to do more, I want to do more, I want to be more, and I am satisfied to have my BOH degree, so now I would like to do … (SP12)*

Confirming the value of internal motivation is an important factor in student participants' determination to succeed, as stated by Student Participant 1 in the interview, who referred to the unfortunate academic record of having to repeat several times. This student participant viewed repeating study years not as a disaster but as motivation to continue with the BOH programme. Student Participant 1 (SP01) concurred with a previous statement of another Student Participant (SP25), who believed that obtaining the qualification would lead to a better future and help to escape the current living environment. With determination, the participant expressed the following goal:

> *Like one thing… umm long pause, probably me failing, as it happened, I feel it was a lot (failing) that changed my mindset because I am failing a lot, I am telling myself yes, you are failing, but you have come that far, why give up? (SP01)*

Student Participant 6 was highly motivated and wanted to excel academically, and stated during the interview:

> *I try to get a certain grade. I do not have pressure from home to have to do well; it is something I set out for myself. I enjoy doing well; I just want to do well. (SP06)*

Positive impact on personality development

Some student participants noted that before joining the BOH programme, they were typically introverted and struggled with communication. Effective communication is an important attribute for BOH candidates. Student Participant 24, a self-identified introvert, mentioned that the programme helped to improve communication skills and self-confidence, and they had high praise for the oral hygiene programme.

At the start of university, I was an introvert, but university moulded me to speak in presentations and speak to people, as well as improve my language, because coming from an Afrikaans environment, speaking English was also a barrier to socialising. I am really making progress. (SP24)

Student Participant 1 made a similar remark, reporting that they are typically quiet but learned to converse and verbalise their thoughts while studying BOH. The participant stated during the interview:

Before I came here, I was quiet. This environment forced me to be more talkative, and this is what this environment did to me. It is a positive force, as I said, I did not speak a lot, and in the environment, if I needed to say something, I would, as at school, I would just think it was not my place (to say something) and keep quiet. (SP01)

Student Participant 12 described their personality as highly strung and did not allow emotions to control reactions or responses. The participant acknowledged that being in the BOH programme created awareness of being in touch with "the self". The student confessed during the interview to having a typically obtuse and unsympathetic nature, and how it has changed since studying:

Before I started studying BOH, I was very hard. I did not cry. In my second year, I just broke down (one day) …since then, I allowed myself to feel things… emotions (SP12)

During the focus group discussions, participants shared similar experiences and responses. Student Participant 5 of Focus Group 2 claimed that since studying oral hygiene, the participant learned to be more approachable and communication with others improved, which contributed to positive well-being and explained:

During high school, I was always an introvert, and coming to study BOH, working with people and seeing patients every day, opened me up to be a whole new person. It changed me as a person, and it contributed to my well-being. (FG02, SP05)

Resilience

Student participants showed resilience in adapting to difficult situations, including heavy course loads, long hours in lectures and clinics, feedback from supervisors,

anxiety about clinical procedures, and tough living conditions. For example, Student Participant 10, who was raised in a protected environment, found adjusting to campus living arrangements to be both psychologically and physically challenging. The participant noted that a significant mindset shift was necessary to cope with circumstances that conflicted with their upbringing and beliefs, and made the following statement during the interview:

> *When I came here, the first thing that shocked me was that we stayed together (males and females) and shared the bathrooms; that was a culture shock. My parents were shocked, but I told them it was fine… I just stuck through it; I guess you just get used to it. In the end, it turned out ok. (SP10)*

The COVID-19 pandemic posed major challenges for Student Participant 18, who had planned to return to university once travel restrictions were relaxed, but faced numerous barriers. After restrictions were eased, the student returned to campus, only to be denied entry to the university residence he occupied before COVID-19. As a result, he became homeless, was mugged, had no food, and was sleeping on the street. The student mentioned:

> *I have faced many problems being here. I had to face serious, serious challenges. I slept outside the residence. It was difficult; Through God, I managed to get through. Prof. said she could not help, and that was like the end. (SP18)*

Student Participant 4 indicated that attending the BOH programme taught them to be survivors and to practice self-affirmation. Student Participant 4 mentioned that bullying and nastiness were evident in the class and angrily stated:

> *There was a lot of nastiness going on. I felt so personally attacked, and you go to people, and you get the sense that you are not supported. At the end, I grew from it, so what this course or/faculty has taught me is to be a very strong person to survive. (SP04)*

5.2.2.1.4 Summary of Theme 1

Participants expressed a range of factors they perceived as affecting their well-being. They described the curriculum as highly demanding, characterised by heavy workloads, frequent unplanned assignments, and the need to prepare for the next day's classes due to the flipped classroom approach, along with preparation for assessments. Some reported experiencing unrealistic expectations from certain

lecturers, and transport challenges further extended their travel time, lengthening their days and negatively impacting their well-being.

The clinical environment was particularly stressful, particularly due to distressing feedback from supervisors and inconsistent guidance, which often led to confusion. Long clinical sessions and issues with time management limited their opportunities for a balanced life, affecting social interactions and raising concerns about burnout. Many participants noted a significant imbalance between work and life, which manifested in sleep disturbances, unhealthy eating habits, and a lack of time for extracurricular activities or relaxation. This situation contributed to feelings of depression and anxiety, leading to self-isolation that they feared could harm their psychological well-being.

Despite these challenges, participants also highlighted the increased motivation, resilience, and personal growth they experienced through their studies, as they remained focused on their goal of qualifying to create a better future.

5.2.2.2 Theme 2: Determinants of the social well-being of students studying

The main theme explores the factors affecting the social well-being of oral hygiene students at a South African university. It includes three sub-themes: Personal relationships (parents, family, partners), institutional relationships (lecturers, clinical supervisors, mentors), and professional institutional relationships (support staff from the Centre for Student Support Services (CSSS) (refer to Table 5.2).

During the interviews, participants highlighted the support they received from parents, particularly mothers, as well as family, life partners, peers, and university support structures, which contributed positively to their overall well-being. However, some supporters were also identified as detractors, having a negative effect on the students' psychological and social well-being.

Table 5.2

Overview of Theme 2: Social well-being

<table>
<tr><td colspan="3">THEME 2: Social well-being
Determinants of the social well-being of oral hygiene students: University and daily life contexts</td></tr>
<tr><td colspan="3">Description of the theme: Determinants of social well-being for students studying oral hygiene with a focus on parents, family members, and partners, as well as relationships in the university environment with peers, lecturers, and clinical advisors (mentors).
Sub-themes: Included the positive and negative effects of relations with family, student peers, lecturers, clinical advisors (mentors) and professional counsellors on the well-being of the oral hygiene students.</td></tr>
<tr><td colspan="3">Inclusion criteria: All determinants of the university and daily life contexts that influence the social well-being of students studying oral hygiene.</td></tr>
<tr><td colspan="3">Exclusion criteria: All determinants that do not relate to the university and daily life context that influence the social well-being of students studying oral hygiene.</td></tr>
<tr><td>Sub-theme:
2.1 Personal relationships

Description: Relationships with family and friends during the years of study</td><td>Sub-theme:
2.2 Institutional relationships with peers

Description: Relationships with peers at the Faculty of Dentistry</td><td>Sub-theme:
2.3 Professional institutional relationships

Description: Professional institutional relationships at the university and the Faculty of Dentistry</td></tr>
<tr><td>Categories:
2.1.1 Relationships with parents and siblings (positive support)
Relationships with parents and siblings (non-supportive)
2.1.2 Relationships with life partners, spouses, in-laws, and children (positive support)
2.1.3 Relationships with life partners, spouses, in-laws(non-supportive)
2.1.3.1 Gender discrimination</td><td>Categories:
2.2.1 Relationship with peers</td><td>Categories:
2.3.1 Faculty and institutional relationships
2.3.2 Lecturers and mentors (positive support)
2.3.3 Clinical advisors/mentors as distractors (non-supportive)
2.3.4 Relationship with Student Support Services</td></tr>
</table>

Note. Table 5.2 presents Theme 2, which relates to the factors that influence the social well-being of oral hygiene students, their related sub-themes, including personal relationships, institutional relationships with peers, and professional institutional relationships, and associated categories.

5.2.2.2.1 Sub-theme 2.1: Personal relationships

Relationships with parents and siblings (Positive support)

Sub-theme 2.1 examined the relationships students have with significant people in their lives during their studies. In this subsection, the focus is on family members. Most participants reported positive relationships with their family members, especially with their mothers. From the interviews, it became evident that mothers play a crucial role in students' academic journeys. Student Participant 6 expressed gratitude for her mother's supportive role, declaring:

> *My mom has been very, very, very supportive. My mom is amazing, and she has not even asked me for anything; she is just. (student pauses for a long while) She is just looking for me to come back; she is everything; she is the best. (SP06)*

Student Participant 25 confirmed that both parents provided support during the years of studies; however, the mother stood out as the one who understood most of what she was going through and shared:

> *My mother is like my psychologist; it is easier to open up to her and talk to her. My mother is my support system. My mother just finished her M… last year, and she understands the emotional toll university can have on someone. So, it was easier for her to understand what I was going through. (SP25)*

Student Participant 28 reported suffering from panic attacks during the years of studying; although both parents were supportive, it was the mother who provided comfort and support during those times. The participant confirmed:

> *Usually, I will talk to my mother; she is very calming, and she will tell me to take three deep breaths. Keeping the panic attack at bay at that moment. (SP28)*

During the interviews, many participants noted they came from single-parent households, with mothers often handling both parental roles. Students acknowledged the challenges their mothers faced and expressed support. Student Participant 24 became emotional reflecting on the lifelong support from her mother.

> *My mother has always been there; she is a single mom, and she is a strong woman…. When I am taking a test, she will phone me or message me. (SP24)*

Student Participant 1 in Focus Group 2 emphasised the importance of parental and sibling support during the focus group discussion.

In our household, my sibling and I would take turns; if one is writing a test, then the other one will do the dishes, etc. and vice versa. (FG02, SP01)

Participants noted that their supportive parents prioritised their studies, helping to reduce stress. Student Participant 16 expressed gratitude that her parents acknowledged the importance of her education.

I am fortunate [that] my parents will do the chores at home, [and] they will prioritise my studies. (SP16)

Participants appreciated their parents' support, but sometimes chose to shield them from negative experiences during their studies. Student Participant 17 mentioned:

I don't want to stress my mom, so I will tell my brothers…, They support me, although my mother checks on me every day. (SP17)

Answers derived from the questionnaires indicate that parents play a significant role as supporters. Questionnaire Respondent 34 wrote:

My mother, because she is understanding, and it's having someone who knows you and your situation. (QR34)

While Questionnaire Respondent 58 indicated:

My mother always gives me good advice. (QR58)

Questionnaire Respondent 48 indicated:

My relationship with my mother is perfect. (QR 48)

Relationships with life partners, spouses, in-laws and children

Most married students and those cohabiting received support and encouragement from their significant others. Life partners, spouses, and close friends offered both emotional and physical help when needed. The ongoing encouragement from partners during late nights and long days of studying left a lasting impression. Student Participant 6 confirmed during the interview that without their partner's support, academic success would have been difficult and expressed gratitude by stating:

My life partner has been very, very supportive. He is always supportive. He is one of the reasons why I did not tip over. He supports me and wants me to be me and achieve good marks, whatever I want to achieve. He is very supportive; he makes me food when I am stressed and have to work on assignments. (SP06)

Student Participant 23's husband received praise for the support provided during her years of studying, and mentioned during the interview that:

> *My husband is very supportive. He will phone me to wake me up, and he will stay awake, although he is in another province, until I am finished studying for a test or exam and then go to sleep. (SP23)*

Student Participant 23 also reported during the interview that her child provided great support, sending WhatsApp messages of encouragement, for example:

> *Mommy, don't stress, you will get great marks. Mommy, all will go well. (SP23)*

Some participants noted that while their life partners offered support, it was not always aligned with their needs. Student Participant 28 shared that although the partner recognised the academic demands, the partner would complain about late-night studying, as mentioned during the interview.

> *I feel that he needs to support me more. Sometimes it is more like when I study late, then the light bothers him. He will try to tell me to put the work down and relax, but that is against me. (SP 28)*

Student Participant 15, during the interview, praised the mother-in-law for being the greatest supporter during the years of studying.

> *My mother-in-law asks at the beginning of the term for all my test dates. She writes it down, and she will send me a message every time to wish me well and then tell me I am the best and that they believe in me. (SP15)*

Information from the questionnaires reflected similar responses regarding support from partners and husbands. Questionnaire Respondent 1 wrote:

> *My boyfriend. He is always there to listen and support me. (QR01)*

Questionnaire Respondent 55 indicated*:*

> *I can turn to my life partner, who always allows me to vent my problems and helps me figure out a solution. He makes me feel happy, stronger and more motivated than ever. (QR55)*

Parents, siblings and family (negative contributors)

Although most student participants mentioned receiving support from parents and family members at home, some students claimed that they endured social and

domestic challenges due to unsupportive parents, family members, spouses, as well as verbal, physical, and emotional abuse.

Student Participant 9 said that a parent would become aggressive, and the anger would play out in verbal, emotional, and at times, physical abuse and mentioned:

> *…when my parents fight, then it affects me. That affects my well-being. (SP09)*

Student Participant 28 spelt out in the interview that parents' potential separation caused anxiety, depression, and isolation, which harmed the participant's well-being and academic performance and said:

> *There are family factors, yes, it is my parents; we went to the family psychologist. There are other factors as well. It is not just the university; it is the family as well. (SP28)*

Some participants did not receive parental support, possibly because their parents did not know how to provide it. Student Participant 1 is the first generation in the family to attend university, and detailed:

> *At home, I feel my parents do not understand. I don't know if they think I just come and sit here all day; they do not have the experience. I just built myself up again from this. I don't expect them to say sorry. (SP01)*

Friends, life partners and spouses (non-supportive)

Some female student participants reported a lack of support from their life partners, who often had unrealistic expectations and struggled to understand their academic challenges. Student Participant 1 noted that her partner had only a few lectures each week and wanted social interaction after an exhausting day. The participant complained:

> *I am tired when I come home. I feel he thinks like my mother; they do not understand that I cannot come and sit and chat now; they don't always understand. (SP01)*

Student Participants 4 and 5 from Focus Group 2 highlighted family pressure to multitask, as household chores often rest on them. This impacts their academic performance and disrupts their lifestyle, leading to sleep deprivation. Student Participant 4, the only female in a male-dominated household, feels obligated to fulfil cultural expectations for domestic duties despite her studies.

I am the only girl in the house; it is very tough … I have two very lazy brothers, so even if I tell them that I am writing a test, they will just not do it, which places me under a lot of pressure. Most of the time, I am exhausted. I will stay up until 2 to 3 am finishing assignments and studying for tests. (FG02, SP04)

5.2.2.2.2 Sub-theme 2.2: Institutional relationships with peers and students

Relationship with peers

Participants indicated that while family and friends offered support in their academic journey, they preferred to seek help from classmates. Many found invaluable support from peers in the BOH year group, as they faced similar challenges. Student Participant 12 explained:

The peers in the class, you know, everybody is struggling, going through the same, we all have the same modules, we are all in the same situation, and that kept me going. (SP12)

A similar remark was made by Student Participant 11, who explained that support came from peers in the year group. According to the participant, peers are going through the same experiences in the clinics:

My main support came from my peers; we would be in the café (cafeteria), and we would talk about the previous day's clinics and how to deal with or go about things the next time. (SP11)

Some participants wanted to protect their parents from added stress; therefore, they preferred talking to their peers first about their concerns. Student Participant 21 explained:

I'll go to my peers first and let off steam with them. I know they (parents) have a lot on their plates, and I do not want to burden them. (SP21)

Participants highlighted the importance of study support from both formal initiatives, like the 'study buddy' program, and informal study groups. This university-backed program enhanced academic and social well-being, especially for BOH students who often felt isolated on satellite campuses. Student Participant 23, largely isolated in a hostel room, praised the program for its excellent support.

From the first year, I had a study buddy and every day we are in touch, we will WhatsApp to discuss how you did that in the clinic. My study buddy and I would go to the mall once a month and have breakfast. (SP23)

Although in the minority, some students indicated that they had no one to turn to for support or preferred not to involve others in their problems. Questionnaire Respondent 48 stated:

I have no one to turn to. (QR48)

Questionnaire Respondent 21 wrote:

I don't like making my problems theirs. (QR21)

5.2.2.2.3 Sub-theme 2.3: Professional institutional relationships

Faculty and institutional relationships

Professional and faculty relationships included support from lecturers, clinical supervisors, clinical advisors (mentors), faculty counsellors, and psychologists, which are discussed in the following section. In a previous section, pre-clinical experiences and inconsistent feedback from clinical supervisors were discussed. The focus of this section will be on institutional relations with mentors (clinical advisors, not to be confused with clinical supervisors) and lecturers. For the sake of clarity, this discussion refers to 'mentors'; however, student quotations could refer to clinical advisors.

Lecturers and mentors (positive supporters)

Relationships with lecturers involve students' interactions with mentors and clinical supervisors. Most students reported positive experiences, finding them approachable and helpful, while some preferred strictly professional relationships for personal reasons. In early 2023, the term 'clinical advisor' was changed to 'mentor' during a faculty workshop to clarify roles. Students and mentors were to meet quarterly to discuss academic progress and support.

Student Participant 12 regularly scheduled mentor appointments and found that, while receiving adequate support from home, the mentorship programme offered additional, goal-driven assistance, stating:

Having a clinical advisor (mentor) makes a big difference. At home, you can talk, but they do not understand. The lecturers are really great and supportive. I had good interactions with my lecturers (SP12)

Student Participant 18 had a positive relationship with the allocated mentor and stated during the interview that the mentor was always available in times of need.

I have a good relationship with the lecturers and clinical advisors. Yes, I think it did, it did help a lot, I think my clinical advisor is one of the most approachable persons…we are aware that the door is always open. (SP18)

Student Participant 28 highlighted the positive mentorship relationship with a lecturer who was recently a student in the Faculty of Dentistry and found the lecturer approachable and understanding of the student's concerns:

I have a very good one-on-one relationship with (mentions lecturer's name). I feel she is on our level, as she has been a recent student and understands us. (SP28)

Student Participant 10 praised the mentor for the assistance and support provided during the passing of a loved one and commended the mentor as follows during the interview:

I can say about the clinical advisor, like last year when my … passed away, I was a bit stressed about how to handle the situation because I had a test on Friday. When I emailed my clinical advisor, she immediately had a solution… (SP10)

Clinical advisors/mentors as distractors (Non-supportive)

Not all students had the necessary support or interactions with their allocated mentors. Student Participant 13 explained that the relationship with the mentor became difficult, and the participant had to request reallocation.

With this clinical advisor, I now have had a good relationship with her from day one. I feel we can have a very casual conversation. I am not fond of the idea that a clinical advisor is chosen for us. (SP13)

A similar comment was voiced during the focus group discussions by Focus Group 2, Student Participants 2 and 7, who agreed that choosing a mentor would be the preferred option; however, it may result in one person having all the students. Participant 02 commented by saying:

It will be guaranteed that one clinical advisor will end up with all the students and the rest with none. (FG02, SP02)

The student and the group started laughing, looking at each other, knowing exactly what was implied.

Some participants expressed disappointment with the mentor programme due to perceived personality clashes with mentors or a reluctance to share personal information with a lecturer.

Student Participant 13 preferred maintaining professional relationships with lecturers and supervisors and found it challenging to share personal information in a professional setting with lecturers as mentors. Student Participant 13 said:

I am very professional in a professional setting. I am not someone who will share personal information. (SP13)

Student Participant 11 admitted that the encounters with the assigned mentor were neither pleasant nor helpful. Student Participant 11 shared first-hand experience and opinion about the mentor programme by explaining:

My clinical advisor (mentor) was very aggressive; it was never in a way that I could go to speak to her, she (the mentor) would be hectic even with online sessions. (SP11)

Student Participant 17 indicated that it was not easy to go to the mentor and would deliberate on the situation before going for a consultation, saying:

I do not know, maybe it is the type of background I have from high school, I do not have a relationship with the teachers, so it is weird to have a relationship with a teacher, sometimes it disadvantages you, as sometimes you want to talk, but it takes a lot to go. (SP17)

The researcher was curious to determine what the mentors thought of the mentorship programme. Lecturer Participant 2 thought that the (mentorship) clinical advisor programme was not always successful. The motivation for the statement is that clinical advisors are allocated to students, and sometimes there could be a clash of personalities. A sensitive-natured student may be allocated to a less sensitive or more abrupt clinical advisor. Lecturer Participant 2 also pointed out that the mentor programme can only be successful if:

… a concerted effort is made to be cognisant of who the students are allocated to. If the clinical advisor is very abrasive, then do not place the person with a very sensitive student. (LP02)

Lecturer Participant 5 voiced personal concerns regarding the absence of necessary mentorship training; however, they confirmed that no student will be turned away if they require support:

I think within our capacity as lecturers and our functions, we have to go to extremes to encourage and promote positive emotional and social well-being. We do not have the necessary training and the necessary qualifications, and we don't know how to deal with it. (LP05)

Lecturer Participant 6 expressed a similar concern during the interview, stating that the university and faculty do not offer mentorship training for lecturers who have to assume that role. The lecturer expressed dissatisfaction and annoyance with the arrangement by saying:

No, I don't think, I don't feel that we are, I don't think it is fair that we must cope; I am not a psychologist. (LP06)

Lecturer Participant 2 echoed the sentiments of Lecturer Participants 5 and 6 regarding the responsibility for mentorship. Lecturer Participant 2 felt equally unprepared for the task and strongly voiced an opinion during the interview:

At first, it was: How do I cope with this? I was never prepared for this. I had to wing it or figure it out because we were actually never prepared for it; we were not given a workshop on it. (LP02)

Lecturers mentioned that being a mentor was an added burden to their already overloaded responsibilities and workload. Most lecturers reported that dealing with students' well-being issues affected their own well-being. The student's plight becomes the mentor's burden. For example, Lecturer Participant 02 in the interview said:

I think you are also carrying the load with them; you become tied to them emotionally. It does not affect me in my work, but it is something you carry with you, and you become quite involved with it. I think, from the perspective of my private personal space, I do not think it is fair. (LP02)

Relationship with Student Support Services

This section details the support services offered by the university's CSSS. The Faculty of Dentistry provides a counsellor who is available weekly and with whom the students can arrange appointments. Students expressed concerns about limited in-person availability and the inadequacy of having to email or call a toll-free number during a crisis. One participant highlighted the need for immediate support in emergencies and voiced disappointment with the current intervention process as follows:

> *The process to get there is just too much, yes, to make the appointment with the psychologist; the process is unreachable for students. That is why a lot of students feel they will just not go and that the support is hyped up… (P04)*

Student Participant 9 agreed with the previous statement and confirmed the opinion that an immediate appointment is required when in crisis. The student participant voiced some concerns:

> *In terms of the counsellor, I think I speak on behalf of all the students. The system should have time for walk-in people as well. (SP09)*

Students responded overwhelmingly to the question of whether they require professional well-being support as follows. Questionnaire responses included:

Questionnaire Respondent 3 wrote:

> *I feel like everyone should talk to someone about their mental state. (QR03)*

Questionnaire Respondent 14 indicated that:

> *It would help me cope better with my stress levels, also it would help talking to a professional who gives good advice. (QR14)*

Questionnaire Respondent 34 wrote:

> *My home situation is the main reason that I am extremely stressed, and I need professional help to overcome this; it affects my studies. (QR34)*

Lecturer Participant 4 elaborated during the interview on how culture, religion, and peer rejection contribute to the reluctance to acknowledge challenges to well-being.

> *I definitely think there is a big shift that needs to happen in certain communities; it is always seen as something other people suffer from, never us, especially males. It is still stigmatised, such things as depression and anxiety. If I had to*

say to my parents that I need to see a psychologist, it would be almost like (parents' reaction), "I think you need to go to church". (LP04)

Not all feedback was negative about the professional well-being support services. Some student participants were satisfied with the university's counselling services, especially those who experienced personal loss, saying:

I had three sessions with the psychologist, and I was ok. I needed to hear affirmation that it was OK for me to feel the way I did. (SP29)

Similarly, Student Participant 8 pointed out how counselling services at the main campus assisted in dealing with the loss of a parent and said during the interview:

I am currently going to therapy just so that I can move past the passing of my dad. My emotional well-being has improved a lot. I will continue with therapy. (SP08)

Furthermore, Student Participant 5 only had positive comments to share about the professional counselling services:

In my first and second years, I was in a very dark place, and I felt I had no one to turn to. Nowhere, and I had a few sessions there, and that helped me. (SP05)

Gender discrimination

During interviews, it was clear that gender discrimination is regarded as a significant issue in the current context. Both married and unmarried female students living at home reported feeling responsible for household tasks after long days at university. These demands led to stress and anxiety as they juggled household chores, had to prepare for tests, and complete assignments. Married women often felt culturally obligated to be homemakers, while their spouses sometimes failed to grasp the demands of their studies. Student Participant 15 expressed frustration about her husband's refusal to help with housework despite his encouragement for her to pursue further studies. To cope, she had to increase her antidepressant medication, explaining in the interview:

No, I clean the house, and do the washing, and the husband does not help. I have no housekeeper helping. I have increased my antidepressant prescription, which has helped me cope. (SP15)

Student Participant 5, living with in-laws, faced significant stress due to the in-laws' demanding expectations to fulfil household chores and her husband's lack of support. The participant was responsible for all household duties and healthcare for the ill in-law. The participant declared that she often goes without food and survives only on coffee. During the interview, she described her dire situation.

> *I had to look after my daughter's schooling, cleaning her (mother-in-law's) wounds, cooking food, caring for and seeing to my father-in-law and my husband…it was difficult. It affected my studies. I don't get food there, so I have to wait for my mom to send me food or eat at my mom's house. If I don't have food, I will drink coffee. (SP05)*

Responses to the questionnaire's open-ended questions confirmed statements by the interviewed participants about factors that influenced their well-being. Questionnaire Respondent 14 wrote that:

> *Arriving home late, I help with cleaning and have to help with preparing food. (QR14)*

Questionnaire Respondent 21 indicated that:

> *I pull my weight at home, spreading myself thin. (QR21)*

5.2.2.2.4 Summary of Theme 2

Student participants shared various aspects of social well-being and support mechanisms. Notably, while positive support was beneficial, it could also act as a distractor. Many students highlighted their mothers' significant contributions to their social well-being, with siblings also playing supportive roles by taking on household chores, thereby allowing them more time for study. For those in long-term relationships, some partners offered essential emotional, physical, and financial support; however, several female participants mentioned that their male partners were unsupportive and had unrealistic expectations of them to multitask.

Student participants perceived the support for well-being provided by the faculty and university as varied, with some having positive experiences and others not. Some students found the mentorship (clinical advisors) supportive, while others were hesitant to disclose information, and some had negative experiences with their mentors. Lecturers assigned mentorship responsibilities have expressed concerns

regarding their lack of training for these roles, noting that this additional duty contributes to their overall workload. The CSSS on campus provided well-being support; however, many students felt too intimidated and feared stigmatisation to discuss their well-being with strangers. Some students felt that immediate access to professional counsellors was lacking when they needed it most. Ultimately, peers were seen as the most understanding and supportive, providing crucial social and emotional support.

5.2.2.3 Theme 3: Environmental factors that influence the well-being of oral hygiene students, with a focus on living conditions and the learning environment

Theme 3 focuses on the factors that influence the well-being of oral hygiene students in their living and learning environments during their studies.

The following sub-themes were identified: Sub-theme 3.1 examines the impact of the residential environment on students' well-being throughout their years of study, specifically considering university, private, and home living settings. Sub-theme 3.2 focuses on learning environments, including physical space and issues such as discrimination faced by BOH students by BDS students, staff, and management (refer to Table 5.3).

Table 5.3

Overview of Theme 3: Living and Learning Environments

<table>
<tr><td colspan="2">THEME 3: Living and learning environments
Environmental factors that influence the well-being of oral hygiene students: A focus on living conditions and the learning environment</td></tr>
<tr><td colspan="2">Description of the theme: Environmental factors influencing the well-being of oral hygiene students, including the focus on living and learning conditions.

Sub-theme: The investigation examined the effects of university residences, private student housing, and living at home on the psychological well-being of students. The investigation was extended to examine the impact of the learning environment, which included the perception of the physical environment, referring to the dental faculty, clinical environments, and the main campus, as well as the support provided to students. The perceived element of discrimination that impacted the psychological well-being of BOH students was identified and extensively reported.</td></tr>
<tr><td colspan="2">Inclusion criteria: Include all factors relating to the environmental aspects, with a specific focus on the living and learning conditions that influence the well-being of oral hygiene students.</td></tr>
<tr><td colspan="2">Exclusion criteria: Exclude all factors unrelated to environmental factors, with a specific focus on the living and learning conditions that influence the well-being of oral hygiene students.</td></tr>
<tr><td>Sub-theme: Living environments
Description: The impact of the residential environment on the well-being of students during the years of study, with a focus on university, private, and home living environments</td><td>Sub-theme: Learning environments
Description: The impact of the Learning environment on the well-being of students during the years of study, with a focus on the various campus and clinical environments and the perception of discrimination.</td></tr>
<tr><td>Categories:
Negative and positive aspects of the living environment
3.1.1 University residences
3.1.2 Living with family at home
3.1.3 Private residence</td><td>Categories:
Negative and positive aspects of the learning environment and support strategies
3.2.1 Lack of amenities
3.2.2 Discrimination in the learning environment
3.2.2.1 Dental students
3.2.2.2 University and faculty management
3.2.2.3 Lecturers in the learning environment</td></tr>
</table>

Note. Table 5.3 presents Theme 3, which provides an overview of the living and learning conditions of the BOH students during their studies. It presents results from data collected on the impact of living in university residences, at home, and in private accommodation, as well as the effects of the campus and clinical learning environments on students' well-being.

5.2.2.3.1 Sub-theme 3.1: Living environments

University residences

Participants living in university residences overwhelmingly reported that their residence life negatively affected their well-being. Students were particularly outspoken about the poor living conditions at a specific campus student accommodation, including disruptive noise levels, all-night parties, unhygienic conditions, and security issues. Reports indicated that calls to security guards to address disruptive students did not always resolve the complaints.

Student Participant 23 noted during the interview that the disruptive behaviour during the early hours of the morning annoyed and frustrated student participants, as they needed to either study or sleep. Participants further complained about the poor response from security:

> *In my living environment at residence just this week, one person was playing loud music until 5:30 in the morning. You can report it to security, but not much happens. (SP23)*

In addition to the disruptive noise, the unhygienic conditions at the university residence were an additional issue raised by several participants. Student Participant 27 indicated that sharing bathroom facilities is generally undesirable:

> *The whole thing of sharing facilities like the bathroom gives me the creeps… (SP27)*

The student's body language indicated that it was a bad experience, as evidenced by shuddering while describing the conditions. Similar comments were noted during the focus group discussions from Focus Group 1, Student Participant 6, referring to the unhygienic conditions in the shared bathrooms, and explained the unpleasant experience as such:

> *We are sharing bathrooms in residence, and that is the worst thing about sharing bathrooms with strangers. During weekends, no one does the cleaning, then it is like students taking care of themselves, and when students get drunk, they do not flush the toilets or the showers. (FG01, SP06)*

During the interviews, it further became apparent that there were significant safety concerns. Female participants reported feeling unsafe due to security breaches in the

bathrooms as well as in their rooms. The participants were upset because their privacy was invaded in the bathrooms, where male students watched them shower. Student Participant 23 indicated that she was upset about not being safe in the bathroom facilities and complained by saying:

> *Yes, incidents were happening in my first year; males were watching and following us (females) into the bathrooms. (SP23)*

The safety in the hostel rooms was mentioned as a concern, as participants reported that strangers wandered into their rooms at any time, day or night. They mentioned that some doors could not be locked, allowing anyone to enter their rooms. Student Participant 23 noted during the interviews that these incidents typically occurred late at night or early in the morning. These intrusions adversely affected the students' well-being, and as the participant expressed, left them feeling anxious and scared:

> *A friend of mine had a guy come into her room at 2 am in the morning. She phoned me to get help. (SP23)*

Participant 6 from Focus Group 1 emphasised during the discussions that control and security at one of the university residences were inadequate. Reported security issues were not addressed, nor were the students who rented their rooms to strangers for financial gain. Student Participant 6 pointed out that the illegal renting of hostel rooms negatively affected their living and learning conditions and stated in the discussion:

> *The students rent out their rooms, and these people will just drink… we had to write an exam, and the people in the room became drunk, and they invited friends, and the music was high up, we did not have an environment to study. (FG01, SP06)*

I was surprised to learn that students reported that hostel rooms are being rented out to people from outside the university. I asked Focus Group 1 if this occurs regularly. Focus Group 1, Student Participant 6, responded as follows:

> *Yes, that happens a lot (all FG01 participants laugh). Students rent out their rooms to other people who are not university students from here, and some are not students. (FG01, P06)*

Information captured from the questionnaires reflects issues similar to those raised about hostel accommodation. Questionnaire Respondent 56 mentioned*:*

On residence, everyone is doing their own thing, not obeying the rules, and there are loud noises when you want to study. Students are making a noise, and the residence is too busy. (QR56)[1]

Living at home

Some participants living at home during their studies reported challenges with their living environments that affected their well-being and ability to focus on their studies. Adverse living factors at home included dangerous living environments, noise, overcrowding, strife among family members, parental quarrels, unaccommodating family members, and lack of privacy.

Student Participant 1, during the interview, expressed that the living environment is challenged due to the presence of gangsters in the immediate environment. The participant expressed a strong desire to help her family relocate out of the dangerous environment:

I would change my living environment, not live there in that place, the area, the community, well, it is gang-invested. (SP01)

Student Participant 1 continued to explain that parental duties were shifted onto the participant, causing stress and harming academic performance. The participant spent hours on the street searching for the sibling rather than studying. Student Participant 1 cried and explained during the interview:

If he is out late at night, I am the one who goes out and goes and looks for where he is, and my parents will always tell me, "Gaan kyk waar is jou broer." He will listen more to me than to them. (SP01)

Student participants reported that noise levels at home were intrusive during their studying time. Student Participant 9 mentioned that the environment at home is too noisy, overcrowded, and not conducive to learning. The participant decided to request admission to campus residence. In the quotation below, the participant explained:

---

[1]It is important to mention that the university hostel most often referred to, which created issues of concern, closed in 2024.

At home, it is very noisy, and there is not enough room; there are only three rooms. My parents, my family is very noisy. If everyone is in the living room, I will be in my room. (SP09)

The insights gained from the questionnaire responses aligned with the statements made during the interview. Questionnaire Respondents 13 and 24 complained that their home environment was too noisy. Questionnaire Respondent 13 reported that:

I live in a noisy environment as I share a room with my siblings. (QR13)

Questionnaire Respondent 23 wrote that:

Our house and environment can be loud at times, as we live a block away from the schools, and the school children are very loud (QR24)

Other issues living at home, such as unstable internet and limited Wi-Fi, were mentioned by Questionnaire Respondent 30:

I do not have access to the Internet, and it delays what I need to do. (QR30)

According to Questionnaire Respondent 13:

Shooting happens often. I don't want to study late and leave the lights on, afraid of what could happen if someone can run in. (QR 13)

Questionnaire Respondent 31 indicated:

I get anxious walking to my place, [and] hear gunshots. (QR 31)

Interview Student Participant 13, however, expressed a positive view, sharing that living at home provided strong support from her parents and siblings.

I like to go to the gym, so that is like an hour out of my day, then I do not think about university, doing things at home, or any social issues, if there are any, I can just focus on myself, as I also need a break. I am quite artistic and like to paint. (SP13)

Private residence

Only a few participants stayed in privately owned residences; therefore, the feedback is limited. Student Participant 2 stayed off campus in a privately-owned student house and reported the living environment as being very good, expressing her gratitude by saying during the interview:

I cannot complain about anything. I live in a good environment, I eat good food, I exercise, I do my work when I have to, I do not have distractions, and there is not much going on in my life that I feel would affect me negatively in that sense. (SP02)

5.2.2.3.2 Sub-theme 3.2: Learning environment

Lack of amenities

Feedback from participants regarding their experiences and perceptions of the learning environment revealed a wide range of responses, from positive to extremely negative. Comments highlighted issues related to both the physical environment and instances of severe discrimination faced by students in the oral hygiene program.

Some students expressed concern about the poor condition of certain training facilities and noted a lack of campus security. They specifically mentioned walking to the parking area after dusk, raising safety concerns.

Participants from Focus Group 1 reported that they had not experienced well-being issues prior to studying oral hygiene. They attributed their declining well-being to the learning environment, particularly mentioning how the clinical setting negatively affected them. Concerns were also raised regarding the lack of amenities for students, such as cafeterias and relaxation areas for short lunch breaks.

During an interview, Student Participant 4 stated that at a specific oral health campus, the physical learning environment was particularly depressing and detrimental to students' well-being.

I think in terms of our physical learning environment, let's be honest, it is not aesthetically pleasing; it is a very depressing place. The layout is terrible and dark. Being there is a mental block to learning; no windows… You have to be quiet, because you walk among patients. (SP04)

A few students mentioned that when they leave late from lectures or the clinical area, and they have to walk to the parking area on their own, they feel unsafe. Student participant 1 mentioned:

If it is later in the day, let's say it is like 4:30, and there are only two or three cars spread out, then I tend to be a bit on edge (SP01).

Continuing the topic of factors that influence students' well-being in the learning environment, it became clear that student participants voiced concerns about the discrimination they experience. Discrimination in the learning environment is discussed in the section below.

Discrimination in the learning environment

As the interviews unfolded, it became evident that the student participants were not positive about their relationships with the dental students (BDS candidates) in the learning environment. The participants voiced dissatisfaction that they were subjected to various types of discrimination and bullying. It became clear during the interviews that the discrimination against the BOH programme stemmed from at least two main sources. The first source of discrimination was the BDS students, and the second source was the lecturers from outside the oral hygiene home department.

Discrimination by Dental students

Participant 10 stated that dental students see themselves as superior to oral hygiene students. Both BDS and BOH groups must meet clinical quotas; however, dental students often claim they should have priority in securing patient quotas and physically push oral hygiene students to the side. Student Participant 10 described the discrimination and insults faced by BDS students and explained:

> *The dental students will say they have more work, or they must get things done first, so even if you are in clinics or at radiography, you also have to get your work done, but they feel they have the right over you; they would say you do not need the quota. (SP10)*

Bullying and discrimination reportedly persisted in various departments during clinical sessions for oral hygiene students. When BDS and BOH students worked together in the Oral Surgery Department, both were expected to perform local anaesthesia on patients. Student Participant 4 noted during the interview that staff labelled BOH students with stickers reading “Oral Hygienist,” which the students saw as discriminatory. Student Participant 4 expressed dissatisfaction with this physical labelling of BOH students.

> *It is like in oral surgery, the BDS students would introduce us (BOH) to the patient as their assistant, and it is so that we have to inject the patient, and I was like…*

Oh no…Sorry, I am the oral hygiene student, …No, you must take your stand then and say no, I am the oral hygienist (not the assistant). (SP04)

Discrimination by clinical supervisors, lecturers and faculty management

Participants of Focus Group 1 agreed that they experienced discrimination from the BDS students, clinical staff supervising BDS, and, at times, administrative staff.

Due to limited resources in the clinical area, including insufficient laboratory space, equipment, materials, instruments, and other clinical facilities, BOH students were asked to leave their designated clinical facilities. Focus Group 1, Student Participant 1 expressed concern during the focus group discussion about this form of discrimination:

I also experienced something where we were allocated chairs, and a BDS fifth-year student came and said they needed to be working… The BDS supervisor went to our supervisor to say that the BDS student must come first, and we should get out. (FG1, P01)

Student Participant 13 recalled that during their first-year orientation, BDS and BOH students were initially grouped together and formed new friendships. However, faculty later separated the groups, creating a divide that persisted throughout their studies and led to feelings of sadness among some of the BOH students.

It feels as if the university was driving a wedge between the two groups. We started as friends; we wanted to be friends, but the separation of the groups that happened at the university destroyed the new friendships. (SP15)

The student participants stated that they faced discrimination not only from the BDS students but also from lecturers outside the oral hygiene department. Discrimination involved derogatory comments directed at both the oral hygiene students and staff. It is clear that lecturers from other departments do not know the scope of practice of the oral hygienist; therefore, they do not understand how the lecture topic they have to cover relates to the oral hygiene profession. Student Participant 4 had the following comment during the interview:

Can all lecturers recognise us, [and] go through our scope of practice before you come and teach? How can you lecture when you do not even know that this is in my scope of practice? That is just being disrespectful. (SP04)

5.2.2.3.3 Summary of Theme 3

Participants discussed how their living and learning environments impacted their well-being. Those in university residences found the conditions noisy and unsafe, with complaints about uninvited strangers and a lack of privacy, particularly in shared bathrooms. Female students reported feeling harassed, and unhygienic conditions made sharing facilities difficult. Despite security complaints, little changed. Students living at home faced challenges too, including unsafe neighbourhoods and family strife, which disrupted their studies. While some appreciated the support from family, others felt their responsibilities at home conflicted with their academic demands.

In terms of learning environments, participants highlighted insufficient lecture venues, pre-clinical and clinical space, and scarce resources such as patients, dental materials, and consumables. Discrimination by dental students, some lecturers, and faculty management was cited as a major concern affecting their well-being. Oral hygiene students often sacrificed access to resources to accommodate BDS students, leading to feelings of inequity and distress.

5.2.2.4 Theme 4: Coping mechanisms students apply during their studies

Theme 4 examines the Coping mechanisms used by oral hygiene students during their studies to manage stressors that affect their well-being. It presents three sub-themes. The first sub-theme explores positive physical and recreational coping strategies, such as hobbies, pastimes, and a commitment to and pursuit of a more balanced lifestyle through physical exercise. The second sub-theme focuses on positive non-physical recreational coping methods, including spirituality, meditation, and sleep therapy. The third sub-theme investigates negative coping mechanisms employed during their studies, which encompass outlets for negative emotions, pharmaceutical use, including prescribed and over-the-counter medications such as antidepressants, as well as non-prescribed recreational drugs and stimulants (refer to Table 5.4).

Table 5.4

Overview of Theme 4: Coping Mechanisms Students Apply During Their Studies

THEME 4: Coping mechanisms Coping mechanisms students apply during their studies.		
Description of the theme: An investigation into the Coping mechanisms of oral hygiene students, examining both positive and negative strategies. **Sub-theme:** Explore positive physical coping methods, such as hobbies and self-care, as well as non-physical activities, such as meditation. Also, consider negative responses, including emotional outbursts and the use of over-the-counter and prescribed pharmaceuticals.		
Inclusion criteria: All coping mechanisms that oral hygiene students apply during their studies.		
Exclusion criteria: Exclude factors that do not relate to coping mechanisms specifically applied during the years of studying oral hygiene.		
Sub-theme: 4.1 Positive physical recreational coping mechanism activities	Sub-theme 4.2 Positive non-physical recreational coping mechanisms	Sub-theme 4.3 Negative coping mechanisms
Description: Recreational activities that assist students in coping with challenges.	**Description:** Internal motivation and spiritual orientation, rest and emotional expression that assist students in coping during challenging times.	**Description:** Medication, substances or stimulants used in response to stress and distress.
Categories: 4.1.1 Hobbies 4.1.2 Positive life balance & self-care 4.1.3 Physical exercise 4.1.4 Therapeutic effect of interaction with pets	Categories: 4.2.1 Planning and time management 4.2.2 Spirituality 4.2.3 Meditation and sleep as therapy 4.2.4 Emotional outlets	Categories: 4.3.1 Pharmaceuticals 4.3.2 Prescribed and over-the-counter medication 4.3.3 Antidepressants 4.3.4 Recreational drugs 4.3.5 Caffeine

Note. Table 5.4 presents Theme 4, the coping mechanisms that oral hygiene students rely on to manage the demands of their studies. Coping mechanisms include subthemes of positive physical coping, non-physical recreational coping, and negative coping mechanisms.

5.2.2.4.1 Sub-theme 4.1: Positive physical recreational coping mechanism activities

The coping mechanisms mentioned included both physical and recreational activities. Activities mentioned included baking, painting, photography, editing video material, listening to music, spending time with pets, walking, jogging, and board games such as chess.

Some student participants indicated that they could not continue their extracurricular activities as before, mostly due to time and financial constraints. However, some participants managed to make time for well-being activities by creatively finding free, home-based alternatives and extracurricular activities.

Recreational activities

Hobbies

Student participants demonstrated creativity by engaging in some hobbies as extracurricular activities. Those who lived in campus residences had limited resources; however, they turned to baking and cooking as a coping mechanism to improve their well-being. Student Participant 9 reported that baking was the best coping mechanism and added:

> *I tend to eat, eating is one way how I cope, the second one is cooking, baking and then eating it. (SP09) (The student laughed when saying this.)*

Student Participant 27, who previously made use of recreational drugs and alcohol, made a turnaround and realised the self-destructive nature of making use of such substances. The participant decided to take up a few high-intensity hobbies. The participant stated proudly during the interview:

> *I keep myself busy; my coping mechanism is a hobby, which is my best advice: just keep your mind busy and keep it busy with positive and good stuff. I used to resort to alcohol and herbal stuff, I would smoke stuff and get a high, and I have learned to keep my mind busy, play sports, and play video games. (SP27)*

Positive life balance and self-care

Participants who deliberately adopted a balanced lifestyle approach as a coping mechanism focused on effective time management. This entailed working long hours on assignments and tasks, and working during university vacations to stay on

schedule. By doing so, they created time to enjoy a balanced lifestyle. Student Participant 13 strived to maintain a good work-life balance during the time of studies, which was achieved by planning well and working long hours and explained:

> *Juggling things like in social life, and you want to give 100 per cent, you don't want to do a good social life or have a good social life and a bad student life, and academically you are not doing well. (SP 13)*

Student Participant 13 also mentioned that it is important to know yourself to realise when life balance is in dissonance and take the necessary steps to achieve harmony and equilibrium, and explained during the interview:

> *I know when I need a day off. I think it is a good practice to take time off, especially for people who tend to get overworked easily. I have always been very hard on myself. (SP13)*

Student Participant 2 agreed in the interview that you have to make a deliberate attempt to maintain a balanced lifestyle and explained how to achieve the balance:

> *I would say my life is very balanced. Ja, I put in an effort, …like I said, I live in a healthy environment. I make an effort to see people so that I do not remain stagnant. Also, with the learning, I also make an effort to be active or move or exercise [which] also helps with your brain. I eat good food. I exercise. I make an effort to get eight hours of sleep. I have to; otherwise, I can't function. (P02)*

Physical exercise

Student Participant 17 indicated that physical exercise was an excellent outlet for stress, and went jogging every day and explained:

> *I jog every day, and my jogging partner goes with me. I jog up to the gate via the parking area. It is about 2.7 km. It makes me feel relaxed. I feel refreshed. (SP17)*

From the questionnaire results, students who made a deliberate effort to maintain a balanced lifestyle reported that physical activities helped them to cope: Questionnaire Respondent 10 indicated as follows:

> *I exercise twice a week and eat a balanced diet. (QR10)*

Questionnaire Respondent 31 wrote:

> *I work out at least three times a week. (QR31)*

Questionnaire Respondent 11 wrote:

> *I do yoga twice a week, I often go horse riding and play tennis with friends. (QR11)*

The therapeutic effect of pets

During the interviews, it became clear that pets had a positive impact on the students' well-being. Students mentioned that while they could not afford gym memberships or pay for extracurricular activities as they had previously, they now spent time relaxing with their pets, walking them to the park, playing with them, or just sitting with them. Participants explained that interaction with their pets improved their psychological well-being.

Student Participant 5 mentioned during the interview that, due to the inability to engage in competitive sports during studies, walking the dog helped to de-stress:

> *I used to play squash before studying, but finance is a bit of an issue at the moment. What I do is when we finish campus early…. I take the dog for a long walk to clear my head from the busy day. (SP05)*

A similar statement was made by Student Participant 4:

> *Being able to play with my cats, I cuddle with them and play, and they look for me at nighttime, it is so good for my mental health. If they think I have a bad day, they will then be much more in my face, and they will come near me. That helps me a lot. (SP04)*

5.2.2.4.2 Sub-theme 4.2: Positive non-physical recreational coping mechanisms

The following section examines effective non-physical recreational coping mechanisms, including time management strategies that enable individuals to achieve a balanced lifestyle. Seeking support through religion and spirituality during difficult periods is also addressed. Participants reported engaging in yoga and meditation as methods of relaxation and coping. Additionally, several individuals identified emotional outlets, such as crying, as beneficial coping mechanisms, indicating that their overall well-being improved following these emotional expressions.

Planning and time management

Focus Group 1, Student Participant 1 mentioned during the discussion that being well-organised, planning work schedules, and managing time are good coping mechanisms that minimise the pressure of workload. Student Participant 1 from Focus Group 1 advised as follows:

> *I think it is very important to plan and manage your time well so that you do not get overwhelmed by everything at once. When I feel overwhelmed, then I like to stop and not do anything, and regroup, recharge, stop freaking out, plan and start again. (FG02, P01)*

Student Participant 7 from Focus Group 2 echoed what Participant 1 said and confirmed the following during the focus group discussion:

> *Know your capabilities; for example, if you are a person who procrastinates, at least do small portions of work to accommodate yourself and to prevent reaching the breaking point. (FG02, P07)*

Spirituality

Most student participants recognised spirituality as a potential coping mechanism, although opinions varied. Some acknowledged a generalised presence of spirituality despite differing religious beliefs. While many continued to follow the religion of their upbringing, others questioned authenticity. Other student participants opted to turn to religion during times of difficulty. For example, interview Student Participant 23, who is devoted, mentioned that turning to God is the primary way of coping with challenges and stated:

> *I will immediately go into prayer, so when things are really, really worse, God has made a promise that he will never leave nor forsake me. It has carried me through the three years. (SP23)*

Student Participant 12 confirmed during the interview that conversations with God in times of despair helped to cope and survive. The participant added that talking to God was preferred over talking to her parents.

> *Yes, when times are tough and challenging, I turn to religion because I do not like to talk about how I feel, so I turn to God for comfort. (SP12)*

A few participants, such as Student Participant 17, confirmed that although religious, they did not experience a need for a more intense relationship with God during difficult times and declared during the interview:

> *I don't know; I feel distant, not maybe praying more, but now I push myself to do so. (SP17)*

Meditation and sleep as a coping mechanism

A few participants mentioned meditation and yoga as a coping strategy. Interview Student Participant 8 indicated that meditation has a calming effect and considers it an acceptable coping mechanism, and explained:

> *Just when I feel I have just too much work and stress, when I feel I have too much on my mind, then I meditate. I need to take time out, and my time out is meditation; even for ten to fifteen minutes, it is not long. (SP08)*

The researcher asked Student Participant 8 if there was a tranquil space in her living environment to do meditation:

> *I would love to do it in a nice open space, like in a park, but I have only my room, so that is what I do at the moment. (SP08)*

Some student participants indicated that sleep was a way of coping with stress. Interview Student Participant 23 reported that sleep had a therapeutic effect when confronted with studies and personal difficulties.

> *I will tell myself to go to sleep, and then when I wake up, things will be better. I don't react immediately. I will take a nap and then wake up. I can start again, and then things will make sense. (SP23)*

Emotional outlets

A few student participants mentioned that emotional outlets, such as crying, helped them cope. Those who cried said that they felt much better afterwards. Some student participants indicated that due to their inability to express themselves to others, they would resort to crying. Interview Student Participant 21 was one of the participants who would cry and feel much better:

> *I will cry and cry, let it all out, and when you stop crying, you feel better. (SP21)*

Interviewed Student Participant 1 confirmed that crying was a coping mechanism during times of stress:

> *I would speak to my friend, and she would say: "You are going to cry, you do not know why, but just cry, then you will feel better." (SP01)*

Participants of Focus Group 02 confirmed during the discussions that crying is the best way to de-stress and stated:

> *I just cry. I will cry for every reason, even if there is no reason, and afterwards, I feel better, reboot and then start again. Crying helps with everything. (FG2, P02)*

Interview Student Participant 23 indicated that while living in isolation in the university residence, she could not socialise and cried to feel better and cope with her situation. She explained:

> *If I am alone, then I will just cry because it helps, and everything feels better afterwards. (SP23)*

Questionnaire Respondent 5 wrote:

> *I am extremely emotional. I cry regularly. I have anxiety, and I have recently been less depressed. (QR05)*

5.2.2.4.3 Sub-theme 4.3: Negative coping mechanisms

The negative Coping mechanisms identified by participants in this study included the utilisation of prescribed medications, such as sleep aids and antidepressants, as well as over-the-counter pharmaceutical products employed to manage stress. Participants also reported the use of stimulants to enhance alertness and maintain energy levels. A minority of students admitted to the use of recreational drugs. During the interviews, it was observed that students demonstrated awareness of the detrimental effects associated with the consumption of over-the-counter stimulants and pharmaceuticals.

In the following section, the focus is on the use of prescribed pharmaceuticals under the supervision of a medical doctor, as well as over-the-counter medications, as coping mechanisms.

Prescribed and over-the-counter medication

Considering that most students reported experiencing stress due to their studies, the researcher was interested in determining whether they were making use of pharmaceutical products to cope. Although the majority of students experienced stress because of the BOH programme, only a few indicated the use of antidepressant and anti-anxiety prescription medication. Some student participants had anxiety and stress before starting their studies due to personal reasons. However, their prescription dosages were increased by medical practitioners as their anxiety and depression levels worsened during their studies.

Antidepressants prescribed

Student Participant 15 received treatment for depression before starting BOH studies due to a personal traumatic incident. The participant mentioned during the interview that depression escalated during the years of studying, and the dosage of antidepressants had to be increased by the psychiatrist, as stated below:

> *I had to have my prescription for antidepressants increased, which has helped me cope better. It is on prescription. I did talk to my doctor regarding this, and I told her I want to come off it (the medication). I have been on it for years. (SP15)*

Student Participant 12 reportedly had been prescribed medication to help cope with a sleeping disorder triggered by anxiety. The student participant indicated that the medication was not taken every day and explained as follows:

> *I am taking sleeping tablets, and the doctor prescribed it. I took it for three days, then left it and then took it again. Taking meds on and off to sleep. (SP12)*

Data collected from the questionnaires confirmed that oral hygiene students were taking prescribed antidepressants while studying. Questionnaire Respondent 46 wrote:

> *Prescribed medication Alprazolam…yes, I need to take it as my mental health is deteriorating. I am struggling to juggle my studies, social life, family and all other responsibilities all at once, and it is affecting my relationship with other people. (QR46)*

Questionnaire Respondent 48 also confirmed taking prescribed medication to cope*:*

> *My medication prescribed is Zytomil 20 mg, Adco Trazodone 100 mg. (QR48)*

Recreational drugs

Only one student participant in the study mentioned the current use of illicit recreational drugs to relieve stress. The participant indicated that a friend would source and pay for the recreational drugs and encourage the use thereof, and explained:

> *I smoke weed as I feel that [it] helps a lot. I do not pay for it; we would then just smoke. (SP10)*

A minority of the participants would consider smoking and drinking alcohol. It was interesting that those who were taking prescribed medication would consider taking other addictive substances along with it to assist them in coping.

Focus Group 2, Student Participant 6 mentioned in the discussions that, along with the prescribed antidepressants, alcohol was considered to help as a coping mechanism, as well as smoking cigarettes. The participant explained:

> *Cigarettes and a glass of whiskey, then you feel better, then I can power through. (FG02, SP06)*

Caffeine

Although some students relied on caffeine-loaded energy drinks or energy boosters, Student Participants 4 and 16 agreed that consuming energy drinks is not advisable, as they provide only short-term energy followed by a notable drop. A situation which could hardly be afforded, considering the amount of work that had to be done in the shortest time. Student Participant 16 during the interview stated as follows:

> *I don't take anything for that (to cope), like coffee makes me get to sleep. Caffeine will give you energy for an hour, and then you crash, and then you are more tired than you were before. (SP16)*

Student Participant 04 used an energy syrup with a high caffeine content, available over the counter or directly from the open shelves at most grocery and pharmacy retailers, for an extended period and suffered damaging physical complications. The participant indicated during the interview being fortunate not to have died and will never consider using it again. The participant explained the health complications experienced due to the use of energy medications as follows:

> *I thought it was safe to use. I did it in my second year, and I totally crashed. I have to preserve the kidney function I have. I still have long-term effects of the*

energy syrup…. My doctor told me that my kidneys are damaged now, and you would think that something to that effect would not be on the market. (SP04)

5.2.2.4.4 Summary of Theme 4

Coping mechanisms students applied included both positive and negative strategies. Positive coping mechanisms included hobbies such as baking, photography, and playing chess. Some student participants reported engaging in physical activities such as walking, jogging, going to the gym, and participating in sports. Physical activity was somewhat limited for most student participants due to time and financial constraints. Self-care practices included taking time out when feeling too stressed and dedicating time to planning the way forward and managing time. Some student participants indicated that taking time out was a positive coping mechanism that worked well for them, allowing them to reflect and meditate. Some participants mentioned spirituality as a coping mechanism. Spirituality was not necessarily linked to a specific religion; however, most participants acknowledged being spiritual beings and related this to positive well-being.

Several participants mentioned that interaction with their pets helped them cope during difficult times. Pets became confidants in times of sadness and companions when jogging or running.

A minority of the students resorted to negative coping mechanisms, which included taking recreational drugs, dependency on over-the-counter antidepressants and stimulants, alcohol consumption, smoking tobacco and dagga, and drinking high caffeine energy syrups.

5.3 Summary of Chapter 5

Chapter 5 presents findings from the data, which were analysed thematically and systematically organised into four principal themes, each supported by relevant sub-themes and categories.

Theme 1: Psychological well-being

The findings for Theme 1 indicate that students view the BOH curriculum as having a heavy workload. Concerns were raised about lengthy lectures and clinical sessions, and about challenges in managing time during clinical sessions. The shift from theoretical to clinical practice was a significant stressor affecting student well-being.

Inconsistent feedback from clinical supervisors and unclear patient treatment guidelines added to their uncertainty. Additionally, unreliable public transport affected the time available for relaxation and extracurricular activities, contributing to feelings of depression and isolation.

Theme 2: Social well-being

The findings for Theme 2 indicated that personal relationships with family, friends, and life partners could be both a source of substantial support and a source of non-support. The same applied to professional relationships with lecturers, mentors, and clinical supervisors. Some students reported that mentors and supervisors provided support and were seen as enablers of their well-being, while others felt intimidated by their mentors. Some described interactions as harsh and experienced insensitivity, which had a negative effect on their well-being, and they tried to avoid such interactions. Some students praised the professional counselling services for assisting them with well-being challenges, while others perceived the services as insufficient due to limited availability. Gender- and culture-rooted perceptions as well as stigmatisation challenged students to consider seeking well-being support from professional counsellors and led them to prefer peer support.

Theme 3: Living and learning environments

The findings for theme 3 indicated that students who resided in university residences perceived the environment as unsafe and unhygienic. The standard of the university residences was unacceptable as a living environment and not conducive to learning. Living at home had both positive and negative aspects. Some students reported enjoying family support and good learning conditions, while others reported overcrowding, noise levels, family strife, and neighbourhood safety issues.

Students further reported on the dental faculty campuses, citing the buildings' unappealing physical state and security issues. Students felt isolated from the main campus and believed that students there had far better opportunities to enjoy university life. Main campus students could join extra-curricular activities, socialise, and access better learning support. Students further reported that one of the most serious issues affecting their well-being was the interprofessional discrimination they had to endure. BOH students perceived that BDS students, staff, and faculty management were discriminating against them in the learning environment.

Theme 4: Coping mechanisms

The findings of Theme 4 indicated that students used both physical and non-physical positive coping strategies, such as hobbies, exercise, yoga, relaxation techniques, and planning, to manage the demanding workload. Some students reported that interacting with their pets contributed to their well-being. Students also reported that talking and venting to peers and family members helped them cope during difficult times. Pharmaceuticals, both prescribed and over-the-counter, were consumed. A minority used recreational drugs as a method of coping during challenging times.

5.4 Conclusion

The data presented in this chapter offer valuable insights into the challenges oral hygiene students face throughout their studies. Notably, these students consciously chose to focus on the positive aspects of their educational journey, rather than on experiences they perceived as negative. They maintained their well-being by being both goal-oriented and driven. Many reported feeling intrinsically motivated to obtain their qualifications, which they believed would open better career opportunities for their future. This qualification not only represented a personal achievement that enabled them to thrive, but also served as an investment in their own future and the future of generations to come. The presentation of the results in Chapter 5 will support answering the main research question and the sub-research questions.

Chapter 6 reinforces the findings detailed in Chapter 5 by contextualising them within the existing literature, the relevant main conceptual framework, and the foundational theories guiding this research and applied throughout the study.

CHAPTER 6

DISCUSSION OF FINDINGS

6.1 Introduction

Chapter 5 presented findings from the datasets to address the main research question and the secondary research questions across four themes and their corresponding sub-themes.

Chapter 6 substantiates the results presented in Chapter 5 by relating them to the current literature review, the theories underpinning this study, and the conceptual framework.

Primary research question:

What are oral hygiene students' perceptions of their psychosocial and emotional well-being at an institution of higher education in South Africa?

Secondary research questions:

- What factors do oral hygiene students perceive as influencing their overall well-being?
- How does the learning environment influence the well-being of oral hygiene students?
- How do oral hygiene students cope with and manage the challenges affecting their well-being?
- What are oral hygiene students' views on the well-being support provided by the faculty, and how can it be improved?

6.2 Discussion of findings

The following sections will present a detailed discussion of the study's findings, organised around the four main themes identified in the data analyses and their respective sub-themes. This analysis will relate the results to the relevant literature and the theoretical frameworks underpinning this research.

6.2.1 Theme 1: Psychological well-being: Determinants of the psychological well-being of students studying oral hygiene at a South African University

Theme 1 focused on the determinants of the psychological well-being of oral hygiene students at a South African university. The first sub-theme identified was the influence of the curriculum demands on the psychological well-being of the oral hygiene students.

6.2.1.1 Sub-theme 1.1: Curriculum demands

6.2.1.1.1 Curriculum workload, assignments, and assessments

Most students in this study found the BOH curriculum highly demanding. They reported that the transition to unfamiliar environments during their first and second years, including pre-clinical settings and acquisition of new clinical skills, affected their well-being. These findings align with Gambetta-Tessini et al. (2013), who indicated that the second year of dental studies is particularly difficult due to the shift from pre-clinical to clinical training.

Senior students noted that the third year was challenging due to numerous assignments and assessments. Studies conducted by Gordon et al. (2016), Harikiran et al. (2012), Harris et al. (2017), and Paudel et al. (2013) determined that dental and oral hygiene students identified course workload, clinical training, acquiring highly technical skills, and the complicated nature of clinical work as the most common stressors. Similar stressors were identified by the oral hygiene students in the current study; therefore, the findings concur with the aforementioned authors.

Participants continued to express dissatisfaction with lecturers for adding impromptu tasks and assessments to their workload, which ultimately affected their psychological well-being. This concurs with the study of Morule et al. (2023), which advised lecturers to inform students well in advance of assessments and assignments. Therefore, the findings of this study confirm that the BOH curriculum's workload is overwhelmingly demanding, and that unplanned assessment activities, assignments, and tasks conducted without clear guidelines, criteria, and instructions constitute an additional source of stress that affects students' psychological well-being. Transitioning into pre-clinical environments, acquiring clinical skills, assessments, and being promoted to the clinical environment added to their stress and influenced their well-being.

The PERMA-V framework, particularly the accomplishment element, aligns with the previous findings, emphasising the importance of autonomous and clinically responsible decision-making. The autonomy component of Ryff's theory is supportive, as it highlights the importance of students' involvement in academic planning, such as setting assessment deadlines. This involvement enhances the students' sense of control over their learning environment (Cullen & Oppenheimer, 2024). Ntoumanis et al. (2021) found that a supportive learning environment fosters autonomy, reducing anxiety and stress, which in turn benefits academic performance and overall well-being.

6.2.1.1.2 Pre-clinical, clinics, and lecture sessions

In the study, students reported that long pre-clinical and clinical hours without breaks negatively affected their well-being. Interviews revealed that junior oral hygiene students often needed more time to complete clinical tasks, leading to extended clinic hours and reduced break times. This aligns with Olson et al. (2019), highlighting the need for better clinical support for junior students. Long clinical sessions restrict break time and social interactions with peers. Therefore, the implication is that clinical supervisors should prioritise helping junior students to manage their clinical time effectively, thus allowing breaks between patients and time for social integration.

A literature review by Mary et al. (2023) found that multiple stressors impacting students' psychological well-being stemmed from clinical issues, such as sourcing patients for procedures and patients not showing up for appointments, which led to lost clinical quotas and increased stress. Participants in the current study reported similar clinical stressors, which align with those reported by Mary et al. (2023). Patient factors, as mentioned above, may lead to unsuccessful clinical outcomes, ultimately affecting students' psychological well-being. Unaccomplished clinical sessions or treatment goals further impact the type of clinical feedback and assessment results the student receives from the clinical supervisor. The information derived from this study aligns with the results of Uraz et al. (2013), confirming that insufficient time to complete clinical work negatively affects the psychological and physical well-being of dental students. This suggests that clinical supervisors should be sensitive to the students' circumstances when session outcomes are not achieved due to patient-related factors.

The PERMA-V framework, particularly the elements of accomplishment and vitality, aligns with the results observed among oral hygiene students and is supported by Ryff's focus on environmental mastery. In the current study, oral hygiene students encountered various challenges in pre-clinical and clinical settings, necessitating adaptation to new environments and the acquisition of technical and clinical skills. They need to demonstrate competency and, in the senior years, master both clinical and theoretical aspects, develop strong interpersonal relationships, and excel academically, which differs significantly from their previous secondary school experiences. Chakraborty et al. (2018) note that individuals with environmental mastery maintain their well-being despite changes around them, allowing them to succeed in their activities.

Similarly, the element of relationships in PERMA-V and in Keyes' theory of social well-being emphasises the importance of social integration and contribution. Students entering the BOH programme must establish both informal friendships and formal professional relationships by interacting with peers and lecturers and by participating in outreach initiatives to serve diverse communities. Although initially challenging, students successfully build these connections while mastering their social environment.

6.2.1.1.3 Lecture sessions

Oral hygiene students in the current study attend lectures and pre-clinical or clinical sessions for most of the day. These lectures and clinical sessions are often scheduled back-to-back, with little to no breaks in between. The long hours and workload could lead to physical and psychological exhaustion, harming the students' well-being. The vitality element of the PERMA-V theory is applicable, as students' well-being is affected by workload. Comments from the participants in the current study align with the research of Oderinu et al. (2024), confirming that students experienced exhaustion and difficulty concentrating by the end of the day due to insufficient breaks. Participants in the study by Oderinu et al. (2024) described a teaching and learning schedule similar to that of the current study, consisting of morning and evening lectures and afternoon clinics. Many participants in the current study expressed concern about the hours they spent in class and clinics, resulting in long, tiring days. Therefore, lecturers must be sensitive to the lengthy time students spend in lecture venues and clinics and ensure that students have the necessary breaks. These results

are consistent with the findings of Bhujade (2017), in which students mentioned that academic demands, such as a challenging curriculum, long lectures and clinical hours, and assessments, had a negative impact on their well-being.

6.2.1.1.4 Clinical supervisor feedback

Black and Wiliam (1998) stated that feedback aims to bridge the gap between what students should know and what they currently know. Traditionally, feedback was a one-way communication from lecturers to students; however, in more recent times, clinical feedback has evolved into a dialogue that supports students in improving their learning and clinical skills (Ajjawi & Boud, 2017). During clinical training, clinical supervisors provide both positive feedback and corrective measures, allowing for interaction that helps students reflect on their practice (Cantillon et al., 2008). The effectiveness of this feedback can be affected by the student's motivation; while negative or poorly delivered feedback may harm their well-being (Bynum, 2015; Engerer et al., 2019).

In this study, participants reported that harsh feedback from supervisors negatively impacted their psychological well-being during clinical sessions. Similar sentiments were echoed in research by Ebbeling et al. (2018), which indicated that some clinical tutors were difficult to approach. Students emphasised the need for supervisors to be considerate when giving immediate feedback in front of patients and peers. Therefore, empathetic and respectful feedback from supervisors is crucial, as supported by Adam et al. (2020) and Nerali et al. (2021), who found that the manner of feedback delivery significantly influences students' well-being.

In the discussion of students' perceptions of oral hygiene and feedback from their clinical supervisors, the PERMA-V theory applies, particularly to the achievement element, reflected in positive feedback on clinical work. Positive emotions related to the PERMA-V model are relevant during clinical feedback discussions when the clinical supervisor and student engage in a positive, encouraging clinical feedback session. Fredrickson’s broaden-and-build theory is supportive by suggesting that positive experiences enhance cognitive processes and skill acquisition, while negative experiences can hinder progress. Li et al. (2020) emphasise the need for positive emotions in clinical discussions to help students cope in challenging environments.

As support theory, Snyder's hope theory is relevant, highlighting supervisors' responsibility to foster a supportive learning environment for skill acquisition. Snyder et al. (2002) describe hope as a cognitive process involving goal achievement that is linked to intrinsic motivation. While Snyder addresses the cognitive aspect of hope, Egan et al. (2008) and Farran et al. (1995) recognise the emotional dimension. Positive feedback can enhance hope, whereas negative feedback can lead to demotivation, resulting in a downward psychological spiral. Ebbeling et al. (2018) found clinical feedback to be one of the most stressful aspects of dental training, prompting Ajjawi and Boud (2018) to urge supervisors to recognise the significant impact of clinical feedback on student success.

6.2.1.1.5 Inconsistent clinical guidance and feedback

Inconsistent guidance from clinical supervisors significantly impacts students' psychological well-being in both pre-clinical and clinical environments. Participants in the current study noted that discrepancies in feedback from clinical supervisors created confusion about treatment plans, echoing findings from Humphris et al. (2002) and Freeman et al. (2020), where students reported that inconsistent remarks contributed to stress. It is crucial for institutions to ensure that clinical staff are well-trained and consistent in their feedback approaches. Additionally, students expressed concerns about discrepancies, particularly between junior and senior staff, fearing these would ultimately affect their clinical grading.

In line with the observation of Freeman et al. (2020) that institutions should be cognisant of the purpose of feedback, and specifically how participants perceive the feedback. The PERMA-V framework can be successfully applied in this situation, with a focus on the positive emotions and relationship components. This refers to the professional relationships among clinical supervisors, peers, and patients. Chen (2020) places the responsibility on the lecturer or supervisor to create a positive learning environment by showing respect for students, demonstrating expertise in their field, and encouraging students to participate actively in teaching and learning activities.

6.2.1.1.6 Scarce pre-clinical and clinical resources

Participants in the present study highlighted that students' psychological well-being was affected by a lack of clinical and laboratory workspace, malfunctioning equipment,

and a scarcity of dental materials and resources in the pre-clinical and clinical environments. Scarce resources affect students' well-being because patients do not always understand equipment failures or resource shortages and can become abrasive toward students. Research conducted by Deeb et al. (2018), Oderinu et al. (2024), and Pyle et al. (2006) indicates that dental schools are challenged by the need to admit more students into their programmes than their clinical, technical, and human resources can manage. This creates overcrowding and limited opportunities for students who have to share resources. This results in stressful situations where students do not know whether they will meet quotas and has a negative impact on their well-being. The results of the current study align with those of Deeb et al. (2018), Oderinu et al. (2024) and Pyle et al. (2008) regarding the scarcity of physical resources in clinical and learning environments at dental schools.

In the present study, students enrolled in the BOH programme frequently received requests to vacate their designated workspaces in clinical areas or laboratories to accommodate students from the BDS programme. This practice disrupted their engagement in critical clinical activities involving patients, necessitating their relocation from essential clinical settings. According to student reports, these interruptions negatively affected their psychological well-being.

This discussion pertains to three pertinent theories. Firstly, the engagement component of the PERMA-V model is defined by the intensity and depth of focus, concentration, and application of knowledge exhibited by clinicians during clinical activities. It is observed that the profound and undivided attention of BOH students towards the procedures being conducted is frequently disrupted by clinical supervisors from various departments. These supervisors require the BOH students to halt their patient treatment to accommodate BDS students in their clinical chairs. Given the detrimental impact of such interruptions on the state of flow experienced by students, the broaden-and-build ‘undo hypothesis’ may serve as a relevant supportive theory. Where participants regularly experience negative encounters due to resource scarcity and being disregarded by BDS students and their supervisors, the negative impact can be restored by exposing students to positive encounters in the future by ensuring equal opportunities and resources are available for all students. The third supportive theory is Keyes’ social well-being theory, which encompasses the elements of social estrangement and social integration. The negative perception that oral hygiene

students are socially estranged and discriminated against by the BDS students and some staff can be changed by ensuring fair resource distribution among all students. This approach will allow them to focus on clinical patient treatment without interruptions. The broaden-and-build theory further explains how individuals or groups can maintain a positive attitude during negative experiences, demonstrating resilience, such as in the example provided.

6.2.1.1.7 Campus transport

Most students in the BOH programme required transportation to lecture and clinical sites, as well as to return to their residences at the end of the day. Students reported that long wait times for bus and transport services added to their stress. The findings of the present study align with those of Hersi et al. (2017), who reported that the long hours spent travelling from home to campus and back again contributed to increased stress levels. In the current study, participants reported that inadequate scheduling of faculty transportation led to wasted time and prevented them from accessing opportunities on the main campus for sports and other recreational activities. The PERMA-V model, particularly the elements of relationships and vitality, is relevant, as students report they cannot access opportunities for extracurricular activities, such as taking part in sport and interacting with other students. The sense of belonging to the broader university environment and student life is diluted because students spend long hours travelling and return late to campus residence or home.

6.2.1.2 Sub-theme 1.2: Curriculum impact

6.2.1.2.1 Lack of lifestyle balance

The following section highlights the impact of the curriculum on oral hygiene students. Students in this study claimed that they lacked lifestyle balance, which included sleep deprivation, poor eating habits, not being able to participate in extracurricular activities, and suffering from anxiety and depression due to the impact of the heavy workload.

6.2.1.2.2 Sleep deprivation and poor nutrition

Interviews conducted with oral hygiene students in the present study found that the high demands of the curriculum significantly affected their sleep and dietary patterns. Students reported that insufficient sleep hindered their ability to function effectively during lectures, assessments, and clinical sessions. Research by Ford (2021), which focused exclusively on oral hygiene students, found that students exhibited stress-

related physical symptoms, including sleeping and eating disorders. Therefore, the findings of the current study concur with research results presented by Ford (2021). Research on healthy eating habits by Anushri (2014) and Peltzer and Pengpid (2017) highlighted the importance of students having breakfast, which has a positive influence on students' psychological well-being and cognitive abilities. However, Sarkar et al. (2020) reported that students indicated that breakfast is the most frequently skipped meal. Participants in the current study reported struggling to maintain a healthy, balanced lifestyle and skipping breakfast due to early morning clinics and lectures. The results of the present study concur with the findings of Sarkar et al. (2020), in which participants reported that they do not always have time for breakfast before leaving for campus and clinics. The PERMA-V model's vitality component underscores the importance of sufficient sleep and nutrition for overall vitality, which the current study found to be lacking among participants.

6.2.1.2.3 Lack of extracurricular activities

Student participants reported having limited to no time for extracurricular activities such as exercise or hobbies. On the other hand, the majority believed that exercise is an important part of achieving work-life balance. Most participants in this study reported engaging in extracurricular physical activities before starting their BOH studies; however, they discontinued these activities due to workload, time, and financial constraints. The current results align with those of Kim and McKenzie (2014) and Henning et al. (2018). Some students in the current study participated in extramural activities and mentioned that exercise and hobbies had a positive effect on their well-being. Students who indicated in this study that their well-being benefited from extracurricular activities concur with earlier studies by Molina-García et al. (2011), Penedo and Dahn (2005), and Rodríguez-Romo et al. (2022).

The PERMA-V model, with specific reference to the element of ‘positive emotions’, is relevant, as students in this research study confirmed the positive well-being effect of having time to invest in extracurricular activities. Positive emotions cultivate positive mindsets and may contribute to better work performance and improved physical health. A second element of the PERMA-V model, that of vitality, entails physical exercise and activity and is important for healthy living.

6.2.1.2.4 Depression, anxiety, isolation and social deprivation

Several factors contributed to participants' depression, anxiety, and the need to isolate. Holzer et al. (2023) explained that although many students would successfully integrate into their newfound environment, some students would find it difficult and become lonely and isolated. In the current study, the main reasons for resorting to social isolation were the demands of the BOH curriculum, high stress levels when dealing with patients, and the impact of clinical supervisors' feedback. The relationships element in the PERMA-V model is relevant, as students' social interactions and ability to socialise are limited due to the aforementioned reasons.

Keyes' social well-being theory, as a supportive theory, is worth mentioning, as students who prefer to isolate may become socially estranged, leading to further challenges to their well-being. Students further mentioned that due to the high workload, they experienced physical and mental exhaustion and fell into anxiety and depression, which compromised their vitality. The component of the PERMA-V model that emphasises the importance of sleep, exercise, and maintaining a healthy diet is applicable to the above-mentioned. When high workload and stress persist over a long period, the risk of burnout increases. Gorter (2005) determined that the prevalence of burnout is higher among oral hygiene professionals than in other occupations. The study results by Deeb et al. (2018) determined that almost half of the dental and oral hygiene students participating in the study suffered from burnout and had thoughts of suicide ideation; therefore, oral hygiene students' well-being is at high risk.

Students who reported experiencing both physical and psychological fatigue indicated that they were nearing the achievement of their goals, resulting in a sense of enhanced well-being. This positive outlook, despite their fatigue, further aligns closely with the accomplishment component of the PERMA-V model. Accomplishment fosters a sense of goal achievement for the individual (Seligman, 2011) and is intrinsically linked to a sense of purpose in life. Moreover, internal motivation is well-associated with the principles of positive psychology. Participants in this study affirmed their goal-oriented mindset and expressed their commitment to pursuing a better future.

6.2.1.3 Sub-theme 1.3: Impact of personal factors

6.2.1.3.1 The unknown environment

The current study aligns with findings by Chao (2011), Knapp (2010), and Student Mental Well-being (2015), highlighting that students transitioning to university face significant social changes, such as moving away from home and adjusting to new living and learning environments. Participants noted that entering an unfamiliar environment adversely impacted their social and emotional well-being, leading to anxiety about navigating the campus. Similar to Al-Omari's (2005) findings on oral hygiene students, the stress of moving away from family was prominent. This emphasises the importance of the PERMA-V model, particularly the aspect of relationships, as students must forge new connections with peers, lecturers, and support staff upon entering university. Failing to cultivate these relationships can lead to social isolation. Ryff's theory, especially the component related to establishing positive relations, is particularly relevant as supportive theory in this context.

Those students transitioning directly from school reported that their previous study methods were inadequate for managing the increased coursework at university. This reinforces the insights from Chao, Knapp, and Student Mental Well-being that adapting to university requires new study techniques, which in turn affect student well-being.

6.2.1.3.2 Language barriers

Some student participants who did not have English as their first language had difficulty adapting to the compulsory, exclusive use of English across all teaching platforms at the dental faculty. As in the current study, students in the research by Chao (2011) and Knapp (2010) reported language barriers due to lectures and study materials presented in a second or third language.

6.2.1.3.3 Mature students

Mature learners (non-traditional learners) in the current study reported that adapting to numerous transitional changes significantly affected their psychological well-being.

Transitional challenges for mature students included adjusting to the living and learning environment, making new friendships, financial difficulties, and concerns about their families at home. An important factor was their self-doubt about their

cognitive abilities to succeed in their studies. The results of this study align with the results of Gregersen and Nielsen (2022) and Hayman et al. (2024).

In the current study, mature participants felt intimidated by younger learners who had just returned from school, as they believed the younger learners had the fundamental knowledge to transition seamlessly into university life.

The component of the PERMA-V main theoretical framework that resonates with students entering the new, unfamiliar university environment is relationships and social connections. As supporting theories, social well-being theory (Keyes) and psychological well-being theory apply. Keyes' (1998) social well-being theory applies to students arriving at university who must adapt to a new learning and living environment. Students seek social integration and social acceptance by establishing new relationships. The psychological well-being theory, the self-acceptance component, refers to students' ability to recognise their strengths and weaknesses. To contextualise self-acceptance in this study, two examples are highlighted. The first example concerns students who experienced language barriers in the new teaching and learning environment. Students who struggled to understand, communicate, and learn in English acknowledged their challenges and made an effort to improve their skills. They accepted the challenges and did not project their shortcomings on the learning environment. The second example involves mature students who acknowledged their academic challenges and the potential drawbacks of returning to university at an older age. These students acknowledged the age difference between them and students who had come directly from school, their cognitive capacity to study, and their lack of preparation, having returned several years after writing their Matric examinations.

The researcher continues to explain in more detail the autonomy component relevant to this study. Students had to adapt to the unfamiliar university environment, which posed several challenges. Students who moved away from their families to university had to learn how to make decisions and act responsibly in their newfound freedom. Autonomy is related to self-determination and independence (Ryff, 1989). These students had to learn to cope with academic life and maintain their own well-being. Ryff (1989) stated that the person who lives autonomously takes responsibility for their thoughts and actions, is internally motivated, and not influenced by external factors.

Challenges reported by participants in adjusting to transitional changes align with Leite et al. (2025), Morule et al. (2023), and Scribner et al. (2020).

6.2.1.3.3 Family matters

Mature learners reported concerns about the well-being of family members they had to leave behind to pursue their dream of studying. These participants mentioned that family members at home depended on them for emotional, physical, and financial support. Participants voiced their concerns about leaving their young children in the care of other family members. Participants with young children reported receiving immeasurable support from their mothers. The results of the current study align with research by Amoabea et al. (2020), who surveyed grandmothers' supportive role in caring for their grandchildren while the mothers pursued their studies. These students had one goal: to achieve a qualification and provide a better future for their families.

The relationship and achievement elements of the PERMA-V model are applicable, as female students want to achieve their goals of providing for their families and can do so due to the positive relationships they have with their mothers, who care for their grandchildren. The hope theory is valuable, as students are internally motivated to reach their goal of obtaining a qualification that will open the door to better work opportunities and earnings. The supporting theory, Snyder's hope theory, is applicable because it explains that hope is a cognitive process that enables an individual to find ways to achieve their goals. Snyder (2002) refers to the importance of internal motivation in achieving success. The majority of the students wanted to improve their qualifications and seek a brighter future. Therefore, they found support from families willing to take on responsibilities for them, which gave the students hope and enabled them to pursue and achieve their goals.

6.2.1.3.4 Finances

Research conducted by Coetzee (2016) and Ruswa and Gore (2022) in the South African context determined that financial support for students in higher education was often insufficient to meet their basic needs and requirements, such as food, accommodation, and medical care. Walker (2019) confirms that when students lack the necessary resources, this impacts their daily functioning and, ultimately, their holistic well-being. Participants in the current study reported that insufficient finances hindered their ability to meet basic needs, such as food and personal hygiene

products. Participants further noted that many of their immediate family members were unemployed and struggling financially; therefore, students were reluctant to ask parents and siblings for financial contributions.

In South Africa, students entering tertiary education institutions may qualify for NSFAS should they meet the necessary criteria. Participants reported that the financial support from NSFAS was often delayed due to administrative processes. Such students would be without financial support for months. In the current study, peers and lecturers played a significant role in supporting students in meeting their basic needs. Although deprived of necessities such as food and accommodation, these students exhibited resilience and a positive outlook, continuing their studies. In the study by Ruswa and Gore (2022), similar situations were reported in which students were left homeless and in need of necessities. It is clear from Coetzee (2016) and Ruswa and Gore (2022) that being financially deprived exposed students to unsafe living conditions, promiscuous behaviour to earn money, and extremely stressful situations, which impacted their ability to perform academically and affected their psychological, emotional, and social well-being. The vitality element of the PERMA-V model is applicable, as students' quality of life is affected by insufficient financial means to maintain a healthy lifestyle.

6.2.1.3.5 Impact of the BOH course's influence on psychological well-being

The following section highlights the positive impact of the BOH programme on students at the designated university. Participants in the program expressed their gratitude for its contributions to various aspects of personal development. These include personal growth, self-acceptance, resilience, purposeful living and learning, the cultivation of character strengths, and the encouragement of sustained internal motivation. These outcomes are linked to the PERMA-V model and the supporting theories discussed in Chapter 3.

The BOH programme as a positive contributor

This research study is framed within the realm of positive psychology. Therefore, this section will highlight how participants maintained psychological well-being while navigating difficult times and challenges through resilience, intrinsic motivation, and a sense of purpose. The current study aligns with Seligman’s PERMA-V model, which includes positive emotions, engagement, relationships, meaning, achievement and

Vitality. Regarding positive emotions, most participants, when asked to reflect on their studies and current circumstances, reported feeling happy and looking forward to a bright future. Several other participants came from challenging backgrounds and worked relentlessly to achieve the qualification and strive for a better future. The study also aligns with Ryff's (2004) psychological well-being theory and Keyes' social well-being theory. Ryff's psychological well-being theory comprises self-acceptance, environmental mastery, positive relationships, personal growth, purpose in life, and autonomy. Keyes' social well-being theory and the elements of social actualisation and social contribution should also be acknowledged (Keyes, 1998). The applicability of Ryff's (2004) model in the current study can be verified as follows: Although participants reported factors that harmed their psychological well-being during their studies, they displayed resilience in navigating difficult times. Students adapted to a new living and learning environment, overcoming language and financial challenges. They reported that the BOH programme fostered personal growth and self-acceptance, improving their self-confidence and communication skills. Many felt that studying oral hygiene prepared them for future opportunities and aimed to provide better lives for their families. Internal motivation was key to their resilience and success, and participants recognised their role in enhancing the holistic and oral health of their communities, achieving a sense of social actualisation.

6.2.2 Theme 2: Determinants of the social well-being of oral hygiene students

The following section discusses the determinants of social well-being among oral hygiene students as they pertain to the current study. This discussion will be underpinned by relevant literature and theoretical frameworks, including the overarching theory and Keyes's social well-being theory, that support the objectives of this research.

6.2.2.1 Emergent sub-themes of the social well-being of oral hygiene students

Emergent sub-themes revealed that relationships with family members, peers, fellow students, lecturers, and clinical supervisors could both contribute to and detract from students' well-being. The discussion and explanation follow hereunder.

The PERMA-V model, with reference to the element of relationships, Ryff's (1989) psychological well-being theory, and the element of positive relationships, as well as

the social well-being theory of Keyes (1998), which highlights important elements of social integration and social acceptance, applies to oral hygiene students and to their occupation. Developing and maintaining positive relationships means creating meaningful professional and personal relationships. Positive relationships imply that an individual will invest time in family and friends and will be willing to share time and resources with others. In the discussion below, participants reported maintaining positive relationships in both their personal and professional environments. The discussion of relationships in the personal and professional environments of oral hygiene students continues below.

6.2.2.2 Sub-theme 2.1: Personal relationships

Research by Basson and Rothman (2019), Diener and Seligman (2002), and Ludban and Gitimu (2015) has found that social support significantly contributes to students' well-being. Studies conducted by Muirhead and Locker (2008) focused on the importance of social support from family members, peers, and partners. Most participants in the current study enjoyed positive relationships with their parents, family, and peers, who provided much-needed support and encouragement, as explained below.

6.2.2.2.1 Parents and siblings

Interviews with participants revealed that parents and siblings serve as important support systems throughout their studies. Most participants indicated that their mothers were their primary source of support. Notably, many participants came from single-parent households, where mothers played a key role in their upbringing. Participants expressed deep appreciation for their mothers and for the physical, emotional, and financial support they provided. Many participants felt motivated to create better lives for their mothers once they became qualified professionals. Most participants in this study confirmed that they received support from their parents. Support included emotional support, offering comforting words during difficult times, and financial assistance.

Relations with their parents were mostly good, and participants indicated that they preferred talking to their parents, especially their mothers, rather than going to a counsellor or mentor. The parental support mentioned by participants in this study aligns with research by McIntyre et al. (2018), O'Neill et al. (2018), and Tus (2021), who found that positive parental support enhances students' well-being. Students with parents who have higher education qualifications reported receiving support and motivation from their parents, as these parents had first-hand experience of what is expected of a university student. This feedback from participants in the current study is consistent with the findings of Dag-um et al. (2024).

Some participants in this study mentioned that siblings played a significant supportive role during their studies. Siblings would take on household chores, which allowed them to focus on their studies. In addition, participants were sensitive to their parents' challenges, did not want to burden them, and sought support from their siblings.

A few participants mentioned that their parents and siblings were unsupportive rather than supportive, which posed a challenge and disrupted their well-being. These participants reported that aggression and abuse within a family would be disruptive and had a negative influence on their well-being. Research studies conducted by McIntyre et al. (2018) and O'Neill et al. (2018) determined that students who do not have parental support stand at risk of being anxious, suffering from depression, and, in severe cases, being at risk for self-harm.

The section above aligns with and applies to the relationship and the positive emotion elements of the PERMA-V model. In the discussion above, positive relationships with parents and siblings contributed to students' well-being and provided support, whereas lack of support had the opposite effect. Ryff's theory, with specific reference to positive relations, is relevant.

6.2.2.2.2 Relationships with life partners, spouses, in-laws and children

Only some of the female participants with life partners or who were married could confirm they received support from their partners. Support included encouragement or physical assistance with household chores. Participants received support from their children, who would send encouraging messages. Children understood that their parents were studying to provide them with better opportunities in life. In some cases, in-laws took a particular interest in the participants' studies and would provide emotional support and encouragement.

In the aforementioned section, students report receiving social support from family members, such as parents, siblings, and in-laws. Positive social support from significant others contributed to social integration, acceptance, and cohesion. These participants felt a sense of belonging and were cared for, which positively contributed to their well-being.

However, while partners, spouses, and in-laws took an interest and acted as support mechanisms, some participants reported the opposite. Gender discrimination by family and partners against female participants became obvious during the interviews. Gender discrimination is present in everyday situations; in this scenario, where it is expected that female students should multitask, they are held responsible for all the household tasks without the support of their life partners or spouses. The findings of the current study align with those of Amoabea et al. (2020), who concluded that

spouses of female students would only occasionally assist with household tasks. Married female students had to multitask, balancing studies and all other household responsibilities. In some cultural environments that upheld strict traditional values, in-laws were not supportive of their daughters-in-law pursuing education, as it was expected that the wife should be the 'good wife' by doing household chores. The feedback from married female students in this study concurs with Thorpe and Kuperberg (2021) that the responsibilities of married students are strongly related to individuals' culture and background, the stage of the relationship, and whether there are children to be cared for. Some participants in this study were first-generation university students who received less support from their families. During the interviews, these students expressed that their parents, spouses, life partners, and friends lacked a point of reference for the challenges of university studies, which meant they were unable to provide adequate support.

6.2.2.3 Sub-theme 2.2: institutional relationships with peers and students

The following section addresses the relationships oral hygiene students cultivate with their classmates, as well as their interactions with other students within their educational environment. The findings will be supported by the previously discussed relevant literature and the theories underpinning this study.

6.2.2.3.1 Relationship with peers

First-generation university students mentioned that their support mostly came from their peers in the BOH programme. This aligns with Pretorius and Blaauw (2020), who highlighted the importance of peer support in higher education. Participants of the current study mentioned that only their classmates truly understood the daily challenges they faced. Research indicates that peer education can help reduce stress and boost students' confidence (Mills et al., 2017; Tosun et al., 2024). Participants in this study reported that their peers provided essential emotional support and shared knowledge of clinical procedures, thereby enhancing their learning experience.

The PERMA-V model, particularly its relationship element, is relevant to the above discussion. In positive psychology and education, engagement refers to students supporting their peers, providing emotional and academic assistance, participating in extracurricular activities, and being fully involved in the learning environment (Kovich et al., 2023).

Despite the lack of a formal peer educator programme, students who engaged in informal discussions with their peers reported benefiting from such interactions. Participants who had a ‘study buddy’ mentioned that the interaction and support improved their social and psychological well-being. This was particularly beneficial for those who had moved away from home and felt socially isolated. While not every student embraced the ‘study buddy’ system, it positively impacted those without familial support or those far away from their families. The social well-being theory is relevant because peers supported one another, and it pertains to the elements of social cohesion, social inclusion, and acceptance. The relationship with dental students is discussed in detail under Theme 3.

6.2.2.4 Sub-theme 2.3: Professional institutional relationships

The following section discusses the professional relationships established with lecturers, mentors, and clinical supervisors, as well as the support for professional well-being offered by the university. The findings from this study on well-being support align with existing literature and theoretical frameworks underpinning this research.

6.2.2.4.1 Lecturers and mentors

According to Swe and Bhardwaj (2020), mentorship in academia is characterised by support from advisors, supervisors, and role models. Usmani et al. (2011) describe mentorship in medical environments as guidance and supervision provided to mentees. Research by Bailey and Phillips (2016), Komarraju et al. (2010), Bene et al. (2023), and McCaig et al. (2014) highlights that consistent lecturer support and interpersonal contact significantly enhance student well-being and academic performance. Eloff et al. (2021) note that effective lecturer support requires qualities like sincerity, respect, and availability, whereas participants in the current study expressed mixed feelings about their interactions with lecturers and mentors. Some valued the mentorship experience and formed strong connections, while others preferred minimal interaction.

The study further explored mentors' perceptions, revealing that many lecturer participants felt unprepared for the challenges of mentorship and often reported negative experiences. Despite being informed about well-being support and referral resources for students, they believed that their immediate needs were not adequately

addressed. Many lecturers felt obligated to serve as mentors and reported that students' issues negatively impacted their own psychological well-being.

Applicable to this section are the relationship, positive emotions, and accomplishment elements of the PERMA-V model. Positive relationships between students and their mentors can boost students' self-esteem, promoting positive emotions and a sense of accomplishment when mentors encourage them and provide positive feedback.

6.2.2.4.2 Clinical supervisors

Ebbeling et al. (2018) determined that feedback from a clinical supervisor can create a stressful clinical learning environment. Clinical feedback should be a positive, uplifting learning experience for the student rather than focusing on the negative (Ebbeling et al., 2018). The findings of Ebbeling et al. (2018) are related to Snyder's hope theory as well as the concepts of positive and negative feedback loops. During feedback sessions, when a clinical supervisor predominantly delivers negative feedback without offering encouragement, it can create a negative feedback loop that leaves students feeling hopeless about the future and ultimately harms their well-being. Ajjawi and Boud (2018) emphasise the importance of clinical supervisors being mindful in their approach to providing feedback. The clinical supervisor's demeanour can significantly influence the student's well-being and often determines the student's sense of hope.

Responses from participants in this study ranged from receiving excellent guidance and support from clinical supervisors to negative experiences. Participants who reported negative feedback experiences indicated that their clinical supervisors confused them by contradicting information regarding procedures, techniques, and treatment planning within the same session for the same patient. Participants believed that clinical supervisors do not provide consistent guidance and often differ from one another.

In addition, participants perceived that clinical supervisors' personality types played a significant role in the expectations placed on students during clinical sessions. Participants explained that they perceived the clinical supervisor's personality differences and inconsistent clinical guidance as affecting their assessment marks, which could, in turn, affect their well-being. In addition, some participants preferred being supervised by junior clinical supervisors, who, in their view, were more

appreciative and acknowledged the clinical work performed during sessions than the senior clinical staff.

6.2.2.4.3 Relationship with professional Student Support Services and well-being support

Research by Bantjes et al. (2023), Douwes et al. (2023), and Kaminer and Shabalala (2019) indicates a rise in the number of students needing well-being support. Siddiqui et al. (2023) highlight factors such as adapting to new environments, distance from family, academic pressures, and financial constraints as reasons for this increase. Many participants in this study seeking support had experienced the loss of loved ones, finding professional counselling helpful for their grief. However, some students criticised the support services as inadequate, citing difficulties in scheduling appointments and ineffective communication from call centres.

Barriers to seeking help included trust issues, cultural norms, and stigmatisation around mental health, particularly in cultures where expressing vulnerability is discouraged. Some religious dogmas further complicate the process of seeking professional well-being support by dismissing mental health concerns. This reluctance to seek professional help can lead to increased social isolation and worsened emotional well-being. The findings align with Ibnian et al. (2025), who note that dental students often prefer socialising over seeking professional assistance, viewing it as taboo in their cultural contexts.

The PERMA-V model, with reference to the elements of relationships, specifically support networks and social connections, is relevant to the discussion. Students do not always utilise the support systems in place for the reasons mentioned in the discussion, and social connections are jeopardised. As support for the overarching conceptual framework, Keyes's (1998) social well-being theory may be considered in this situation, specifically the element of social estrangement.

6.2.3 Theme 3: Environmental factors influencing the well-being of oral hygiene students: A focus on living conditions and the learning environment

This discussion presents the environmental factors affecting the well-being of oral hygiene students. Emphasis is placed on living and learning environments, with a

focus on inadequate living conditions and instances of discrimination within the educational setting.

6.2.3.1 Sub-theme 3.1: Living environments

Students attending university may either stay in campus residences, privately managed and owned student housing, or live at home. In the section hereunder, the focus is on university accommodation and living at home during the years of study. Kobue et al. (2017) and Pretorius and Blaauw (2020) concluded in their studies that a student's well-being can be affected by their living arrangements during their years of studying. This section focuses on the effect of the various types of accommodations on participants' well-being as perceived in this study.

6.2.3.1.1 University residences

Participants in this study who lived in a specific campus residence reported unpleasant living conditions. They complained about residents who abused alcohol and caused disturbances, played loud music, and held late-night parties. Participants noted a general state of poor hygiene in shared bathrooms and reported the illegal act of registered students subletting rooms to the general public. Participants said that complaints to on-site security made little difference. Female participants felt unsafe, claiming that being in their rooms did not protect them from intruders. The challenges experienced by students in this study living in campus residences were consistent with research by Harikiran et al. (2012), who concluded that life in campus residences is subject to more stressful events than for those living at home.

In contrast, participants in Gbadegesin et al. (2022) described on-campus living as peaceful, conducive to learning, quiet, and an environment where respect was demonstrated. The respondents in the study by Gbadegesin et al. (2022) identified two important factors contributing to their satisfaction with their campus residences: noise levels kept to a minimum and acceptable rules and standards for on-campus residences.

Investigating the ideal living conditions for students, Chong et al. (2019) determined that students expected on-campus accommodation to be well-maintained and managed, safety should be prioritised, and high standards of hygiene should be non-negotiable. Kobue et al. (2017) maintain that universities should be held responsible for providing their students with residential accommodation that is of an acceptable

standard, well-maintained, and located near the campus and lecture venues. The PERMA-V model is applicable with specific reference to the elements of vitality and positive emotions. The living conditions in university residences in this study challenged students and jeopardised their ability to maintain a healthy lifestyle. The dire living environment caused depression, anxiety, and social isolation, which had an impact on their emotional status.

6.2.3.1.2 Living at home

Some participants who lived at home during their studies encountered challenges in their living environments, while others felt safe and content. Those living in challenging environments mentioned residing in high-crime areas, feeling unsafe inside and outside the house due to shootings and gang fights. Other challenges living at home included having to take on household responsibilities, caring for younger siblings, difficulties with public transportation, overcrowding, disrespect from family members, cramped living arrangements, physical and emotional abuse, and high noise levels. These factors contributed to significant challenges to psychological, social, and emotional well-being. Students who lived in social environments marked by strife, danger, and scarce resources would become socially estranged, isolating themselves from their families and social environment.

Some participants praised their parents for creating comfortable environments conducive to studying. These participants noted that living at home allowed them to maintain a balanced lifestyle, enjoy good nutrition and self-care, have time for relaxation and extracurricular activities, and receive emotional and psychological support. This concurs with the study by Al-Omari (2005), in which students living at home did not experience significant stressors related to their living environment.

The relationship and vitality components of the PERMA-V theory are applicable to the discussion above, as relationships with family members and peers in their living environment can significantly influence their well-being. The contribution of relationships could be positive or negative, as explained above. Students who have positive, supportive living environments enjoy greater vitality by having a balanced diet. A few students in the current study who lived in privately owned student housing reported enjoying a positive and supportive learning environment. An international study by Harris et al. (2018) examined the living conditions of oral hygiene and dental

therapy students and concluded that these conditions did not significantly affect their well-being or stress levels. In contrast, in the South African context, living conditions can significantly affect the well-being of oral hygiene students, as this study found.

6.2.3.2 Sub-theme 3.2: Learning environment

Research by Haden et al. (2006) found that three factors in the learning environment shape students' perceptions of it. The first factor is the physical appearance of the learning environment; the second is the context in which the learning takes place; and the third is the typical culture of the specific learning environment.

6.2.3.2.1 The physical appearance of the learning environment

Research conducted by Bhayat et al. (2018) concurred with earlier research by Haden et al. (2006) that the physical appearance of buildings and other infrastructure plays a significant role in the learning experience. Bhayat et al. (2018) studied the dental learning environment, determining that the nature of clinical activities, including clinical supervision and the atmosphere created by people in the learning environment, plays an important role in how students perceive it.

Participants in this study had diverse perceptions of the learning environment, ranging from extremely negative to positive. Participants with a negative perception agreed that the learning environment significantly affected their well-being, with some attributing their poor psychological well-being solely to the physical appearance and condition of the buildings. Negative perceptions they mentioned included the physical appearance of the learning environment. Some students particularly referred to the solemn and depressing nature of the clinical treatment areas and lecture venues, the lack of recreational activities and basic amenities, and the isolation from social interactions with peers on the main campus. However, some participants in this study acknowledged that the quietness and clinical appearance of the learning environment were beneficial, as the faculty provided a typical hospital and clinical setting, preparing them for their future careers in oral healthcare.

Some students referred to the lack of clinical training equipment for patient treatment. The students who referred to the scarcity or limitations of resources were the same students who raised concerns about being discriminated against as oral hygiene students. Their perception was that BDS students are given preference in the allocation of clinical resources over BOH students.

6.2.3.2.2 Discrimination in the learning environment

Participants in the current study reported perceiving discrimination against them as oral hygiene students. They perceived that discrimination stems from three sources: dental students, lecturing staff from outside the oral hygiene department, and the tertiary institution itself.

Participants noted that dental students often displayed attitudes of superiority toward them. Participants recalled instances where dental students would belittle them by taking their patients for the sake of quotas, imply to patients that the BOH students are merely there to assist them as BDS students in the clinics and seize their clinical resources. The results of this study concur with those of Brame et al. (2015), who determined that dental students often perceive oral hygiene students as subordinate and consider them assistants.

According to Reinders et al. (2017), the discrimination stems from dental students who are not fully informed about the curriculum and scope of practice of oral hygienists, which may lead to misconceptions. Henesy et al. (2024) state that dental students willingly deny similarities in the curriculum between oral hygiene and dental programmes. While Satter et al. (2020) advocate for the integrative and collaborative training of dentists and oral hygienists to eliminate the culture of discrimination between oral health professions, Kersbergen et al. (2020) concluded in their study that, although intra-professional opportunities could be created during training, it is not guaranteed that discrimination will be eliminated.

In the current study, discrimination is encouraged by clinical supervisors from other departments, including discriminatory remarks against the BOH curriculum and oral hygiene staff. The factors mentioned above impact the psychological and emotional well-being of BOH candidates.

The section above addresses the perceived discrimination against undergraduate oral hygiene students and their desire to be acknowledged as equals within the oral health professions, a dynamic that resonates with Maslow's Hierarchy of Needs. Specifically related to this section is the element of esteem, where individuals have the desire to belong, be accepted, acknowledged, and respected by others (Maslow, 1943). Hurtado et al. (2007) and Peacock and Cowan (2019) determined that university students have a strong need to feel accepted in their learning environment. Eloff et al.

(2021) confirm significant support from lecturers in cultivating achievement, self-acceptance, and a sense of belonging among their students. The PERMA-V model, particularly the elements of achievement and relationships, aligns closely with the previously mentioned points. In this context, achievement means that oral hygiene students not only master clinical skills but also show the ability to act responsibly and professionally with colleagues, peers, and patients. The opportunity for Bachelor of Oral Health (BOH) students in this study to attain clinical competency and refine their skills is significantly undermined when discriminatory practices deny them full access to clinical and lecture resources. Furthermore, the social well-being of students is undermined when they face discrimination. Keyes's (1998) social well-being theory is applicable, and the elements of social integration, social acceptance, and social estrangement play a vital role in the well-being of oral hygiene students.

6.2.4 Theme 4: Coping mechanisms students apply during their studies

This section will explore the Coping mechanisms utilised by students enrolled in oral hygiene programmes throughout their academic journey. The identified coping mechanisms encompass both adaptive strategies and maladaptive approaches. A considerable number of participants in this study expressed a preference for employing adaptive coping mechanisms.

6.2.4.1 Categories of coping mechanisms

According to Kim and McKenzie (2014), there are problem-focused coping styles that seek information on how to resolve situations, and emotion-focused styles. Hatunoglu (2020) refers to problem-focused coping as adaptive coping and considers long-term solutions, whereas emotion-focused coping relies on communication with family, peers and friends; venting; projecting as a defence mechanism; and blaming, denying, and avoidance. The aforementioned approaches provide only short-term solutions or stress release. Maladaptive coping includes addiction or abuse of alcohol, smoking, self-harm or harm to other people. Donovan et al. (2017) and Hatunoglu (2020) determined that positive coping mechanisms may include leisure activities and physical exercise.

6.2.4.2 Sub-theme 4.1: Positive physical and recreational coping mechanisms

In a study conducted by Bhayat and Madiba (2017) in the South African context, the authors found that the majority of students enrolled in training programmes in dentistry and oral hygiene experience stress ranging from moderate to severe. Exploring the various Coping mechanisms dental students employ to manage stress included adaptive and emotional Coping mechanisms (Bhayat & Madiba, 2017). The results of Bhayat and Madiba (2017) indicated that most dental students coped with stress by sleeping, followed by watching television. Socialising with others ranked third, followed by physical exercises.

Similarly, a study by Dewan et al. (2022) determined that most dental students reported utilising positive coping mechanisms, such as resting, talking to supportive friends and family, and engaging in hobbies, which concurs with the study by Bhayat and Madiba (2017). The current study aligns with the findings of Bhayat and Madiba (2017) and Dewan et al. (2022), indicating that students predominantly employed positive and problem-solving coping mechanisms rather than maladaptive ones.

Students participating in the current study reported several factors that prevented them from engaging in extracurricular activities, such as time constraints due to coursework, a limited budget, and being isolated from main campus activities. Alshamrani and Alshalan (2021) and Van Merriënboer and Sweller (2005) confirmed that students who are studying in the oral health professions find it difficult to participate in leisure activities such as relaxation and hobbies due to their high workload, long lecture and clinical hours, budget constraints, and not having the opportunity to socialise. The current study, therefore, concurs with Alshamrani and Alshalan (2021) and Van Merriënboer and Sweller (2005).

6.2.4.2.1 Hobbies

Although the majority of participants could not engage in extracurricular activities, some reported considering affordable leisure activities, such as baking, cooking, sharing meals with friends and family, and having conversations with peers, as coping mechanisms. Some participants explored creative outlets like videography, photography, pencil and watercolour sketches, dancing, playing musical instruments, listening to music, and reading. Several participants noted that their hobbies or creative pursuits eventually became sources of income to sustain their finances.

During the interviews, it was observed that the few participants who dedicated time to a hobby expressed feeling less stressed about their workload and demonstrated good time management skills. This observation aligns with Jenkins et al. (2019), who argued that students who prioritise relaxation tend to achieve a better work-life balance. Furthermore, the results of this study support the findings of Hatunoglu (2020), who stated that engaging in leisure activities enhances self-autonomy, strengthens social relationships, fosters optimism, and promotes overall well-being. This relates to the PERMA-V model, specifically the elements of relationships, vitality, positive emotions, and accomplishment. The supporting theories are those of Keyes and Ryff.

6.2.4.2.2 Positive life balance and self-care

Participants in this study who maintained a positive life balance to promote or sustain their well-being explained that it took careful time management and sacrifices. During university vacations, these participants mentioned working on tasks and assignments to get a head start on assessment deadlines. Working longer hours every day was mentioned as one of the sacrifices that ultimately paid off in the long term, creating and allowing time to invest in self-care. This would allow them some time in their busy schedules to engage in activities that support their well-being. Participants who managed to practise a well-balanced lifestyle explained that it was important to know oneself and to take a “personal mental health day” to regain balance and energy to continue with everyday responsibilities.

Research conducted by Jenkins et al. (2019) found that students who engage in relaxation techniques and activities had a healthier work-life balance and improved overall well-being compared to those who did not. The current study therefore concurs with Jenkins et al. (2019). The elements of vitality, positive emotions, and accomplishment apply to self-care coping mechanisms and maintaining life-work balance.

6.2.4.2.3 Physical exercise

In this study, some participants managed their time well enough to accommodate exercise and acknowledged the benefits to their overall well-being. Participants reported that exercise increased their energy levels, reduced stress, cleared their minds, and elevated their feel-good hormones. Based on feedback from respondents in this study and research by Kim and McKenzie (2014), Molina-García et al. (2011),

and Penedo and Dahn (2005), it can be concluded that maintaining regular physical activity is a positive contributor to students' well-being. However, a study by Henning et al. (2018) determined that not all students could afford a gym membership or time for physical exercise. The current study aligns with Henning et al. (2018), who reported that some students lacked the budget to pay for a gym membership or had insufficient time for extracurricular activities. In the current study, participants with financial constraints walked or ran on campus or in their neighbourhoods, despite being aware of the security risks. The majority of participants in the current study reported improved well-being after engaging in some form of physical activity.

Although they were in the minority, some participants reported feeling worse after physical activity. One participant reported being forced to take part in an exercise that made them feel worse afterwards. In support of the students in the current study who did not benefit from exercise, Davoren et al. (2013) found that male students who were less physically active reported better mental well-being.

Continuing with the benefits of exercise, it is important to mention the benefits of yoga, specifically for students in the oral health profession (Alire et al.,2020). According to Ford (2021), oral hygienists are continuously exposed to ergonomic challenges. Research conducted by Alire et al. (2020) confirmed that oral hygiene students who practised yoga reported improvements in their emotional, behavioural, and physical well-being, as well as improved social connections. Some of the students in the current study practised meditation as a coping mechanism, supporting the above-mentioned research.

The theory underpinning the aforementioned positive physical and recreational coping mechanism activities is Fredrickson's (2004) broaden-and-build theory. According to the broaden-and-build theory, self-care, engaging in creative outlets, being physically active, and maintaining a positive attitude are coping mechanisms employed by resilient individuals. Positive coping mechanisms allow individuals to have hope, believe in a positive future, accept current circumstances, enjoy what they have, show gratitude, and, above all, inspire others, nurturing and cultivating resilience in those around them. Snyder's (2002) hope theory resonates well with positive coping mechanisms, emphasising the importance of holding on to hope to achieve short- or long-term goals set by an individual. The overarching PERMA-V model and the vitality element are applicable, as students want to maintain a healthy and balanced lifestyle.

6.2.4.2.4 Interaction with pets

Some participants in this study, who were cat or dog owners, reported that spending time with their pets alleviated stress and enhanced their emotional well-being. They indicated that activities such as sitting with and talking to their pets helped reduce feelings of depression and anxiety, providing them with affection and comfort. Dog owners specifically mentioned that walking their dogs offered both quality time and exercise amidst their busy study schedules. The interviews revealed that pets positively influenced the participants' psychological well-being, suggesting that pet companionship serves as an effective coping mechanism. These findings align with previous research by Bert et al. (2016), Kamioka et al. (2014), and Nepps et al. (2014), which emphasised the benefits of interactions with animals on human health. Peel et al. (2023) confirmed that interactions with dogs reduced anxiety and increased happiness among participants. Dell et al. (2015) highlighted that students often struggle to access professional well-being support due to academic pressures, and that pets can provide companionship when formal support is lacking.

6.2.4.3 Sub-theme 4.2: Positive non-physical recreational coping mechanisms

6.2.4.3.1 Planning and time management

Research on the value of university students' efforts in planning and good time management was confirmed by the results of a study by Morule et al. (2023). Participants in the study by Morule et al. (2023) reported coping with a heavy coursework load by working ahead on assignments, creating their own detailed study and work schedules, and studying for extended hours. Some participants mentioned adding extra hours to their studies by studying before lectures, during lunch breaks, and directly after lectures, while waiting for transport to arrive. Likewise, in the current study, participants who managed their workload reported academic success, had some free time for extracurricular activities, and agreed that planning and time management are essential to maintain a balance between work and leisure. This is supported by the vitality component of the PERMA-V main theoretical framework, in which students plan well in advance to allow time to maintain a healthy work-life balance.

Participants who submitted assignments on time, excelled academically, and maintained a well-balanced lifestyle mentioned working consistently rather than procrastinating and cramming. Participants mentioned that efficient time management and planning helped them cope when the workload felt overwhelming. Participants suggested dividing the workload into smaller and more manageable sections. Working on tasks and assignments during university vacations was acknowledged as an effective coping mechanism.

6.2.4.3.2 Religion and spirituality

According to Tomás and Rosa (2021), spiritual and religious coping can be described as behavioural, interpersonal, and cognitive methods to cope during challenging times. Religious orientation to challenging times can be positive or negative (Tomás & Rosa, 2021). In a positive orientation to religion, the individual may pray for a resolution to a negative situation and experience support from their religion. Conversely, some individuals may experience negativity toward religion and spirituality during challenging times. Such individuals experience a lack of support from religious interactions and do not want to turn to God for help, as they perceive the challenge as being punished by God. Ano and Vasconcelles (2005) associated negative spiritual or religious orientations in times of difficulty with poor well-being and mental health issues, while the opposite prevails. Koenig (2010) states that a positive religious orientation towards problem-solving and difficult times can be associated with positive mental health and protection of an individual's well-being.

Participants in this study belonged to various cultures and religions. Most participants acknowledged that they are spiritual beings. Some participants admitted that they are religious and would turn to a Higher Being during difficult times. This orientation concurs with Ano and Vasconcelles (2005), who stated that religion and spirituality could contribute to well-being. These participants would dedicate more time to praise, scripture reading and prayer to help them cope during intense periods of difficulties and stress. Other participants indicated that they do not consider religion important and do not view praise and prayer as a coping mechanism. Some participants interpreted difficult times as punishment from God and would not engage in prayer or praise. Instead of having deepened religious experiences, difficult times led them to turn away from Divine help. These findings align with research results by Henning et al. (2018) and Tomás and Rosa (2021). Participants in this study acknowledged and

showed immense respect for each other's perspectives on religion and spirituality, although not all were religious.

Participants indicated that they would neither discriminate against any religious orientation nor convince any of their peers to adopt a different religion. The researcher sensed a deep respect for each one's orientation to spirituality and religion. Participants mentioned that although the group consisted of individuals from various religions, they would pray for one another during difficult times. The data from the current study indicate that some participants may have a deeper spiritual experience during difficult times, while others may turn away from spirituality; however, all participants would respect each other's religious practices and orientations.

This section considers Seligman's PERMA-V model and the element of meaning in life in relation to spirituality. Those students who enjoyed deeper spirituality and religious connections during challenging times may find meaning in life and could be considered to be experiencing eudaimonia. As aptly stated by Ano and Vasconcelles (2005), religion and spirituality contribute to the well-being of individuals who believe and have a deepened spiritual connection.

6.2.4.3.3 Sleep as a coping mechanism

Participants in this study conveyed a sense of being overwhelmed by the demands of the BOH programme. Some individuals identified good-quality and adequate sleep, along with meditation, as effective coping strategies. Conversely, several participants reported that a lack of sleep negatively impacted their performance in both classes and clinical settings. A study by Davison et al. (2023) explored the coping mechanisms of undergraduate students, specifically examining the relationship between anxiety, sleep, and coping. The findings revealed that higher levels of anxiety were linked to sleep disturbances, including insufficient sleep and poor sleep quality. Participants in this study frequently mentioned their inability to sleep due to stress and anxiety. Additionally, Ford (2021) found that oral hygiene students experienced disrupted sleep patterns, nightmares, digestive issues, and eating disorders, which were attributed to the stressors associated with their academic journey.

6.2.4.3.4 Emotional outlets or emotional sharing

Various participants in this study resorted to crying as a coping mechanism. Reasons for crying included feeling overwhelmed, depressed, and isolated, not having the

ability to communicate their well-being challenges, responding to clinical feedback, and destressing in general. These participants confirmed that crying helped them cope with the challenges they confronted during their oral hygiene studies. Scribner et al. (2020) referred to crying as a positive coping strategy. Participants in the study by Scribner et al. (2020) confirmed improved well-being after a crying session. Participants in the present study shared similar information about the benefits of a crying session and how it supports their well-being, helping them feel good. The positive emotions element of the PERMA-V model is applicable, as students reported that after venting or crying, they emotionally felt better and could continue with their daily tasks.

6.2.2.4 Sub-theme 4.3: Negative coping mechanisms

The subsequent section focuses on the negative coping mechanisms that students employed during their academic years. During the data collection phase, it became apparent that a minority of students resorted to pharmaceuticals, whether prescribed or obtained over the counter, as a means of addressing the challenges associated with their studies. This pattern was further corroborated through the analysis of data relating to substance use, including alcohol, tobacco, and recreational drugs and the use of stimulants that enhance energy levels.

6.2.2.4.1 Prescription and over-the-counter anti-depressants, stimulants, caffeine and recreational drugs

Several participants reported their use of prescribed antidepressants and anti-anxiety medications. Among these individuals, some had been prescribed these medications prior to commencing their BOH studies, while others received prescriptions throughout their academic pursuits. A portion of the participants expressed a desire to discontinue the use of antidepressants, while others indicated that their dosages had been increased in response to the demands associated with their studies. A minority of the students mentioned the concurrent use of antidepressants, tobacco products, and alcohol. Additionally, a few students reported the use of recreational drugs, although most of these individuals had since ceased their usage. Regarding caffeine-laden energy syrups and energy drinks, some students expressed the view that consuming these stimulants is not advisable due to the potential long-term health risks associated with their use. The findings of the current study that a minority of students are making

use of prescribed medication and recreational drugs concur with the study of Dewan et al. (2022) and Dhama et al. (2017). The findings of Dewan et al. (2022) aligned with those of Basudan (2017), Cambetta-Tessini (2016), and Dhama et al. (2017), who concluded from their studies that a minority of students engaged in negative coping methods, including the use of tobacco, prescribed tranquillisers, antidepressants, and anti-anxiety medications. The coping mechanisms identified in the current study are consistent with those reported in studies by Bhayat and Madiba (2017), Dewan et al. (2022), and Dhama et al. (2017).

6.3 Summary

Chapter 6 provides a comprehensive validation of the findings derived from the diverse data sets and analytical methods employed in this study. This validation is achieved by drawing connections between the results and the existing literature as well as the theoretical frameworks and models that underpin this research.

In this chapter, the data presented in Chapter 5 are thoroughly reported and interpreted through the lens of four primary themes, each accompanied by relevant sub-themes identified through the analysis of the datasets. These themes not only reflect the core insights gained from the research but also situate the findings within a broader scholarly context, ensuring that the conclusions are well-supported and aligned with established theories in the field. The in-depth exploration of these themes allows for a richer understanding of the data’s implications and contributes to the broader discourse surrounding the topic under investigation.

6.4 Conclusion

Chapter 6 examined the study's findings in relation to existing literature, the conceptual framework, and pertinent theories. The results indicate a complex interplay among the learning environment, students' living conditions, and the support structures available to them. The discussion highlights that various individuals involved in the students' educational journeys can act as either facilitators or barriers to their academic success. The findings align with both national and international literature addressing the well-being of students in dental training programmes.

CHAPTER 7

SUMMARY, RECOMMENDATIONS AND CONCLUSION

7.1 Introduction

Chapter 6 presented the study's findings and aligned them with the relevant literature, theories, models, and frameworks underpinning the study. In Chapter 7, the research question and sub-questions are addressed, the conceptual framework is revisited, and the study's limitations and the challenges encountered during the research process are discussed. In the latter section of Chapter 7, the discussion elaborates on the contributions this study makes to advancing research focused on the well-being of oral hygiene students. It highlights how the findings may serve as a foundational framework for subsequent investigations aimed at exploring various factors that influence the psychological, emotional, and academic health of these students. Furthermore, the study emphasises the importance of understanding the challenges faced by oral hygiene students, thereby enabling educational institutions to implement targeted support mechanisms that promote their overall well-being. In conclusion, this chapter proposes considerations for future research for researchers, dental faculty management, lecturers and well-being professionals in oral hygiene training programmes as they develop policies to enhance student well-being.

Students in oral health training programmes face unique challenges in balancing university and curriculum demands with everyday life (Morule et al., 2023). Curriculum demands include understanding and mastering theoretical knowledge, applying it to practical skills, and performing irreversible clinical procedures on patients. In addition, students must demonstrate competence in soft skills such as communication, cultural sensitivity, empathy, adaptability to the patient’s context, and problem-solving when delivering treatment to patients and communities across the country.

7.2 Overview of the study

The current study explored the psychosocial and emotional well-being of oral hygiene students at a selected institution of higher education in South Africa. To answer the research question, the perceptions and experiences of second- and third-year oral hygiene students were explored through self-administered questionnaires with a focus on open-ended questions, face-to-face, semi-structured individual interviews, and focus group discussions. Semi-structured interviews were conducted with full-time and

part-time staff to determine whether there are similarities in the data collected from students' perceptions and views. To answer the research question, this study focused exclusively on the well-being of oral hygiene students. International and national research on the well-being of oral health care workers had mainly focused on dental students (Harris et al., 2018). Previous studies were predominantly quantitative, providing statistical data rather than in-depth qualitative insights. The researcher was interested in identifying the factors influencing the well-being of oral hygiene students, given that although the curricula and training duration differed, their learning environments were similar to those of dental students at the research site.

The literature review focused on the main research question and sub-questions, employing positive psychology theories as the study's framework. The literature review drew on academic journals, textbooks, theses, white papers, conference papers, and government resources.

The theoretical frameworks that informed and guided this study were rooted in several theories: Ryff's psychological well-being theory (1989), Keyes' social well-being theory (1998), the broaden-and-build theory of positive emotions proposed by Fredrickson (2004), Snyder's hope theory (2002), and Deci and Ryan's self-determination theory (1985). Among these, the PERMA-V theory served as the primary theoretical framework, with the other theories providing valuable support.

Previous research on the well-being of oral hygiene students was mainly quantitative. This study used a qualitative approach to gather detailed data from students and staff in an oral health programme. Student interviews provided personal insights, while staff interviews identified factors that they perceived as affecting students' well-being. Semi-structured interviews with students and staff, as well as the focus group discussions, yielded consistent findings.

Four themes emerged from the data analysis. The first theme examined the determinants of students' psychological well-being in oral hygiene studies at a South African university, including the curriculum's demands and impact. The second theme identified determinants of oral hygiene students' social well-being, including positive and negative relationships with family, friends, peers, and life partners; relationships with lecturers and clinical teaching staff; and professional well-being support such as psychologists and counsellors. The third theme identified environmental factors that

influence the well-being of oral hygiene students, focusing on living conditions in on-campus residences, living at home, and the physical learning environment. The fourth theme identified the coping mechanisms students apply during their studies.

7.3 Overview of the research questions

Sections 7.3.1 and 7.3.2 below outline the research questions that guided this study.

7.3.1 Primary research question

What are oral hygiene students' perceptions of their psychosocial and emotional well-being at an institution of higher education in South Africa?

7.3.2 Secondary research questions

- What factors do oral hygiene students perceive as influencing their overall well-being?
- How does the learning environment influence the well-being of oral hygiene students?
- How do oral hygiene students cope with and manage the challenges affecting their well-being?
- What are oral hygiene students' views on the well-being support provided by the faculty, and how can it be improved?

7.4 Addressing the research questions

In the following section, each of the study's secondary research questions and objectives is addressed by synthesising the research findings to answer the primary research question.

7.4.1 Secondary research question and objective 1

What factors do oral hygiene students perceive as influencing their overall well-being?

Objective: To identify the factors that oral hygiene students perceive as influencing their overall well-being.

Students in the oral hygiene programme identified multiple factors that influenced their overall well-being during their studies. These factors, identified in the research findings, are discussed below.

7.4.1.1 Curriculum demands and impact on well-being

Van Merriënboer and Sweller (2005) noted that an overwhelming curriculum can lead to cognitive overload. The current study found that participants consistently reported that the BOH curriculum was overwhelming and negatively affected students' well-being. Second-year students reported feeling pressured by the volume of projects, assignments, and ongoing assessments, while third-year oral hygiene students were overwhelmed by the number of group activities, projects, and assignments. Both groups felt the unrealistic workload hindered their ability to maintain a healthy work-life balance. They indicated that the high workload contributed to social isolation, depression, poor dietary habits, and sleep disturbances, having a direct negative influence on their overall well-being.

Pre-clinical and clinical training are crucial for health profession students, particularly in dentistry (Oderinu et al., 2024). The current research highlights that pre-clinical training and clinical demands heighten anxiety, negatively impacting students' well-being. Factors such as poor clinical time management, patient-related issues, expectations of patients and clinical supervisors, extended clinical hours and limited breaks led to physical and emotional fatigue. Limited breaks and long hours spent in lecture halls, pre-clinical settings, and clinics providing patient care deprived students of opportunities for social interaction and extracurricular activities, ultimately affecting their overall well-being.

Participants in this study expressed concerns that the flipped classroom approach added to the already heavy demands of the curriculum. This method required students to complete all lecture content for the following day, along with pre- and post-lecture activities, and to prepare for tests, assignments, projects, and presentations. The flipped classroom approach posed challenges to students' well-being by failing to account for a balanced work-study-life equilibrium.

In the current study, most participants who did not reside in on-campus residences relied on public transportation to reach the campus. Many reported finding public transport to be unreliable and unsafe, which resulted in delays and anxiety that negatively impacted their well-being. Additionally, faculty-provided transportation to clinical training sites was deemed inadequate, as it offered only a single entry and exit point daily. This limitation restricted students' ability to participate in extracurricular activities at the main campus and encroached upon their study time.

Recent research, including studies by Leite et al. (2025), Morule et al. (2023), and Scribner et al. (2020), indicates that dental students face significant challenges during their transition to university life. Similarly, this study found that oral hygiene student participants encountered various academic, social, and personal challenges that affected their overall well-being. Individuals transitioning directly from secondary education to higher education often encounter difficulties in adapting to new social and academic environments. Key academic challenges included adapting to new study methods, managing heavy workloads, enduring long lectures and clinical sessions, and mastering pre-clinical and clinical skills. Many participants reported difficulties balancing academic and daily life responsibilities, leading to issues such as poor nutrition, sleep deprivation, and limited time for social and extracurricular activities. These challenges significantly impacted their well-being, with a high workload being a primary concern. These findings align with those of Wahid et al. (2023) regarding medical and dental students.

Some students struggled academically at university compared to their school performance, feeling underprepared to succeed and overwhelmed by the workload. High-achieving students entering university often set unrealistic expectations of themselves, which negatively affect their well-being, leading to social withdrawal, sleep disturbances, and increased depression and anxiety.

Mature students entering university faced unique challenges, including self-doubt about their abilities after a long break from education, concerns about their cognitive capacity to study, difficult living arrangements, such as sharing hostel accommodation with younger peers, and social discrimination due to age differences with younger students in the BOH programme. Mature students sacrificed their established households, leaving families behind, and resigned from jobs and steady incomes to return to university, while some had the financial responsibility of maintaining a household while studying. Despite these obstacles, their internal drive and motivation to achieve qualifications helped them continue their studies.

Research by Kujan et al. (2015) indicates that university students feel disadvantaged when tuition is not provided in their first language, leading to significant language barriers that hinder both academic and social experiences. Participants in the current study reported difficulty understanding lectures and assignments when not presented in their mother tongue. This language challenge adversely affected their academic

performance, social interactions, and ability to engage in group work, contributing to feelings of exclusion and not belonging. Students perceived discrimination in the learning environment when they were unable to converse fluently in English, which amplified their social stress. Overall, the findings suggest that language barriers significantly affect the well-being of the oral hygiene students.

Complaints regarding living arrangements primarily focused on a particular university hostel, where most participants in this study resided. Participants expressed concerns about safety, unhygienic conditions, and elevated noise levels from late-night parties, all of which adversely impacted their living and learning environments. Some students opted for isolation due to feelings of insecurity within the hostel, leading to issues such as depression and anxiety. Additionally, participants highlighted the residence's poor structural maintenance, illicit activities, unauthorised individuals entering the premises, and subletting of hostel rooms to outsiders.

Conversely, several students living at home reported stress stemming from overcrowding, family disputes, and living in high-crime neighbourhoods. The need to manage household responsibilities while focusing on their academic pursuits adversely affected their overall well-being. Additionally, some participants identified a lack of resources at home, including limited or non-existent internet connectivity and insufficient learning materials, as significant challenges. However, some participants found their home environments supportive, with parental and sibling support enabling them to focus on their studies. This support played a crucial role in helping them manage their time effectively and maintain a balanced, positive lifestyle.

Results from the current study confirmed that a lack of finances had a significant negative impact on the holistic well-being of the oral hygiene student participants. Without sufficient funds, students reported difficulties accessing proper nutrition, safe accommodation, money to travel to attend university, obtaining proper medical care when ill, and meeting their basic everyday needs. It is evident that students participating in the current study were largely dependent on NSFAS; however, the unpredictability of the funds often left them without income for extended periods. The study found that most students in the BOH undergraduate programme were unable to improve their financial situations through part-time work due to a heavy course load. Due to the difficult economic climate, students were hesitant to add to their families' financial burden by requesting additional support. Students supported each other with

essentials when NSFAS funding was delayed or insufficient. Overall, financial constraints significantly impacted their well-being.

Family, peers, lecturers and clinical supervisors played a significant part in the overall well-being of the oral hygiene students participating in this study. Regarding familial matters, participants in the study reported that separation from their families induced stress. Several respondents indicated that they assume significant responsibility for their families by providing both physical and emotional support, often serving as an absent parent. Their absence from home made them anxious and concerned, which affected their well-being.

Familial discord and the need to care for younger siblings were identified as factors affecting participants' overall well-being and diverting their focus from their studies. Some participants reported enjoying support from spouses, life partners, in-laws, and their children; others reported the opposite. Some participants reported that spouses and life partners provided emotional support; however, they lacked physical support, such as sharing or assisting with household responsibilities. Familial factors that positively contributed to students' well-being included parental support. Participants mostly noted that mothers' support was invaluable. Most oral hygiene student participants mentioned that peer support significantly affected their well-being. Participants noted that their peers were the most understanding of their experiences and challenges in the oral hygiene programme. Students preferred to discuss their academic and personal challenges with each other. First-generation university participants indicated that only peers could truly understand and support them, as their parents lacked the frame of reference to understand their challenges or offer support. Peer support contributed to the overall well-being of the students.

During the COVID-19 pandemic, participants in the current study faced personal challenges, including food scarcity, overcrowded living conditions, and family issues, which affected their well-being. Academically, they struggled with limited access to e-learning devices, poor Internet connectivity, and anxiety about not being able to meet clinical requirements. Many felt abandoned by their institution at the onset of lockdown and worried about passing their courses. Personal hardships due to COVID, including illness and loss of family, compounded their psychological stress.

Despite these issues, some students adapted well, maintaining discipline, attending online classes, and starting small businesses to support themselves. They appreciated faculty efforts to reintroduce clinical hours and implement safety measures, including PPE and infection control.

Participants in the BOH programme reported a significant increase in their sense of purpose regarding their future and their career opportunities. They noted that the oral hygiene curriculum, despite the heavy workload, fosters both personal growth and development. Many students expressed increased self-confidence and improved communication skills, which facilitated the establishment of new friendships and professional connections, thereby enhancing their social well-being. Furthermore, participants acknowledged that the programme broadened their perspectives on life and cultivated cultural and religious sensitivity.

7.4.1.2 Conclusion: Secondary research question 1

In conclusion, regarding secondary research question 1, various factors significantly influenced the holistic well-being of the oral hygiene students. These factors encompassed curriculum demands, the pre-clinical and clinical learning environments, and the challenges encountered during pre-clinical training and patient care. Additionally, the flipped-classroom approach, transportation issues, and the transition to a new learning environment—particularly for students directly from high school and those identified as mature students were important considerations. Language barriers, adaptation to new living arrangements, distractions within the home environment, personal family matters, and the value of peer support were also notable influences. Furthermore, the impact of the COVID-19 pandemic on participants' holistic well-being was an essential aspect to consider.

7.4.2 Secondary research question and objective 2

How does the learning environment influence the well-being of oral hygiene students?

Objective: To examine the influence of the learning environment on the well-being of oral hygiene students.

Students in the oral hygiene programme identified multiple factors in the learning environment that influenced their well-being, as discussed below.

7.4.2.1 How does the learning environment influence the well-being of oral hygiene students?

The findings of this study indicate that a lack of resources in the learning environment significantly affects students' well-being. Reasons included insufficient clinical resources, malfunctioning and broken equipment, and a shortage of treatment chairs and dental materials, all of which delayed students' ability to work effectively during clinical sessions. The study further revealed that participants were disappointed with clinical supervisors who blamed them for failing to achieve the outcomes of clinical treatment plans during sessions, not considering the resource constraints. Resource scarcity extended beyond the clinical setting to laboratory space, equipment, and lecture venues, all of which affected students' well-being.

Research by Haden et al. (2006) and Bhayat et al. (2018) highlights the profound impact of the physical appearance of buildings and infrastructure on shaping students' perceptions of their learning spaces. The findings of this study reveal that students' experiences in the clinical setting are significantly influenced by its stark environment, including the lack of windows in some clinical areas and lecture venues. For some, the oppressive atmosphere of the facility weighs heavily on their holistic well-being, casting a shadow that engenders feelings of gloom and even depression. In contrast, some find value in the clinical atmosphere, seeing it as meaningful preparation for their future careers, where the grit of real-world practice comes alive.

However, numerous factors contribute to students' overall well-being. Physical hazards and dilapidated conditions in the facilities create an unsettling atmosphere, while the absence of essential amenities and safety measures further exacerbates the discomfort. Students expressed concerns about safety in the buildings, parking areas and their surroundings. They also noted that amenities, such as a cafeteria and space to relax, were limited or sometimes non-existent. The limited engagement with the vibrant main campus life due to the isolation of the dental training site stifles social interactions, making it difficult for friendships to flourish. This disparity in resources and facilities between the dental training site and the main campus underscores a significant divide, leaving students to navigate an environment that may not fully support their educational and emotional needs.

Discussions with the oral hygiene student participants made it clear that they perceived interprofessional discrimination. Oral hygiene students reported being overlooked, ignored, and unfairly treated within the dental faculty environment. Oral hygiene students described instances in which dental students, faculty, and BDS programme coordinators seemed to prioritise the needs of dental students over those of oral hygiene students. Results indicated that specific preferences were allowed for dental students. Participants shared their experiences of perceived discrimination and being degraded by mentioning specific physical acts of clinical supervisors, BDS coordinators and clinical supervisors from other departments. Understandably, these experiences took a toll on their emotional well-being, with a few students reporting feelings of anxiety or experiencing panic attacks before entering the clinical environment.

Given the age of most students, who are young adults, they are vulnerable and sensitive to comments from peer groups and other significant role players. This study suggests that hurtful comments left the oral hygiene students discouraged and feeling unwelcome in the faculty. The study found that perceived discrimination led to self-doubt, causing individuals to question their abilities and whether they should pursue a career in oral hygiene. Discrimination against oral hygiene students left them emotionally hurt and socially estranged, isolated, and experiencing a loss of belonging.

The current study on oral hygiene students highlighted the mixed perceptions of clinical supervision. While students valued guidance and feedback from supervisors, many described their experiences as harsh and insensitive, leading to feelings of trauma, self-doubt, and stress. Some students reported that positive feedback enhanced their learning experiences, but they preferred immediate, sensitive feedback that avoided embarrassment in front of peers and patients.

Inconsistent feedback and clinical guidance from clinical supervisors were found to significantly impact students' emotional and psychological well-being, increasing stress levels. This aligns with previous research by Humphris et al. (2002) and Freeman et al. (2020), which identified inconsistent and unfair remarks as major stressors in clinical settings. Student participants noted that discrepancies in clinical guidance and feedback often arose between junior and senior staff, forcing them to adjust their focus to align with individual supervisors' preferences, distinct personalities, and clinical interests.

7.4.2.2 Conclusion: Secondary research question 2

In conclusion to secondary research question 2, the data revealed that various factors influenced the students' well-being in the learning environment. Some students felt that the dental training campus's physical environment was too clinical, while others recognised that it prepared them for their future careers. Concerns have been raised about safety issues within the buildings and their surrounding areas, the adequacy of security measures on the premises, and the insufficient amenities available to students. A number of students reported experiencing perceived discrimination, predominantly from BDS students and faculty members from departments outside the oral hygiene programme. Furthermore, the limited opportunities to participate in campus-wide activities were noted to adversely affect students' overall well-being. Inconsistent feedback regarding clinical performance was also identified as a factor impacting students' mental health and academic experience.

7.4.3 Secondary research question and objective 3:

How do oral hygiene students cope with and manage the challenges affecting their well-being?

Objective: To investigate the strategies oral hygiene students use to cope with challenges affecting their well-being.

7.4.3.1 How do oral hygiene students cope with and manage the challenges affecting their well-being?

Based on the research results, the majority of participants in this study employed problem-focused coping mechanisms, which aim to resolve situations, as well as emotion-focused and negative coping mechanisms. A minority of the students applied negative coping mechanisms such as making use of prescription and over-the-counter medication, stimulants or recreational drugs to relieve stress, depression and other challenges related to their studies.

Research conducted by Raghavasree (2021) indicated that dental students mostly reported coping with stressors in the learning environment by engaging in sports activities, exercising, meditating, and utilising creative outlets such as art, listening to music, and reading. Some participants in the current study engaged in physical activities such as walking, jogging, dancing, and participating in sports. Others took up hobbies such as painting, photography, writing, playing musical instruments,

gardening, baking, and cooking. Some students engaged in constructive non-physical coping mechanisms, expressing a preference for solitary activities such as reading, writing poetry, listening to music, sleeping, meditation, and yoga. Student participants who successfully engaged in extracurricular activities focused on planning their schedules and implementing effective time management strategies.

The current research findings confirmed that most oral hygiene students felt overwhelmed by their workload, but some managed their time more effectively than others. They achieved this through careful planning that made time for relaxation and extracurricular activities. These students adopted a ‘work smart’ approach by working ahead of schedule on projects, assignments, and assessments. It was clear from their interviews and discussions that these students felt more relaxed compared to those who were overwhelmed, procrastinated, and coped by withdrawing from social activities, isolating themselves, working constantly under pressure, and neglecting self-care.

This study's findings suggest that some participants considered leisure physical activity an effective coping mechanism. Students involved in extracurricular sports or physical activities felt energised after exercising. Despite financial limitations that restrict access to gym memberships, most participants chose affordable alternatives, such as walking or jogging on campus or nearby. The findings indicate that regular physical activity benefited the overall well-being of the oral hygiene student participants.

Additionally, the study confirmed that animals have beneficial effects on participants' well-being. Student pet owners reported that quality time with their pets significantly enhanced their holistic health. Activities such as walking, jogging, conversing, or sitting together with their pets provided comfort and relaxation. Pets included domesticated animals such as cats and dogs. Thus, this study highlights the value of pets in providing comfort and companionship, thereby improving the well-being of oral hygiene students.

In the current study, some participants used non-physical, positive coping mechanisms, particularly religion and spirituality. While many found solace in deepening their relationship with the Almighty through prayer and scripture during tough times, some felt estranged from their faith, seeing challenges as punishment.

Participants who lacked religiosity often reported issues like depression and anxiety. Notably, most females gravitated towards spirituality during difficult times. Some participants preferred problem-solving coping mechanisms over prayer. Participants shared various spiritual practices, including meditation and yoga. Some participants also mentioned self-affirmation and sleep as coping mechanisms.

Findings from this study indicated that some student participants relied on pharmacological aids to manage stress, depression, and anxiety. These included both prescribed and over-the-counter antidepressants. During data analysis, it was notable that most participants who had been prescribed antidepressants had been using them before starting their studies. However, higher dosages were prescribed during their studies due to increased stressors.

Other harmful coping mechanisms included the intake of high-caffeine products, which included over-the-counter medications and energy drinks. Most participants were unaware of the potential physical damage caused by the abuse or dependence on these products. On the positive side, this current study determined that only a minority of students made use of addictive or illegal substances as a coping mechanism.

The results of this study indicated that most oral hygiene students managed their stressors through positive, problem-solving coping strategies, thereby enhancing their overall well-being.

7.4.3.2 Conclusion: Secondary research question 3

Among oral hygiene students, participants utilised both problem-focused and emotion-focused coping strategies. Positive problem-focused coping included physical exercise, hobbies, yoga, and effective time management, which led to improved well-being and self-care. Spending time with pets provided therapeutic benefits and opportunities for outdoor exercise. Spirituality emerged as a coping mechanism for some students, though not universally accepted. Most participants deemed the use of over-the-counter and dependency-forming pharmaceuticals as unacceptable.

7.4.4 Secondary research question and objective 4

What are oral hygiene students' views on the well-being support provided by the faculty, and how can it be improved?

Objective: To gain an in-depth understanding of students' views on the current well-being support provided by the faculty and to explore suggestions for enhancing this support.

7.4.4.1 What are oral hygiene students' views on the well-being support provided by the faculty, and how can it be improved?

The university and dental faculty offer several well-being support structures to all registered students and staff members. A discussion of the support follows hereunder.

The dental faculty has been providing well-being support to students for many years by assigning them to clinical advisors, also referred to as mentors. These mentors were academic staff at the faculty. The results of this study confirm that students in oral hygiene programmes had different opinions about the support for well-being provided by the dental faculty and the main campus.

Student feedback on the efficacy of the mentor programme was ambivalent. Some of the oral hygiene students mentioned that they refused to discuss their academic performance or personal issues with lecturing staff and did not attempt to make contact. Factors that student participants identified as derailing the success of the clinical advisor/mentor-student/mentor-mentee relationship included confidentiality and trust issues, incompatible personalities, harshness, and an unsympathetic tone, which rendered the clinical advisor/mentor programme ineffective. Mature students did not appreciate having to discuss their academic and well-being issues with lecturers.

Contrary to the aforementioned, some students found value in the clinical advisor/mentor programme and praised the lecturers for their support and guidance. It was evident that these students enjoyed a good professional relationship with their clinical advisor/mentor and received the support and appropriate referral to professional counsellors when required.

The interviews revealed that some students suggested the option to select their own clinical advisor/mentor rather than being assigned someone whose personality may clash with theirs. This study found that during interviews, lecturers unanimously agreed that being assigned mentorship responsibilities affected their well-being and interfered with their personal lives. The most important and undisputed response from the lecturer participants was that they did not receive any training on how to be a mentor, and that students' problems affected their own well-being. This study found that lecturer participants overwhelmingly responded negatively to being held responsible as clinical advisors/mentors for students.

However, most student participants in this study praised the lecturers from the Oral Hygiene Department for consistently maintaining an open-door policy, which allowed students to seek support from any staff member as needed and guidance on how to seek professional support if required.

As a side note, it is important to state that the mentorship programme was debated at a workshop at the beginning of the 2025 academic year, where it was decided that the allocation of students to a specific advisor for mentorship purposes would be discontinued for the time being.

The faculty annually organises a well-being day for dental and oral hygiene students, which usually takes the format of a sports day. Unfortunately, these initiatives are not always well attended by students or staff.

A second opportunity to improve student well-being at the faculty was an attempt to present well-being workshops. The workshop, held during academic hours, was structured; students were allocated to groups with pre-determined topics, and attendance was compulsory. However, the after-hours workshops for students were poorly attended due to logistical factors, such as transport availability and safety concerns about travelling back home after hours.

The university's main campus offers a range of well-being support services through CSSS. The CSSS provides therapeutic services, academic support, support for students with physical and other well-being challenges, and guidance in leadership and social responsibility. The services of the CSSS have affiliations with numerous other resources of well-being support, for example, the South African Depression and Anxiety Group (SADAG), Cipla Mental Health Helpline, Adcock Ingram Depression & Anxiety Helpline, Lifeline National Counselling Helpline, Gender Violence Helpline, AIDS Helpline, South African National Council on Alcoholism and Drug Dependence (SANCA), Families South Africa (FAMSA), and the Thuthuzela Care Centre. The majority of the aforementioned wellness support is available 24/7.

The CSSS focus on the physical, emotional, spiritual, social, environmental, financial, career, and intellectual well-being of all students. Therefore, it could be considered a holistic approach to support the well-being of all students at the university.

When asked about their perceptions and experiences of the university support systems available to students, participants' responses were diverse, ranging from

positive to neutral to negative. Some student participants indicated that their experience has been that a toll-free number or an email response was not deemed sufficient support during serious mental health crises. Students preferred face-to-face contact with a psychologist. They further commented on the high demand for on-campus psychologist appointments, which makes face-to-face engagement difficult.

Both student and staff participants noted that cultural and religious beliefs, along with stigmatisation, often prevented learners from seeking available well-being support. This stigma, rooted in traditional views held by students, their families, and communities, affects perceptions of receiving professional help. Participants believe that although the university and faculty offer well-being support, accessing appointments was difficult due to limited availability and the scheduling of the BOH programme.

Peer support was highly valued by the student participants in this study. They unanimously agreed that their peers in the BOH programme were the only ones who truly understood their experiences. Participants highlighted that they received essential support and encouragement from one another.

The study revealed that while participants were aware of some well-being support options at the main campus, they were not fully informed about all the available resources. Many oral hygiene students were hesitant, did not feel the need to use these support systems, or did not feel comfortable using them. The dental faculty and the CSSS should consider implementing awareness campaigns to address the barriers perceived by students, for example, by increasing visibility at the dental faculty. This strategy aims to eradicate entrenched misconceptions and fears that may hinder their educational experience, and ultimately, their holistic well-being. Student participants indicated that it is advisable to consider appointing a full-time well-being officer within the dental faculty to enhance student well-being.

7.4.4.2 Conclusion: Secondary research question 4

Students at the dental faculty are reluctant to utilise well-being support services. Feedback indicates that the staff-student mentor programme is perceived as unsuitable because of unpleasant or unavailable lecturers, and that mature students feel uncomfortable discussing issues with staff due to personality clashes and a lack of trust. Hesitancy to schedule appointments with professional services arises from a

shortage of psychologists and dissatisfaction with referral systems. Stigmatisation, influenced by cultural and social factors, deters students from accessing these services, and coordinating academic responsibilities with appointment availability is also a challenge.

7.5 Primary research question

What are oral hygiene students' perceptions of their psychosocial and emotional well-being at an institution of higher education in South Africa?

7.5.1 Addressing the primary research question

In the following section, this research addresses the primary research question.

As the researcher of this study, it became evident that student participants enrolled in the BOH degree faced numerous challenges as they transitioned from their familiar environment, such as school, home, and friends, to the unfamiliar university environment, impacting their holistic well-being. Significant negative factors affecting their psychosocial and emotional well-being included the overwhelming workload of the BOH curriculum, language barriers, isolation, and a lost sense of belonging. This often led to anxiety, stress, further isolation, and depression. Students reported that their psychological well-being was affected by a range of assessments and assignments, preclinical and clinical training, the risks associated with clinical practice, and feedback from clinical supervisors and lecturers. Demanding hours in pre-clinical laboratories, clinical sessions and lectures contributed to an unbalanced work-life routine, resulting in sleep disturbances, poor nutrition, and a lack of exercise. Students reported that their emotional well-being was negatively affected by perceived discrimination from dental students, belittling remarks from lecturers outside the oral hygiene department, jealousy from family members, and personality clashes with lecturers and clinical supervisors. The majority of students believed their emotional well-being at some point during their studies was poor; this resulted in them feeling emotionally depleted, lacking the energy to engage with others, and suffering from depression and anxiety due to their living and learning conditions. The emotional toll from unsafe living environments significantly contributed to students' poor emotional well-being. Furthermore, the COVID-19 pandemic exacerbated these issues. Students reported that their displacement from university learning and living environments, coupled with inadequate technological resources such as Wi-Fi and computer

equipment, has significantly impacted their psychosocial and emotional well-being. Additionally, the necessity to attend online lectures from early morning until late at night, without sufficient breaks, further exacerbated their well-being challenges. Some students were concerned about their clinical competency due to the limited time they had spent in pre-clinical and clinical training due to the COVID-19 pandemic.

Despite various challenges, oral hygiene students found that the BOH programme positively impacted their overall well-being. Many participants, initially introverted, gained confidence and improved communication skills through the curriculum. These newfound competencies and skills enhanced their psychological resilience, motivating them to engage with their studies and communities, form meaningful relationships, and contribute to their sense of eudaimonia. Students began to view academic and personal challenges as opportunities for growth, fostering pride and self-confidence, purpose in life, as well as a positive outlook on their future careers. Support from family, peers, and friends played a significant role in their emotional resilience and motivation.

Students expressed appreciation for the camaraderie among classmates and the influence of supportive lecturers, whose high professional and ethical standards cultivated a positive mindset. Although initial feedback from lecturers and clinical supervisors could be daunting, and academic challenges were present, students acknowledged and recognised it as part of their personal, academic and career development. Many aimed to further their education through postgraduate studies or additional qualifications. Overall, students reported feeling stronger and more independent, equipped with critical-thinking and problem-solving skills essential to their future roles as practitioners. Regarding their social well-being, it appeared that those who experienced social well-being maintained positive relationships with family, friends, peers, lecturers, and clinical supervisors. This study found that students who planned well, followed year planners, sought to complete tasks and assignments early, and employed a smart-working approach reported good social well-being. These students made a conscious effort to schedule leisure time and take breaks with loved ones. Such brief social interactions contributed to their overall well-being, energising them to continue with their workloads.

Students who felt their social well-being was lacking reported limited support from family and friends, leading to feelings of isolation and struggles with anxiety and

depression. Their primary focus was on completing their degrees and achieving financial security, often viewing socialising as a hindrance to their goals.

In contrast, students exhibiting higher emotional well-being managed their workloads effectively. Some student participants faced challenges before enrolling in the BOH program, which helped them develop effective coping strategies. These participants exhibited resilience and intrinsic motivation; however, several students reported experiencing fluctuations in their emotional well-being throughout their studies.

Most participants felt the BOH programme promoted professional development, enhancing their social, emotional and professional skills and self-awareness. They valued the high standards set by the oral hygiene department and faculty and demonstrated determination to succeed and build better futures. Despite difficulties, they maintained a positive outlook and a commitment to their studies, with many expressing interest in postgraduate education.

In conclusion, addressing the main research question, the findings indicate that students enrolled in the oral hygiene programme at the designated dental faculty exhibit remarkable resilience, enabling them to navigate and overcome the multiple challenges encountered throughout their academic journey. The challenges faced encompassed a range of difficulties, including various academic hurdles such as understanding complex subjects and keeping up with assignments. Additionally, there were social challenges, such as forming and maintaining friendships, navigating social dynamics, and dealing with peer pressure. Emotional issues were also present, affecting overall well-being and mental health, making it difficult to cope with stress, anxiety, and feelings of isolation. Rather than succumbing to stagnation or languishing, they demonstrated survival skills, and a capacity and desire for personal and professional growth, ultimately leading to flourishing in both their studies and personal lives. This positive outlook and hope for a better future not only enhance their educational experience but in the future contribute to their long-term success in the occupation of oral hygiene.

7.6 Revisiting the conceptual framework

Chapter 3 outlined the conceptual framework explaining the interrelationships among various dimensions of well-being that collectively influence an individual's overall well-being. This framework is grounded in the well-being theories, models, and foundations

pertinent to the current study, with the PERMA-V as the overarching framework. The data collected during this investigation provided insights into the determinants affecting the psychosocial and emotional well-being of undergraduate oral hygiene students studying at a South African university. The research identified several factors that affect the psychosocial and emotional well-being of students engaged in oral hygiene studies, which are integrated into this study's modified conceptual framework.

In this study, the PERMA-V model was proposed as a comprehensive framework that encapsulates various theories and principles within positive psychology. This model serves as an umbrella concept that integrates multiple overlapping theories, models, concepts, and frameworks discussed in more detail in chapters 2 and 3. By integrating these diverse aspects of positive psychology, the PERMA-V model offers a structured approach to understanding and promoting students' psychosocial and emotional well-being, ultimately contributing to their academic success and personal development.

The well-being of oral hygiene students is shaped by a variety of interconnected factors that should not be viewed in isolation. To promote overall well-being, collaborative efforts among students, lecturers, faculty, the university administration, and resident management are essential. Additionally, improvements can be made by strengthening social and familial environments and upgrading the university's physical resources and infrastructure.

The importance of support services for oral hygiene students, including counselling and psychological services, in enhancing their well-being should not be overlooked, even though they are currently underutilised. The results of this study highlight the need for supporters such as lecturers, clinical teachers and student administrators to undergo comprehensive training to effectively support students' well-being. This requirement is particularly important given students' vulnerabilities and the considerable pressures oral hygiene students face throughout their academic pursuits, which can have a detrimental effect on their overall well-being. It is crucial to integrate positive coping mechanisms into the curriculum to enhance these students' overall well-being. Acquainting both students and their supporters with well-being practices can be instrumental in mitigating challenges such as burnout, anxiety, and depression during their educational experience, ultimately better preparing them for their future professional roles.

The conceptual framework is depicted in Figure 7.1, emphasising key components relevant to the study. The psychological well-being of oral hygiene students is notably affected by their need to adapt to new learning environments, including pre- clinical skills laboratories and clinical settings involving invasive patient care. These students face challenges such as language barriers, dental terminology, cultural assimilation, and adjusting to different academic methodologies compared to high school. Mature students, in particular, encounter difficulties arising from prolonged academic disengagement.

The demanding curriculum often overlooks student well-being as they strive to maintain a balanced lifestyle. It is suggested that students should have autonomy within the learning environment and actively participate in curriculum design. The PERMA-V model and Ryff's theory of psychological well-being highlight the importance of this autonomy in mastering the competencies outlined in the Scope of Practice for oral hygienists in South Africa.

According to the comprehensive PERMA-V model of well-being, promoting positive emotions and relationships is crucial, as students benefit significantly from engaging with peers, patients, and instructors. Keyes' Social Well-being Theory supports this perspective by highlighting the importance of social integration. Reports indicate that many oral hygiene students experience feelings of belonging deprivation and social exclusion within the dental environment, often due to perceived discrimination from Bachelor of Dental Surgery (BDS) peers and some lecturers. Consequently, it is essential to cultivate an inclusive environment and provide training for faculty, staff, and students to enhance awareness and sensitivity regarding discriminatory behaviours.

To address this, opportunities to foster positive emotions, improve interactions, and social integration should be promoted and established by the faculty and the university. Furthermore, recognising the significance of peer support is vital and prompts the oral hygiene department and faculty to consider training programmes to help students support one another, whether formally or informally.

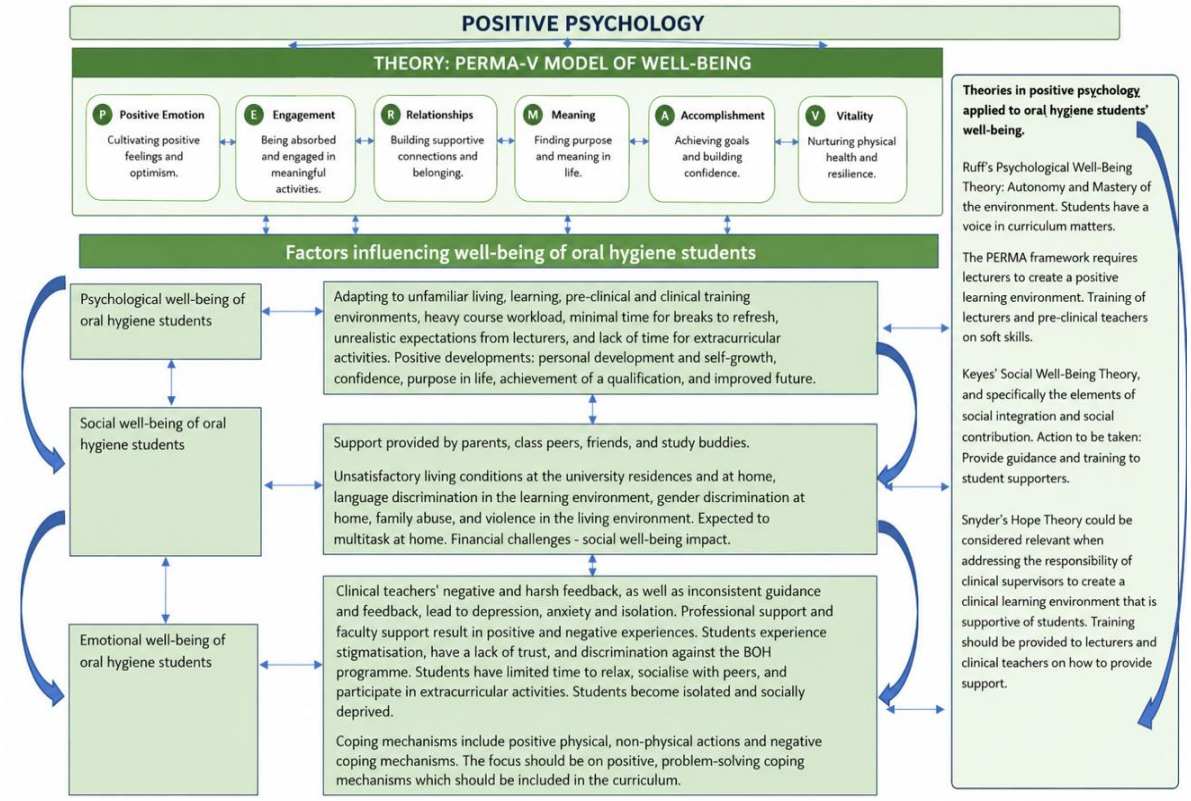
The acquisition of clinical skills and the effective application of theoretical knowledge are vital for oral hygiene students aiming to improve their career prospects. Lecturers and clinical supervisors play a pivotal role in helping students to achieve their

aspirations. Snyder's theory emphasises the importance of positive feedback, which can facilitate progress, whereas negative comments can hinder it. Thus, it is essential for educators to provide constructive encouragement and recognise the vital role they play in the training, development, and success of the professional oral hygienist.

Therefore, it is important to recognise that no single positive psychology model underpinning this study should be relied upon exclusively to promote the well-being of oral hygiene students.

Figure 7.1

Revisiting Conceptual Frameworks Applicable to this Study



Note. Figure 7.1 presents a conceptual framework that examines the psychosocial and emotional well-being challenges experienced by BOH students at a specific university in the South African context and provides theory-supported solutions to guide the institution in addressing these challenges and improving students' well-being.

Image generated by the author and re-generated with ChatGPT, July 20, 2026, OpenAI.

7.7 Reflecting on the study

In this section, the researcher reflects on pre-existing ideas and expectations regarding the psychosocial and emotional well-being of students studying oral hygiene. The reflection is detailed below.

7.7.1 Researcher reflexivity

As a lecturer with over 35 years of experience, the researcher has been part of the lives of many students facing challenges to their well-being. These challenges range from stress related to university demands to more serious mental health issues. It is reassuring that students had access to support services, including professional counselling, which often led to positive outcomes. However, some students avoided these options for personal reasons or due to stigma surrounding well-being support, which is shaped by religious and cultural views.

The researcher has noticed an increase in serious well-being challenges beyond just stress and anxiety, prompting an investigation into the underlying factors. Initially, the researcher believed students would feel comfortable sharing their experiences because of the trust that had developed over the years. However, while preparing ethical clearance documentation, the researcher became aware of potential reluctance among students to discuss personal issues with someone they know, as well as concerns about power imbalances that could affect participation and the reliability of the information provided. Similar concerns also applied to interviews with staff participants, many of whom were former students. Furthermore, the researcher questioned whether students would be inclined to participate in a study delving into their psychosocial and emotional well-being, given the personal nature of the information being shared. To mitigate the influence of power dynamics, participants were given control over the information they were sharing by being able to pause the recording at any time, request deletion of any interview segments, and seek clarification on questions they found unclear. Throughout the interviews, the researcher regularly confirmed that participants were still comfortable continuing the discussion. The researcher made efforts to create an environment that was both comfortable and neutral for all participants. Having come from a single-parent, single-income household and having been responsible for home chores while at school from a very young age, taking care of the parent, and having an overarching goal to strive

for a better future, the researcher could identify with students from similar backgrounds. As the data collection process continued, the researcher was surprised by the eagerness of both students and staff to participate in the study. Participants candidly shared their personal experiences and the factors influencing their well-being. Some individuals revealed previously unspoken information and subsequently reported feeling relieved and less stressed. At the outset of each interview, the researcher emphasised that she could not provide counselling services but encouraged participants to contact the professional services at the main campus if they deemed it necessary. At the end of each interview, participants were asked whether they needed professional support; however, none did. The data collection process was enriching, highlighting the trust participants held and showing that power imbalances did not hinder their participation in the study. Overall, participants left with a positive attitude, thankful for the opportunity to contribute to the study, reinforcing the mutual respect and professionalism in the relationship.

7.8 Reflecting on the challenges and limitations of this study

The data collection methods employed for this study included obtaining information from student and staff participants. Student participants could participate by completing self-administered questionnaires, participating in semi-structured interviews, and participating in focus group discussions. Staff and clinical supervisors were invited to take part in semi-structured interviews.

Ethical approval was obtained in February 2020. Unfortunately, the abrupt announcement of the COVID-19 pandemic posed unexpected challenges to this study at all stages of data collection, as researchers were prohibited from conducting face-to-face interviews and focus group discussions. UNISA permitted interviews for data collection exclusively via Microsoft Teams. Unfortunately, the Microsoft Teams platform was unfamiliar and unavailable to most participants at the time. Furthermore, the platform was unstable at times. In general, most participants faced challenges related to the availability of technical online resources and data, as well as a lack of technical expertise. Students did not always have access to data or the technological means to participate online. Load shedding further complicated data collection through online interviews. The researcher had to discontinue data collection due to many failed attempts via the Microsoft Teams platform and the reasons mentioned above. The decision was made to wait until the lockdown levels were either relaxed or lifted. With

relaxed COVID-19 restrictions, face-to-face contact was allowed, but with strict guidelines. Challenges included conducting face-to-face semi-structured interviews while maintaining a distance of at least three meters, with both the interviewer and interviewee wearing double masks. Facial expressions and other nonverbal cues could not be recorded because masks covered at least two-thirds of the face.

Due to the high-risk environment in the dental facility, infection control guidelines included full PPE for all students and staff entering the building until 2022. All interviews were conducted with full PPE, and although infection control guidelines were later relaxed, masks remained compulsory while moving around the clinical buildings, between levels, and in all venues. Consequently, what would not have been a methodological limitation under normal circumstances became a significant challenge.

Most students were not on campus during the 2020 – 2021 period. Only final-year students were allowed on-site for limited periods, which further complicated students' availability to arrange the semi-structured interviews. The pandemic significantly affected students' well-being, impacting interview considerations. Many faced housing displacement, illness, caregiving for sick family members, or the loss of loved ones. This necessitated an additional literature review on the pandemic's effects on students, particularly those in dental training programmes. Sourcing the extensive literature and reviewing the information caused a further significant delay in data collection.

Reflecting on the methodological limitations of this study, the data collection process was further challenged by participants' availability during the term or semester. The BOH II and BOH III timetables do not always allow for free time, such as elective sessions. Although students were willing to participate in the study, they found it challenging to schedule an interview. Therefore, the majority of interviews took place during a study break or at the end of a formal examination period. Some students made commendable efforts to participate and arranged to come to campus during their vacation to attend the interview.

Regarding transferability, the results of this study reflect the perceptions, interpretations, and experiences of a group of BOH II and BOH III students at a specific dental faculty at a South African university. Therefore, the results are particular to a group of students at the time the data was collected and cannot be generalised to all

students studying oral hygiene; however, the results, consisting of information-rich descriptions, could be applied to similar contexts.

7.9 Recommendations

In the section that follows, recommendations for policy development are presented, along with suggestions for improving practice. Finally, considerations for future research are proposed.

7.9.1 Recommendations for policy

Students for whom English is not a first language had difficulty understanding lecture content and learning materials. They struggled with social interactions and often felt a lack of belonging, which adversely affected their overall well-being. Additionally, students who had difficulty communicating in English reported feeling discriminated against. It is therefore recommended that the dental faculty's language policy be reassessed.

The recently drafted well-being policy should be revisited and circulated more broadly to gather input from all staff, students, and faculty management.

A de-stigmatisation well-being policy and an awareness programme on the professional well-being support available at the dental faculty and from CSSS at the main campus should be implemented to ensure that all students, regardless of their study programme, gender, religion, culture, or any other orientation, feel entitled to access support and that their rights are upheld.

The BOH selection programme offers a limited number of placements for first-year students. The selection policy is intended to help committees evaluate applicants based on their academic performance, qualifications, and competencies. Committees should consider a more holistic approach to evaluation to ensure optimal outcomes for both students and the programme. This approach should include consideration of students' primary career aspirations and provide career guidance for those who may be uncertain about their career paths and academic pursuits. Given constraints on learning and teaching resources, the university and faculty should review the policy governing the number of students admitted to their programmes.

Students who transitioned directly from high school to university reported feeling underprepared for academic success at the university level. Therefore, Basic

Education in South Africa should initiate the drafting and, ultimately, the implementation of documentation outlining guidelines for preparing learners for tertiary education. Preparing students during their high school years can help facilitate a smoother transition to higher education. Additionally, increasing faculty and campus support to reduce the challenges students encounter upon entering higher education should be considered a priority.

This study frequently highlighted the status of campus residences or student hostels as a factor influencing the holistic well-being of oral hygiene students. Therefore, the university should take responsibility and prioritise the quality of student residences on campus, as the findings indicate that the residences are perceived as unsafe, unhygienic, and insufficiently conducive to academic study.

The study highlights that mature students returning to education often face insecurities due to prior learning or work experience. An orientation program tailored for adult learners is recommended to address their unique needs, which differ from those of traditional students. Concerns about shared living spaces with younger students and a desire for a conducive studying environment were noted. Mature students are often motivated to improve their employability and typically seek a quieter living situation. Thus, the university should consider providing dedicated accommodations for mature students on campus.

7.9.2 Recommendations for practice

This section focuses on recommendations for practice planning to improve students' well-being.

The findings of this study revealed that most students felt overwhelmed by their workload in the BOH programme. To address the challenges posed by the current BOH programme curriculum, a thorough review is necessary to ensure it adequately addresses the workload students face in each academic year. In reviewing the BOH curriculum, it is suggested that some modules are aligned to minimise repetition. The second year is particularly skills-based and content-heavy. A suggestion is to alleviate the course load and its impact. It is suggested that some BOH II content could be relocated to the first or the third year. Some of the current modules will be better suited for postgraduate studies in oral hygiene, while others could be merged or abolished.

It is urgent and crucial to prioritise the advancement of interprofessional collaboration within the dental faculty. This initiative should focus on actively addressing and eliminating any perceived derogatory behaviour from students and staff towards BOH students. Consideration should be given to fostering opportunities for both BOH and BDS students to work closely together in lectures and patient care. A typical group practice setup, incorporating junior and senior oral hygiene and dental students, could effectively collaborate on patient cases. This approach would not only enhance understanding of the respective scopes of practice for oral hygienists and dental students but also better prepare them for their professional careers.

Although much of this collaborative work occurs during the second year of the BOH programme, it would be advantageous to extend these initiatives into the later years of both the BOH and BDS programmes. Furthermore, it is recommended that regular evaluations be conducted to assess how students perceive collaborative efforts. The insights gained from these evaluations could inform the BOH programme director and the Deputy Dean of Academic, Teaching, and Learning on how to enhance collaboration between BDS and BOH students.

A further recommendation is for the oral hygiene department and faculty to create more opportunities for oral hygiene students to engage in either formal or informal physical activities, as they often lack access to the activities available on the main campus due to academic demands. This decision will promote students' psychosocial well-being by encouraging new connections with peers from other degree programmes and preventing isolation.

The faculty should consider appointing a full-time, on-site wellness officer. This individual should be available daily to assist students with well-being issues, make referrals, and provide wellness preparedness programmes and initiatives. These wellness programmes should be integrated into the BOH curriculum. This should be done in consultation and close collaboration with the wellness officers at the university’s main campus. Preferably, the wellness officer should deliver lectures on well-being, workplace soft skills, and work preparedness. The well-being officer should also be able to identify students who are challenged, struggling academically and lack intrinsic motivation. By doing so, potential well-being issues stemming from academic pressures and other social challenges that could escalate into crisis situations can be diverted. The outcomes of these well-being initiatives and programmes should be

evaluated annually by students and staff and tailored for optimal suitability. Such programmes will equip oral hygiene students to maintain their well-being by providing problem-focused coping mechanism interventions during their training, potentially leading to better-prepared graduates entering the demanding workforce. Once qualified, an oral hygienist may practice independently under the HPCSA regulations and should therefore be equipped to manage the psychosocial, emotional, physical, and financial challenges associated with the occupation and running a practice.

Clinical supervisors have been identified as a significant source of stress during clinical training. Therefore, it is recommended that clinical supervisors attend developmental workshops to enhance soft skills and interpersonal communication. A further recommendation is to regularly calibrate clinical supervisors to prevent the perception of contradiction during patient treatment sessions, which creates stress and anxiety among students. Newly appointed clinical supervisors should be inducted in accordance with written, standardised operational procedures to avoid procedural inconsistencies in the clinical environment. The oral hygiene programme director should regularly update the standardised operational procedures manual to keep pace with changing clinical protocols and procedures.

The findings of this study indicate that not all students recognise that each patient has unique bio-psychosocial factors that influence their treatment plan. Therefore, it is recommended that clinical supervisors emphasise the importance of clinical discussions to contextualise the patient’s treatment before the actual treatment begins.

A programme should be developed to destigmatise well-being services and support from psychologists, taking into account the community's traditional perceptions.

Barnard et al. (2020) recommend that oral hygiene students learn, during their years of study, how to manage stress and apply positive coping mechanisms to avoid professional burnout. This could be achieved by addressing the issues mentioned above during their undergraduate years, thereby preparing candidates for the world of work and enabling them to function successfully in these challenging milieus.

7.9.3 Recommendations for future research

The present research was conducted as a single-case study focused on the factors affecting the well-being of oral hygiene students enrolled at a particular university in South Africa. While this study provides valuable insights, further investigation could

expand the scope to include other universities across South Africa that offer oral hygiene programmes.

Additionally, the research could be enhanced by cross-comparisons between the psychosocial well-being of South African students and that of their counterparts in other countries on the African continent, thereby enriching our understanding of the factors influencing student well-being across different cultural and academic contexts.

This study utilised a qualitative approach to examine the complex dimensions of well-being among oral hygiene students, allowing for in-depth exploration of their experiences and challenges. Future research endeavours might adopt a mixed-methods approach, integrating quantitative data to complement qualitative findings, thereby offering a more holistic view of the factors that affect these students' overall well-being.

Furthermore, conducting a comparative analysis of the well-being of oral hygiene and dental students at multiple universities throughout South Africa could provide a deeper understanding of how these two groups experience academic and psychosocial pressures differently. Such comparisons would yield rich insights to tailor support programmes more effectively.

Ultimately, national-level findings could be compared with international findings, contributing to a global discourse on the factors affecting the well-being of oral health profession students. This comprehensive approach would not only inform educational practices in South Africa but also enhance our understanding of student well-being worldwide.

7.9.4 Contribution of the study

The contribution of this study lies in its provision of groundbreaking insights by employing a qualitative research methodology grounded in the principles of positive psychology. Specifically, it explores the well-being of oral hygiene students in the South African context, at a specific dental faculty, a topic that has not been extensively studied in existing research. By focusing on this unique group, the study uncovers important dimensions of their experiences, challenges, and overall satisfaction related to their academic and personal lives. This approach not only enriches our understanding of the factors influencing these students' well-being but also highlights the significance of positive psychological constructs in a field that has previously

received limited attention. As a result, the findings pave the way for future research and practical applications aimed at enhancing the well-being of oral hygiene students and potentially other related disciplines.

The development of a comprehensive conceptual framework to enhance the overall well-being of individuals pursuing oral hygiene education and careers is the focal point of this study. This framework encompasses psychological, social, and educational dimensions to provide a holistic approach to improving the quality of life for these candidates. By integrating theories and practices from relevant fields, the framework identifies and addresses the specific needs and challenges faced by oral hygiene students and professionals, ultimately leading to better support systems and resources.

7.10 Summary

In Chapter 7, the emphasis was placed on addressing the four research sub-questions, which culminated in the response to the primary research question. Sub-question 1 examined the factors that oral hygiene students perceive as influencing their overall well-being. Participants in the current study identified several factors that affect their holistic well-being, including academic and personal challenges. In response to research sub-question 2, the study explored how the learning environment impacts the well-being of oral hygiene students. Participants reported that the learning environment significantly affects their holistic well-being, highlighting factors such as inadequate resources, the geographical location of training sites, and safety concerns. Most participants noted that supervisory feedback also influenced their well-being, particularly during the junior years of clinical training. A critical factor affecting students' well-being was the perceived discrimination from BDS students and certain staff members.

Sub-question 3 addressed how oral hygiene students cope with and manage the challenges affecting their well-being. The majority of participants reported engaging in positive coping mechanisms, which included effective problem-solving strategies. Conversely, a minority resorted to emotion-focused coping or negative coping mechanisms. Positive Coping mechanisms were characterised by effective time management, participation in physical activities, engagement in hobbies, interaction with family pets, support from family and peers, and religious involvement. Negative

coping mechanisms included the use of pharmaceuticals, which varied from over-the-counter products to prescribed medications for conditions such as depression, anxiety, and mood disorders.

Sub-question 4 examined the perceptions of oral hygiene students regarding the well-being support provided by the faculty and opportunities for improvement. Participants articulated their views on institutional support services, such as professional counselling available on the university's main campus, interactions with mentors, and various well-being initiatives offered by the faculty. Opinions regarding the effectiveness of these professional support structures varied. Some students found value in sessions with counsellors, while others preferred to avoid such interventions and favoured discussions with peers or parents. The decision to utilise professional well-being services remains influenced by historical perceptions from previous generations, as well as religious and cultural orientations.

Chapter 7 further included a detailed discussion of the researcher's reflexivity and revisited the conceptual framework. Lastly, recommendations aligned with the responses to each sub-question were suggested, limitations of the study were discussed, and considerations for future research on the well-being of oral hygiene students were provided.

7.11 Conclusion

This study aimed to identify the factors influencing the psychosocial and emotional well-being of oral hygiene students at a South African university from a positive psychology perspective.

Through conducting the data collection and analysis, the researcher became aware of several challenges that oral hygiene students in this case study had to endure. These students encountered challenges in both their teaching and learning, and in their living environment. The students endured many social challenges, such as entering university with minimal financial resources, unstable, violent social environments, and coming from environments where tertiary education is an exception rather than the norm. Academically, some students felt that they had arrived underprepared from school and had to adjust to the academic standards of tertiary education. Emotionally, students who were separated from their families due to distance and other circumstances experienced isolation and longed to see and be with them. In the

learning environment, oral hygiene students were emotionally traumatised by dental students and staff members who, according to them, belittled their occupation. Students were further emotionally traumatised by harsh, inconsistent and unsubstantiated pre-clinical and clinical training and feedback. Many students indicated receiving the greatest emotional support from their parents and peers. Considering the factors that influenced students' psychosocial and emotional well-being, the study was conducted through the lens of positive psychology, with the students in this study being exemplars. Through the lens of positive psychology, the students participating in this study served as exemplars of resilience, survival, and growth. They confronted and overcame various challenges, demonstrated intrinsic motivation, and exhibited optimistic employment prospects. Their hopeful outlook for the future reflects their survival skills, motivation to flourish, and personal development. Although they may have encountered negative experiences during their academic journey, they actively chose to transform these adversities into positive outcomes.

REFERENCES

Abrahams, L. C. (1971). Oral hygienists. *Journal of the Dental Association of South Africa*, *26*(11), 381.

Abu-Ghazaleh, S. B., Rajab, L. D., & Sonbol, H. N. (2011). Psychological stress among dental students at the University of Jordan. *Journal of Dental Education*, *75*(8), 1107–1114. https://doi.org/10.1002/j.0022-0337.2011.75.8.tb05156.x

Adams, W. C. (2015). Conducting semi-structured interviews. *Handbook of Practical Program Evaluation*, *1*(4), 492–505. https://doi.org/10.1002/9781119171386.ch19

Adam, L. A., Oranje, J., Rich, A. M., & Meldrum, A. (2020). Advancing dental education: Feedback processes in the clinical learning environment. *Journal of the Royal Society of New Zealand*, *50*(1), 144–157. https://doi.org/10.1080/03036758.2019.1656650

Adom, D., Yeboah, A., & Ankrah, A. K. (2016). Constructivism philosophical paradigm: Implications for research, teaching and learning. *Global Journal of Arts Humanities and Social Sciences*, *4*(10), 1–9. https://doi.org/10.6084/m9.figshare.5018798.v1

Ahmad, F. A., Karimi, A. A., Alboloushi, N. A., AL-Omari, Q. D., AlSairafi, F. J., & Qudeimat, M. A. (2017). Stress level of dental and medical students: Comparison of effects of a subject-based curriculum versus a case-based integrated curriculum. *Journal of Dental Education*, *81*(5), 534–544. https://doi.org/10.21815/jde.016.026

Ahmed, S. K. (2024). The pillars of trustworthiness in qualitative research. *Journal of Medicine, Surgery, and Public Health*, *2*, 100051. https://doi.org/10.1016/j.glmedi.2024.100051

Ajjawi, R., & Boud, D. (2017). Researching feedback dialogue: An interactional analysis approach. *Assessment & Evaluation in Higher Education, 42*(2), 252–265. https://doi.org/10.1080/02602938.2015.1102863.

Ajjawi, R., & Boud, D. (2018). Examining the nature and effects of feedback dialogue. *Assessment & Evaluation in Higher Education*, *43*(7), 1106–1119. https://doi.org/10.1080/02602938.2018.1434128

Akinkugbe, A. A., Garcia, D. T., Smith, C. S., Brickhouse, T. H., & Mosavel, M. (2021). A descriptive pilot study of the immediate impacts of COVID-19 on dental and dental hygiene students' readiness and wellness. *Journal of Dental Education, 85*(3), 401–410. https://doi.org/10.1002/jdd.12456

Alhajj, M. N., Khader, Y., Murad, A. H., Celebic, A., Halboub, E., Márquez, J. R., Macizo, C. C., Khan, S., Basnet, B. B., Makzoumé, J. E., de Sousa-Neto, M. D., Camargo, R., Prasad, D. A., Faheemuddin, M., Mir, S., Elkholy, S., Abdullah, A. G., Ibrahim, A. A., Al-Anesi, M. S., & Al-Basmi, A. A. (2018). Perceived sources of stress amongst dental students: A multicountry study. *European Journal of Dental Education*, *22*(4), 258–271. https://doi.org/10.1111/eje.12350

Alire, E., Brems, C., Bell, K., & Chiswell, A. (2020). The role of yoga in treating stress-related symptoms in dental hygiene students. *International Journal of Yoga*, *13*(3), 213–222. https://doi.org/10.4103/ijoy.ijoy_5_20

Allen, K., Kern, M. L., Vella-Brodrick, D., Hattie, J., & Waters, L. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, *30*(1), 1–34. https://doi.org/10.1007/s10648-016-9389-8

Al-Omari, W. M. (2005). Perceived sources of stress within a dental educational environment. *The Journal of Contemporary Dental Practice*, *6*(4), 64–74. https://doi.org/10.5005/jcdp-6-4-64

Alrashed, F. A., Sattar, K., Habib, S. R., Ahmad, T., Al Rashoud, A. S., SAFHI, T., Almajed, A. H. M., Alnafisah, H. A. H., Alharbi, N. H., & Alsubiheen, A. (2021). Implications of the COVID-19 pandemic on the mental health and professional psychomotor skills of dental students. *Psychology Research and Behavior Management*, *14*, 675–685. https://doi.org/10.2147/prbm.s317641

Alshamrani, A. S., & Alshalan, T. A. (2021). Stress among dental students: Brief review and messages to all related. *Oral Health and Dental Studies*, *2*(1). https://doi.org/10.31532/OralHealthDentStud.2.1.005

Al-Sowygh, Z. H. (2013). Academic distress, perceived stress and Coping mechanisms among dental students in Saudi Arabia. *The Saudi Dental Journal*, *25*(3), 97–105. https://doi.org/10.1016/j.sdentj.2013.05.002

Alzahem, A. M., van der Molen, H. T., Alaujan, A. H., Schmidt, H. G., & Zamakhshary, M. H. (2011). Stress amongst dental students: A systematic review. *European Journal of Dental Education*, *15*(1), 8–18. https://doi.org/10.1111/j.1600-0579.2010.00640.x

Alzahem, A. M., Van der Molen, H. T., Alaujan, A. H., & De Boer, B. J. (2014). Stress management in dental students: A systematic review. *Advances in Medical Education and Practice*, *5,* 167–176. https://doi.org/10.2147/AMEP.S46211

American Psychological Association. (n.d.). Well-being. In *APA dictionary of psychology*. Retrieved June 10, 2026, from https://dictionary.apa.org/well-being

American Psychological Association. (n.d.). Loneliness. *In the APA dictionary of psychology.* Retrieved January 20, 2026, from https://dictionary.apa.org/loneliness

Amoabea, E. J., Oppong-Yeboah, A., Hammond, V. A., & Yaa, N. (2020). Marriage, family and schoolwork: A case of married female undergraduate students at the University of Ghana. *Gender and Behaviour*, *18*(2), 15476–15486.

Ano, G. G., & Vasconcelles, E. B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology*, *61*(4), 461–480. https://doi.org/10.1002/jclp.20049

Antaramian, S. P., Huebner, E. S., Hills, K. J., & Valois, R. F. (2010). A dual-factor model of mental health: Toward a more comprehensive understanding of youth functioning. *American Journal of Orthopsychiatry*, *80*(4), 462–472. https://doi.org/10.1111/j.1939-0025.2010.01049.x

Anushri, M., Yashoda, R., & Puranik, M. (2014). Relationship between psychological well-being and perceptions of stress among undergraduate dental students in Bengaluru city: A cross-sectional study. *Journal of Indian Association of Public Health Dentistry*, *12*(4), 283. https://doi.org/10.4103/2319-5932.147666

Arafat, M. Y. (2024). Research ethics: Meaning and principles. *Social Sciences Research Network Electronic Journal, 8*(1). https://doi.org/10.2139/ssrn.4887943

Arellano, L., Alcubilla, P., & Leguízamo, L. (2023). Ethical considerations in informed consent. *Ethics - Scientific Research, Ethical Issues, Artificial Intelligence and Education*. https://doi.org/10.5772/intechopen.1001319

Aristippus | Greek philosopher. (n.d.). Encyclopaedia Britannica. https://www.britannica.com/biography/Aristippus

Baby, S., Fatima, M., & Kaneez, S. (2022). Impact of social well-being on academic performance of students. *Journal of Positive School Psychology, 6*(8), 8786-8792. https://journalppw.com/index.php/jpsp/article/view/11366

Baik, C., Larcombe, W., & Brooker, A. (2019). How universities can enhance student mental wellbeing: The student perspective. *Higher Education Research & Development*, *38*(4), 674–687. https://doi.org/10.1080/07294360.2019.1576596

Bailey, T. H., & Phillips, L. J. (2016). The influence of motivation and adaptation on students' subjective well-being, meaning in life and academic performance. *Higher Education Research & Development*, *35*(2), 201–216. https://doi.org/10.1080/07294360.2015.1087474

Baker, S. R. (2004). Intrinsic, extrinsic, and amotivational orientations: Their role in university adjustment, stress, well-being, and subsequent academic performance. *Current Psychology*, *23*(3), 189–202. https://doi.org/10.1007/s12144-004-1019-9

Bantjes, J., Kessler, M., Lochner, C., Breet, E., Bawa, A., Roos, J., Davids, C., Muturiki, M., Kessler, R. C., & Stein, D. J. (2023). The mental health of university students in South Africa: Results of the national student survey. *Journal of Affective Disorders*, *321*, 217–226. https://doi.org/10.1016/j.jad.2022.10.044

Barnard, S. A., Alexander, B. A., Lockett, A. K., Lusk, J. J., Singh, S., Bell, K. P., & Harbison, L. A. (2020). Mental health and self-care practices among dental hygienists. *Journal of Dental Hygiene, 94*(4), 22–28. https://api.semanticscholar.org/CorpusID:220976875

Barnett, R. (2007). *A will to learn: Being a student in an age of uncertainty*. McGraw-Hill/Open University Press.

Basson, M. J., & Rothmann, S. (2019). Pathways to flourishing among pharmacy students: The role of study demands and lecturer support. *Journal of Psychology in Africa*, *29*(4), 338–345. https://doi.org/10.1080/14330237.2019.1647953

Basson, R., Smit, D., Maart, R. D., & Gordon, N. (2022). The psychosocial effect of the COVID-19 national lockdown on dentistry and oral Hygiene students. *South African Dental Journal 77*(04), 191–198. https://doi.org/10.17159/2519-0105/2022/v77no4a1

Basudan, S., Binanzan, N., & Alhassan, A. (2017). Depression, anxiety and stress in dental students. *International Journal of Medical Education, 8*, 179–186. https://doi.org/10.5116/ijme.5910.b961

Baumgartner, H., Pieters, R., & Bagozzi, R. P. (2007). Future-oriented emotions: Conceptualization and behavioral effects. *European Journal of Social Psychology*, *38*(4), 685–696. https://doi.org/10.1002/ejsp.467

Bene, K., Adan, S., & Kere, M. M. B. (2023). University students' classification of factors affecting their well-being and psychological distress. *The Journal of Social Science*. https://doi.org/10.30520/tjsosci.1240176

Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, *15*(2), 219–234. https://doi.org/10.1177/1468794112468475

Bert, F., Gualano, M. R., Camussi, E., Pieve, G., Voglino, G., & Siliquini, R. (2016). Animal-assisted intervention: A systematic review of benefits and risks. *European Journal of Integrative Medicine*, *8*(5), 695–706. https://doi.org/10.1016/j.eujim.2016.05.005

Bhayat, A., & Madiba, T. K. (2017). The self-perceived sources of stress among dental students at a South African dental school and their methods of coping. *South African Dental Journal*, *72*(1), 6–10. https://scielo.org.za/scielo.php?script=sci_arttext&pid=S0011-85162017000100005

Bhujade, V.M. (2017). Depression, anxiety and academic stress among college students: A brief review. *Indian Journal of Health and Wellbeing*, *8*, 748–751. https://iahrw.org/our-services/journals/indian-journal-of-health-wellbeing/

Bird, C. M. (2005). How I stopped dreading and learned to love transcription. *Qualitative Inquiry*, *11*(2), 226–248. https://doi.org/10.1177/1077800404273413

Biswas-Diener, R., Linley, P. A., Govindji, R., & Woolston, L. (2011). Positive psychology as a force for social change. In K. M. Sheldon, T. B. Kashdan, & M. F. Steger (Eds.), *Designing positive psychology: Taking stock and moving forward* (pp. 410–418). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195373585.003.0027

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*,*5*(1), 7–74. https://doi.org/10.1080/0969595980050102

Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S.-M., & Olfson, M. (2008). Mental health of college students and their non-college-attending peers: Results from the National Epidemiologic Study on Alcohol and Related Conditions. *Archives of General Psychiatry*, 65(12), 1429–1437. https://doi.org/10.1001/archpsyc.65.12.1429

Böke, B. N., Mills, D. J., Mettler, J., & Heath, N. L. (2019). Stress and coping patterns of university students. *Journal of College Student Development*, *60*(1), 85–103. https://doi.org/10.1353/csd.2019.0005

Bossard, J. H. S. (1944). Family backgrounds of wartime adolescents. *The Annals of the American Academy of Political and Social Science*, *236*(1), 33–42. https://doi.org/10.1177/000271624423600106

Bradburn, N. M. (1969). *The structure of psychological well-being*. Aldine Pub. Co.

Brame, J. L., Mitchell, S. H., Wilder, R. S., & Sams, L. D. (2015). Dental and allied dental students' attitudes towards and perceptions of intraprofessional education. *Journal of Dental Education*, *79*(6), 616–625. https://doi.org/10.1002/j.0022-0337.2015.79.6.tb05933.x

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. SAGE Publications.

Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE Publications. Brooker, A., Brooker, S., & Lawrence, J. (2017). First-year students' perceptions of their difficulties. *Student Success*, *8*(1), 49–62. https://doi.org/10.5204/ssj.v8i1.352

Bugaj, T., Cranz, A., Junne, F., Erschens, R., Herzog, W., & Nikendei, C. (2016). Psychosocial burden in medical students and specific prevention strategies. *Mental Health & Prevention*, *4*(1), 24–30. https://doi.org/10.1016/j.mhp.2015.12.003

Burns, R. (2016). Psychosocial well-being. *Encyclopedia of Geropsychology*, 1–8. https://doi.org/10.1007/978-981-287-080-3_251-1

Butler, J., & Kern, M. L. (2016). The PERMA-Profiler: A Brief multidimensional measure of flourishing. *International Journal of Wellbeing*, *6*(3), 1–48. https://doi.org/10.5502/ijw.v6i3.526

Bynum, W.E. (2015). Filling the feedback gap: the unrecognised roles of shame and guilt in the feedback cycle. *Medical Education, 49*. https://doi.org/10.1111/medu.12754

Caldwell, L. L. (2005). Leisure and health: Why is leisure therapeutic? *British Journal of Guidance & Counselling*, *33*(1), 7–26. https://doi.org/10.1080/03069880412331335939

Campbell, F., Blank, L., Cantrell, A., Baxter, S., Blackmore, C., Dixon, J., & Goyder, E. (2022). Factors that influence mental health of university and college students in the UK: A systematic review. *BMC Public Health*, *22*(1), 1–22. https://doi.org/10.1186/s12889-022-13943-x

Cantillon, P., & Sargeant, J. (2008). Giving feedback in clinical settings. *British Medical Journal*, *337*, Article a1961.https://doi.org/10.1136/bmj.a1961

Campion, J., & Nurse, J. (2007). A dynamic model for wellbeing. *Australasian Psychiatry, 15(*1_suppl), S24–S28. https://doi.org/10.1080/10398560701701106

Carreño-Flores, O. D., Jalixto-Erazo, H. M., De Los Santos, M. a. O., Mejia-Guerrero, H., Cantaro-Popayan, F. A., Quispe-Anccasi, F. K., & Rodriguez-Barboza, J. R. (2024). Emotional well-being and its impact on academic performance in university Students: A pathway to achieving the sustainable development goals. (SDGS). Pakistan Journal of Life and Social Sciences (PJLSS), *22*(2). https://doi.org/10.57239/pjlss-2024-22.2.00365

Carton, S. T., & Goodboy, A. K. (2015). College students' psychological well-being and interaction involvement in class. *Communication Research Reports*, *32*(2), 180–184. https://doi.org/10.1080/08824096.2015.1016145

Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. *Annual Review of Psychology*, *61*(1), 679–704. https://doi.org/10.1146/annurev.psych.093008.100352

Chakraborty, T., Saha, R., & Desai, M. (2018). Preparedness to change: The role of resilience as moderator on subjective vitality and environmental mastery. *Journal of Business Studies*, *10*(1), 67–77. https://journalofbusinessstudies.in/upload/2018/jbs-2018%20(X)-67-77.pdf

Chalmers, D. J., Manley, D. & Wasserman, R. (2005). *Metametaphysics: New essays on the foundations of ontology*. Oxford University Press.

Chan, S. F., Chau, A. W. L., & Chan, K. Y. K. (2012). Financial knowledge and aptitudes: impacts on college students' financial well-being. *College Student Journal*, *46*(1), 144–132.

Chao, R. C.-L. (2011). Managing stress and maintaining well-being: social support, problem-focused coping, and avoidant coping. *Journal of Counseling & Development*, *89*(3), 338–348. https://doi.org/10.1002/j.1556-6678.2011.tb00098.x

Chen, C. (2020). The positive turn of higher education. International *Journal of Economics, Business and Management Research*, *4*(11), 183–198.

Chong, A. K. W., Mohammed, A. H., Abdullah, M. N., & Rahman, M. S. A. (2019). Maintenance prioritization – a review on factors and methods. *Journal of Facilities Management*, *17*(1), 18–39. https://doi.org/10.1108/jfm-11-2017-0058

Chute, A., Vihos, J., Johnston, S., Buro, K., & Nirudika Velupillai. (2023). The effect of animal-assisted intervention on undergraduate students' perception of momentary stress. *Frontiers in Psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1253104

Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. *Proceedings of the National Academy of Sciences*, *113(*31), 8664–8668. https://doi.org/10.1073/pnas.1608207113

Coetzee, I. (2016). *Student support to enhance student living and learning at a South African University*. In Proceedings of the 2nd International Conference on Higher Education Advances (HEAd'16) (pp.211-218) Universitat Politècnica de València. https://doi.org/10.4995/head16.2016.2659

Coetzee, S., & Viviers, R. (2007). An overview of research on positive psychology in South Africa. *South African Journal of Psychology*, *37*(3), 470–490. https://doi.org/10.1177/008124630703700307

Cohen, L., Manion, L., & Morrison, K. R. B. (2011). *Research methods in education*. Routledge.

Coombs, H. (2022). *Case study research: single or multiple* [White paper]. Southern Utah University. https://doi.org/10.5281/zenodo.7604301

Corbin Dwyer, S., & Buckle, J. L. (2009). The space between: On being an insider-outsider in qualitative research. *International Journal of Qualitative Methods*, *8*(1), 54–63. https://doi.org/10.1177/160940690900800105

Costa, E. F. de O., Rocha, M. M. V., Santos, A. T. R. de A., Melo, E. V. de, Martins, L. A. N., & Andrade, T. M. (2014). Common mental disorders and associated factors among final-year healthcare students. *Revista Da Associação Médica Brasileira*, *60*(6), 525–530. https://doi.org/10.1590/1806-9282.60.06.009

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE Publications.

Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Thousand Oaks, CA: SAGE Publications.

Cross, R., Rebele, R., & Grant, A. (2016). Collaborative overload. *Harvard Business Review*. https://hbr.org/2016/01/collaborative-overload

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process.* SAGE Publications Limited.

Csíkszentmihályi, M. (2016). *Flow and the foundations of positive psychology: The collected works of Mihaly Csikszentmihalyi*. Springer.

Csíkszentmihályi, M. (1990). *Flow: The psychology of optimal experience*. Harper Perennial.

Cullen, S., & Oppenheimer, D. (2024). Choosing to learn: The importance of student autonomy in higher education. *Science Advances*, *10*(29). https://doi.org/10.1126/sciadv.ado6759

Dag-Um, I. J., Guiruela, I. J., Murillo, A., Tadlas, M., & Taja-On, E. (2024). Spousal commitments and student life: A study on married students in higher education. *Zenodo (CERN European Organization for Nuclear Research)*. https://doi.org/10.5281/zenodo.13256958

Darling-Hammond, L., Hyler, M., & Gardner, M. (2017). Effective teacher professional development. *Learning Policy Institute*. https://doi.org/10.54300/122.311

Davis, E., Tedesco, L., & Meier, S. (1989). Dental student stress, burnout, and memory. *Journal of Dental Education, 53*(3), 193–195. https://doi.org/10.1002/j.0022-0337.1989.53.3.tb02301.x

Davison, C., & Diez, E. (2023). *Anxiety, sleep & coping: A survey on college students*. Psychology Student Scholarship, *3*. https://scholarworks.seattleu.edu/psychology-stdt/3

Davoren, M. P., Fitzgerald, E., Shiely, F., & Perry, I. J. (2013). Positive mental health and well-being among a third level student population. *PLoS ONE*, *8*(8), e74921. https://doi.org/10.1371/journal.pone.0074921

De Clercq, M., Galand, B., & Frenay, M. (2017). Transition from high school to university: A person-centred approach to academic achievement. *European Journal of Psychology of Education*, *32*(1), 39–59. https://doi.org/10.1007/s10212-016-0298-5

De Jong-Gierveld, J. (1987). Developing and testing a model of loneliness. *Journal of Personality and Social Psychology*, *53*(1), 119–128. https://doi.org/10.1037//0022-3514.53.1.119

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour* (1st ed.). Springer US. https://doi.org/10.1007/978-1-4899-2271-7

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology*, *49*(3), 182–185. https://doi.org/10.1037/a0012801

Deeb, G. R., Braun, S., Carrico, C., Kinser, P., Laskin, D., & Golob Deeb, J. (2018). Burnout, depression and suicidal ideation in dental and dental hygiene students. *European Journal of Dental Education*, *22*(1), e70–e74. https://doi.org/10.1111/eje.12259

Dell, C. A., Chalmers, D., Gillett, J., Rohr, B., Nickel, C., Campbell, L., & Brydges, M. (2015). PAWSing student stress: A pilot evaluation study of the St. John Ambulance Therapy Dog Program on three university campuses in Canada. *Canadian Journal of Counselling and Psychotherapy*, *49*(4), 332–359. https://cjc-rcc.ucalgary.ca/article/view/6107

Denscombe, M. (2008). Communities of practice. *Journal of Mixed Methods Research*, *2*(3), 270–283. https://doi.org/10.1177/1558689808316807

Denscombe, M. (2010). *The good research guide: For small-scale social research projects* (4th ed.). Open University Press.

Denscombe, M. (2014). *The good research guide: For small-scale social research projects* (5th ed.). Open University Press.

Denscombe, M. (2017). *The good research guide: For small-scale social research projects* (6th ed.). Open University Press.

Dental Association of South Africa (1969). Minutes of the 34th AGM of DASA. *The Journal of the DASA, 24*(6), 223–224.

Denzin, N. K., & Lincoln, Y. S. (2000). *Handbook of qualitative research*. SAGE Publications.

Dewan, H., Loka, S. R., Mandal, N. B., Mogla, S., Lenin, K. R., Loganathan, J., & Mahajan, A. (2022). Prevalence of stress and coping disorders among dental students: An original research. *Journal of Pharmacy and BioAllied Sciences*, *14*(5), 277–277. https://doi.org/10.4103/jpbs.jpbs_730_21

Dhama, K., Gupta, R., Singla, A., Patthi, B., Ali, I., Niraj, L. K., Kumar, J. K., & Prasad, M. (2017). An insight into spiritual health and coping tactics among dental students: A gain or blight: A cross-sectional study. *Journal of Clinical and Diagnostic Research, 11(*8), ZC33–ZC38. https://doi.org/10.7860/JCDR/2017/25358.10371

Dhanabhakyam, M., & Sarath, M. (2023). Psychological wellbeing: A systematic literature review. *International Journal of Advanced Research in Science, Communication and Technology*, *3*(1), 603–607. https://doi.org/10.48175/ijarsct-8345

Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, *55*(1), 34–43. https://doi.org/10.1037/0003-066x.55.1.34

Diener, E., Lucas, R. E., & Oishi, S. (2005). Subjective well-being: The science of happiness and life satisfaction. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of Positive Psychology* (2nd ed., pp. 63-73). Oxford University Press.

Diener, E., & Seligman, M. E. P. (2002). Very happy people. *Psychological Science*, *13*(1), 81–84. https://doi.org/10.1111/1467-9280.00415

Divaris, K., Barlow, P. J., Chendea, S. A., Cheong, W. S., Dounis, A., Dragan, I. F., Hamlin, J., Hosseinzadeh, L., Kuin, D., Mitrirattanakul, S., Mo'nes, M., Molnar, N., Perryer, G., Pickup, J., Raval, N., Shanahan, D., Songpaisan, Y., Taneva, E.,

Yaghoub-Zadeh, S., & West, K. (2008). The academic environment: The students' perspective. *European Journal of Dental Education*, *12*(1), 120–130. https://doi.org/10.1111/j.1600-0579.2007.00494.x

Donovan, N. J., Wu, Q., Rentz, D. M., Sperling, R. A., Marshall, G. A., & Glymour, M. M. (2017). Loneliness, depression and cognitive function in older U.S. adults. *International Journal of Geriatric Psychiatry*, *32*(5), 564–573. https://doi.org/10.1002/gps.4495

Dooris, M., & Doherty, S. (2010). Healthy universities: Current activity and future directions - findings and reflections from a national-level qualitative research study. *Global Health Promotion*, *17*(3), 06–16. https://doi.org/10.1177/1757975910375165

Dost, G., & Mazzoli Smith, L. (2023). Understanding higher education students' sense of belonging: A qualitative meta-ethnographic analysis. *Journal of Further and Higher Education*, *47*(6), 1–28. https://doi.org/10.1080/0309877x.2023.2191176

Douwes, R., Metselaar, J., Pijnenborg, G. H. M., & Boonstra, N. (2023). Well-being of students in higher education: The importance of a student perspective. *Cogent Education*, *10*(1). https://doi.org/10.1080/2331186x.2023.2190697

Duckworth, A. L., Steen, T. A., & Seligman, M. E. P. (2005). Positive psychology in clinical practice. *Annual Review of Clinical Psychology*, *1*(1), 629–651. https://doi.org/10.1146/annurev.clinpsy.1.102803.144154

Durayappah, A. (2011). The 3P model: A general theory of subjective well-being. *Journal of Happiness Studies*, *12*(4), 681–716. https://doi.org/10.1007/s10902-010-9223-9

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, *82*(1), 405–432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Dyson, R., & Renk, K. (2006). Freshmen adaptation to university life: Depressive symptoms, stress, and coping. *Journal of Clinical Psychology*, *62*(10), 1231–1244. https://doi.org/10.1002/jclp.20295

Ebbeling, S., Adam, L., Meldrum, A., Rich, A., McLean, A., & Aitken, W. (2018). Oral health and dental students' perceptions of their clinical learning environment: A focus group study. *Journal of Dental Education*, *82*(10), 1036–1042. https://doi.org/10.21815/jde.018.102

EBSCO. (2024). Coping strategies. *Research Starters*. https://www.ebsco.com/research-starters/psychology/coping-strategies

Egan, L., Butcher, J., & Howard, P. (2008). *Hope as a basis for understanding the benefits and possibilities of community engagement* (IACE Background Paper No. 1). Australian Catholic University, Institute for Advancing Community Engagement. https://acuresearchbank.acu.edu.au/items/da5eb136-4a21-4227-8a9f-23c9cc1fd837

Ehsan, F., Imdad, S., Ahmed, M., & Khalid, M. (2024). An educational intervention to enhance self-care practices among 1st year dental students: A mixed-method study design. *BMC Medical Education, 24*(1), 1304. https://doi.org/10.1186/s12909-024-06198-

Eid, M., & Larsen, R. J. (2008). *The Science of Subjective Well-Being*. Guilford Press.

Eisenberg, D., Gollust, S. E., Golberstein, E., & Hefner, J. L. (2007). Prevalence and correlates of depression, anxiety, and suicidality among university students. *American Journal of Orthopsychiatry*, *77*(4), 534–542. https://doi.org/10.1037/0002-9432.77.4.534

Eisenberg, D., Hunt, J., & Speer, N. (2013). Mental health in American colleges and universities: Variation across student subgroups and across campuses. *The Journal of Nervous and Mental Disease*, *201*(1), 60–67. https://doi.org/10.1097/nmd.0b013e31827ab077

Elani, H. W., Allison, P. J., Kumar, R. A., Mancini, L., Lambrou, A., & Bedos, C. (2014). A systematic review of stress in dental students. *Journal of Dental Education*, *78*(2), 226–242. https://doi.org/10.1002/j.0022-0337.2014.78.2.tb05673.x

Ellard, O. B., Dennison, C., & Tuomainen, H. (2023). Review: Interventions addressing loneliness amongst university students: a systematic review. *Child and Adolescent Mental Health*, *28*(4), 512–523. https://doi.org/10.1111/camh.12614

Eloff, I. (2021). College students' well-being during the COVID-19 pandemic: An exploratory study. *Journal of Psychology in Africa*, *31*(3), 254–260. https://doi.org/10.1080/14330237.2021.1939055

Eloff, I., O'Neil, S., & Kanengoni, H. (2021). Students' well-being in tertiary environments: Insights into the (unrecognised) role of lecturers. *Teaching in Higher Education*, *28*(7), 1–21. https://doi.org/10.1080/13562517.2021.1931836

Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology*, *84*(2), 377–389. https://doi.org/10.1037/0022-3514.84.2.377

Endries, A. (2024). Examining the effects of emotional support and therapy animals on anxiety and depression in university students: A literature review (Paper 1467). [Honors thesis, Portland State University]. PDXScholar. https://doi.org/10.15760/honors.1499

Engerer, C., Berberat, P. O., Dinkel, A., Rudolph, B., Sattel, H., & Wuensch, A. (2019). Specific feedback makes medical students better communicators. *BioMed Central Medical Education, 19*(1). https://doi.org/10.1186/s12909-019-1470-9

Estrada, M., Monferrer, D., Rodríguez, A., & Moliner, M. Á. (2021). Does emotional intelligence influence academic performance? The role of compassion and engagement in education for sustainable development. *Sustainability*, *13*(4), 1721. https://doi.org/10.3390/su13041721

Farran, C.J., Herth, K.A. & Popovich, J.M. (1995). *Hope and hopelessness: Critical clinical constructs*. SAGE Publications.

Felce, D., & Perry, J. (1995). Quality of life: Its definition and measurement. *Research in Developmental Disabilities*, *16*(1), 51–74. https://doi.org/10.1016/0891-4222(94)00028-8

Florence, G. E., Derman, W. E., Popperwell, J. M., Kunorozva, L., & Gomez-Ezeiza, J. (2023). Prevalence of health risk behaviours related to non-communicable diseases amongst South African university students: a systematic review. *Journal of Public Health, 45*(4), 1042–1055. https://doi.org/10.1093/pubmed/fdad106

Ford, K. (2021). *Stress and anxiety experience of dental hygiene students.* [Masters thesis, East Tennessee State University]. Digital Commons @ East Tennessee State University. https://dc.etsu.edu/etd/3987

Fredrickson, B. L. (2004). The Broaden-and-Build Theory of positive emotions. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, *359*(1449), 1367–1377. https://doi.org/10.1098/rstb.2004.1512

Freedman, M. B. (2019). The passage through college. In S. Alpern, J. Antler, E. I. Perry, & I. W. Scobie (Eds.), *Redefining the new woman, 1920-1963* (pp. 259–274). Routledge. https://doi.org/10.4324/9781315051994

Freeman, Z., Cairns, A., Binnie, V., McAndrew, R., & Ellis, J. (2020). Understanding dental students' use of feedback. *European Journal of Dental Education*, *24*(3), 465–475. https://doi.org/10.1111/eje.12524

Frymier, A. B. (2005). Students' classroom communication effectiveness. *Communication Quarterly*, *53*(2), 197–212. https://doi.org/10.1080/01463370500089896

Fugill, M. (2005). Teaching and learning in dental student clinical practice. *European Journal of Dental Education*, *9*(3), 131–136. https://doi.org/10.1111/j.1600-0579.2005.00378.x

Gable, S., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, *9*(2), 103–110. https://doi.org/10.1037/1089-2680.9.2.103

Gambetta-Tessini, K., Mariño, R., Morgan, M., Evans, W., & Anderson, V. (2013). Stress and health-promoting attributes in Australian, New Zealand, and Chilean dental students. *Journal of Dental Education*, *77*(6), 801–809. https://doi.org/10.1002/j.0022-0337.2013.77.6.tb05532.x

García, D., Akinkugbe, A., Mosavel, M., Smith, C., & Brickhouse, T. (2021). COVID-19 and dental and dental hygiene students' career plans. *Journal of Dental Research Clinical & Translational Research, 6*(2),153–160. https://doi.org/10.1177/2380084420984772

Gbadegesin, J., Marais, L., Von Maltitz, M., Cloete, J., Lenka, M., Rani, K., Campbell, M., Denoon-Stevens, S., Venter, A., Koetaan, Q., & Pretorius, W. (2022). Student housing satisfaction at a South African university. *Journal of Student Affairs Research and Practice*, *59*(5), 1–21. https://doi.org/10.1080/19496591.2022.2032111

Gopalan, M., Linden-Carmichael, A., & Lanza, S. (2021). College students' sense of belonging and mental health amidst the COVID-19 pandemic. *Journal of Adolescent Health*, *70*(2). https://doi.org/10.1016/j.jadohealth.2021.10.010

Gordon, N. A., Rayner, C. A., Wilson, V. J., Crombie, K., Shaikh, A. B., & Yasin-Harnekar, S. (2016). Perceived stressors of oral hygiene students in the dental environment. *African Journal of Health Professions Education*, *8*(1), 20. https://doi.org/10.7196/AJHPE.2016.V8I1.422

Gorter, R. (2005). Work stress and burnout among dental hygienists. *International Journal of Dental Hygiene*, *3*(2), 88–92. https://doi.org/10.1111/j.1601-5037.2005.00130.x

Gorter, R., Freeman, R., Hammen, S., Murtomaa, H., Blinkhorn, A., & Humphris, G. (2008). Psychological stress and health in undergraduate dental students: Fifth year outcomes compared with first year baseline results from five European dental schools. *European Journal of Dental Education*, *12*(2), 61–68. https://doi.org/10.1111/j.1600-0579.2008.00468.x

Govindji, R., & Linley, P. A. (2007). Strengths use, self-concordance and well-being: Implications for strengths coaching and coaching psychologists. *International Coaching Psychology Review*, *2*(2), 143–153. https://doi.org/10.53841/bpsicpr.2007.2.2.143

Govorova, E., Benítez, I., & Muñiz, J. (2020). How Schools Affect Student Well-Being: A Cross-Cultural Approach in 35 OECD Countries. *Frontiers in psychology*,*11*, 431. https://doi.org/10.3389/fpsyg.2020.00431

Grandy, T., Westerman, G., Mitchell, R., & Lupo, J. (1984). Stress among first-year dental students. *Journal of Dental Education, 48*(10), 560–562. https://doi.org/10.1002/j.0022-0337.1984.48.10.tb01829.x

Greenberg, J. (2011). Organizational justice: The dynamics of fairness in the workplace. In S. Zedeck (Ed.), *APA Handbook of Industrial and Organizational Psychology, Vol 3: Maintaining, Expanding, and Contracting the Organization*, (pp. 271–327). https://doi.org/10.1037/12171-008

Gregersen, A. F. M., & Nielsen, K. B. (2022). Not quite the ideal student: Mature students' experiences of higher education. *International Studies in Sociology of Education*, *32*(1), 1–20. https://doi.org/10.1080/09620214.2022.2120525

Guliver, E., & Byrom, N. C. (2014). *Peer support for student mental health: A review of the use of peer support in higher education*. Student Minds. https://kclpure.kcl.ac.uk/portal/en/publications/peer-support-for-student-mental-health-a-review-of-the-use-of-pee

Haden, N. K., Andrieu, S. C., Chadwick, D. G., Chmar, J. E., Cole, J. R., George, M. C., Glickman, G. N., Glover, J. F., Goldberg, J. S., Hendricson, W. D., Meyerowitz, C., Neumann, L., Pyle, M., Tedesco, L. A., Valachovic, R. W., Weaver, R. G., Winder, R. L., Young, S. K., & Kalkwarf, K. L. (2006). The dental education environment. *Journal of Dental Education*, *70*(12), 1265–1270. https://doi.org/10.1002/j.0022-0337.2006.70.12.tb04228.x

Harikiran, A., Srinagesh, J., Nagesh, K., & Sajudeen, N. (2012). Perceived sources of stress amongst final year dental undergraduate students in a dental teaching institution at Bangalore, India: A cross-sectional study. *Indian Journal of Dental Research*, *23*(3), 331–336. https://doi.org/10.4103/0970-9290.102218

Harris, M., Wilson, J. C., Holmes, S., & Radford, D. R. (2017a). Perceived stress and well-being among dental hygiene and dental therapy students. *British Dental Journal*, *222*(2), 101–106. https://doi.org/10.1038/sj.bdj.2017.76

Harris, M., Wilson, J. C., Hughes, S., & Radford, D. R. (2017b). Stress and well-being in dental hygiene and dental therapy students. *British Dental Journal, Team*, *4, 17136.* https://doi.org/10.1038/bdjteam.2017.136

Harris, M., Wilson, J. C., Hughes, S., Knevel, R. J. M., & Radford, D. R. (2018). Perceived stress and well-being in UK and Australian dental hygiene and dental therapy students. *European Journal of Dental Education*, *22*(3), e602–e611. https://doi.org/10.1111/eje.12360

Harrison, P. L., Shaddox, L. M., Garvan, C. W., & Behar-Horenstein, L. S. (2016). Wellness among dental students: An institutional study. *Journal of Dental Education*, *80*(9), 1119–1125. https://doi.org/10.1002/j.0022-0337.2016.80.9.tb06194.x

Hatunoglu, B. Y. (2020). Stress Coping mechanisms of university students. *Cypriot Journal of Educational Sciences*, *15*(5), 1320–1336. https://doi.org/10.18844/cjes.v15i5.5171

Hayes, A., Hoover, J. N., Karunanayake, C. P., & Uswak, G. S. (2017). Perceived causes of stress among a group of Western Canadian dental students. *BMC Research Notes*, *10*(1), 714. https://doi.org/10.1186/s13104-017-2979-9

Hayman, R., Wharton, K., Bell, L., & Bird, L. (2024). Navigating the first year at an English university: exploring the experiences of mature students through the lens of transition theory. *International Journal of Lifelong Education*, *43*(1), 1–13. https://doi.org/10.1080/02601370.2023.2297671

Health Development Agency. (2004). *Drug use prevention among young people: A review of reviews* (Evidence Briefing). Health Development Agency. https://www.drugsandalcohol.ie/14032/1/Canning_Health_Development_Agency_Review_of_Reviews_2004.pdf

Healthy Minds Network. (2015). The Healthy Minds Study: 2014-2015 Data Report. University of Michigan, University of California, Los Angeles, Boston University, and Wayne State University. https://healthymindsnetwork.org/wp-content/uploads/2019/04/HMS_national_DataReport_14-15.pdf

Hellawell, D. (2006). Inside-out: Analysis of the insider-outsider concept as a heuristic device to develop reflexivity in students doing qualitative research. *Teaching in Higher Education*, *11*(4), 483–494. https://doi.org/10.1080/13562510600874292

Henesy, M. A., Henderson, R. P., Gross, E. L., Shah, A., & Kearney, R. C. (2024). Dental and dental hygiene students' perceptions on intraprofessional education. *Journal of Dental Education*, *89*(3), 355-362. https://doi.org/10.1002/jdd.13741

Henning, M. A., Krägeloh, C. U., Dryer, R., Moir, F., Billington, R., & Hill, A. G. (2018). *Wellbeing in Higher Education*. Routledge.

Henning, M. A., Krägeloh, C. U., Hawken, S. J., Zhao, Y., & Doherty, I. (2012). The quality of life of medical students studying in New Zealand: A comparison with nonmedical students and a general population reference group. *Teaching and Learning in Medicine*, *24*(4), 334–340. https://doi.org/10.1080/10401334.2012.715261

Hersi, L., Tesfay, K., Gesesew, H., Krahl, W., Ereg, D., & Tesfaye, M. (2017). Mental distress and associated factors among undergraduate students at the University of Hargeisa, Somaliland: A cross-sectional study. *International Journal of Mental Health Systems*, *11*(1). https://doi.org/10.1186/s13033-017-0146-2

Hijrianti, U. R., & Taqiyah, I. (2024). A self-acceptance and body image on student self-confidence. *KnE Social Sciences, 9*(5), 110–123. https://doi.org/10.18502/kss.v9i5.15169

Hill, P. L., Edmonds, G. W., Peterson, M., Luyckx, K., & Andrews, J. A. (2016). Purpose in life in emerging adulthood: Development and validation of a new brief measure. *The Journal of Positive Psychology*, *11*(3), 237–245. https://doi.org/10.1080/17439760.2015.1048817

Hodge, B. J., Anthony, W. P., & Gales, L. M. (2003). *Organizational theory: A strategic approach* (6th ed.). Prentice Hall.

Holzer, D. W., Counts, C. J., Ashmore, E. P., Hammock, C., & John-Henderson, N. (2023). Childhood environments and their relationship with sleep and ambulatory blood pressure in college students. *Journal of American College Health*, 71(1), 190–199. https://doi.org/10.1080/07448481.2021.1885414

Hopcraft, M., McNally, C., Ng, C., Pek, L., Pham, T., Phoon, W., Poursoltan, P., & Yu, W. (2008). Attitudes of the Victorian oral health workforce to the employment and scope of practice of dental hygienists. *Australian Dental Journal*, *53*(1), 67–73. https://doi.org/10.1111/j.1834-7819.2007.00012.x

Houghton, A., & Anderson, J. (2017). *Embedding mental wellbeing in the curriculum: maximising success in higher education*. https://www.advance-he.ac.uk/knowledge-hub/embedding-mental-wellbeing-curriculum-maximising-success-higher-education

Howell, T. J., Nieforth, L., Thomas-Pino, C., Samet, L., Agbonika, S., Cuevas-Pavincich, F., Fry, N. E., Hill, K., Jegatheesan, B., Kakinuma, M., MacNamara, M., Mattila-Rautiainen, S., Perry, A., Tardif-Williams, C. Y., Walsh, E. A., Winkle, M., Yamamoto, M., Yerbury, R., Rawat, V., & Alm, K. (2022). Defining terms used for animals working in support roles for people with support needs. *Animals*, *12*(15), 1975. https://doi.org/10.3390/ani12151975

Humphris, G., Blinkhorn, A., Freeman, R., Gorter, R., Hoad-Reddick, G., Murtomaa, H., O'Sullivan, R., & Splieth, C. (2002). Psychological stress in undergraduate dental students: baseline results from seven European dental schools. *European Journal of Dental Education*, *6*(1), 22–29. https://doi.org/10.1034/j.1600-0579.2002.060105.x

Holloway, I. (1997). *Basic Concepts for Qualitative Research*. Wiley-Blackwell.

Hung, M., Licari, F. W., Hon, E. S., Lauren, E., Su, S., Birmingham, W. C., Wadsworth, L. L., Lassetter, J. H., Graff, T. C., Harman, W., Carroll, W. B., & Lipsky, M. S. (2020). In an era of uncertainty: Impact of COVID-19 on dental education. *Journal of Dental Education*, *85*(2), 148–156. https://doi.org/10.1002/jdd.12404

Huppert, F. A. (2009). Psychological well-being: evidence regarding its causes and consequences. *Applied Psychology: Health and Well-Being*, *1*(2), 137–164. https://doi.org/10.1111/j.1758-0854.2009.01008.x

Huppert, F. A., & So, T. T. C. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research*, *110*(3), 837–861. https://doi.org/10.1007/s11205-011-9966-7

Hurtado, S., Han, J. C., Sáenz, V. B., Espinosa, L. L., Cabrera, N. L., & Cerna, O. S. (2007). Predicting transition and adjustment to college: Biomedical and behavioral science aspirants' and minority students' first year of college. *Research in Higher Education*, *48*(7), 841–887. https://doi.org/10.1007/s11162-007-9051-x

Huta, V., & Waterman, A. S. (2014). Eudaimonia and its distinction from hedonia: Developing a classification and terminology for understanding conceptual and operational definitions. Journal of Happiness Studies, 15(6), 1425–1456. https://doi.org/10.1007/s10902-013-9485-0

Huta, V. (2015). The complementary roles of eudaimonia and hedonia and how they can be pursued in practice. In S. Joseph (Ed.), *Positive psychology in practice: Promoting human flourishing in work, health, education, and everyday life* (2nd ed., pp. 159–182). John Wiley & Sons. https://doi.org/10.1002/9781118996874.ch10

Huta, V. (2016). Eudaimonic and Hedonic orientations: Theoretical considerations and research findings. *Handbook of Eudaimonic Well-Being*, 215–231. https://doi.org/10.1007/978-3-319-42445-3_15

Ibnian, D., Barba, A., Mojtahedi, S., Friesen, D., Udochukwu Oyoyo, & Kwon, S. R. (2025). Assessment of stress levels and Coping mechanisms among students at a dental school in Southern California. *Journal of the California Dental Association*, *53*(1). https://doi.org/10.1080/19424396.2025.2539525

International Conference on Health Promoting Universities & Colleges. (2015). *Okanagan Charter: An international charter for health promoting universities and colleges*. University of British Columbia. https://doi.org/10.14288/1.0132754

Iosif, L., Ţâncu, A. M. C., Didilescu, A. C., Imre, M., Gălbinașu, B. M., & Ilinca, R. (2021). Self-perceived impact of COVID-19 pandemic by dental students in Bucharest. *International Journal of Environmental Research and Public Health*, *18*(10), 5249. https://doi.org/10.3390/ijerph18105249

Irving, L. M., Snyder, C. R., & Crowson, Jr., J. J. (1998). Hope and coping with cancer by college women. *Journal of Personality*, *66*(2), 195–214. https://doi.org/10.1111/1467-6494.00009

Isen, A. M. (2001). An influence of positive affect on decision making in complex situations: Theoretical issues with practical implications. *Journal of Consumer Psychology*, *11*(2), 75–85. https://doi.org/10.1207/s15327663jcp1102_01

Jarden, A., & Roache, A. (2023). What is wellbeing? *International Journal of Environmental Research and Public Health*, *20*(6), 5006. https://doi.org/10.3390/ijerph20065006

Jenkins, S., Johnson, I., & Ginley, J. (2019). Work, stress and play: Students' perceptions of factors impacting on their studies and well-being. *European Journal of Dental Education*, *23*(3), 349–354. https://doi.org/10.1111/eje.12436

Jowkar, Z., Masoumi, M., & Mahmoodian, H. (2020). Psychological stress and stressors among clinical dental students at Shiraz School of Dentistry, Iran. *Advances in Medical Education and Practice*, *11*, 113–120. https://doi.org/10.2147/amep.s236758

Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being: The foundations of hedonic psychology*. Russell Sage Foundation.

Kamdar, R. (2018). Stress in Dentistry: Review article. Acta Scientific Dental Sciences, *2*(12), 79–82. https://actascientific.com/ASDS/pdf/ASDS-02-0382.pdf.

Kaminer, D., & Shabalala, N. (2019). Developing a student mental health policy for a South African university: Consultation, contestation and compromise. *South African Journal of Higher Education*, *33*(5), 196–212. https://doi.org/10.20853/33-5-3597

Kamioka, H., Okada, S., Tsutani, K., Park, H., Okuizumi, H., Handa, S., Oshio, T., Park, S.-J., Kitayuguchi, J., Abe, T., Honda, T., & Mutoh, Y. (2014). Effectiveness of animal-assisted therapy: A systematic review of randomized controlled trials. *Complementary Therapies in Medicine*, *22*(2), 371–390. https://doi.org/10.1016/j.ctim.2013.12.016

Kaunaite, V., & Harris, M. (2025). Beyond bouncing back: Exploring undergraduate dental professional students' perceptions of resilience. *International Journal of Dental Hygiene*. https://doi.org/10.1111/idh.12873

Kersbergen, M. J., Creugers, N. H. J., Hollaar, V. R. Y., & Laurant, M. G. H. (2019). Perceptions of interprofessional collaboration in education of dentists and dental hygienists and the impact on dental practice in the Netherlands: A qualitative study. *European Journal of Dental Education*, *24*(1), 145–153. https://doi.org/10.1111/eje.12478

Keyes, C. L. M. (1998). Social well-being. *Social Psychology Quarterly*, *61*(2), 121–140. https://doi.org/10.2307/2787065

Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, *43*(2), 207–222. https://doi.org/10.2307/3090197

Keyes, C. L. M., & Haidt, J. (Eds.). (2003). Flourishing: Positive psychology and the life well-lived. *American Psychological Association*. https://doi.org/10.1037/10594-000

Keyes, C. L. M. (2010). The next steps in the promotion and the protection of positive mental health. *Canadian Journal of Nursing Research, 42*(3), 17–28. https://pubmed.ncbi.nlm.nih.gov/21086774

Khatri, P., Duggal, H. K., Lim, W. M., Thomas, A., & Shiva, A. (2024). Student well-being in higher education: Scale development and validation with implications for management education. *The International Journal of Management Education*, *22*(1), 100933. https://doi.org/10.1016/j.ijme.2024.100933.

Kiefer, S. M., & Pennington, S. (2017). Associations of teacher autonomy support and structure with young adolescents' motivation, engagement, belonging, and achievement. *Middle Grades Research Journal, 11*(1), 29–46. https://eric.ed.gov/?id=EJ1146219

Kim, J., & Ra, Y. (2020). The role of public service motivation in employee performance: Evidence from South Korea. *International Journal of Public Sector Management*, *33*(6/7), 819–836.

Kim, J. H., Keck, P., Miller, D., & Gonzalez, R. (2012). Introduction to positive psychology: Overview and controversies. *Journal of Asia Pacific Counseling*, *2*(1), 45–60. https://doi.org/10.18401/2012.2.1.3

Kim, J.H., & McKenzie, L. A. (2014). The impacts of physical exercise on stress coping and well-being in university students in the context of leisure. *Health*, *6*(19), 2570–2580. https://doi.org/10.4236/health.2014.619296

Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, *6*(5), 26–41. https://doi.org/10.5430/ijhe.v6n5p26

Knifsend, C. A., Green, L. A., & Clifford, K. L. (2020). Extracurricular participation, collective self-esteem, and academic outcomes among college students. *Psi Chi Journal of Psychological Research*, *25*(4), 318–326. https://doi.org/10.24839/2325-7342.jn25.4.318

Knipe, D., Maughan, C., Gilbert, J., Dymock, D., Moran, P., & Gunnell, D. (2018). Mental health in medical, dentistry and veterinary students: cross-sectional online survey. *BJPsych Open*, *4*(6), 441–446. https://doi.org/10.1192/bjo.2018.61

Kobue, T., Oke, A., & Aigbavboa, C. (2017). Understanding the determinants of students' choice of occupancy for creative construction. *Procedia Engineering*, *196*, 423–428. https://doi.org/10.1016/j.proeng.2017.07.219

Koenig, H. G. (2010). Spirituality and mental health. International Journal of Applied Psychoanalytic Studies, *7*(2). https://doi.org/10.1002/aps.239

Komarraju, M., Musulkin, S., & Bhattacharya, G. (2010). Role of student–faculty interactions in developing college students' academic self-concept, motivation, and achievement. *Journal of College Student Development*, *51*(3), 332–342. https://doi.org/10.1353/csd.0.0137

Koole, S., Vandeweghe, S., Mattheos, N., & De Bruyn, H. (2014). Implant dentistry education in Europe: 5 years after the Association for Dental Education in Europe consensus report. *European Journal of Dental Education*, *18*, 43–51. https://doi.org/10.1111/eje.12084

Kovich, M. K., Simpson, V. L., Foli, K. J., Hass, Z., & Phillips, R. G. (2023). Application of the PERMA model of well-being in undergraduate students. *International Journal of Community Well-Being*, *6*(1), 1–20. https://doi.org/10.1007/s42413-022-00184-4

Kowalczuk, K., Krajewska-Kułak, E., & Sobolewski, M. (2021). Relationships between sleep problems and stress coping mechanisms adopted by nurses including socio-occupational factors. *Frontiers in Psychiatry*, *12*. https://doi.org/10.3389/fpsyt.2021.660776

Krägeloh, C. U., Chai, P. P. M., Shepherd, D., & Billington, R. (2010). How religious coping is used relative to other coping mechanisms depends on the individual's level of religiosity and spirituality. *Journal of Religion and Health, 51*(4), 1137–1151. https://doi.org/10.1007/s10943-010-9416-x

Kujan, O., Hasan, R. A., Nasog, M., Badawi, T., Hanouneh, S., & Nassani, M. (2015). Assessing learning barriers among dental and nursing undergraduates: A qualitative study, students' perspectives. *Oral Health and Dental Management*, *14*, 265-271.

Kumar, C. (2020). Psychosocial well-being of individuals. In W. Leal Filho, A. M. Azul, L. Brandli, P. G. Özuyar, & T. Wall (Eds.), *Quality education* (Encyclopedia of the UN Sustainable Development Goals). Springer. https://doi.org/10.1007/978-3-319-95870-5_45

Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. SAGE Publications.

Lambert, L., Passmore, H.-A., & Holder, M. D. (2015). Foundational frameworks of positive psychology: Mapping well-being orientations. *Canadian Psychology/Psychologie Canadienne*, *56*(3), 311–321. https://doi.org/10.1037/cap0000033

LaNasa, S. M., Olson, E., & Alleman, N. (2007). The impact of on-campus student growth on first-year student engagement and success. *Research in Higher Education*, *48*(8), 941–966. https://doi.org/10.1007/s11162-007-9056-5

Landow, M. V. (2006). *Stress and mental health of college students*. Nova Science Publishers.

Langeland, E. (2014). Emotional well-being. In A. C. Michalos (Ed.), *Encyclopedia of quality of life and well-being research* (pp. 1874–1876). Springer. https://doi.org/10.1007/978-94-007-0753-5_859

Larcombe, W., Finch, S., Sore, R., Murray, C. M., Kentish, S., Mulder, R. A., Lee-Stecum, P., Baik, C., Tokatlidis, O., & Williams, D. A. (2016). Prevalence and socio-demographic correlates of psychological distress among students at an Australian university. *Studies in Higher Education, 41*(6), 1074–1091. https://doi.org/10.1080/03075079.2014.966072

Larson, J. S. (1996). The World Health Organization's definition of health: Social versus spiritual health. *Social Indicators Research*, *38*(2), 181–192. https://doi.org/10.1007/BF00300458

Lee, J., Jeong, H. J., & Kim, S. (2021). Stress, anxiety, and depression among undergraduate students during the COVID-19 pandemic and their use of mental health services. *Innovative Higher Education*, *46*(5), 519–538. https://doi.org/10.1007/s10755-021-09552-y

Leedy, P. D., & Ormrod, J. E. (2015). *Practical research: Planning and design* (11th ed., pp. 329–346). Pearson Education Limited.

Legault, L. (2017). Self-Determination Theory. *Encyclopedia of Personality and Individual Differences*, *1*(1), 1–9. https://doi.org/10.1007/978-3-319-28099-8_1162-1

Leite, T. C., Wankiiri-Hale, C. R., Shah, N. H., Vasquez, C. S., Pavlowski, E. M., Koury, S. E., Kim, J., Ceravolo, K. M., Weinberg, S. M., & Horvath, Z. (2025). Change is never easy: Exploring the transition from undergraduate to dental student in a U.S.-based program. *PLoS ONE*, *20*(4), e0321494–e0321494. https://doi.org/10.1371/journal.pone.0321494

Lemyre, L., & Tessier, R. (2003). Measuring psychological stress: Concept, model, and measurement instrument in primary care research. *Canadian Family Physician*,*49*(9), 1159–1168. www.ncbi.nlm.nih.gov

Le Roux Institute of Law. (2024, February 27). *The role of government gazettes in South Africa*. https://gawieleroux.co.za/blog/role-government-gazettes-south-africa

Levinson, B. M. (1962). The dog as a “co-therapist.” *Mental Hygiene, 46*, 59–65.

Li, L., Gow, A. D. I., & Zhou, J. (2020). The role of positive emotions in education: A neuroscience perspective. *Mind, Brain, and Education*, *14*(3), 220–234. https://doi.org/10.1111/mbe.12244

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.

Linley, P. A., Joseph, S., Harrington, S., & Wood, A. M. (2006). Positive psychology: Past, present, and (possible) future. *The Journal of Positive Psychology*, *1*(1), 3–16. https://doi.org/10.1080/17439760500372796

Lloyd, C., & Musser, L. A. (1989). Psychiatric symptoms in dental students. *The Journal of Nervous and Mental Disease, 177*(2), 61–69. https://doi.org/10.1097/00005053-198902000-00001

Ludban, M., & Gitimu, P. (2015). Psychological well-being of college students. *Undergraduate Research Journal for the Human Sciences*, *14*. https://publications.kon.org/urc/v14/ludban.html

Lugassy, D., Ben-Izhack, G., Zissu, S., Shitrit Lahav, R., Rosner, O., Elzami, R., Shely, A., & Naishlos, S. (2025). Anxiety, stress, and depression levels among dental students: gender, age, and stage of dental education related. *Psychology, Health & Medicine*, *30*(7), 1394–1408. https://doi.org/10.1080/13548506.2025.2476085

Lyubomirsky, S., Dickerhoof, R., Boehm, J. K., & Sheldon, K. M. (2011). Becoming happier takes both a will and a proper way: An experimental longitudinal intervention to boost well-being. *Emotion*, *11*(2), 391–402. https://doi.org/10.1037/a0022575

Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research, 16*(2), 193–205. http://www.iier.org.au/iier16/mackenzie.html

Madiba, T. K., Mostert, V., & Sykes, L. M. (2022). Self-reported substance use in dental and oral hygiene students at a university in South Africa. *South African Dental Journal*, *77*(9), 535–539. https://doi.org/10.17159/2519-0105/2022/v77no9a2

Mallman, M., & Lee, H. (2017). Isolated learners: Young mature-age students, university culture, and desire for academic sociality. *International Journal of Lifelong Education*, *36*(5), 512–525. https://doi.org/10.1080/02601370.2017.1302012

Mary, A. V., Kesavan, R., Ranjani, D., Aprose, N. A. N., Boopathy, S., & Lakshme, K. (2023). Assessment of stress among dental students: A descriptive cross-sectional

study. *International Journal of Applied Dental Sciences*, *9*(4), 272–276. https://doi.org/10.22271/oral.2023.v9.i4e.1879

Maslach, C., Jackson, S.E. & Leiter, M.P. (1996). *Maslach Burnout Inventory* (3rd edition). Consulting Psychologists Press.

Maslow, A., & Lewis, K. J. (1987). *Maslow's hierarchy of needs*. Salenger Incorporated, 14(17), 987–990.

Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review*, *50*(4), 370–396. https://doi.org/10.1037/h0054346

Mayer, J.D. & Salovey, P. (1997). *What is emotional intelligence? Emotional development and emotional intelligence: Implications for educators*. Basic Books.

McIntyre, J. C., Worsley, J., Corcoran, R., Harrison Woods, P., & Bentall, R. P. (2018). Academic and non-academic predictors of student psychological distress: The role of social identity and loneliness. *Journal of Mental Health*, *27*(3), 230–239. https://doi.org/10.1080/09638237.2018.1437608

McMillan, J. H. & Schumacher, S. (2006). *Research in education: Evidence-based inquiry* (6th ed.). Pearson Education.

McMillan, J. H., & Schumacher, S. (2013). *Research in education: Evidence-based inquiry* (7th ed.). Pearson Education.

Merriam, S. B. (1998). *Qualitative research and case study applications in education.* (2nd ed.). Jossey-Bass Publishers.

Merriam-Webster. (2025). *Well-being*. In *Merriam-Webster.com dictionary*. https://www.merriam-webster.com/dictionary/well-being

Michaelson, J., Mahony, S., & Schifferes, J. (2012). *Measuring wellbeing: A guide for practitioners*. New Economics Foundation.

Mikolajczak, M., Avalosse, H., Vancorenland, S., Verniest, R., Callens, M., van Broeck, N., Fantini-Hauwel, C., & Mierop, A. (2015). A nationally representative study of emotional competence and health. *Emotion*, *15*(5), 653–667. https://doi.org/10.1037/emo0000034

Miles, M. B., Huberman, A. M., & Saldana, J. (2018). *Qualitative data analysis*. SAGE Publications.

Mills, D. A., Hammer, C. L., & Murad, A. (2017). Power of peers: Students' perceptions of pairing in clinical dental education. *Journal of Dental Education, 81*(1), 36–43. https://doi.org/10.1002/j.0022-0337.2017.81.1.tb06245.x

Mofokeng, J. T., Simelane, N. N., & Mofokeng, L. (2023). *Student safety and security for sustainable and inclusive residences: A cross-sectional study.* Proceedings of the 17th International Conference on Sustainable Development. Autonomous University, Barcelona, Spain. https://oidaijsd.com/wp-content/uploads/2023/12/16-04-1-02-SPA-23.pdf

Molina-García, J., Castillo, I., & Queralt, A. (2011). Leisure-time physical activity and psychological well-being in university students. *Psychological Reports*, *109*(2), 453–460. https://doi.org/10.2466/06.10.13.pr0.109.5.453-460

Moodley, R., Singh, S., & Moodley, I. (2022). Undergraduate dental students' perspectives on teaching and learning during the COVID-19 pandemic: Results from an online survey conducted at a South African university using a mixed-methods approach. *African Journal of Health Professions Education*, *14*(1), 26–33. https://doi.org/10.7196/ajhpe.2022.v14i1.1482

Moore, D. M. (1962). The dental student: Attitudes associated with the dental school. *Journal of the American College of Dentists*, *29*(2), 140–164.

Morales-Rodríguez, F. M., Espigares-López, I., Brown, T., & Pérez-Mármol, J. M. (2020). The relationship between psychological well-being and psychosocial factors in university students. *International Journal of Environmental Research and Public Health*, *17*(13), 4778. https://doi.org/10.3390/ijerph17134778

Morule, M., Bhayat, A., & Krüger, C. (2023). Learning experiences of undergraduate first-year dental and oral hygiene students at a South African dental university. *South African Dental Journal*, *78*(5), 233–238. https://doi.org/10.17159/sadj.v78i05.16878

Muirhead, V., & Locker, D. (2008). Canadian dental students' perceptions of stress and social support. *European Journal of Dental Education*, *12*(3), 144–148. https://doi.org/10.1111/j.1600-0579.2008.00512.x

Myers, J. E., & Sweeney, T. J. (2008). Wellness counseling: The evidence base for practice. *Journal of Counseling & Development*, *86*(4), 482–493.

Narragatti, S., Vadiraja, H. S., & Anburani, S. (2023). The role of yoga in enhancing student well-being and academic performance: a comprehensive review. *Journal of Emerging Technologies and Innovative Research*, *10*(10), 738–748. https://www.jetir.org/papers/JETIR2310180.pdf

Negovan, V. (2010). Dimensions of students' psychosocial well-being and their measurement: Validation of a students' psychosocial well-being inventory. *Europe's Journal of Psychology*, *6*(2), 85–104. https://doi.org/10.5964/ejop.v6i2.186

Nepps, P., Stewart, C. N., & Bruckno, S. R. (2014). Animal-assisted activity: effects of a complementary intervention program on psychological and physiological variables. *Journal of Evidence-Based Complementary & Alternative Medicine*, *19*(3), 211–215. https://doi.org/10.1177/2156587214533570

Nerali, J., Chakravarthy Pishipati, V., Telang, L., & Telang, A. (2021). Dental students' perception towards feedback during clinical training. *Archives of Medicine and Health Sciences*, *9*(1), 62–67. https://doi.org/10.4103/amhs.amhs_212_20

NHS Health Development Agency (2004). *Promoting emotional health and well-being through the National Healthy School Standard (NHSS).* Department of Education and Skills and the Department of Health. http://www.hda-online.org.uk/Documents/promoting_health_wellbeing.pdf

Nijhawan, L. P., Udupa, N., Bairy, K., Bhat, K., Janodia, M., & Muddukrishna, B. (2013). Informed consent: Issues and challenges. *Journal of Advanced Pharmaceutical Technology & Research*, *4*(3), 134–140. https://doi.org/10.4103/2231-4040.116779

Noble, T., & McGrath, H. (2011). The third pillar of the student well-being pedagogy: Positive educational practices. In *Teacher education and values pedagogy: A student wellbeing approach* (pp. 54–74). David Barlow Publishing.

Noble, T., & McGrath, H. (2015). PROSPER: A new framework for positive education. *Psychology of Well-Being*, *5*(1), 1–17. https://doi.org/10.1186/s13612-015-0030-2

Ntoumanis, N., Ng, J. Y. Y., Prestwich, A., Quested, E., Hancox, J. E., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Lonsdale, C., & Williams, G. C. (2021). A meta-analysis of self-determination theory-informed intervention studies in the health domain: Effects on motivation, health behavior, physical, and psychological health. *Health Psychology Review*, *15*(2), 214–244. https://doi.org/10.1080/17437199.2020.1718529

Oades, L. G., Robinson, P., Green, S., & Spence, G. B. (2011). Towards a positive university. *The Journal of Positive Psychology*, *6*(6), 432–439. https://doi.org/10.1080/17439760.2011.634828

Oderinu, O.H., Balogun, M., & Pugsley, H. (2024). Exploring dental students' perceptions of their clinical learning environment: A qualitative study to evaluate the curriculum. *International Journal of Research in Education and Science (IJRES)*, *10*(2), 279–298. https://doi.org/10.46328/ijres.3364

Olasehinde, T. (2025). *Emotion-focused coping and self-soothing*. ResearchGate. https://www.researchgate.net/publication/391156268_Emotion-Focused_Coping_and_Self-Soothing

Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, *39*(3), 607–634.

Olson, H., Beckett, D. M., Adam, L. A., Tawse-Smith, A., & Moffat, S. M. (2019). Self-perceived stressors of Bachelor of Oral Health students and implications for student support. *Focus on Health Professional Education: A Multi-Professional Journal*, *20*(1), 36–49. https://doi.org/10.11157/fohpe.v20i1.313

O'Neill, S., McLafferty, M., Ennis, E., Lapsley, C., Bjourson, A., Armour, C., Murphy, S. D., Bunting, B., & Murray, E. K. (2018). Socio-demographic, mental health and childhood adversity risk factors for self-harm and suicidal behaviour in College Students in Northern Ireland. *Journal of Affective Disorders, 239*, 58–65. https://doi.org/10.1016/j.jad.2018.06.006

OpenAI. (2026). ChatGPT (GPT-5.6) [Large language model]. https://chatgpt.com

Organisation for Economic Co-operation and Development. (2016). *PISA 2015 results (Volume I): Excellence and equity in education*. OECD.http://dx.doi.org/10.1787/9789264266490-en

Ousman, Y. I., & Nazir, T. (2023). Loneliness among university students as a growing concern. *Journal of Family Counseling and Education, 8*(2), 85–99. https://doi.org/10.32568/jfce.1312556

Oxford University Press. (1989). Well-being. In *Oxford English Dictionary* (2nd ed., p. 112).

Oxford University Press. (2013). Well-being. In *Oxford South African Concise Dictionary* (2nd ed., p. 1276).

Palmer, S., & Cooper, C. L. (2013). *How to deal with stress* (3rd ed.). Kogan Page.

Park, C. L., Kubzansky, L. D., Chafouleas, S. M., Davidson, R. J., Keltner, D., Parsafar, P., Conwell, Y., Martin, M. Y., Hanmer, J., & Wang, K. H. (2022). Emotional Well-Being: What It Is and Why It Matters. *Affective Science*, *4*(1), 10–20. https://doi.org/10.1007/s42761-022-00163-0

Pillow, W. (2003). Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. *International Journal of Qualitative Studies in Education, 16*(2), 175–196. https://doi.org/10.1080/0951839032000060635

Pretorius, L. (2024). Demystifying research paradigms: Navigating ontology, epistemology, and axiology in research. *The Qualitative Report, 29*(10), 2698–2715. https://doi.org/10.46743/2160-3715/2024.7632

Pyle, M., Andrieu, S. C., Chadwick, D. G., Chmar, J. E., Cole, J. R., George, M. C., Glickman, G. N., Glover, J. F., Goldberg, J. S., Haden, N. K., Hendricson, W. D., Meyerowitz, C., Neumann, L., Tedesco, L. A., Valachovic, R. W., Weaver, R. G., Winder, R. L., Young, S. K., & Kalkwarf, K. L. (2006). The case for change in dental education. *Journal of Dental Education*, *70*(9), 921–924. https://doi.org/10.1002/j.0022-0337.2006.70.9.tb04162.x

Parks, A. C., & Biswas-Diener, R. (2013). Positive interventions: Past, present, and future. In T. B. Kashdan & J. Ciarrochi (Eds.), *Mindfulness, acceptance, and positive psychology: The seven foundations of well-being* (pp. 140–165). New Harbinger Publications.

Partido, B. B., Stefanik, D., & Forsythe, A. (2020). Association between emotional intelligence and professionalism among dental hygiene students. *Journal of Dental Education*, 1–7. https://doi.org/10.1002/jdd12327

Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, *25*(1), 104–112. https://doi.org/10.1080/02673843.2019.1596823

Patterson, F., Lerman, C., Kaufmann, V. G., Neuner, G. A., & Audrain-McGovern, J. (2004). Cigarette smoking practices among American college students: Review and future directions. *Journal of American College Health*, *52*(5), 203–212. https://doi.org/10.3200/jach.52.5.203-212

Pau, A. K. H., Croucher, R., Sohanpal, R., Muirhead, V., & Seymour, K. (2004). Emotional intelligence and stress coping in dental undergraduates — a qualitative study. *British Dental Journal*, *197*(4), 205–209. https://doi.org/10.1038/sj.bdj.4811573

Paudel, S., Subedi, N., & Shrestha, A. (2013). Stress and its relief among undergraduate dental students in a tertiary health care centre in eastern Nepal. *Dentistry*, 3(2), 1000157. https://doi.org/10.4172/2161-1122.1000157

Peacock, S., & Cowan, J. (2019). Promoting a sense of belonging in online learning communities of inquiry. *Online Learning*, *23*(2). https://doi.org/10.24059/olj.v23i2.1488

Peel, N., Nguyen, K., & Tannous, C. (2023). The impact of campus-based therapy dogs on the mood and affect of university students. *International Journal of Environmental Research and Public Health*, *20*(6), 4759. https://doi.org/10.3390/ijerph20064759

Peltzer, K., & Pengpid, S. (2017). Dietary behaviors, psychological well-being, and mental distress among university students in ASEAN. *Iranian Journal of Psychiatry and Behavioral Sciences*, *11*(2), e10118. https://doi.org/10.5812/ijpbs.10118

Penedo, F. J., & Dahn, J. R. (2005). Exercise and well-being: a review of mental and physical health benefits associated with physical activity. *Current Opinion in Psychiatry*, *18*(2), 189–193. https://doi.org/10.1097/00001504-200503000-00013

Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Oxford University Press.

Petre, G. (2025). Data collection methods in qualitative research. In *Qualitative research: A practical guide for early career researchers* (pp. 67–82). Editura Universității Adventus.

Pfund, G. N., Bono, T. J., & Hill, P. L. (2021). Purpose as a predictor of satisfaction across relationship domains during the first semester of university. *Journal of Social and Personal Relationships*, *39*(3), 570–591. https://doi.org/10.1177/02654075211042613

Pillay, H., & Moodley, R. (2023). Final-year oral hygiene and dental therapy students' perceptions of teaching and learning at a South African university. *South African Dental Journal*, *78*(05), 258–266. https://doi.org/10.17159/sadj.v78i05.16887

Pillow, W. (2003). Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. *International Journal of Qualitative Studies in Education, 16*(2), 175–196. https://doi.org/10.1080/0951839032000060635

Piorkowski, B. (2023). *Factors that affect the well-being of college students* [Honors project, The University of Akron]. https://ideaexchange.uakron.edu/cgi/viewcontent.cgi?article=3222&context=honors_research_projects

Pointon-Haas, J., Waqar, L., Upsher, R., Foster, J., Byrom, N., & Oates, J. (2023). A systematic review of peer support interventions for student mental health and well-being in higher education. *British Journal of Psychiatry Open*, *10*(1), e12. https://doi.org/10.1192/bjo.2023.603

Potgieter, E. M. (2007). A brief history of the oral hygiene profession in South Africa (1968-2003). *South African Dental Journal, 62*(6), 254–257.

Preoteasa, C. T., Axante, A., Cristea, A. D., & Preoteasa, E. (2016). The relationship between positive well-being and academic assessment: Results from a prospective study on dental students. *Education Research International*, *2016*, 1–8. https://doi.org/10.1155/2016/9024687

Pretorius, M., & Blaauw, D. (2020). Financial challenges and the subjective well-being of first-year students at a comprehensive South African university. *Journal of Student Affairs in Africa*, *8*(1). https://doi.org/10.24085/jsaa.v8i1.4181

Prohaska, T., Burholt, V., Burns, A., Golden, J., Hawkley, L., Lawlor, B., Leavey, G., Lubben, J., O'Sullivan, R., Perissinotto, C., van Tilburg, T., Tully, M., Victor, C., & Fried, L. (2020). Consensus statement: loneliness in older adults, the 21st century social determinant of health? *British Medical Journal Open*, *10*(8), e034967. https://doi.org/10.1136/bmjopen-2019-034967

Pyle, M., Andrieu, S. C., Chadwick, D. G., Chmar, J. E., Cole, J. R., George, M. C., Glickman, G. N., Glover, J. F., Goldberg, J. S., Haden, N. K., Hendricson, W. D., Meyerowitz, C., Neumann, L., Tedesco, L. A., Valachovic, R. W., Weaver, R. G., Winder, R. L., Young, S. K., & Kalkwarf, K. L. (2006). The case for change in dental education. *Journal of Dental Education*, *70*(9), 921–924. https://doi.org/10.1002/j.0022-0337.2006.70.9.tb04162.x

Raghavasree, G. V. (2021). Mental health of dental students and dentists. *Social Innovations Journal*, *9*. https://socialinnovationsjournal.com/index.php/sij/article/view/940

Ravitch, S. M., & Riggan, M. (2016). *Reason & rigor: How conceptual frameworks guide research* (2nd ed.). SAGE Publications.

Reinders, J. J., Krijnen, W. P., Onclin, P., van der Schans, C. P., & Stegenga, B. (2017). Attitudes among dentists and dental hygienists towards extended scope and independent practice of dental hygienists. *International Dental Journal*, *67*(1), 46–58. https://doi.org/10.1111/idj.12254

Rehman, A. A., & Alharthi, K. (2016). An introduction to research paradigms. International *Journal of Educational Investigations, 3*(8), 51–59.

Republic of South Africa. (2012, March 30). *Government Notice* (No. 35200, Notice No. R266). Government Printer.

Republic of South Africa. (2015, November 26). *Government Gazette* (No. 39453, Notice No. 605). Government Printer.

Republic of South Africa. (2017, May 19). *Government Gazette* (No. 40847, p. 40). Government Printer.

Republic of South Africa. (2021, September 17). *Government Gazette* (No. 45176) Government Printing Works.

Resnik, D. B. (2018). Privacy and confidentiality. In *The ethics of research with human subjects: Protecting people, advancing science, promoting trust* (pp. 145–163). Springer. https://doi.org/10.1007/978-3-319-68756-8_6

Robbins, P.S. (2009) *Organizational behavior. International Version* (13th ed.). Pearson Higher Education.

Robinson, K. (2017). *How mindsets impact learning* [Master's thesis, Northwestern College]. NWCommons. https://nwcommons.nwciowa.edu

Rodríguez-Romo, G., Acebes-Sánchez, J., García-Merino, S., Garrido-Muñoz, M., Blanco-García, C., & Diez-Vega, I. (2022). Physical activity and mental health in undergraduate students. *International Journal of Environmental Research and Public Health*, *20*(1), 195. https://doi.org/10.3390/ijerph20010195

Rotaru, D. I., Chisnoiu, R. M., Bolboacă, S. D., Gileru, E. A., Chisnoiu, A. M., & Delean, A. G. (2024). Insights into self-evaluated stress, anxiety, and depression among dental students. *Scientific Reports*, *14*(1). https://doi.org/10.1038/s41598-024-79427-7

Rule, P., & John, V. (2011). *Your guide to case study research*. Van Schaik PublishersRuswa, A., & Gore, O. (2022). Student poverty in South African universities: Promoting the wellbeing and success of students. *Perspectives in Education*, *40*(4), 4–18. https://doi.org/10.38140/pie.v40i4.6379

Ruswa, A. S., & Gore, O. T. (2021). Rethinking student poverty: Perspectives from a higher education institution in South Africa. *Higher Education Research & Development*, *41*(7), 1–14. https://doi.org/10.1080/07294360.2021.2014409

Ryan, R., & Deci, E. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, *52*(1), 141–166. https://doi.org/10.1146/annurev.psych.52.1.141

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069–1081. https://doi.org/10.1037/0022-3514.57.6.1069

Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, *9*(1), 13–39. https://doi.org/10.1007/s10902-006-9019-0

Sanders, A. E., & Lushington, K. (2002). Effect of perceived stress on student performance in dental school. *Journal of Dental Education, 66*(1), 75–81. https://doi.org/10.1002/j.0022-0337.2002.66.1.tb03510.x

Saricaoğlu, H., & Arslan, C. (2013). An investigation into psychological well-being levels of higher education students with respect to personality traits and self-compassion. *Educational Sciences: Theory & Practice, 13*(4), 2097–2104. https://eric.ed.gov/?id=EJ1027676

Sarkar, S., & Goswami, S. (2020). Effect of diet and sleep on academics of undergraduate students. *International Journal of Creative Research Thoughts*, *8*(11), 1173–1178. www.ijcrt.org

Satter, K. E. G., Jackson, S. C., DiMarco, A. C., & Nagasawa, P. R. (2020). Intraprofessional education with dental hygienists: The post training impact on dentists. *Journal of Dental Education, 84*(9), 991–998. https://doi.org/10.1002/jdd.12182

Schein, E. H. (1985). *Organizational culture and leadership*. Jossey-Bass.

Scherer, K. R. (2007). Componential emotion theory can inform models of emotional competence. In G. Matthews, M. Zeidner, & R. D. Roberts (Eds.), *The science of emotional intelligence: Knowns and unknowns* (pp. 101–126). Oxford University Press.

Schoch, K. (2020). Case study research. In G. J. Burkholder et al. (Eds.), *Research design and methods: An applied guide for the scholar-practitioner* (pp. 245–258). SAGE Publications.

Scribner, M., Sasso, P. A., & Puchner, L. (2020). Stress management and coping mechanisms in undergraduate students at a Midwestern state university. *New York Journal of Student Affairs, 20*(1), 54–73. https://commons.library.stonybrook.edu/nyjsa/vol20/iss1/6?utm_source=commons.library.stonybrook.edu%2Fnyjsa%2Fvol20%2Fiss1%2F6&utm_medium=PDF&utm_campaign=PDFCoverPages

Scully, J. H. (2005). Improving APA's Public Outreach For `Healthy Minds, Healthy Lives'. *Psychiatric News, 40*(19), 4–4. https://doi.org/10.1176/pn.40.19.00400004

Sefako Makgatho Health Sciences University. (2025, December 21). Wikipedia. https://en.wikipedia.org/w/index.php?title=Sefako_Makgatho_Health_Sciences_University&oldid=

Seligman, M. (2010). *Flourish: Positive psychology and positive interventions. The Tanner lectures on human values*. https://esterlianawati.files.wordpress.com/2018/09/flourish-martin-seligman.pdf

Seligman, M. (2011). *Flourish: A visionary new understanding of happiness and well-being.* Psycnet.apa.org. https://psycnet.apa.org/record/2010-25554-000

Seligman, M. (2010). Flourish: Positive psychology and positive interventions. The Tanner lectures on human values, 31(4), 1–56. http://tannerlectures.utah.edu

Seligman, M. E. P., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford Review of Education, 35*(3), 293–311. https://doi.org/10.1080/03054980902934563

Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, *60*(5), 410–421. https://doi.org/10.1037/0003-066X.60.5.410

Seligman, M. E. P. (2002). Positive psychology, positive prevention, and positive therapy. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 3–9). Oxford University Press.

Seligman, M. E. P., & Csikszentmihalyi, M. (2001). Positive psychology: An introduction. *American Psychologist*, *56*(1), 89–90. https://doi.org/10.1037//0003-066x.56.1.89

Selvam, T., & Selvasivasankari, S. (2025). Social well-being among college students. *International Journal of Creative Research Thoughts*, 13(4), f411– f419. https://www.ijcrt.org/papers/IJCRT2504624.pdf

Shin, D. C., & Johnson, D. M. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research*, *5(*1-4), 475–492. https://doi.org/10.1007/bf00352944

Shuster, E. (1997). Fifty years later: The significance of the Nuremberg Code. *New England Journal of Medicine, 337*(20), 1436–1440. https://doi.org/10.1056/nejm199711133372006

Siddiqui, N., Maxwell, H., & Agaliotis, M. (2023). Health and well-being in higher education: Student perception of an Australian university. *Education Sciences*, *13*(10), 1046. https://doi.org/10.3390/educsci13101046

Smith, E. N., Romero, C., Donovan, B., Herter, R., Paunesku, D., Cohen, G. L., Dweck, C. S., & Gross, J. J. (2017). Emotion theories and adolescent well-being: Results of an online intervention. *Emotion*, *18*(6), 781–788. https://doi.org/10.1037/emo0000379

Snape, D., & Spencer, L. (2003). The foundations of qualitative research. In J. Ritchie & J. Lewis (Eds.), *Qualitative research practice: A guide for social science students and researchers* (pp. 1–23). SAGE Publications.

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, *60*(4), 570–585. https://doi.org/10.1037/0022-3514.60.4.570

Snyder, C. R., & Lopez, S. J. (2002). *Handbook of positive psychology*. Oxford University Press.

Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2002). Hope theory: A member of the positive psychology family. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 257–276). Oxford University Press.

Stahl, N. A., & King, J. R. (2020). Expanding approaches for research: understanding and using trustworthiness in qualitative research. *Journal of Developmental Education*, 44(1), 26–28. http://www.jstor.org/stable/45381095

Stanton, A., Zandvliet, D., Dhaliwal, R., & Black, T. (2016). Understanding students' experiences of well-being in learning environments. *Higher Education Studies*, *6*(3), 90–99. https://doi.org/10.5539/hes.v6n3p90

Stern, D. T., Frohna, A. Z., & Gruppen, L. D. (2005). The prediction of professional behaviour. *Medical Education*, *39*(1), 75–82. https://doi.org/10.1111/j.1365-2929.2004.02035.x

Sugiura, G., Shinada, K., & Kawaguchi, Y. (2005). Psychological well-being and perceptions of stress amongst Japanese dental students. *European Journal of Dental Education*, *9*(1), 17–25. https://doi.org/10.1111/j.1600-0579.2004.00352.x

Stormon, N., Sexton, C., Ford, P. J., & Eley, D. S. (2021). Understanding the well-being of dentistry students. *European Journal of Dental Education, 26*(1). https://doi.org/10.1111/eje.12666

Swe, K. M. M., & Bhardwaj, A. (2020). Mentoring undergraduate students: Perception of medical and dental faculties on undergraduate mentoring program. *Journal of Education, Society and Behavioural Science*, *33*(2), 55–61. https://doi.org/10.9734/jesbs/2020/v33i230202

Tan, J., & Andriessen, K. (2021). The experiences of grief and personal growth in university students: A qualitative study. *International Journal of Environmental Research and Public Health*, *18*(4), 1899. https://doi.org/10.3390/ijerph18041899

Teddlie, C. & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences.* SAGE Publications.

Theofanidis, D., & Fountouki, A. (2019). Limitations and delimitations in the research process. Perioperative Nursing (GORNA), 7(3), 155–162.

Thomas, L., Orme, E., & Kerrigan, F. (2020). Student loneliness: The role of social media through life transitions. *Computers & Education*, *146*(0360-1315), 103754. https://doi.org/10.1016/j.compedu.2019.103754

Thorpe, S., & Kuperberg, A. (2020). Social motivations for college hookups. *Sexuality & Culture*, *25*(2), 623–645. https://doi.org/10.1007/s12119-020-09786-6

Tosun, S., Arslan, H. K., & Ertuğrul, İ. F. (2024). Akran desteğinin diş hekimliği öğrencilerinin stres ve kaygı düzeylerine etkisi: Kesitsel araştırma [The effect of peer support on stress and anxiety levels of dental students: A cross-sectional research]. *Turkiye Klinikleri Journal of Dental Sciences*, *30*(4), 610–614. https://doi.org/10.5336/dentalsci.2024-103518

Tus, J. (2021). Amidst the online learning in the Philippines: The parental involvement and its relationship to the student's academic performance. *International Engineering Journal for Research & Development*, *6*(ICIPSE), 1–13.

Universities UK. (2015). *Student mental well-being in higher education: Good practice guide*. Universities UK.

Uraz, A., Tocak, Y. S., Yozgatlıgil, C., Cetiner, S., & Bal, B. (2013). Psychological well-being, health, and stress sources in Turkish dental students. *Journal of Dental Education*, *77*(10), 1345–1355. https://doi.org/10.1002/j.0022-0337.2013.77.10.tb05609.x

Usmani, A., Omaeer, Q., & Sultan, S. T. (2011). Mentoring undergraduate medical students: Experience from Bahria University Karachi. *The Journal of the Pakistan Medical Association, 61*(8), 790–794.

Van Breda, A. D. (2017). Resilience of vulnerable students transitioning into a South African university. *Higher Education*, *75*(6), 1109–1124. https://doi.org/10.1007/s10734-017-0188-z

Van Doren, E. J., Lee, J. E., Breitman, L. S., Chutinan, S., & Ohyama, H. (2020). Students' perceptions on dental education in the wake of the COVID-19 pandemic. *Journal of Dental Education, 85*(S1), 1187-1189. https://doi.org/10.1002/jdd.12300

Van Merriënboer, J. J. G., & Sweller, J. (2005). Cognitive load theory and complex learning: Recent developments and future directions. *Educational Psychology Review*, *17*(2), 147–177. https://doi.org/10.1007/s10648-005-3951-0

Van Teijlingen, E. R., & Hundley, V. (2001). The importance of pilot studies. *Social Research Update, (35)*, 1–4. https://sru.soc.surrey.ac.uk/SRU35.html

Vázquez, C., & Chaves, C. (2016). Positive psychology. *Encyclopedia of Mental Health (2nd Ed.)*, 290–299. https://doi.org/10.1016/B978-0-12-397045-9.00049-5

Visser, M., & Law-van Wyk, E. (2021). University students' mental health and emotional wellbeing during the COVID-19 pandemic and ensuing lockdown. *South African Journal of Psychology*, *51*(2), 229–243. https://doi.org/10.1177/00812463211012219

Wahid, M. H., Sethi, M. R., Shaheen, N., Javed, K., Qazi, I. A., Osama, M., Ilah, H., & Firdos, T. (2023). Effect of academic stress, educational environment on academic performance & quality of life of medical & dental students; gauging the understanding of health care professionals on factors affecting stress: A mixed method study. *PLoS ONE, 18*(11), e0290839. https://doi.org/10.1371/journal.pone.0290839

Walker, M. (2019). The well-being of South African university students from low-income households. *Oxford Development Studies*, *48*(1), 1–14. https://doi.org/10.1080/13600818.2019.1672143

Weir, M. (2015). Student mental well-being in higher education. *Journal of Applied Research in Higher Education, 7*(1), 1–3.

White, M., & Kern, M. L. (2018). Positive education: Learning and teaching for wellbeing and academic mastery. *International Journal of Wellbeing*, *8*(1), 1–17. https://doi.org/10.5502/ijw.v8i1.588

White, M. A., & Murray, S. (2015). Evidence-based approaches in positive education: implementing a strategic framework for well-being in schools. Springer Netherlands.

William, F. K. A. (2024). Interpretivism or constructivism: Navigating research paradigms in social science research. *International Journal of Research Publications*, *143*(1), 1–5. https://doi.org/10.47119/ijrp1001431220246122

Wilson, V. J., Rayner, C. A., Gordon, N. A., Shaikh, A. B., Crombie, K, & Yasin-Harnekar, S. (2015). Perceived stress among dental students at the University of the Western Cape. *South African Dental Journal*, *70*(6), 255–259.

World Health Organisation. (1986). *Ottawa Charter for Health Promotion*. https://www.who.int/teams/health-promotion/enhanced-wellbeing/first-global-conference

World Health Organisation. (2005). *The World Health Report 2005: Make every mother and child count*. http://iris.who.int

World Health Organisation. Regional Office for Europe. (2013). *Measurement of and target-setting for well-being: An initiative by the WHO Regional Office for Europe: Second meeting of the expert group.* Paris, France, 25–26 June 2012.

Wu, M.-J., Zhao, K., & Fils-Aime, F. (2022). Response rates of online surveys in published research: A meta-analysis. *Computers in Human Behavior Reports*, *7*(2), 1–11. https://doi.org/10.1016/j.chbr.2022.100206

Yildirim, T. T., & Atas, O. (2021). The evaluation of psychological state of dental students during the COVID-19 pandemic. *Brazilian Oral Research*, *35*. https://doi.org/10.1590/1807-3107bor-2021.vol35.0069

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.

Yu, H., Li, M., Li, Z., Xiang, W., Yuan, Y., Liu, Y., & Xiong, Z. (2020). Coping style, social support and psychological distress in the general Chinese population in the early stages of the COVID-19 epidemic. *BMC Psychiatry*, *20*, 426.

Yung, S. T., Chen, Y., & Zawadzki, M. J. (2021). Loneliness and psychological distress in everyday life among Latinx college students. *Journal of American College Health*, 1–10. https://doi.org/10.1080/07448481.2021.1927051

Zahedi, H., Sahebihagh, M. H., & Sarbakhsh, P. (2022). The magnitude of loneliness and associated risk factors among university students: A cross-sectional study. *Iranian Journal of Psychiatry*, *17*(4), 411–417. https://doi.org/10.18502/ijps.v17i4.10690

Zeidner, M., Matthews, G., & Roberts, R. D. (2011). The emotional intelligence, health, and well-being nexus: What have we learned and what have we missed? *Applied Psychology: Health and Well-Being*, *4*(1), 1–30. https://doi.org/10.1111/j.1758-0854.2011.01062.x

Žukauskas, P., Veinhardt, J., & Andriukaitienė, R. (2018). Philosophy and paradigm of scientific research. In *Management culture and corporate social responsibility*, *1*(1). InTech. https://doi.org/10.5772/intechopen.70628

APPENDICES

APPENDIX 1: THE ORIGINAL SCOPE OF PRACTICE 1972 – 1986

OH/03

No R1729 9 August 1985

THE SOUTH AFRICAN MEDICAL AND DENTAL COUNCIL

REGULATIONS DEFINING THE SCOPE OF THE PROFESSION OF ORAL HYGIENE

In terms of section 33(1) of the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act 56 of 1974), the Minister of Health and Welfare, acting on the recommendation of the South African Medical and Dental Council, has made the regulations set out in the Schedule hereto.

SCHEDULE

1. In this Schedule "the Act" shall mean the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act 56 of 1974), and, unless the context otherwise indicates, any expression to which a meaning has been assigned in the Act shall bear such meaning.

2. The following acts shall for the purposes of the Act be deemed to be acts pertaining to the profession of oral hygiene:

(1) Provisional examination and charting of conditions of the mouth, with particular reference to the teeth and periodontium;

(2) scaling, root planing and polishing of the teeth, including trimming and polishing of restorations;

(3) dental radiography;

(4) topical application of agents appropriate to the practice of the oral hygienist, including caries preventive agents, tooth desensitising agents, surface anaesthetics and plaque controlling agents;

(5) the application and removal of periodontal packs and other dressings;

No R1729 9 Augustus 1985

DIE SUID-AFRIKAANSE GENEESKUNDIGE EN TANDHEELKUNDIGE RAAD

REGULASIES WAT DIE OMVANG VAN DIE BEROEP MONDHIGIËNE OMSKRYF

Die Minister van Gesondheid en Welsyn het, op aanbeveling van die Suid-Afrikaanse Geneeskundige en Tandheelkundige Raad, kragtens artikel 33(1) van die Wet op Geneeshere, Tandartse en Aanvullende Gesondheidsdiensberoepe, 1974 (Wet 56 van 1974), die regulasies in die Bylae hiervan uiteengesit, uitgevaardig.

BYLAE

1. In hierdie Bylae beteken "die Wet" die Wet op Geneeshere, Tandartse en Aanvullende Gesondheidsdiensberoepe, 1974 (Wet 56 van 1974), en tensy uit die samehang anders blyk, het 'n uitdrukking waaraan 'n betekenis in die Wet geheg is, daardie betekenis.

2. Die volgende handelinge word vir doeleindes van die Wet geag handelinge te wees wat by die beroep mondhigiëne tuishoort:

(1) Die voorlopige ondersoek en kartering van toestande van die mond, met besondere verwysing na die tande en periodonsie;

(2) die skalering, wortelskawing en polering van tande, insluitende die afwerk en polering van herstellings;

(3) tandheelkundige röntgenografie;

(4) die plaaslike aanwending van middels gebruiklik in die mondhigiënepraktyk, insluitende kariesvoorkomende middels, tanddesensiteermiddels, oppervlakverdowingsmiddels en plaakbestrydingsmiddels;

(5) die aanwending en verwydering van periodontale pakke en ander verbande;

(6) the removal of sutures and orthodontic appliances and the placing of pre-activated orthodontic appliances;

(7) the care of wounds related to dental treatment;

(8) the performance of intra-oral diagnostic technical procedures such as taking impressions for and casting study models.

(6) die verwydering van hegtings en ortodontiese toestelle en die plasing van vooraf geaktiveerde ortodontiese toestelle;

(7) die versorging van wonde wat met tandheelkundige behandeling verband hou;

(8) die uitvoer van binnemondse diagnostiese tegniese handelinge, soos die neem van afdrukke vir en giet van studiemodelle.

APPENDIX 2: EXPANDED SCOPE OF FUNCTION 2000

HEALTH PROFESSIONS ACT 56 OF 1974

REGULATIONS DEFINING THE SCOPE OF THE PROFESSION OF ORAL HYGIENE

Published under Government Notice R1150 in *Government Gazette* 21736 of 17 November 2000.

The Minister of Health has, in terms of section 33 (1) of the Health Professions Act, 1974 (Act No. 56 of 1974), on the recommendation of the Health Professions Council of South Africa, made the regulations in the Schedule.

SCHEDULE

Regulation 1

Regulation 2

Regulation 3

1. In these regulations, any expression to which a meaning has been assigned in the Act shall bear such meaning and, unless the context otherwise indicates-

"The Act" means the Health Professions Act, 1974 (Act No. 56 of 1974).

2. The following acts shall, for the purposes of the application of the Act, be deemed to be acts pertaining to the profession of oral hygiene:

(1) Provisional examination and charting of conditions of the mouth, with particular reference to the teeth and periodontium;

(2) scaling, root planing and polishing of the teeth, including trimming and polishing of restorations;

(3) performing dental radiography;

(4) topical application of agents appropriate to the practice of the oral hygienist, including caries-preventive agents, tooth-desensitising agents, surface anaesthetics and plaque-controlling agents;

(5) application and removal of periodontal packs;

(6) taking impressions and casting of study and primary work models;

(7) placement of temporary fillings as an emergency measure prior to referral to a dental therapist or dentist;

(8) temporary cementing of inlays, crowns and bridges;

(9) placement of glass ionomer cement on sensitive dentine or cervical abrasion lesions;

(10) placement of soft linings in dentures as tissue conditioners;

(11) taking of cytological smears, for example, to test for Candida infections;

(12) performing specified functions in orthodontics-

(a) cephalometric tracings;

(b) relief of trauma caused by intra- and extra-oral appliances, for example, the cutting of distal ends of arch wires;

(c) the placement of pre-activated orthodontic appliances and the removal of orthodontic attachments and bands;

(13) administering of applicable local analgesia as appropriate to the scope of the profession of oral hygiene.

3. The regulations promulgated by Government Notice No. R. 1729 of 9 August 1985 are hereby repealed.

APPENDIX 3: EXPANDED SCOPE OF FUNCTION 2015



DEPARTMENT OF HEALTH

NO. 1171 **26 NOVEMBER 2015**

HEALTH PROFESSIONS COUNCIL OF SOUTH AFRICA

REGULATIONS DEFINING THE SCOPE OF THE PROFESSION OF ORAL HYGIENE

The Minister of Health intends, in terms of section 33(1) read with section 61(2) of the Health Professions Act, 1974 (Act No. 56 of 1974), and on the recommendation of the Health Professions Council of South Africa and the Professional Board for Dental Therapy and Oral Hygiene, to make the Regulations in the Schedule.

Interested persons are invited to submit any substantiated comments or representations on the proposed regulations to the Director-General of Health, Private Bag X828, Pretoria, 0001 (for attention of the Director: Public Entities Governance), within three months of the date of publication of this notice.

SCHEDULE

Definitions

1. In these Regulations any word or expression to which a meaning has been assigned in the Act shall bear that meaning, and unless the context otherwise indicates –

"board" means the Professional Board for Dental Therapy and Oral Hygiene established in terms of section 15(1) of the Act;
"oral hygiene" means the profession of a person registered as an oral hygienist in terms of the Act;
"oral hygienist" means a person registered as such in terms of the Act;
"the Act" means the Health Professions Act, 1974 (Act No. 56 of 1974).

This gazette is also available free online at www.gpwonline.co.za

Scope of the profession of oral hygiene

2. The following acts are hereby specified as acts which shall, for the purposes of the application of the Act, be deemed to be acts pertaining to the profession of oral hygiene:

(a) The development, implementation and evaluation of oral health promotion programmes.

(b) the assessment of a patient by means of an interview and an oral clinical examination;

(c) the performance of analogue and digital radiography and the taking of clinical photographs;

(d) the taking of impressions, cast, trim and the polishing of study model casts.

(e) the making of an oral hygiene diagnosis and the development of an appropriate treatment plan within the scope of the profession of oral hygienist.

(f) the advising and education of patients about oral self-care practices including mechanical and chemotherapeutic plaque control, nutritional counselling and tobacco cessation;

(g) the advising of patients about vitamins and dietary supplements, fluoride tablets, mouth rinses and other anti-microbial agents;

(h) the application of topical agents such as caries-preventive agents, remineralising agents, tooth-desensitising agents, surface anaesthetics and plaque-controlling agents;

(i) the application of pit and fissure sealants;

(j) the performance of scaling and root debridement, the scaling of implants and the polishing of teeth;

This gazette is also available free online at www.gpwonline.co.za

(k) the making of a study cast to produce protective vacuum formed mouth guard.

(l) the placing and removing of rubber dam and matrix bands, the application of minimally invasive procedures such as atraumatic restorative techniques (ART) and sealant restorations;

(m) the treatment of dentine hypersensitivity and cervical abrasion lesions with glass ionomer cement;

(n) the polishing and recontouring of overhanging restorations;

(o) the application of topical anaesthesia;

(p) the administration of local anaesthesia;

(q) the giving of assistance to dental therapists, dentists, dental specialists with the performance of basic and advanced clinical procedures;

(r) the application of vital tooth bleaching (whitening) techniques and procedures;

(s) the performance of the following supportive clinical procedures as instructed by dentists and dental specialists:

(i) The taking of cytological smears;
(ii) the splinting of mobile teeth;
(iii) the application and removal of periodontal packs; and
(iv) the removal of surgical sutures;
(v) the placing of temporary restorations as an emergency measure;
(vi) the performance of temporary cementing of inlays, crowns and bridges;
(vii) the placement of soft linings in dentures as tissue conditioners;
(viii) the performance of cephalometric tracings;
(ix) the relieving of trauma caused by intra-and extra-oral appliances, such as the cutting of distal ends of arch wires;

This gazette is also available free online at **www.gpwonline.co.za**

(x) the taking of impressions, cast and trim study and primary work models;

(xi) placement of pre-activated orthodontic appliances, the removal of orthodontic attachments and bands (the placement and removal of elastics and ligature wires, the placement and activation of arch wires); and

(xii) the re-cementing of orthodontic retainers.

Performance of professional act by student in oral hygiene

3. A student in oral hygiene shall perform acts, referred to in regulation 2, only under the supervision of a dental specialist, dentist, dental therapist, or oral hygienist.

Conditions of practice by registered oral hygienist

4. A registered oral hygienist may practice independently, his or her profession, only -

(a) after serving a period of at least one year under the control and supervision of a registered dentist, dental therapist or another registered oral hygienist, and with approval of the Board;

(b) after obtaining any of the qualifications in oral hygiene approved by the Board, and if such qualification was obtained prior to 2001, he or she must have also obtained a further qualification in expanded clinical functions in oral hygiene offered by any of the examining authorities approved by the Board; and

(c) after successfully completing a First Aid Level 3 training at a training institution approved by the Health and Welfare SETA.

Repeal

5. The regulations published in Government Notice R.800 in *Government Gazette* No. 36944 of 17 October 2013 are hereby repealed.

This gazette is also available free online at **www.gpwonline.co.za**

Short title

6. These Regulations are called the Regulations Defining the Scope of Oral Hygiene.

:

DR A MOTSOALEDI, MP

MINISTER OF HEALTH

DATE: 15/11/2015

This gazette is also available free online at **www.gpwonline.co.za**

APPENDIX 4: EXPANDED SCOPE OF FUNCTION 2021

Appendix 4 **DEPARTMENT OF HEALTH**

NO. 881 **17 September 2021**

HEALTH PROFESSIONS ACT, 1974 (ACT NO.56 OF 1974)

REGULATIONS DEFINING THE SCOPE OF THE PROFESSION OF ORAL HYGIENE

The Minister of Health intends, in terms of section 33(1) of the Health Professions Act, 1974 (Act No. 56 of 1974), and on the recommendation of the Health Professions Council of South Africa and the Professional Board for dental assisting, dental therapy, and oral hygiene, to make the Regulations in the Schedule.

Interested persons are invited to submit any substantiated comments or representations on the proposed Regulations to the Director-General of Health, Private Bag X828, Pretoria, 0001 (for attention of the Director: Public Entities Governance, mihloti.mushwana@health.gov.za and paul.tsebe@health.gov.za), within three months of the date of publication of this Notice.

DR M.J PHAAHLA, MP
MINISTER OF HEALTH
DATE: 30/08/2021

This gazette is also available free online at www.gpwonline.co.za

SCHEDULE

Definitions

1. In these regulations and any word or expression to which has been assigned in the Act shall have that meaning, and , unless the context indicates-

"Act" means the Health Professions Act, 1974 (Act No. 56 of 1974).

Acts of oral hygiene

2. The following are for purposes of the Act deemed to be specifically acts pertaining to the profession of oral hygiene-

(a) the development, implementation, and evaluation of oral health promotion programmes;

(b) the recording of the medical, social, and dental history, examination of patients, and the charting of their oral and dental status;

(c) the assessment of a patient by means of measuring vital signs, conducting an interview, and oral clinical examination;

(d) the performance of analogue, digital radiography, and the taking of clinical photographs;

(e) the making of a diagnosis and the development of an appropriate treatment plan within the scope of the profession of oral hygiene;

(f) the advising and education of patients about oral self-care practices including, but not limited to, mechanical and chemotherapeutic plaque control, and tobacco cessation:

(g) advising patients about nutrition and diet, fluorides, and anti-microbial agents (excluding antibiotics) in relation to oral disease prevention;

(h) the application of topical agents such ascaries-preventive agents, remineralising agents, tooth-desensitising agents, surface anaesthetics and plaque-controlling agents;

(i) the application of pit and fissure sealants, and of minimally invasive procedures such as atraumatic restorative techniques (ART) and sealant restorations, and the placement and removal of rubber dam and matrix bands;

(j) the performance of debridement, scaling, root-planing, the cleaning of dental implants and the polishing of teeth;

(k) the treatment of dentine hypersensitivity and cervical abrasion lesions with glass ionomer cements;

This gazette is also available free online at www.gpwonline.co.za

(l) the polishing and recontouring of overhanging restorations;
(m) the application of topical and local anaesthesia;
(n) assisting oral health care professionals in the performance of basic and advanced clinical procedures;
(o) the application of vital tooth whitening techniques and procedures;
(p) the making of a study cast or digital impressions (intraoral scans) to produce vacuum formed mouth guards; occlusal guards and whitening trays;
(q) the administration of nitrous oxide;
(r) the prescription of medication for the treatment of oral conditions relevant to the practice of oral hygiene, and as published in the relevant government gazette as amended from time to time; and
(s) the performance of the following clinical procedures as prescribed by dentists and dental specialists:
  (i) taking of cytological smears;
  (ii) splinting of mobile teeth;
  (iii) application and removal of periodontal packs;
  (iv) removal of surgical sutures;
  (v) placement of temporary restorations as an emergency measure;
  (vi) performance of temporary cementing of inlays, crowns and bridges;
  (vii) placement of soft linings in dentures as tissue conditioners;
  (viii) performance of cephalometric tracings;
  (ix) relief of trauma caused by intra- and extra-oral appliances, such as the cutting of distal ends of arch wires;
  (x) the taking of impressions, casting and trimming study and primary work models;
  (xi) placement and removal of pre-activated orthodontic appliances, attachments and bands;
  (xii) placement and removal of elastics and ligature wires, the placement and activation of arch wires and the cementing space maintainers;
  (xiii) the re-cementing of orthodontic retainers; and
  (xiv) to produce vacuum formed retainers.

Repeal

3. The Regulations Defining the Scope of the Profession of Oral Hygiene as published under *Government Notice* No. 713 in *Government Gazette* No. 40996 of 21 July 2017 are hereby repealed.

This gazette is also available free online at www.gpwonline.co.za

APPENDIX 5: ETHICAL CLEARANCE CERTIFICATE

UNISA university of south africa

UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2026/01/26

Ref: **2020/02/19/5998670/11/AM**
Name: Ms K Viljoen
Student No.: 5998670

Dear Ms K Viljoen

Decision: Ethics Approval from 2020/02/19 to 2025/02/19

Researcher(s): Name: Ms K Viljoen
E-mail address: 5998670@mylife.unisa.ac.za
Telephone: 082 8 799 015

Supervisor(s): Name: Prof K Mohangi
E-mail address: mohank@unisa.ac.za
Telephone: 012 337 6169

Title of research:

The psychosocial and emotional well-being of oral hygiene students at a South African university: A case study

Qualification: PhD Psychology of Education

Thank you for the application for research ethics title amendment by the UNISA College of Education Ethics Review Committee for the above mentioned research. Amendment approval was granted on 2026/01/20. All other conditions remains unchanged.

*The **medium risk** application was reviewed by the Ethics Review Committee on 2020/02/19 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
7. No field work activities may continue after the expiry date **2025/02/19**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number **2020/02/19/5998670/11/AM** *should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,

Prof JO August
CHAIRPERSON:CEDU RERC
augusjo@unisa.ac.za

Prof Mpine Makoe
EXECUTIVE DEAN
qakisme@unisa.ac.za

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
Box 392 UNISA 0003 South Africa
Telephone +27 12 429 3111 Facsimile +27 12 429 4150
www.unisa.ac.za

APPENDIX 6: COVER LETTER FOR SELF-ADMINISTERED QUESTIONNAIRE



The psychosocial and emotional well-being of oral hygiene students at a South African university: A case study

Dear respondent

This questionnaire forms part of my doctoral research titled: The psychosocial and emotional well-being of oral hygiene students at a South African university: A case study for the degree at the University of South Africa. You were selected through a purposive sampling strategy from the population of oral hygiene students. Hence, I invite you to take part in this survey.

This study aims to investigate the psychosocial and emotional well-being of oral hygiene students in a South African university. The findings of the study may benefit the university in assisting students in future.

You are kindly requested to complete this questionnaire, comprising seven (7) pages, as honestly and frankly as possible, based on your personal views and experiences. No foreseeable risks are associated with completing the questionnaire, which is for research purposes only. The questionnaire will take approximately 45 minutes to complete.

You are not required to indicate your name or organisation, and your anonymity will be ensured; however, providing your age, gender, occupation, position, etc., will contribute to a more comprehensive analysis. All information obtained from this questionnaire will be used for research purposes only and will remain confidential. Your participation in this survey is voluntary, and you have the right to omit any question if so desired, or to withdraw from answering this survey without penalty at any stage. After the completion of the study, an electronic summary of the findings of the research will be made available to you upon request.

Permission to undertake this survey has been granted by the University of the [redacted] Ethics Committee of the College of Education, Unisa. If you have any research-related inquiries, you can address them directly to my supervisor or to me. My contact details are: 021 [redacted], e-mail:kviljoen@[redacted].ac.za and my supervisor can be reached at 012 337 6169, College of Education, UNISA, e-mail: mohank@unisa.ac.za

By completing the questionnaire, you imply that you have agreed to participate in this research. Please return the completed questionnaire to Mrs Karin Viljoen before (date to be announced).

APPENDIX 7: DEMOGRAPHIC DATA AND OPEN-ENDED QUESTIONS

Questionnaire

Please answer the following questions concerning yourself as a participant.

Age Years ☐ Months ☐

Gender Male ☐ Female ☐

Other ☐

Language

State your home language.....

What other language do you speak?.....

Does the language you receive lectures in differ from your home language?

Yes ☐ No ☐

If you answered "yes", explain the influence thereof on your learning experience.

.....

.....

Marital status Single ☐ Married ☐

Life partner ☐ Divorced ☐

Do you have any dependents? Yes ☐ No ☐

How many dependants?.....

How are you related to the dependants?.....

Who is responsible for supporting the dependents?

.....

.....

Indicate if this is your second or third year of study on the BOH programme.

BOH II ☐ BOHIII ☐

Have you repeated any of the BOH academic study years? Yes ☐ No ☐

What is your view on why you had to repeat a year?

.....

.....

What is your current highest qualification?

Grade Xii ☐ University degree ☐ University diploma ☐

University of Technology qualification ☐ Other qualifications ☐

Please specify the post-school qualifications you have obtained.

.....

.....

Were you employed before you entered the Bachelor of Oral Health programme?

Yes ☐ **No** ☐

If yes, what type of employment did you engage in?

.....

.....

Are you currently working after hours?

Yes ☐ **No** ☐

What type of work are you doing after hours?

.....

.....

How many hours do you spend working after hours?

.....

Who is funding your studies?

.....

Please provide information about the occupation of your

Father.....

Mother.....

Spouse or life partner.....

The qualifications of your

Father.....

Mother.....

Spouse or life partner.....

How many siblings do you have? State how many brothers and/or sisters.

.....

In what type of structure do you currently live during your studies?

Private formal housing	☐	Formal house	☐	Flat	☐
Townhouse	☐	Campus hostel	☐	Other	☐

If "Other", please specify:

.....

.....

Please indicate by ticking the boxes if your housing during the years of study has the following:

A separate room for each individual staying at the accommodation	**Yes**	☐	**No**	☐
A fully functioning bathroom inside the accommodation	**Yes**	☐	**No**	☐
Water from a tap inside the accommodation	**Yes**	☐	**No**	☐
Electricity on a daily basis	**Yes**	☐	**No**	☐
Daily availability of hot water from inside the accommodation	**Yes**	☐	**No**	☐

Television	**Yes**	☐	**No**	☐
DSTV	**Yes**	☐	**No**	☐
Wi-Fi	**Yes**	☐	**No**	☐
A desk and chair to sit at when studying	**Yes**	☐	**No**	☐
The place you are studying is conducive to studying	**Yes**	☐	**No**	☐

If "No", please explain why you find your current accommodation not to be a good learning environment.

.....

.....

Do you ever experience or witness violence in the environment you are situated in at the moment or at any time? How does it affect you?

.....

.....

.....

Do you participate in extracurricular activities? **Yes** ☐ **No** ☐

If "Yes", please indicate what type of extra-curricular activities.

.....

.....

.....

If "No", please indicate why you do not participate in any extracurricular activities.

.....

.....

.....

How would you rate your physical health?

Excellent ☐ **Good** ☐ **Fairly good** ☐

Poor ☐ **Very poor** ☐

Motivate your answer about your physical health.

.....

.....

.....

How would you rate your psychological/mental health?

Excellent ☐ **Good** ☐

Fairly good ☐ **Poor** ☐ **Very poor** ☐

Motivate your answer about your psychological health.

.....

.....

.....

Have you had any counselling about your psychological/mental health?

Yes ☐ **No** ☐

Are you taking any medication for your emotional well-being at the moment?

Yes ☐ **No** ☐

Over-the-counter medication: Type/brand name .....

Pre-scribed medication: Type/brand name.....

Do you think you should be seeking counselling to assist you with your psychological health?

Yes ☐ **No** ☐

If "Yes", explain why you think you need counselling.

.....

.....

Your current emotional status:

On a scale from 1 to 10, how happy are you at this moment? 1, not being happy at all, and 10, being extremely happy.

1 2 3 4 5 6 7 8 9 10

What factors, according to your perception and experience, contribute to your emotional status at this moment?

.....

.....

.....

Do you have any people that you can turn to when having problems?

Yes ☐ **No** ☐

Please state the relationship you have with the person you can turn to when having problems.

.....

.....

.....

APPENDIX 8: LETTER TO THE PROSPECTIVE STUDENT PARTICIPANT

Date 20/01/2020

Title: The psychosocial and emotional well-being of oral hygiene students at a South African university: A case study

Dear prospective student participant

My name is Mrs Karin Viljoen, and I am researching under the supervision of Prof. K. Mohangi, a Professor in the Department of Educational Psychology, towards a PhD degree in Psychology of Education at the University of South Africa.

I have a bursary from UNISA awarded toward the completion of this study to obtain a PhD degree in Psychology of Education.

I am inviting you to participate in a study entitled: The psychosocial and emotional well-being of oral hygiene students at a South African university: A case study

What Is The Purpose Of The Study?

The purpose of this study is to collect information that could assist with the identification of perceived factors that may influence the psychosocial and emotional well-being of students registered for the Bachelor's in Oral Health degree. The psychosocial and emotional well-being of students may influence coping mechanisms, academic performance and the holistic well-being of the student. Identification of perceived factors that may influence the well-being of the students may assist the university in providing appropriate support to students to achieve optimal and holistic well-being during their years of study and for the “World of work”.

Why Am I Being Invited To Participate?

You are invited because you are currently registered for a Bachelor's degree in Oral Health and are part of an exclusive group of students who may provide rich information contributing to this study.

Regarding student participation, I obtained your name, surname, year of study, and your student number from the class lists for the academic year 2020 as compiled by the offices of the Academic Deputy Dean.

The sample size for this research project will be determined by those potential participants who voluntarily indicate their willingness to participate in the study. Each potential participant has the autonomy to decide to participate in the study.

What Is The Nature Of My Participation In This Study?

The study involves audio-taping and note-taking during face-to-face interviews, self-administered questionnaires collecting demographic information, with the focus on open-ended questions and focus group discussions.

You will be required to answer questions as stipulated in Appendices H, I, J, and L. Questions in the questionnaire include demographic information and open-ended questions. The face-to-face semi-structured interviews will be focused on the theme of well-being and the factors you perceive that may influence your well-being, coping strategies, factors in the learning environment and social environment which influence your well-being. The approximate time to complete the questionnaire may be 45 minutes. The face-to-face semi-structured interview may take about 90 minutes, and the focus group discussion could be 90 minutes. The time scheduled for completing the questionnaire, face-to-face semi-structured interviews, and focus group discussions will not interfere with the timetabling of lectures, pre-clinical work, clinical work or assessment activities.

Can I Withdraw From This Study Even After Having Agreed To Participate?

Participating in this study is voluntary, and you are under no obligation to consent to participation. If you decide to take part, you will be given this information sheet to keep and asked to sign a written consent form. You are free to withdraw at any time, without giving a reason. However, once you have submitted the questionnaire, it will not be possible to withdraw the questionnaire, as the questionnaire is anonymous and the

researcher will not be able to retrieve the questionnaire from the data collected.

What Are The Potential Benefits Of Taking Part In This Study?

The benefit of this study is that the collected data and their analysis could provide the researcher and, ultimately, the training institution with valuable insights. This information could assist students to improve academic performance, acquire positive coping mechanisms, provide support systems, and ultimately benefit from holistic well-being.

Are There Any Negative Consequences For Me If I Participate In The Research Project?

The researcher is aware that some of the questions, although not posing harm, may be perceived as sensitive. Participants are under no obligation to answer such questions.

Will The Information That I Convey To The Researcher And My Identity Be Kept Confidential?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research (this measure refers to confidentiality) Your name will not be recorded anywhere and no one will be able to connect you to the answers you give (this measure refers to anonymity). Your answers will be given a code number or a pseudonym, and you will be referred to in this way in the data, any publications, or other research reporting methods, such as conference proceedings (this measure refers to confidentiality).

The researcher is the only person who will have access to the collected data. Should the researcher decide to request the assistance of a transcriber, the data will not reflect the identity of any of the participants.

The anonymity of the participant will at all times be respected during the write-up of the results, analysis of data reports in the thesis, as well as in any journal articles derived from this study. Participants' privacy will be protected in any publication of the information. Although privacy and anonymity cannot be guaranteed during the focus group discussions, the researcher pledges that when writing such reports, no names of individuals will be mentioned. The researcher will ensure that no participant will be

connected to any information provided during the focus group discussions when reporting thereon.

A focus group discussion is a technique that is applied as a method of collecting data in qualitative research and could be considered a group interview. Focus group discussions focus on a specific theme or topic. In this case, the focus will be on the topic of the well-being of students. During focus group discussions, a theme or topic is usually explored in depth. In a focus group, the researcher is interested in how participants respond to each other's responses to questions. Participants may form a view on the topic based on the views deriving from other participants and their own views. Researchers are specifically interested in exposing how the group's participants view the issues which are under discussion. The focus group for this study will be conducted by the researcher herself, who will serve as the facilitator. The focus group sessions will be voice-recorded, and observation notes will be made by the researcher.

The researcher will make every effort to ensure that you will not be connected to the information that you share during the focus group, as pseudonyms will be allocated to participants during the writing of the final report.

Each person participating in the focus group discussions will be requested to sign a non-disclosure agreement document in which they declare that, as participants, they shall hold in trust, keep confidential and not disclose to any third party or make any use of the confidential information that is part of the focus group discussions.

How Will The Researcher Protect The Security Of Data?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet at the researcher's offices for future research or academic purposes; electronic information will be stored on a password-protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Hard copies will be shredded, and/or electronic copies will be permanently deleted from electronic devices and computer software.

Will I Receive Payment Or Any Incentives For Participating In This Study?

No payment or reward will be offered to participants. There will be no cost involved for the account of the participants.

Has The Study Received Ethics Approval

This study has received written approval from the Research Ethics Review Committee of UNISA. A copy of the approval letter can be obtained from the researcher if you so wish. The ethical clearance number is 2020/02/195998670/11AM

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Mrs Karin Viljoen on [redacted] or email kviljoen@[redacted].ac.za. The findings are accessible during the period of the presentation and for two weeks thereafter in a report format.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Mrs Viljoen at [redacted] or via e-mail: kviljoen@[redacted].ac.za

Should you have concerns about how the research has been conducted, you may contact Prof K. Mohangi at the e-mail address mohank@[redacted].ac.za or [redacted]

Thank you for taking the time to read this information sheet and for participating in this study.

APPENDIX 9: LETTER TO THE PROSPECTIVE STAFF PARTICIPANT



Date: 20/01/2020

Title: The psychosocial and emotional well-being of oral hygiene students at a South African university: A case study

Dear prospective staff member participant

My name is Mrs Karin Viljoen, and I am researching under the supervision of Prof. K. Mohangi, a Professor in the Department of Educational Psychology, towards a PhD degree in Psychology of Education at the University of South Africa.

I have a bursary from UNISA awarded towards the completion of this study to obtain a PhD degree in Psychology of Education.

I am inviting you to participate in a study entitled: The psychosocial and emotional well-being of oral hygiene students at a South African university: A case study

What Is The Purpose Of The Study?

The purpose of this study is to collect information that could assist with the identification of perceived factors that may influence the psychosocial and emotional well-being of students registered for the Bachelor's in Oral Health degree. The psychosocial and emotional well-being of students may influence coping mechanisms, academic performance and the holistic well-being of the student. Identification of perceived factors that may influence the well-being of the students may assist the university in providing appropriate support to the oral hygiene students to achieve optimal well-being during their years of study and for the “World of work”.

Why Am I Being Invited To Participate?

You are invited because you are currently a lecturer and/or clinical supervisor in the oral hygiene department. Due to your daily engagement as an academic in lectures and on the clinical teaching platform with the oral hygiene students, you are part of an

exclusive group of staff members who may provide rich information contributing to this study.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

As a staff member, the researcher will require you to participate in a face-to-face interview. The interview will be semi-structured and conducted by the researcher. Information derived from the interview will be audio taped, and handwritten notes will be made by the researcher.

The duration of the interview will be approximately 60 minutes. You will be required to answer questions as stipulated in Appendix K. The face-to-face semi-structured interviews will focus on the theme of well-being, namely, what is your understanding of well-being, what is your current perception of the students' well-being, and the challenges and support of the students' well-being.

Can I Withdraw From This Study Even After Having Agreed To Participate?

Participation in this study is voluntary, and you are under no obligation to consent to participation. If you do decide to participate, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The benefit of this study is that the collected information and analysis of the data could provide the researcher and, ultimately, the training institution with valuable information on how to provide well-being support to the oral hygiene students. This information could assist students to improve academic performance, acquire positive coping mechanisms, provide support systems and ultimately benefit from holistic well-being.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

The researcher is aware that some of the questions, although not posing harm, may be perceived as sensitive. Participants are under no obligation to answer such questions.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher, will know about your involvement in this research (this measure refers to confidentiality). Your name will not be recorded anywhere, and no one will be able to connect you to the answers you give (this measure refers to anonymity). Your recorded interview will be assigned a code number or a pseudonym, and you will be referred to in this way in the data, in publications, and in other research reporting methods, such as conference proceedings (this measure refers to confidentiality).

The researcher is the only person who will have access to the collected data. Should the researcher decide to request assistance from a transcriber, the data will not reveal the identities of any participants.

The anonymity of the participant will at all times be respected during the write-up of the results, analysis of data and reports in the thesis, as well as should any journal articles derived from this study. Participants' privacy will be protected in any publication of the information, as all data will have any of the information. Although anonymity cannot be guaranteed during the face-to-face interview, the researcher pledges that when writing such reports that no names of individuals will be mentioned. The researcher will ensure that no participant will be connected to any information provided during the face-to-face interview when reporting thereon.

HOW WILL THE RESEARCHER PROTECT THE SECURITY OF DATA?

Voice and paper copies of your interview will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet at the researcher's offices for future research or academic purposes; electronic information will be stored on a password-protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Hard copies will be shredded, and/or electronic copies will be permanently deleted.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

No payment or reward will be offered to participants. There will be no cost involved in the account of the participants.

HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of UNISA. A copy of the approval letter can be obtained from the researcher if you so wish. The ethical clearance number is 2020/02/195998670/11AM

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Mrs Karin Viljoen on [redacted] or email kviljoen@[redacted].ac.za. The findings are accessible during the period of the presentation and for two weeks thereafter in a report format.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Mrs Viljoen at 021 937-3125 or via e-mail: kviljoen@[redacted]ac.za

Should you have concerns about how the research has been conducted, you may contact Prof K. Mohangi at the e-mail address mohank@[redacted]ac.za or 012 3376169.

Thank you for taking the time to read this information sheet and for participating in this study.

Mrs. K Viljoen

APPENDIX 10: SEMI-STRUCTURED INTERVIEW SCHEDULE WITH BOH STUDENTS



Interview schedule: Students

Participant code:..... Date:.....

These questions are intended to guide the semi-structured interview. While the participant's responses will guide the discussion, the researcher will gather data to answer the objectives of this research.

1. What is your understanding of:
   - psychological well-being?
   - social well-being?
   - emotional well-being?
2. How would you describe the following at present?
   - your psychological well-being
   - your social well-being
   - your emotional well-being
3. Has your psychosocial or emotional well-being changed during the past few months or years? Please describe. What has contributed to these changes? Elaborate on your answer or explain what has brought on the changes (if any) in your psychosocial and/or emotional well-being.
4. How does the following influence your overall well-being?: Elaborate on each:
   - your learning environment
   - your social environment
   - factors in your personal life
5. What are your thoughts on what you could do to improve your psychological well-being?
6. What are your thoughts on what you could do to improve your social well-being?

7. What are your thoughts on what you could do to improve your emotional well-being?
8. How satisfied are you with who and what you are at the moment? In other words, what is your current perception of yourself? (Self-perception)
9. How would you like to change, and how would it contribute to your overall well-being?
10. Do you feel that you are in charge of the various environments you function in daily? Such as in your:
    - Social environment
    - Learning environment
    - Accommodation and living environment
11. How would you describe your relationships/ connectedness with other people, such as your:
    - Friends
    - Family
    - Spouse/ life partner
    - Children
    - Lecturing staff/ colleagues
    - Clinical supervisors
    - Patients
    - Administrative staff in the learning environment
12. What is your typical reaction when you experience difficulties, challenges or confrontations?
13. Would you say you are a spiritual person? Explain or elaborate on your answer.
14. How do challenging times influence your spiritual life?
15. Who or what supports you emotionally as a student/learner?
16. Who or what would you consider currently as a challenge during your studies?
17. Do you experience any stress during your studies?
18. What are the factors which contribute to your stress? / What are the most important stressors at the moment in the learning environment?

19. How do the factors you identified in the previous **answer influence you** as a learner and as an individual when functioning outside the learning environment?
20. Of what are you the most afraid in your current situation?
21. Would you consider yourself a happy person? What makes you happy in your current situation?
22. Do you experience depression or just feel “down” at times? What is the cause of feeling depressed or “down”? elaborate
23. What are your greatest challenges at this moment?
    - In your Learning environment
    - In your Physical environment
    - Social environment
    - Emotional challenges?
24. What are your Coping mechanisms in the learning environment? How do you manage?
25. What are your Coping mechanisms in your social environment?
26. What are your Coping mechanisms in your personal life?
27. What type of support do you have available in your:
    - Learning environment
    - Social environment
    - Family
    - Friends
    - Life partner/ partner/ spouse
    - Children
28. How would you rate the efficacy of these support systems?
29. Do you have any specific person you can count on when you need support?
30. Do you know of any other support structures to your availability in the community or learning environment?
31. Do you, and why do you make use of these support structures?
32. Why not? (if participant indicates that they do not make use of support structures)
33. What suggestions would you make to your university, faculty, family, friends, partners, and children to support you better?

34. How do you feel about your future?
35. How do you feel about your career you are about to enter?
36. How do you feel about mastering skills in:
    - Everyday life
    - The occupation you are preparing for at the moment
37. Was oral hygiene your first, second or third choice or may it not have been your choice at all?
38. Does the fact that you are studying oral hygiene contribute to your psychosocial and emotional status? Elaborate
39. Do you part take in extracurricular activities? Sport, hobbies, etc
40. Why do you par take or not in extracurricular activities?
41. When participating in extracurricular activities, how do you feel afterwards?
42. Would you consider yourself a happy person? Elaborate
43. Do you wish to add any comments or suggestions to this conversation?

Thank you for your participation.

APPENDIX 11: SEMI-STRUCTURED INTERVIEW QUESTIONS FOR PARTICIPATING LECTURERS AND CLINICAL ADVISORS ON THE PSYCHOSOCIAL AND EMOTIONAL WELL-BEING OF ORAL HYGIENE STUDENTS



The participant's responses will guide the discussion; however, the researcher will gather data to answer the objectives of this research.

Participant code: .....Date: .....

Gender: Male Female

1. What is your understanding of psychosocial well-being?
2. What is your understanding of emotional well-being?
3. What is your view on the faculty's promoting the well-being of our oral hygiene students?
4. To what extent are staff members provided with a clear mandate to improve student well-being? Are staff members given the resources by the faculty or university to support the promotion of the well-being of our students?
5. According to your perception and experience, what are the factors that challenge the well-being of the oral hygiene students?
6. According to what you have mentioned above, do you have any suggestions on how these challenges could be addressed and or resolved?
7. Do we, as staff and the faculty, provide enough student-friendly spaces around the various dental training facilities for students, which may contribute to their well-being?
8. To what extent do you think students see themselves as active contributors to the culture of well-being in their current learning environment?
9. In what ways do students lead activities that directly improve their well-being across the arts, sports, culture and academics at this faculty?

10. According to your knowledge and experience, in what ways do the oral hygiene students contribute to strategic planning and identifying the priorities and responses to promote student well-being?
11. What evidence do you have of teacher collaboration that enhances student well-being?
12. To what extent does the above evidence you have mentioned inform teaching practices for student well-being?
13. To what extent are students' strengths, prior knowledge, interests and aspirations valued and reflected in curriculum planning and delivery?
14. Are you of the opinion that lecturers and clinical supervisors systematically and purposefully teach the skills needed for students to develop social-awareness, relationship skills, self-confidence, self-management and responsible decision-making, which all contribute to well-being?
15. According to your teaching experience, how well aligned are the faculty's well-being priorities with the oral hygienist curriculum?
16. According to your experience, how do students feel about their teachers? Are relationships strong, trusting and fair?
17. To what extent do students lead their own learning? According to your knowledge and experience, do you think all students feel safe at school?

Motivate your answer:

18. According to your knowledge and experience, do you think the clinical advisory support program at the faculty is successful in providing the required support to students?
19. According to the clinical advisory support programme, all students have one academic lecturer they can turn to. Do you think that students should have more than one adult they can turn to for guidance and support? Would it benefit their well-being?
20. How clear and robust are the policies for student well-being, including anti-bullying and action to prevent and respond to suicide within our faculty?
21. According to your knowledge, does the faculty or university have policies for student well-being that align with the practice for student well-being?

22. To what extent do the faculty and university provide the training and resources for lecturers and clinical supervisors to:
    a) Build positive rapport with all students
    b) Implement restorative practices
    c) Identify and assist vulnerable students
    d) Contribute to strategies to improve student well-being
    e) Work safely and ethically with information that could risk student well-being and safety?
23. According to your knowledge, is there a formal complaint procedure in place for students if they are of the opinion that their well-being is placed under threat?
24. According to your knowledge, what processes and procedures are in place for students in case of traumatic events?
25. According to your knowledge, does the faculty have a set of agreed goals and targets based on data that emphasise student well-being, to guide all actions, reviews and improvements so that all young people can be, and continue to be, ‘confident, connected, actively involved lifelong learners’.
26. Do you wish to add any comments or suggestions to this conversation?

APPENDIX 12: FOCUS GROUP CONSENT AND CONFIDENTIALITY AGREEMENT



I_____ grant consent that the information I share during the focus group may be used by _Karin Viljoen for research purposes. I am aware that the group discussions will be digitally recorded, and I grant consent for these recordings, provided that my privacy will be protected. I undertake not to divulge any information that is shared in the group discussions to any person outside the group to maintain confidentiality. I shall at all times hold in trust, keep confidential and not disclose to any third party or make any use of the confidential information beyond those activities that are part of the Focus group.

Participant‘s Name (Please print): _____

Participant Signature: _____

Researcher’s Name: (Please print): Karin Viljoen

_____

Researcher’s Signature: Date: 20/01/2020

APPENDIX 13: FOCUS GROUP DISCUSSION: POSSIBLE QUESTIONS TO GUIDE THE DISCUSSION



The purpose of the focus group is to discuss the factors associated with the psychosocial and emotional well-being of students studying oral hygiene in a South African university.

The groups will consist of a minimum of 6 and a maximum of 10 participants. Each group discussion session will last for approximately 90 minutes.

The venue will be situated in the Oral Hygiene Board Room [redacted] Your willingness to avail your time and willingness to partake in this study are sincerely appreciated.

Focus group rules/guidelines

The input of each participant is valuable.

Each participant must have an equal chance to speak. One participant may talk at a time.

Do not have side conversations.

All participants must respect each other at all times. You are allowed to disagree but not argue.

All cell phones must be switched off and placed in a safe place. All responses are confidential.

Do you have any questions before we start the focus group discussion?

Question 1

Explain what your understanding is of the concept of psychological well-being and emotional well-being. What factors do you perceive as having an influence on your well-being?

From the factors you have mentioned, which factor has the greatest influence on your well-being? Explain why? Is there anything else you can add?

Question 2

According to your experience, has your well-being changed over the past few months? Provide reasons. What is your current well-being according to your perception? What was your well-being status before? Explain what has happened to change your well-being.

Explain how it has influenced your daily functioning.

Question 3

Are there situations on campus that influence well-being? Provide more detail.

How do these situations influence daily functioning?

Any suggestions on how these situations may be addressed?

Who has a different perspective from that of the group discussion?

Question 4

Do any of you experience any environmental, social or psychological challenges which may influence your well-being?

Can you elaborate on these challenges? Can you provide examples?

How do you perceive these challenges, and do you have coping mechanisms? What are these Coping mechanisms applied by students?

What is the effect of these coping mechanisms? Do you have any support systems to turn to?

Do you have possible solutions to the challenges students experience?

Overall, considering all the factors mentioned that may influence your well-being, would you claim that you are experiencing positive well-being?

Question 5

What is your opinion on the contribution of the university, faculty, and lecturers towards students' well-being?

Is the psychosocial and emotional support provided in your current environment meeting your expectations? Elaborate on your answers.

Any suggestions on how support could be improved?

Are there any other matters to discuss regarding students' well-being? Who wants to add information regarding the topic being researched?

Thank you for your participation.

APPENDIX 14: EXAMPLE OF ANALYSIS OF THE SELF-ADMINISTERED QUESTIONNAIRE

Question: Does the language you receive lectures in differ from your home language? Yes/No

If answered “Yes”, explain the influence thereof on your learning experience.

Participant number	Did your home language differ from the lecture language		If "Yes" How does it influence your learning?
seso	Yes	No	
1		1	
2	1		
3		1	
4		1	
5	1		
6	1		It is not hard but very essential to know, as it is the bridge language to communicate in for everyone, IsiZulu
7	1		It is helpful but in some cases difficult when it comes to terminology that is difficult to pronounce, isiXhoza
8		1	
9	1		I fully understand English, but especially in the beginning (Afr)
10		1	
11		1	
12	1		No data participant was Afrikaans speaking
13		1	
14		1	
15	1		
16		1	
17		1	
18	1		It is difficult to explain to patients in Afrikaans about their condition due to me learn everything in English. A lot of the English words are difficult to understand (Afr)
19		1	
20	1		
21	1		I struggle with understanding biological/big words (Afr)
22	1		
23		1	
24		1	
25	1		It does not influence my learning experience that much because I completely understand English isiZulu
26	1		At the beginning, it was quite challenging to translate the English being spoken to in class to your home language to understand, but with time, it got better (Afr)
27		1	
28		1	I studied in Afr, so my educational foundation was based in Afrikaans, but my family is bilingual (Afr)
29		1	
30		1	
31	1		Sometimes it has a negative impact where I could misinterpret the words (influences?) type of words used in assignment Xhoza
32	1		it was difficult the first few months of starting university, but I managed to adjust using a dictionary and watching videos. (AFR)
33		1	
34		1	
	15	19	
Number	home lang differ from lecture language		
seso	Yes	No	How does it influence your learning?
35			
36		1	
37	1		I can comprehend my lectures with ease as I was taught how to read, write and speak in English from a young age. Sepedi
38	1		Most of times I understand the content, but sometimes I (gram) Cramm? The work is difficult for me to translate into my own language, Sesoto
39		1	
40		1	
41		1	
42		1	Having been taught in English from primary school, I understand it, but sometimes there are times when I have to think and translate the words beingsaid in my head
43	1		It is a bit challenging to understand the words. I need to translate to English
44		1	
45	1		In the beginning, it was difficult to study in another language as words differed, but I grew accustomed (Afr)
46		1	
47		1	
48	1		It is beneficial for me should I want to move to a different country that I am familiar with the dental language (Afr)
49	1		Sometimes the understanding of certain words I struggle with often delays me from getting a good and clear understanding of my work (AFR)
50		1	
51		1	It has not affected the learning significantly as English has always been the medium language throughout my schooling career, but sometimes I struggle to express or articulate myself IsiZ
52	1		I found that during the first years of studying, it was difficult to understand concepts. Had to do extra research to understand it. It also affected my performance academically
53		1	
54			
55			
56	1		Translating everything you read into Afrikaans is challenging. Some of the big English words require me to translate them before understanding what is asked. (AFR)
57	1		Sometimes the words are very complicated and hard to pronounce. This could make presentation work difficult if there are no substitute words (AFR)
58		1	
59	1		It is not too significant, however, I have experienced challenges where I could not understand a particular word or sentence in a test/exam, and that affected my performance (IsiZulu)
60	1		I don’t think there's any negative influence that has had on my learning experience, mainly because English has always been the language that I've been taught in (Afr)
			Key for analysis:
			Blue: Home language differed from the tuition language and influenced their studies
			Lilac: :Home language did not differ from tuition language

Question: Is the place you are studying at conducive to studying in? Yes/No

If "**No**", please explain why you find your current accommodation not to be a good learning environment.

Is your environment conducive to studying?			If "No" explain why it is not conducive to studying
Yes	No	Participant Number	
1		1	
1		2	
1		3	
1		4	
1		5	
1		6	
1		7	
	1	8	Other family members are also working from home
1		9	
1		10	
1		11	
1		12	
	1	13	It is noisy, and I share a room with my siblings
	1	14	Too much noise
		15	
1		16	
1		17	
1		18	
1		19	
1		20	
		21	(mentions area)) can be loud at times, live a block away from ..... School
	1	22	The wifi in my room is making me have difficulties with attending lectures and studying
1		23	
	1	24	Noisy, busy
1		25	
1		26	
1		27	
1		28	
1		29	However I share a room with my sister, some nights I work until late with the room light on, and consequently, when she works, I need to sleep. This affects our quality of sleep which in turn effects how we function at school/varisty the next day
1		30	I do not have access to the internet whenever I want, which limits the research that I need to do and delays what I need to do
	1	31	I have to prepare stuff for my family, help my sister with her work, have chores to attend to, TV and music get distracting
1		32	
1		33	
1		34	
26	6		
condusive to study			If no explain why
Yes	No		
1		35	
1		36	
1		37	
1		38	
1		39	
1		40	
1		41	
1		42	
1		43	
1		44	
1		45	
1		46	
1		47	
1		48	
1		49	
	1	50	Honestly, I am scared of myself, of my father and this virus
1		51	
	1	52	Noisy in the neighbourhood, parents and siblings not understanding that I have to study, daily occurrences in the neighbourhood
1		53	
1		54	
	1	55	I share a room with my siblings, and my house consists of many people
	1	56	On residence everyone is doing their own thing, not obeying the rules, and there are load noises when you want to study. Students are making a noise, and the residence is too busy
	1	57	The area is gang-infested with loud sounds from outside. Share a room with others
1		58	
	1	59	There are constantly people making noise, having parties, etc. The designated study rooms do not have chairs, and sometimes have to share with other people.
1		60	
20			
			Key for analysis
			Green: noise factor
			Orange: family related matters
			Blue: Technology challenges, Wifi,

Question: Do you ever experience or witness violence in the environment you are situated in at the moment or at any time? Yes/No

If "**Yes**", how does it affect you?

Do you ever experience violence in your environment?			Participant number
Yes	No	How does it affect you?	
	1		1
	1		2
1		drive-by shooting 2 weeks ago (violence)	3
	1		4
	1		5
1		It makes me feel uncomfortable and fear for my life, while far from family	6
1		Traumatic, there were times when fights could occur, and I'd witness people leaving the room with bloody clothes	7
	1		8
	1		9
	1		10
	1		11
	1		12
1		Shooting, I don't want to study late and leave the lights on, afraid of what could happen if someone runs in	13
1		It makes me scared to go around or walk in my area	14
	1		15
	1		16
	1		17
	1		18
	1		19
	1		20
1		I will call security to move them out of the area, which occurs weekends end of month and the start of the month, drunk people, homeless people	21
	1		22
1		Gang violence is rife in my area- I have since moved, and it is much better now.	23
	1		24
	1		25
	1		26
	1		27
	1		28
	1		29
1		It makes me feel unsafe and adds extra anxiety	30
1		I get anxious walking to my place, hear gunshots	31
1		it affects my study, constantly having anxiety about what might happen to my family members	32
	1		33
	1		34
Violence		**If yes**	
Yes	**No**	**Effect on you?**	
	1		35
	1		36
1		It makes me more aware of my surrounding environment; moreover, it encourages me to walk and go to the shopping mall with other students	37
	1		38
	1		39
	1		40
1		It does not really affect me as much as I am not directly involved in the altercations	41
	1		42
	1		43
	1		44
	1		45
1		The area in which I reside is not a typical safe environment. There are often break-ins and violence at my neighbours	46
1		Break-ins and robbery	47
	1		48
	1		49
1		I've always felt anxious, sometimes even just from sitting indoors,	50
	1		51
1		I am in shock and need time	52
	1		53
	1		54
	1		55
	1		56
1		Negatively, because one can't get resources from outside	57
	1		58
	1		59
	1		60

Question: Do you participate in extra-curricular activities? Yes/ No

If “**Yes**”, please indicate what type of extra-curricular activities.

If ”No”, please indicate why you do not participate in any extra-curricular activities.

	Yes	Type	No	Explain why you do not participate in extracurricular activities
1			1	I do not have time, I need to travel home after school, arrive home late, clean, help with food, study, then I study or spend time with my family on weekends
2			1	I really wish I could, but due to less time I have
3	1	I play squash at a sports club, and I coach my brother when he plays table tennis in tournaments		
4			1	I used to swim for a club, but due to water restrictions and then COVID-19, I did not pursue
5			1	I have become extremely occupied with the university work
6			1	I do not get time, I always have to be at school or do school work
7			1	They are time-consuming!!
8			1	No reason state
9			1	Due to COVID, all extra-curricular activities were stopped, and people rather stayed home
10	1	Ice skating		
11	1	Horse riding, tennis, yoga		
12	1	Soccer and Chess		
13			1	I work in my spare time sometimes, when I have class or finish seeing my patients, it makes me tired to want to do anything else
14			1	I do not have time, I need to travel home after school, arrive home late, clean, help with food, study, then I study or spend time with my family on weekends
15	1	Model for film agencies as an extra, currently running and learning to grow my own business	0	
16	1	Jogging, skateboarding (rarely), Soccer		
17			1	Cannot drive to attend activities and no one can drop and fetch me
18			1	I prefer to use all my time studying and achieving the best marks. My parents also prefer that I use my time to study/do assignments. I don't really have enough time to do extra-curricular activities, maybe after I gradu
19	1	Soccer, cycling		
20			1	I do not have the time to participate in any extracurricular activities
21	1	1st year, I used to run and do indoor rock climbing. I do not have time for it anymore	1	The 2nd year workload is too much. Need to prioritise
22	1			Because I have off-campus residence there are no activities done. If I want to do activities, I have to go to the main campus instead, and I come back from school late so its hard to engage myself in sports activities
23	1	I enjoy making art		
24			1	no time
25			1	I do not have time
26			1	My studies do not allow me to due to time constraints)
27			1	I don't have time due to responsibilities
28	1	Events, jogging		
29			1	There is absolutely no time; some days, I feel guilty for even sitting down to eat or sleep
30			1	I just don't feel that I have enough time to take part in additional activities
31			1	I haven't heard of any (activities?)
32			1	I do not have time with all the university assignments and studying for tests
33	1	Church activities		
34			1	Varsity is hectic enough when I have free time, I like to relax. Workload is too high
		Extra curricular activities?		
	Yes	Type	No	Why
35			1	Between academic commitment and working part-time, there is no time to do extra-curricular activities
36	1	High jump, surfing, heptathlon, gym, running, animal volunteer		
37			1	The gym is not close by and one feels drained after a workout. I prefer to use the hours to study and excel academically
38			1	I am lazy
39			1	I did extra-curricular activities at school, but I stopped because I chose to focus more on my academics in university
40	1	Gym, running, sailing		
41			1	Most of the time I will make use of my time by doing chores, studying and reading
42			1	The campus or residence I am staying in is not in the University's campus, and there are not extra-curricular activities in place
43	1	Soccer occasionally		
44			1	I would love to participate, but I do not have the time, and I cannot find a team that is situated close to where I reside
45	1	Gym, hiking on walking trails, painting, and drawing as a part-time job.		
46	1	Baking and decorating cakes for extra money		
47	1	Bellville netball club, however, due to lockdown and my busy schedule, I cannot make time for it		
48			1	I have no friends, and I also spend my time studying
49			1	Classes finish late in the afternoon, and after that I had to study for the upcoming tests
50			1	As an asthmatic, I haven't been active in much sport. I also lost interest in playing guitar
51			1	The majority of extracurricular activities are on the Main campus and occur during time where I am still in class, clinics or at M/Plain
52			1	No data
53	1	Hiking and running		
54			1	As a student, most of my time is allocated towards my studies and spending time with my family
55			1	
56			1	I don't have time to balance between school work and extracurricular activities
57	1	Volunteer to do a career expo at high schools		
58	1	I exercise regularly and either run, hike, or play soccer, which makes me feel good		
59			1	I feel like doing extracurricular activities will be a distraction and affect my performance in school. I want all or most of my time and energy to go towards my school work and resting
60			1	I really don't have the time to juggle school work and extra-curricular activities
				Key for analysis
				Green: No time for extra-curricular activities
		Key for analysis		Purple: Academically focused
		Yellow: Physical activities		Pink: Personal reasons
		Pink: Non-physical activities, hobbies, other interests		Red: Not available activities

Question: Would you rate your physical health as? Excellent, Good, Fairly good, Poor or Very poor.

Motivate your answer about your physical health.

Rate your health						Motivate you answer with regard to health
Excellent	Good	Fairly good	poor	very poor	Participant Number	
		1			1	I can do everything physically, I just need to exercise more so that I can be fit and energised
			1		2	I do not exercise nor go to any physical training activity
		1			3	I am very active and I take care of myself well. I barely ever get sick
		1			4	I take time during the day to exercise, and I drink more than 8 glasses of water a day
	1				5	Last year, I exercised frequently, but as I do not exercise regularly, I am still in great health
			1		6	Due to school hours and work, I always come back to rest and sleep, then wake up to study
	1				7	I tend to excersie during my study sessions and that does ...me to (be?) fit
		1			8	Eat healthy and exercise
	1				9	I suffer from no illness or diseases
		1			10	I exercise twice a week and eat a balanced diet
		1			11	I do yoga twice a week, I often go horse riding and play tennis with friends
	1				12	I practice soccer 3 to 4 times every week
			1		13	I am always tired
		1			14	I do not exercise a lot and eat a lot of junk food.
		1			15	I exercise twice a week and take long walks now and again, a fair diet
		1			16	I do go out jogging, but not every day, and I do it for my mental health as well. My diet is cariogenic, though
		1			17	I suffer from bad eczema on my hands that effects thorugout the year, and therefore I am very self-conscious of it. I am also anaemic and suffer from acne
ate.		1			18	I currently have an abscess, and I do not have enough time to exercise. I try to eat healthy and drink enough water, and also make sure to get 7 hours of sleep
1					19	Go th the gym every day, eat healthy
			1		20	I do not exercise every day
		1			21	I used to be active before I studied, now I take the stairs at the hospital, don't have time, take the dogs to the park and books to study there
		1			22	
		1			23	I have no extreme disabilities, my senses all work fine, but my asthma prevents me from doing extremely strenuous activity
		1			24	
		1			25	I exercise seldom
		1			26	I only stated fairly good as I do not excersise as I should, so there is room for improvement
	1				27	I do not have any underlying diseases the only time I do get sick is when I am stressed
	1				28	it is good on most days it is just my migraine ets and othe r things
		1			29	I am not sick or in pain
			1		30	In the current situation being uynder lockdown it has been difficult my health as I am not eating as healthily as I did prior , I am not able to go to the gym and I have just not been out of home
		1			31	I work out at least thrice a week, I do not run out of breath easily when doing normal activities, recently diagnosed with cholestorol
	1				32	I try to walk and move around a lot and eat healthy
		1			33	I am not very active
			1		34	I am exhausted most of the time because I am not fit
1	7	20	6	0		
Rate your health						Motivate the answer with regard to health
Excellent	Good	Fairly good	poor	very poor		
		1			35	I try to physically exercise, I have never been diagnosed with any condition, and I have never been critically ill besides normal flu
1					36	I train daily, eat nutritious foods , ensure I trake in plenty of water to be able to keep "momentum" and stay fit (there is more info on the QP)
		1			37	I can get by, most of the time I take the lift instead of the elevator. (Stairs?) I get headaches and feel pain in my neck
1					38	I do not have any condition or desease and I can function well
	1				39	I have no underlying helath conditions. I walk to and from campus each day of choice as it contributes to my health, and I eat every day and try to follow a healthy diet everyday.
		1			40	I enjoy doing fitness and eating healthy, but sometimes time and the finance restricts that. I wish to be better, I exercise when I can and also sometimes I am not in the mood to be healthy in a sense where take outs are easier.
		1			41	I do not excerise or eat balanced but I do have not expreienced any complications relation to physical health
		1			42	I do exercise, but only when I feel like doing so. I eat a lot of fast food
	1				43	Healthy eating, occasional jogg,s Gym three times a week
	1				44	I do not have any major comorbidities
1					45	I am physically fit, no chronic or present illness, I rarely fall ill during the year
	1				46	I go to gym/training 3 times a week, hike on Sundays and my diet is fairly healthy
	1				47	I exercise regularly, but eating healthily is the challenge
		1			48	I eat well and do some exercise at home
1					49	Keep myself fit physically and exercise often, and have good hygiene factors
	1				50	I don't have any major disability. I do have asthma, which does affect me daily
	1				51	I rarely get sick, only once a year, but sometimes experience skin problems (eczema) and abscesses
		1			52	I am too lazy to exercise
		1			53	I try to stay active by engaging in hikes, doing exercises and running outdoors
	1				54	I am young with no underlying medical conditions, I do not exercise as at first as I would like to.
	1				55	Being happy, healthy and fully spiritual
		1			56	I am not an active person, do not exercise regularly, I do eat healthy and unhealthy foods, which is why I say my physical health is fairly good
	1				57	I don't use drugs, and I exercise sometimes. My diet isn't very healthy
	1				58	I try to exercise at least three times a week, try to eat well-balanced meals and get at least 8 hours of sleep at night
		1			59	I eat healthily, I try to stay active (exercise sometimes), and I feel good. I know, however, it is not excellent because sometimes I do have severe joint and back pain as well as headaches
1					60	I've never had any problems with my overall health in general I am always fine.
						Key for analysis
						Green: Excellent to good health
						White: Fairly good (can imporve- -very poor health)

Question: Would you rate your psychological/mental health as? Excellent, Good, Fairly good, Poor or Very poor

Motivate your answer about your psychological health.

Mental health					Participant number	Motivate your answer with regardto mental health
Excellent	Good	Fairly good	Poor	Very poor		
		1			1	I get distracted easily. I worry a lot anxiety and stress
		1			2	Academics is the major problem that causes my mental health to be in this state
	1				3	I am not easily influenced by others and stand by my own morals. I also love myself and work to improve by activiteis such as journaling and self-reflection.
		1			4	I ve been going through a rough patch in my relationship and it has changed my psychological health a lot
			1		5	I am extremely emotional, I cry regulary. I have anxiety and I recently less depressed which is good
	1				6	My marks have decreased , I have become stressed
		1			7	fairly good, I have moments where I'd get close to breaking down but I'd quickly pick myself up and keep my head high up (meaning to motivate myself)
			1		8	I have a lot of anxiety and depression episodes
				1	9	in previous years I had phases of depression, only lasting a few weeks, for the past year or 2, I cant even remember when last I was truly happy, the depression phase is not a phase anymore I think, it gives thoughts of unhappiness, -thinking and not wanting to live, feeling sad for no particular reason, feeling o
	1				10	Sometimes I doubt myself or get discouraged when I don't reach my goal, however most days my psychological health is good
		1			11	I think my psychological health is fairly good as I exercise, have a good diet and a balanced lifestyle
	1				12	Get to destress by playing soccer and chess
			1		13	
			1		14	I am under a lot of stress regarding my varisty work and my home situation
	1				15	Enjoy reading about mental health, write how I feel and what bothers me and always try to solve it and talk to people close to me and spend more time creating positivity and spending time doing what fulfills me
		1			16	it is fairly good, we do not get many hours to sleep, and the workload is piling up the stress
		1			17	I can function properly on a day-to-day basis but I do get my moments where I feel "off"
		1			18	I am happy with what I have achieved in life so far. Due to constant studying I don't have time to take care of my health (e.g see a doctor or dentist), and therefore I am constantly anxious and worried
1					19	Don't put myself under stress
			1		20	Due to the stress at univeristy I have lots of stress and anxiety
			1		21	Sleep... is a luxury, 4 hours sleep a nihgt. Havent had a weekend off in three months, just catching up on studies. My partner makes sure I eat
	1				22	with exam, test and assignments, it is hard to have excellent mental health because I tend to worry a lot about my health
		1			23	At this stage my Psyc health is fairly good, I have not had any panic attacks in a while, but I still find myself dissociating and isolating in some instances
		1			24	Generalyy happy, deal with anxiety occasionally brought on by stress
	1				25	I do get mental breakdowns when I feel overwhelmed with my life but most times I am positive about my life
1					26	I assume/ believe that I function normal in society
			1		27	I find myself crying, often unable to cope. I sometimes feel that I have had enough with life, however, I keep reminding myself of the good in life, that's why I keep carrying on.
	1				28	
				1	29	Trying to finish a clinical degree amidst a global pandemic is awful. The fear of potentially infecting those whom I love haunts me. Besides the challenges clinically, academically, the assignments are draining, I can't sleep peacefully without having panmic attacks in my sleep about incomplete work
			1		30	I suffer from anxiety often and it takes a lot for me to be able to complete things
		1			31	I stress out on a daily and worry constantly have to motivate myself "that I can do this"
			1		32	I suffer from anxiety when I get into stresful situations and current situations have been really stressful
		1			33	Due to COVID-19 it has had a major effect on my mental, emotional health
	1				34	I am able to remain calm mostly in stressful situations because I have a good support system and experience with therapy, however the stressor of this course does get to me
2	9	12	9	2		
Mental health						**Motivate your answer with regard to mental health**
Excellent	**Good**	**Fairly good**	**Poor**	**Very poor**		
			1	1	35	Academically it has been very stresful since the first year. Trying to adapt and the academic pressure in the second year was very overwhelming, family issues have also been one of the causes of my poor (psychological) health
			1	1	36	I have bouts of anxiety from living away from home, from not studying to my capability due to sports and feeling exhausted after training
	1			1	37	I try to blockout negativity as far as possible and focus more on the positive aspects. I do believe in positive affirmation
	1			1	38	I am not depressed nor unhappy
		1		1	39	I stress a lot, especially if things go wrong or when exams and tests are in progress. There are a few things I have gone through for the past year which really impacted my mental health
		1		1	40	I sometimes lack motivation and get despndant quickly. I try and Ill get into the swing of things and have a strategy/plan, but if one day goes wrong, I am off the wagon and not focused
		1		1	41	I used to have anxiety and panic attacks in the past but currentlly in a good place and have not experienced any anxiety/panic for more than a year
	1			1	42	I am not stressing to much, when I stress it is only for sometime and it passes. I do have a lot of time to myself to reflect on my life
	1			1	43	At times the stresses of life can affect my mental health
		1		1	44	I have days when I just feel overwhelmed wand I ge,t anxiety
	1			1	45	I am very strong minded and take good self-care to ensure that I am mentally healthy
			1	1	46	I have been diagnosed with anxiety and depression just after I began my studies. My mental health has not gotten better. I suffer from insomnia
	1			1	47	Not being exempted from stress relating to varsity, personal life and occasional work, I think I do okay dealing with these stresses
			1	1	48	Father tried to commit suicide twice in the last 6 months
	1			1	49	I always keep track of my mental health and am more concerned about my health
			1	1	50	Self-esteem is low enough to hate myself
		1		1	51	Regularly get bouts of depression and anxiety. Constant episodes of panic attacks on and off for 5 years. Pressure and stress frequently cause breakdown, but most if the time it is under control and easily managed
			1	1	52	I tend not to deal with a lot of things
	1			1	53	I am an overthinker, which has an impact on my mental health. I tend to think about everything before I do it, which can lead to my not doing anything. University and relationships with other people also have an impact so I would rate my mental health as good, I try my best to manage it.
			1	1	54	Overall, I am a happy person, a supportive family. I am happy and satisfied with my career
	1			1	55	I am able to bear everything that is happening around me
		1		1	56	Coping between school work and personal circumstances becomes challenging. Sometimes you hae your back against the wall and feels like everything is too much
		1		1	57	External factors like community happenings play a negative role when I have to go home from school.
	1			1	58	I don't tend to suffer from anxiety and am willing to adapt to changes. I am usually optimistic and realistic.
		1		1	59	In general, I am ok; however, there are moments when I can't cope. I cry, clench and break down. Especially with the pandemic, I feel alone sometimes (haven't seen my family in months) I often feel anxious. These are feelings I haven't exprienced before (at least not to this magnitude,) but because I can get
			1	1	60	currently Id say I am not mentally coping. I am far too behind with school work due to lack of resources at home, I wasn't able to attend online classess and I missed some tests that has all led to me being under a lot of pressure and sterss now that I am back at res and have to catch -up
						Key of analysis:
						Green: Good mental well-being
						Orange : Well-being moderately affected
						Red: Mental well-being at risk

Question: Have you had any counselling about your psychological /mental health? Yes/No

Are you taking any medication for your emotional well-being at the moment? Yes/No

Taking “Over-the-counter medication”, mention type or brand name, Prescribed medication

Do you think you should be seeking counselling to assist you with your psychological health?

Meds		OTC		Prescribed		Need counceling		If yes
Yes	No	Yes	No	Yes	No	Yes	No	Participant number	Explain why it is necessary to have a consultation
	1		1		1		1	1	
	1		1		1		1	2	
	1		1		1	1		3	I feel like every one should talk to someone about their mental state
	1		1		1	1		4	I have been advised to speak to someone by my parents due to the toll its taking on me
	1		1		1	1		5	Sometimes I am unable to handle everything on my own
	1		1		1	1		6	I feel the lack of my self-confidence has affected my school work, as well as my well-being
	1		1		1		1	7	
	1		1		1	1		8	I cannot speak to parents or people itrust about how I am feeling without judgment
f hopeless	1		1		1	1		9	I personally feel I am emotionally unstable at times I do not know how to control my anger and would like to get rid of negative thoughts
	1		1		1		1	10	
	1		1		1		1	11	
	1		1		1		1	12	
	1		1		1	1		13	Sometimes everything just feels overwhelming and too much
	1		1		1	1		14	It would help me cope better with my stress levels, also it would help talking to a professional who gives good advice
	1		1		1		1	15	
1		1			1		1	16	Takes over-the-counter meds- Prozen for anxiety
	1		1		1		1	17	
	1		1		1		1	18	
	1		1		1		1	19	
	1		1		1		1	20	
1		1		1			1	21	Take rescue remedy, Omega oils and a B shot (prescribed). I don't have time for it (counselling), I need a good night's sleep, and a cry can also sort me out.
	1		1		1	1		22	To be able to share my problems and have a guide and give me advice on ways to cope with stress and anxiety
	1		1		1	1		23	I am sometimes irrational, lazy, aggressive, unstable and will try to avoid people in some instances
	1		1		1		1	24	
	1		1		1		1	25	
1			1				1	26	I take vitamins and ICC200
	1		1		1	1		27	I feel that with counseling they help you see things differently, and sometimes talking to someone about it gives you clarity
	1		1		1			28	
	1		1		1		1	29	
	1		1		1	1		30	I think I need someone to provide me with appropriate coping strategies
	1		1		1	1		31	I have kept in a lot of things, speaking feels like it might work
	1		1		1	1		32	Just to know how to deal with situations and to keep myself calm
	1		1		1		1	33	
	1		1		1	1		34	My home situation is the main reason that I am extremely stressed and I need professional help to overcome this and not have it affect my studies
3	31	2	32	1	32	15	18		
Meds		**OTC**		**Prescribed**		**Need counceling**			**If yes**
Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**		**Why**
	1		1		1		1	35	
1		1		1		1		36	Prozac 40 g, stressam/ urbanol I need because of low self-esteem, I suffered from an eating disorder 6 years ago, I feel insecure about myself, I ALSO Bottle up my ANGER or ANXIETY instead of addressing it
	1		1		1		1	37	
	1		1		1		1	38	
	1		1		1	1		39	Sometimes it is not easy to talk to close/immediate family, and I feel better if I could speak to someone who is not as close to me.
	1		1		1	1		40	Just for me to sometimes make sense of my thought pattern
	1		1		1		1	41	
	1		1		1		1	42	
	1		1		1	1		43	It is imperative to deal with issues affecting mental health as it is something that can slowly break an individual down
	1		1		1		1	44	
	1		1		1		1	45	
1				1		1		46	Prescribed medication Alprozolam...yes, I need it as my mental health is deteriorating. I am struggling to juggle my studies, social life, family and all other responsibilities all at once and it is affecting my relationship with other people.
1		1					1	47	Resue "remedy"
1				1			1	48	Medication prescribed Zytomil 20 mg, Adco Trazodone 100mg
	1		1		1		1	49	
	1		1		1	1		50	I am losing interest in everything I am doing, I just want to feel safe getting out of the house
	1		1		1	1		51	To better manage anxiety and panic attacks, and also resolve issues and deal with my bouts of depression
	1		1		1		1	52	
	1		1		1		1	53	
	1		1		1		1	54	
	1		1		1		1	55	
	1		1		1	1		56	I don't always talk about my feelings and the traumas I have experienced. Being able to talk to someone who won't judge you might help with my problems
	1		1		1		1	57	
	1		1		1	1		58	I would think that everyone at some point in their life should go for counselling, irrespective of whether they are in good or bad circumstances. There is always something that needs some work
up and ge	1		1		1	1		59	
	1					1		60	I think at this point I need someone to vent on, someone to advise me
4	22	2	21	3	21	11	15		
									Key for analysis
									Pink: Willing to arrange a consultation with a professional counsellor
									Green: Over-the-counter and prescription medications (and a combination of the two)
									Red: Presents with serious well-being challenges

Question: Do you have any people that you can “turn” to when having problems? Yes/No

Please state the relationship you have with the person you can turn to when having problems.

yes	no	Participant number	Who
1		1	My boyfriend. He is always there to listen and support me
1		2	Friends and family support
	1	3	I usually deal with my emotions myself. I never look for advice, which I feel like I probably should do. However, I feel as if I handle my emotions well.
1		4	My best friend- she lets me speak, but at this point, she is not very supportive because she just wants me to move on. My mom is trying to be there and to understand, but she doesn't understand why I put myself through this
1		5	My mother, father and boyfriend
1		6	Cousin (family)
	1	7	No data
	1	8	No data
1		9	Yes, this is with my partner, but the problem is that I find it hard to talk about my problems. It takes a lot of encouragement from her to finally speak about my feelings or what bothers me. Which is hard for me because I cannot pin- point what exactly is maing me feel depressed, sad, hopeless, not seeing he n
1		10	My boyfriend
1		11	If I have a problem, I can turn to my family
1		12	Friends
1		13	My aunt. I tend to talk to her at times
1		14	My parents , best friend and aunt. (Family)
1		15	My mother (parent)
1		16	My friends, my parents help me as well
1		17	My best friend for 4 years and friends for from) university.
1		18	My landlord
1		19	Family
1		20	My sister and my mother
1		21	Mother and partner, I don't though. Don't like making my problems theirs, they wont be able to help me cash is tight for everyone
1		22	My mother
1		23	My cousin and Family
1		24	Friends, family, docters, psychologists
Yes		25	My mother
Yes		26	My mother and my best friend
	1	27	No data
1		28	My sister and my lover
1		29	My colleagues at the campus, my family and friends
1		30	I can speak to my sister and my boyfriend. I find that they are the most supportive, and they have advice for me when I am going through things
1		31	A close friend of mine
1		32	My mother, because she is understanding, and it's having someone who knows you and your situation, with having to talk to
1		33	My mother
1		34	My boyfriend and my mother
			People who support you or you can turn to you
yes	**no**		
1		35	My mother and my aunt. These are the people I feel most comfortable talking to
1		36	My ex-girlfriend x2, my mom, dad and sister, a friend, my coach, sports manager, BUT I really don't tell them everything
1		37	He is a student whom I feel I can speak freely to about things that I'm going through
1		38	My relationship with my mother is perfect
1		39	My parents, aunt and boyfriend. They are very supportive
1		40	Husband and Mother
1		41	It would be my family, mother, sisters, aunt, uncle and cousins. They are very supportive and offer help when I need some assistance
1		42	My older sister and cousins (family)
1		43	Family, father, uncle, family who understands me
1		44	I have a very good relationship with this person because I feel comfortable to tell them whatever is on my mind
1		45	I am in a romantic relationship where a space has been created to talk about anything. I also have a great relationship with my parents and siblings, and I can talk to them
1		46	My best friend I met when I started studying. She always listens
1		47	Mother, father, boyfriend and his mother, my sisters and ONE friend
	1	48	No one to turn to
1		49	Good relationship, most trustworthy
	1	50	
1		51	My mother and best friend
1		52	I have a close friend with whom I can talk, and vice versa
1		53	It is good because my mother always gives me good advice
	1	54	I am not the person to burden my issues with family or friend members
1		55	I can turn to my life partner, who always allows me to vent my problems and helps me figure out a solution. He makes me feel happy, stronger and more motivated than ever
1		56	My cousin, we grew up together, and it s much easier talking to her than anybody else. She is always available and can also relate to my problems
1		57	My mother and my friend
		58	1) Partner: Always communicate with one another. 2) Mother- we speak most days 3) Friends often keep in touch and speak every week 4) Other family members, we catch up relatively often and get to speak about many things.
1		59	My boyfriend- he constantly supports and motivates me during difficult times. Friends/ classmates- some of my classmates have become my close friends and are always there for me when I need them
	1	60	
			Key for analysis
			Pink: mother support
			Yellow: Family support
			Brown: Multiple, such as family, friends, parents
			Turquoise. Close friends
			Light blue: Life partners, boyfriends
			Dark blue: No support and no support required

APPENDIX 15: EXAMPLE OF ANALYSIS OF STUDENTS' SEMI-STRUCTURED INTERVIEW

Interview schedule: Students

Participant code:…..recording number [redacted] Date[redacted]

These questions are intended to guide the semi-structured interview. While the participant's responses will guide the discussion, the researcher will gather data to answer the objectives of this research.

1. What is your understanding of:

• Psychological well-being?

Psych well-being is able to cope with your everyday surroundings, and what happens to you during the day, to cope with it in a normal and acceptable fashion.

• Social well-being?

Being comfortable around other people, being able to form friends, visiting them to be able to go out, to go for a jog in the area, maybe go to a restaurant and not to be stuck in the house the whole day.

•Emotional well-being?

Being in contact with your emotions and not just pushing them down or pushing them away, and being comfortable to show your emotions or to tell someone I am feeling unhappy or happy today or whatever you experience.

Research question	Transcript	Coding
How would you describe the following at present? Your psychological well-being	I am taking antidepressants at the moment, and the prescription had to be increased. I suffer from anxiety and depression.	Anxiety and depression: increased medication.
Has your psychosocial or emotional well-being changed during the past few months or years? Please describe. What has contributed to these changes? Elaborate on your answer or explain what has brought on the changes (if any) in your psychosocial and /or emotional well-being.	Yes, it has. I am not social at all. Since I started my studies, I have been focused on my studies; as soon as I walk away from my studies, I feel guilty, and then the games that I play in my head are just not worthwhile. I will use holidays to relax, and emotionally it is still the same as it used to be … uhmm. Psychologically, it has had a toll on me. I have become more down and a bit more depressed, uhmm, but not in a way that I feel that I cannot do anything, I can get myself out of that pit, by doing something else, washing the car, or planting tomatoes or something.	Focused on studies, no social interaction outside the house. Social well-being declined due to studies. Psychological WB- negatively affected- taking a break - games in head. Psychological WB shows. Resilience - can get out of a depressed state due to studies - do something else, like a household chore.
You say you are a bit more depressed. What is the reason?	No, I think I am not going out as often as I used to, I am not going to the beach or taking a walk there. I am not going to the gym anymore. I am constantly in the house and just focusing on my studies because I want to pass (student laughs).	Depression escalated due to studies, less social interaction, and being in-house all the time.

Research question	Transcript	Coding
Do you feel you have to talk to a professional?	No, but I have increased my antidepressant prescription, which helped me cope better. It is on prescription, I talked to my doctor regarding this, and I told her I want to come off it. I have been on it for years, since 2012. I did once try to wean off it gradually, but it was very difficult. You feel so emotional, just want to cry all the time. I have to get off it. There must be another way. I cannot be weepy while I am at work; it is going to affect my work; it is going to affect my whole well-being.	Psychological well-being-studies taking more prescribed antidepressants, a higher dosage. Psychological WB Depression – the main reason is past relationships, job stress, and incidents overseas. Crying spells due to medication and depression
Was it just the studies that contributed to your emotional status?	In the beginning, the studies were very stressful, and I would become very anxious. I would get anxiety attacks. But I took time to sit and think about it, and I changed my mindset; it is actually good stress because it motivates you to do better in each test. I did put myself under a lot of pressure. I did not even tell my family that I am studying. Only after my second term, I told them, and so by the way, I am studying, and I showed them my test results. I previously told them that I wanted to study again, and they were against it. Family indicated that you are earning a good salary, [so] why leave? My husband knew I was studying. Now	Stress – studies at the beginning of the course. Anxiety escalated due to studies. Internal motivation – undue pressure. Studies kept secret, initially, no support from family to start with studies. Support for studies in-laws (mother and husband). Support Father and mother-somewhat supportive now.

Research question	Transcript	Coding
	they all know, and they would send me messages if I [were to] write a test. My family is very supportive now. My husband supports me very much. I do not have friends here. We usually only visit family, but we do not have friends here. I do not have friends. We basically keep to ourselves. I don't have friends.	
How does the following influence your overall well-being? Elaborate on each: • Your learning environment	My learning environment, when we have practicals, which is my happy days…. I am excited, I am going to work with a patient, [and] I will be able to demonstrate what I have learned and see the results of what I have learned.	Learning environment-clinical days are positive, conducive to learning.
Your social environment	Well, as I said, I don't socialise at the moment.	Social isolation
• Factors in your personal life?	I still do my own things to keep myself positive. To break away from the studies a bit, I will start baking bread or planting something.	Resilience, trying to overcome social isolation by being or doing creative activities. Well-being: baking, keeping positive WB.
What are your thoughts on what you could do to improve your psychological well-being?	My psychological Well-being. Well, I need to find a balance between work and play, and that is difficult for me at the moment. I have my mind set on something, then it is difficult to break away, and when I do break away to get the balance, then I get the feeling that I	Psychological WB-challenge balance approach between work and play, struggles to break away from studies. Work life studies. not good

Research question	Transcript	Coding
	should have studied. I think once the studies are done, I will get the balance again. I will start to work again and get a different routine.	
Once qualified, are you concerned that you will not have job security, or have you secured something	Well, I have secured something for job security, I have secured some work opportunities, I am a bit two-minded, and there is something that is off-putting. So, I have sent my CV and things like that and showed my face at some practices. And there is positive feedback. If I do not find something soon, it is not a train smash. But I am sure I will get something. I am not at all concerned.	Job security- have secured a job.
How satisfied are you with who and what you are at the moment? In other words, what is your current perception of yourself? (Self-perception)	Well, I am actually very proud of myself for getting this far. I have done this basically on my own. I have always done things on my own, not asking for help or assistance. I have always felt confident enough to tackle things on my own, and I will reach the goal. I am focused, and I know what I want.	Self-perception well-being: Proud of self, goal-driven, focused. Goal-oriented, internal motivation.
Do you feel that you are in charge of the various environments you function in daily? Such as in your living and learning environment?	Am I in charge? …No, not really. Uhmm, no, not really.	

Research question	Transcript	Coding
Are you in charge of your living environment?	NO, I clean the house, and do the washing, and the husband does not help, no housekeeper helping. I have a routine and do things in a certain way. I do not have time to teach someone to do it in a certain way.	Support, husband and in-laws support emotionally being a student; however, physical support is not provided, has to multitask, being a student, keeping up with household chores.
How would you describe your relationships/ connectedness with other people, such as your:	• Friends No friends • Family Better connection with in-laws than with my own family, uhmm … • Children No children • Lecturing staff/colleagues, I feel comfortable sending an email or WhatsApp. I am not scared to ask for help; they are approachable – tons of support, and I can send them a message if I need help. The clinical advisors and lecturers will criticise you to make you aware of what you have done wrong and how to better yourself, and that I love feedback is very helpful, as I have never experienced belittlement.	Relationships Social well-being- No friends. Relationships are better with in-laws than parents. Relationships- lecturers, good,-good, always approachable. Support lecturers tons of support, positive criticism-better myself, my work.
What do you think of the clinical advisor programme?	I do not actually know. I have not actually spoken to my clinical advisor, really. I have spoken to another lecturer as I did not feel comfortable with the clinical supervisor who was allocated to me.	Support clinical advisor – did not find support, went to other lecturers, did not feel comfortable with the advisor's clinical advisor.

Research question	Transcript	Coding
What is your typical reaction when you experience difficulties, challenges, or confrontations?	Uhmm, it depends on the situation. It depends [on] what the difficulty is. I will feel anxious and have a lot of internal conversations in order to figure out what to do [and] how to handle the situation. I don't just jump into something without thinking first. My father always said I should think logically and not emotionally. I will walk away from a situation and back off, go and think about it in a logical way of dealing with it, so that it does not escalate. It helps me to calm down as soon as I have a plan. To sort something out, I am calm.	Reaction to challenges-think logically about challenges, not emotionally react, walk away from the situation, calm down.
Would you say you are a spiritual person? Explain or elaborate on your answer.	Yes, definitely spirituality, but spirituality does not become more or less during challenging times.	Spirituality, yes, but spirituality does not become more or less during challenging times.
Who or what supports you emotionally as a student/learner?	My mother-in-law (very convincing), they live in Worcester, she asks in the beginning of the term for all my test dates, writes it down, and she will send me a message every time to wish me well and then tells me I am the best, and they believe in me.	Emotional support mother-in-law.
Who or what would you consider a challenge currently during your studies	Assignments cause the most stress [among] all assignments. I would rather study for a test than work on an assignment. I would spend so much time	Stressor Assignments

Research question	Transcript	Coding
	collecting the information, where I feel almost rushed, and I know next week is another assignment, and another assignment. I would much rather sit up day and night studying for a test. I feel too rushed to complete the assignment, as I know there is another one that is waiting to be done.	Workload- assignments
Is there enough support, and how would you rate the efficacy of these support systems?	I am aware of the lecturers and clinical supervisor, uhmm, and when I do get stuck with something, I will ask a lecturer or a supervisor.	Support in the learning environment from lecturers and clinical supervisors.
Are you aware that there is a psychologist who comes into the faculty on a weekly basis?	Yes, I have never made use of it, but referred someone; I have actually.	Support counsellor not personally made use of but referred someone.
Do you know of any other support structures to your availability in the community or learning environment? Do you, and why do you make use of these support structures?	NO I have a support system at home, a medical doctor who prescribes antidepressants.	University Support structures - not utilised.
Does the fact that you are studying oral hygiene contribute to your psychosocial and emotional status? Elaborate.	Oh no, not at all; it is exciting, it is a hands-on job, and that is exciting. And with no stress, studying along with dental students.	Well-being was not affected negatively, and no negativity from dental students.

Research question	Transcript	Coding
Do you take part in extracurricular activities? Sports, hobbies, etc.?	Well, I used to crochet, but at the moment, no, there yes, I am baking bread; I got a mixer that will knead, making bagels, and experimenting with bread types. I have started a recipe book with recipes from my mother-in-law, grannies, and I got an old recipe book from my granny's granny, 1906, it was a recipe for soap, crochet patterns, and needlework.	Extra-curricular activities – not much time at times; baking, writing a recipe book - baking.
Why do you take part take in extracurricular activities?	Time: the studies I need to focus on.	Studies need to focus, not much time for other extracurricular activities.
When participating in extracurricular activities, how do you feel afterwards?	When participating in extracurricular activities, how do you feel afterwards?	Extracurricular activities – positive influence on well - being.
Would you consider yourself a happy person, in general, or are you more neutral or depressed? Elaborate.	It is a bit difficult to say, because of the antidepressants, you do not show emotions, and you don't feel emotions, unless you do something to make yourself happy, then you would feel happy. If you do not do anything, you will have no emotions, you do not experience joy, and everything is the same.	A happy person is difficult to say; antidepressants take away emotions; antidepressants do not allow a person to feel happy. Not happy- no emotions – antidepressants.

Research question	Transcript	Coding
Do you wish to add any comments or suggestions to this conversation?	Uhmm, no. I think the main thing is if you are focused and you know what you want [you] should go for it, but to get the balance between work and play, that is very important	Resilience- stay focused, get life balance work and play.
Would you say this environment is conducive to studying? What is your opinion?	Yes… it feels like [it] because we are in a hospital. Yes, this is the direction; this makes you motivated. You see all other kinds of aspects of dentistry, it is oral medicine and orthodontics and other aspects of dentistry, and it motivates you. It is the best decision to have the lectures in the training hospital environment, there it would feel like I am just like in high school. Yes, I am studying for my profession. I have to be here.	Learning environment- conducive to learning, hospital environment orients well to occupation and exposure to the real work world in dentistry.

APPENDIX 16: EXAMPLE OF ANALYSIS OF STAFF SEMI-STRUCTURED INTERVIEW

The participant's responses will guide the discussion; however, the researcher will gather data to answer the objectives of this research.

Participant code: [redacted] [redacted]

Gender:

Research question	**Transcript**	**Coding**
What is your view with regard to the faculty promoting the well-being of our oral hygiene students specifically?	Nothing ..... (no further answer from the interviewee).	Faculty support, student WB- no assistance in WB.
To what extent are staff members provided with a clear mandate/instruction/order to improve student well-being?	From my understanding, and I hope there are channels to follow for students' Well-being, what I have seen [is] that staff in this department always go the extra mile. If a student does not provide food for them, the department is always rallying to. If we look at the Well-being of the student from that aspect, that is what the department is doing. Whether they have mandated or policies in place, I am not sure.	University and faculty mandate to improve WB- unsure. OH, the department goes the extra mile to assist students in all well-being aspects.
Are staff members provided with resources by the faculty or university to support the promotion of the well-being of our students?	No ... not what I know of,	Institutional / faculty support – resources promote WB students- not aware of any.

Research question	Transcript	Coding
Can you suggest what can be done?	I think …uhmm… training should be provided for staff, and staff should be made aware that students come with their own "baggage," their own social constraints and social upbringing that hinders their interaction with other people or promotes their interaction. Training or workshop for staff will help; that is something the faculty and department could look at. I think from my experience, a big part is a cultural thing as well. Staff should be culturally sensitive towards students.	Staff training The capability of staff to be sensitive to the diverse environments in which students come to university Staff capability requires workshops and training. Cultural sensitivity
According to your perception and experience as a lecturer/clinical advisor, what are the factors that challenge the well-being of the oral hygiene students?	I think a lot has changed from being a student then, and what our students are dealing with now. They definitely have more mental issues; we could never identify it as such, or it was a bit more. You could not label it. A lot of our students can articulate how they are feeling, and uhmm, what is happening with them and a lot of their struggles at this point are anxiety, depression, and they come to the department with that and pressure from the university possibly contributes to that.	BOH WB challenges-escalating WB issues. BOH WB challenges: depression, anxiety, University pressure.

Research question	Transcript	Coding
	Yes, yah, yah. A lot has to do with social media; people can see that other people are also suffering from. I am seeing a psychologist. I think students are seeing other people going through the same thing, seek help, don't suffer in silence, and it is being normalised, like if I had to say to my parents that I need to see a psychologist, it would almost be like I think you need to … to go to church. Things like depression has been normalised. Uhmm…how do I know it is anxiety or is just a heart problem? For example, I think social media …I also think that a suicide rate played a bigger role because people are asking why people [are] committing suicide … I definitely. Personal experience, I only had my anxiety and depression diagnosed at the beginning of COVID. Before, it I was just trying to deal with it so COVID had a big part in it and just stresses that increase. If I look [at] what COVID has done to people, their teeth, they have ground away half of their tooth structure.	Social media contributes to or exacerbates WB issues. Normalise seeing Psychologists. BOH Well-being challenges-more going to the psychologist. WB issues traditionally-not acknowledged - parental advice to pray, go to church, does not acknowledge depression. Well-being and culture-, stigmatisation, if you suffer from psychological well-being issues.

Research question	Transcript	Coding
Do you think there is a cultural issue in acknowledging depression?	I definitely think there is a big cultural shift that needs to happen. If in a certain community, it is always seen as it is something other people suffer from, never us, especially males, it is still stigmatised. Uhmm, things like depression and anxiety. Yah ....it will still until there is a shift in cultural thinking. I saw an interesting thing last month: 73 men went to visit a wellness clinic for depression and anxiety. I think it is picking up, but there is definitely still a stigma to it.	WB and culture, stigmatisation, if you suffer from Psychological Well-being issues. Cultural – Psychological well-being and Emotional well-being issues are only certain cultures. Cultural Well-being - influence of the male elders not approving of psychologists' interventions.
7. According to what you have mentioned above, do you have any suggestions on how these challenges could be addressed and or resolved?	So, for me, uhmm, I don't know, it should not be taken away that university is a space, it is a high-stress environment and high pressure, you are leaving with a degree. If you downplay it, it's going to be like a matric. Allow space in the curriculum to look at their holistic well-being. Something we are trying to do at the practice is to have a yoga instructor in the morning. Have a yoga instructor come online. Something that really helped me was breathing exercises, diaphragmatic breathing and stretching. Breath work is an amazing thing you can do that while I am working on a	University high stress environment. Challenges- address-holistic well-being well-being curriculum allow breathing, yoga, Pilates. Financial Challenges- poverty, finances, NSFAS.

Research question	Transcript	Coding
	patient. Maybe it is something that could be done. It is easier at university level than yoga or Pilates, and they will have the benefit of that, and no one will know, and we can look at it when we are specifically looking at anxiety. Within students WB. Uhmm, students are also struggling with … uhmm... poverty..., so financially as a dept there is not much that can be done government has implemented NSFAS … uhmm, those are things that are in place for students, but what adds to it is the tedious process of getting the approval for it or being rejected because of a document that was not in. So, I am not sure if that is something from the department that all students apply to the department and … the department or the faculty can make sure that documents are in place and not get rejected because of a simple document that is not there. And everything is so computerised, and if that process is not there, all the boxes are not ticked. It is something I had to deal with as a student as well.	Challenges – students not sure how to complete application forms for NSFAS, etc. Orientation program- include how to complete forms, correctly.

Research question	Transcript	Coding
8. Do we, as staff and the faculty, provide enough student-friendly spaces around the various dental training facilities for students, which may contribute to their well-being?	I think, uhmm, from personal experience... this was almost very separate to M/C it is very separate. My friends used to call this faculty the Elite faculty … is actually too detrimental as nothing is happening for our students. Well-being for our students on this side, uhmm, between the three campuses. One site nothing no cafeteria.	Challenge – not being part of the main campus exclusion. One of the dental campuses is more inviting. Poor student amenities Challenges well-being
	Space on the [redacted]-level just outside the [redacted]-venue is such wasted space. Put in fake grass and put some tables and chairs for students to use. There is so little outdoor space, even in your break, you are still in the air-conditioned building; there is nothing for them to make use of. Put up a fence so that you don't look into the other building... on the question, I do not think there is enough space that encourages WB on all three levels. Aesthetically, what we try and do in practice is a room which we call a recovery room, so once they are done with treatment, maybe we need a room, I think their [redacted] centre. I would use that area to encourage Well-being, [and] have a meditation corner.	Well-being challenge- no outdoor space to relax- develop green areas to sit and relax. Well-being challenge- create meditation corners, chill out rooms, escape places. Well-being – positive suggestions,

Research question	Transcript	Coding
	So, I think what we do for the three-year-olds, we have an escape space, and the students should have an escape space. We need to encourage that for our students and make it OK for students.	
Changes that could be considered in the curriculum.	I am not sure what the overall TT looks like, to be honest. I think as a student I was doing two years and an additional third year. Maybe it is spread, but if not, it is still a very full programme, specifically if you have clinics and then a lecture. Then you only have 30 minutes to take a break, which for some is enough, and for others not. As clinical supervisors, we need to make sure that our students get out of the clinical setting … it is as hygienists who work five days a week in the same clinical setting. I have only recently discovered that when I reached burnout, it is not sustainable working from 6 to 6 in the evening, and it is not sustainable. The dentist takes a full day off and works four days a week, and the rest of the staff works.	Curriculum Challenges- Timetable, work overload, heavy workload. Theoretical and clinical Learning challenge- too short break time between clinics and too short lunch break

Research question	Transcript	Coding
	I think our newer generation students are better at it; they are looking [for] a work-life balance or life-work balance. The salary can be good, but they will not stay.	
To what extent do you think students see themselves as active contributors to their well-being in their current learning environment?	I don't think that students is also the type of student. This is too much; I am reaching burnout, and then there are students who will just get through it. On the curriculum, I do not think students have much say on [the] curriculum. With [the] staff we try and spread it out for them.	Students are not an active part of the curriculum design and timetable.
To what extent are students' strengths, prior knowledge, interests and aspirations valued, respected, and reflected in curriculum planning and delivery?	I am not sure if that does happen; it is something that should happen. I have a BOH I student who is an OT, and we can make use of her expertise as OT, but I am not sure if those things are looked at. I am not sure if a student comes in at a door, if they are coming as a student who knows everything, we can … the total opposite is a student who thinks that they come in with all the knowledge.	Students with prior knowledge are not acknowledged and could contribute to the teaching and learning environment.
According to your experience, perception, or knowledge, how do students experience/feel about their lecturers?	Uhmm, is this past experience and present? I think in the past, the type of student who came in was very different. Firstly, it was a student who knew this was the lecturer, and these were the boundaries.	Students-the new generation-different – not accept and challenge the system. Lecturers more approachable than previous

Research question	Transcript	Coding
	They tell us what to do, [and] we accept. We have lecturers who are more approachable now than they were then. It is most probably an age-related thing that contributed to it. I remember we had lecturers who came in who were more condescending, uhmm, or not so approachable, and that could be because they are dentists or specialists who came in specifically. What I think is important as a student – you need representation of your own kind in your own kind that holds authority, almost like a mentor. So, that person is also representable as a supervisor. They will ask the role of the male OH in the fraternity students who speak isiXhosa but would relate better to the supervisor who speaks isiXhosa. I think it is good that we have a well-rounded staff component that is representative of the student profile for many of them (students) they do not see themselves in the clinical setting for the rest of your life, you can move into education, opening practice it is this kind of question they ask and it is people that look like them ... Did I answer the question?	Perception of lecturers: specialist and dental lecturers very condescending to OH students Perception of lecturers: need to identify with the same “type”; they are like a male student with a male mentor or clinical advisor.

Research question	Transcript	Coding
According to your knowledge, experience and perception, is the clinical advisory support programme at the faculty successful in providing the required support to students?	It works. A concerted effort should be made to match students to clinical advisors. If you have a CA that is very abrasive, do not place a very sensitive student with that CA. It is possible, a good idea, I am not sure if it is, but there should be a trained counsellor [that] our students could go to on the faculty. If you do not come.	Clinical advisory programme- should take serious consideration of the student's personality and the clinical advisor CA allocated.

It should be noted that not all questions were answered because the interview was semi-structured. At times, the participant provided information that was indirectly relevant to forthcoming questions during the discussion.

APPENDIX 17: EXAMPLE OF FOCUS GROUP DISCUSSION

The purpose of the focus group is to discuss the factors associated with the psychosocial and emotional well-being of students studying oral hygiene in a South African university.

Focus group 2

Recording 0066

The groups will consist of a minimum of 6 and a maximum of 10 participants.

Each group discussion session will last for approximately 90 minutes.

Your willingness to avail your time and willingness to partake in this study is sincerely appreciated.

Focus group rules/guidelines:

The input of each participant is valuable.

Each participant must have an equal chance to speak.

One participant may talk at a time.

Do not have side conversations.

All participants must respect each other at all times.

You are allowed to disagree but not argue.

All cell phones must be switched off and placed in a safe place.

All responses are confidential.

Do you have any questions before we start the focus group discussion?

Question 1

Explain what your understanding is of the concepts of psychological well-being and emotional well-being.

Participant = P

Student well-being is influenced by external factors, such as the social environment, people in the facility, and also your emotions.

P3: I think my Psych WB is the thoughts that I have every day on a daily basis… uhmm, and then that will affect my emotion WB, because how I am going to behave or conduct myself based on those thoughts I have …

P1: I agree with what he said umm but for me is Psy WB is being able to not just being only to function on yourself but to function in a group setting umm like all our students are always in a class or smaller group setting, class so I think Psych web you should be able to function in a group or society on a psyche level being able to understand your thoughts, knowing how you feel and be able to act upon your feelings in a positive manner…

P5: I agree with ……and let's say what she mentioned it is also the emotional WB that how you deal with things, and that goes far beyond your everyday life. Here we are impacted with so much, how you deal with certain aspects here as a student, and at home, how you deal with that also plays a role in your emotional WB?

P7: I think it is also striking a balance between all of them, all that is also important of that effects who you are as a person.

P6: It is also important to know what your capacity, like how much you can you take before you reach like [a] breaking point and how to handle yourself to ensure that you don't reach that breaking point.

Have you ever felt that you are at the breaking point?

P2: Yes, definitely crying for nothing … you just had enough (student laughing)

P7: About I think it goes back to what the one Participant said about knowing your own capabilities, for example if you are a person and you know your capabilities and that procrastinate a lot and if you know what it leads to at the end like a mental breakdown and all of that so if you are able to least do small portions of work to accommodate yourself and to prevent reaching breaking point

P2: I agree.

P6: Just power through. When you get to the point of Oh my word, what I am doing you know. Not knowing where you are or anything, you start to focus on one single thing and get through that, you cannot stop, you just push through, you cannot go back, you cannot retake a test or something.

P7: And with each thing you finish, you feel better, you feel at least there were 10, and now there are 9, at least you know you have done one.

P2: Laughing, just make a move.

P2: I think it is very important to plan, to have good time management, so that you do not get overwhelmed with anything all at once. For me, when I feel overwhelmed, then I like to stop and not do anything, do nothing and just regroup, recharge, stop freaking out, and plan and start again.

P2: I also have like this participant, reached a point before you get to the point, and reboot, and sometimes I reach a point just to cry. I will cry for every reason, or even if there is no reason, and afterwards I feel better, reboot and then start again. Crying definitely helps for everything.

P1: Like an emotional outlet.

Does anybody feel the need to use something (medication) over-the-counter to cope?

P6: Cigarettes and a glass of whiskey, then you feel better, then I can power through.

P7: For me, it is a bit of snacking.

P3: I found that and other students do that as well, I procrastinate to the point where I know that I have given my all I have given my all I have given my best but whatever happens but I can’t find that I cannot work before that but I always manage to get a pass on whatever task it is because when I am working through that then I feel that I am then very inspired and a lot more motivated to do the work.

P3: Perform under stress, under pressure, best performance.

P2: I perform best under pressure.

P3: It will not benefit me in the future. Definitely, there are tasks that need to be performed way before the due date. Or close to the due date.

Quite a few of you will tell me you have to reboot, but do you reach what you need to achieve? In the work environment, there is going to be stress all the time.

P2: We do not have another choice because either as a student you are paying to be here so not working hard to achieve whatever you have to you are wasting money and being out in in practice not working as hard as you should, you can lose money because you are actually earning money, so what you do anything is what you get paid for, so if you do not do what you suppose to do you don't get the money being out in practice

P2: To prevent breaking point, you can be how organised, "life happens" somewhere along the line to follow the schedule, and you reach this point no matter how hard you try to be disciplined or time management.

Workload, is there anything else contributing to you not having WB, besides being students?

P2: I think the biggest thing for students at university is that we are not high school learners and that you are not a child anymore. Some of us are living with our parents and people providing for us, but some students have another job, or they are providing for a family, working, and they have to cook and clean. I think having this workload on top of the normal activities, you as a normal human can become overwhelmed because not everyone is taking into their consideration what is going on in your mind, people think about their own thing, and that is all they think about so if people do not know what is going on in your mind they will not consider it and it can become overbearing having to do everything.

P3: I think, as another Participant said, that there also needs to be a balance between what is happening in and outside of the university, and there needs to be a balance.

P6: It helps to have a support system.

P1: Yes.

P6: To have someone to help you clean the house, or if you do not have the time to cook, someone to step in quickly or things like that. If you do not have that, then you feel like you are the only person having to do everything.

P2: Staying in res, you do not have the support, you do not have someone who can do the dishes, you have to do the cooking, the washing, the laundry, you have to do everything by yourself, so some days have way too little hours to get to everything. .

P7: On the days you have a lot of university work, you also have a lot of other things to do, like washing scrubs because I have clinics the next day, cooking, we knead bread, I have to do this, and I have to do that.

P2: Financial support plays a big role, yes, if you have a family like me. I have a 10-year-old daughter, [and] it takes a lot; your mind is in different places.

P4: For me, personally, it is good because my parents do support me and other family members too. I personally believe that we should not take the responsibility alone. I know we are students; you are not at school anymore, and you have your own responsibilities, but our parents or support system should understand and take some responsibility, especially if it is known and your chores, like with house [work] and chores. Parents need to understand that we need to study or do an online lecture, and it needs to come from both sides. I am not saying that I cannot do chores and disregard chores, but there should be some balance from me, and from them; it should be a shared responsibility.

Did you get support from family?

P2: I think it is important … sometimes we do feel overwhelmed because sometimes we take on too much responsibility, and we want to do everything ourselves … I think it is important to know when to ask for help, for example, if you cannot do the dishes, will someone else be able to do it? Or something like that, I know in my household, my sibling and I would take turns if one is writing a test, the other one will do the dishes, etc. and vice versa.

P5: In my household, I have the support. In my household, it is the same. I have a lot of support from my parents sometimes. The thing is that it is not to say that if someone has a lot of responsibilities, they are functioning at a lower level.

I help my mom do dishes and prepare food, but mentally and emotionally, there is no equilibrium, so then, some students may go home to an abusive dad, or to children and a husband. And then functioning at a better level, WB level than I am. That will determine how they are functioning at school, meaning that they could be performing much better at school than I am.

P4: For me personally, our household is different; so, when I am online and at home, I will feel obligated to do things, because no one else will do it.

P4: for I still feel obligated to do chores.

P5: I am to agree with …. I have the same. I am the only girl in the house. It is very tough, and [I] feel obligated. I have two brothers who are very lazy, so even if I tell them that I am writing a test and if I ask them, they will just not do it. That places me under a lot of pressure. Most of the time, I am exhausted. It makes me exhausted. I will stay up until 2-3 am in the morning finishing assignments and studying for tests. It does place a lot of pressure on me because it makes me feel tired; it is a lot.

P2: It can influence you positively; everything sounds negative. I think you will be able to take what you are going through and put it into a positive light by saying, if I am a student and I am already going through all of this, is it preparing me for my workplace, where I also have stress and also have to go home and do all of that.

I think it can impact on you negatively especially being so exhausted, and you cannot go on like this forever and we will not have nice vacations when we work, … uhmm, I think it influences your behavior in the future knowing how [to] plan better and knowing how to be flexible and you will know what to do in the future knowing how to be flexible because life happens.

P2: If I think about all this negative things, it makes me stronger at the end of the day, and I sit and think back of all of this.

P2: I feel that is what Psychological and emotional WB is being able to function amidst the negative things happen[Ing] and saying I can still do this and that, seeing the positive, at least you are trying.

P2: Every time I feel I am going to give myself over to negatively, then someone, some random people, I will receive a message of someone from somewhere about how I motivate them and how strong I am and how I motivated them. Then you feel there is some light at the end of the tunnel.

What factors do you perceive as having an influence on your well-being?

From the factors you have mentioned, which factor has the greatest influence on your well-being? Explain why.

Is there anything else you can add?

Question 2

According to your experience, has your well-being changed over the past few months? Provide reasons.

P2: I arrived very confused…….

P2: During the 1st year, it was quite stressful. You do not know what to expect. [It] is your first time at university, what are you going to learn? Will you cope with the studies as it goes on during the year? You kind of feel more positive about yourself, thinking yes, I can actually do this, and you start developing internal motivation that is pushing yourself for [a] better mark or just to be better in something, and then the 2nd year, the whole COVID thing happened ….that you ask, what then next, what now? That influenced my well- being, yah.

P2: I definitely agree, like for me, everything felt fine, super excited, but in three months, everything fell apart. I lost my salary, I felt I have to just give up, going home I gave up my house, then moving into a small bedroom (at res) sharing with a person like 10 years younger than me, all of that had a negative impact on me but everything started changing, and just when you think everything is OK, COVID came and disrupted again and I thought being at home online 6 months doing everything online for 6 months you come back after COVID and you hear that your class is doing well in clinics although you have not been here for 6 months … then it gives you hope. It is an improvement.

P2: I also think it influenced me in a way…. not academically but more personally, making me open to new relationships, different cultures, people, coming out of school, being used to people being the same year group as you are, then coming here some students are 10 years older than you, people who have seen places, people who have done other things, are the exposure [that] impacted my WB positively.

P3: Definitely, I felt intimidated. I am a mature student coming back. This is my second qualification, then coming back to students who were students just out of school, and I actually thought, can I do this? To get back into studying, it took a while to find what actually works for me.

P3: Definitely on top of the list is finances. How was I going to cope (financially)? You cannot work part-time; you are a full-time student. I was battling to cope.

P7: You cannot work part-time in this course.

P2: In this course, you cannot work part-time (tried in my first year).

P7: I was in Matric 10 years ago. When lecturers say you did this in Matric, then I think, Oh lord! I did this 10 years ago …. the other thing was the language. My home language is Afrikaans, I was working in Afrikaans, everything was in Afrikaans, so I had to find my way to adapt to English quickly again. I would listen in class but get lost a few times (during the lectures) and in the afternoon [I] had to go sit through everything again, make sure I understand the work. Sometimes I did pre-reading, but it did not always work to do pre-reading every time before class.

P2: I actually think it is funny that you felt intimidated as a mature student, whereas I came straight out of high school. I was used to studying surrounded by the younger students. When I came in, I was straight out of school. I was used to studying. I looked at the older students in our class, and I think, wow, if you can do it after not studying for how many years, then I should stop moaning and just do it, because I was doing it for the last 12 years … I was just continuing, there was no stopping for me. There was no time for me to forget how to study all that, so it is actually funny how different people interpret [it] differently. I thought, wow, you guys are out here and doing what you want to do and it inspired me to think that if I am done with this degree and I have been working for ten years and I want to … switch my career or do something extra if other people are capable, so will I. You were like an inspiration. If other people are capable, so will I.

P7: I don't think much of it…. where I come from (older people studying). A lot of people where I come from acquire their degree at an older age. You work, and you realise, hey, if you want to get progress in life, you have to upgrade skills to keep up with the times. So, my mom did it, and my aunts did it. Even when I did my first degree, there were older people in class. I was not intimidated by it. It did not affect my WB. I think maybe the staying in res part (that was difficult for the participant). I never stayed at res. I stayed in a commune, and now alone, and that maybe a shift or adjustment, but in terms of the class, I wasn't.

P7: I did not even know that we had older, and younger students. I don't look at these things – them as older or younger students. For me, it was the same …

Are there situations on campus that influence your well-being? Provide more detail.

P4: Clinics, a lot of times you come to clinics and you are in a good mood, you wrote a good paper or a good assignment and you come into the clinic, the supervisor, or another student or a patient or staff at sterilisation, their attitude or way they address you (negatively?) would immediately change the way you feel for the rest of the day. At that moment, a minor thing will change my mood. I am a very emotional person. Other people's reaction influences me and how I react for the rest of the day and my well-being. That will affect me and will influence the way I treat my patients, etc.

P5: For me, personally, at high school I was always an introvert, and coming to study BOH, working with people and seeing patients, every day, it opened me up to being a whole new person. … it changed me as a person, and it definitely contributed to my WB.

P5: For me, I was in the beginning. I was very nervous when I had to work on patients. I went in like positive we are going to gain knowledge and skills, I told myself "you can do this", and then if someone would say something that does not sit well with me, I will sit in the bathroom and sit and cry or be emotional throughout the whole day. If a patient would say certain things to you, then I would think … is this (referring to the course) for me, or am I not competent? But then you outgrow this person. I changed a lot. I was an introvert in school, in my first year, so much happened. I am a whole new person. I speak to everyone. I am this jolly person, yes, I changed a lot.

The course changed it to the positive.

P2: I also agree with them. I went from an introvert to an extrovert, but not only because by who I was surrounded with, my mindset is, if you want something done, do it yourself, just do it yourself. So, I thought if no one is taking charge…. if not me…I don't want to wait. You want something done, you have to do it yourself. I was also a very emotional person when I was younger. I was easily offended…. always reading some type of message between the lines that was not even there, so I was easily offended. In the past few years, I have grown somewhat thick-skinned and will take everything as positive criticism rather than going home thinking I did this wrong and that wrong. I would now think I did that wrong, but at least everything else right.

What created this change?

P1: It is a little bit of everything. Working with different people, different cultures, etc. Some people are always super nice, nothing bad to say…. it could be my patient. and they will always say you are the best, but now you get supervisors who will pinpoint you on one negative aspect. In those cases, it is important to look for the positive instead of the negative.

P6: I always look forward to clinic days, it is like the best days, you have to think outside the box, of how you are going to treat the patient. It is not always the same patient; it is a different face every time …

P2: I was always very structured, to such a way that it was painful…to be that structured, things cannot change, things cannot move. I am more flexible now. If my patient. is super happy the one day and very mad or angry the next, I will be able to adapt to the situation. I am with a different supervisor every day and working in groups, so you have to be open to learn, to be flexible, otherwise you are just going to be steamrolled.

This comes up all the time and will become a theme. You came up with the word adapt to the clinical supervisor? People adapt to the clinical supervisor.

P7: You get to know what they look for, [the] supervisor expects you [to] know this. …

P:1 It is just the same when you approach people on a social base, where certain supervisors you know you can make a joke with, and some will hug you, and some is just professional, yah…

P7: No, Ms. That is the thing. You cannot plan (beforehand who is your supervisor going to be); you only find out in the clinic on that day.

P7: The only time you start planning mentally is when you know who is going to supervise you,. you look at the form that you are presenting. You know Mrs. looks at the medical history in detail. I have to be specific, but others (supervisor), if you say the patient. has Diabetes Mellitus, then you done, then they tell you, OK, what is your treatment plan?

P7: You know you cannot mess up your diagnosis with that supervisor (mentioned name of supervisor) ……. Your diagnosis needs to be on point …. It is that kind of thing.

P2: For each one, (supervisor) you figure out.

P6: It is not necessarily bad … look at something specific, so you get good at each of them on your own thing.

P2: You cannot prepare on Monday in advance, who is your supervisor… you only know who will supervise when you come there (clinic) then you only know.

P5: At the same time, you also must take into consideration that I see this person different to what you see the person, so, for example, Mrs. A, I will see her as the nicest person to me, or I see her as the nicest person and you may say, No I think the person is … I might not experience the person the way you do. It differs there, too. Person X may not like Dr …I may.

P1: If it comes back to personal relationship… who you work well with in the workplace, it is going to be the same. Every person has a person at work they feel more comfortable [with]

P2: You get the one that also trips all your switches all the time.

P2: Students will ask me, how do you stay so neutral? A supervisor can say something, I will not get on my horse, I will think it from all different angles that comes from my 8 years of work experience, so over the years I developed just stay calm and listen and maybe I am a slow processer but I will not if you say something to me get upset immediately and just react cause words is something you cannot take back, so I will sit and think this is what you have said. When you are angry, you cannot take words

back, and most of the time, if you are angry, I will sit and rethink everything and think I should have said this and this.

P1: Think rational about the situation before you act out.

Most of you have a personality trait that you will not respond immediately.

P2: On the other side, people in general, we are all so quick to hear one word and start thinking of responses … what we can say and react. It is important to keep your thoughts tamed, and it is important to listen and not react all the time.

Question 4

Have any of you experienced environmental, social or psychological challenges that may influence your well-being?

Can you elaborate on these challenges? Can you provide examples?

How do you perceive these challenges, and do you have coping mechanisms?

This aspect was covered earlier in the focus group; therefore, the question was not repeated.

What are these coping mechanisms applied by students?

What is the effect of these coping mechanisms?

Do you have any support systems to turn to?

Do you have possible solutions to the challenges students experience?

Overall, considering all the factors mentioned that may influence your well-being, would you claim that you are experiencing positive well-being?

The above questions were partly answered by each of the participants as the discussion unfolded- see above responses.

Question 5

What is your opinion on the contribution of the university, faculty, and lecturers towards students' well-being?

Is the psychosocial and emotional support provided in your current environment meeting your expectations? Elaborate on your answers.

P7: Can I just say this firstly, when I came here, it was like all the lecturers are in your face …. I come from the Faculty of Economics and Management, that is where I was. There are 300 students. The lecturers do not know that are you there …. Here (at dentistry), all the lecturers are in your face, this is very intimate, there are meetings (with the students). I was very overwhelmed, no man, … I thought this is too much support, I did not see it as support… I saw it as intruding into my private space, I gradually adjusted to it, but at first, I did not want to lie. I felt … it was too much, the whole of the first year, aah. No, it is too much; the whole of the first year was too much.

P3: In saying that, there are clinical supervisors who are very concerned if you are an hour late, and then some of those who just [do] not care – I won't mention names (of the clinical supervisor), but she could[n't] care whether I come or go or pass or fail, that is how I feel.

P2: I feel people (clinical supervisors) do this (maybe seems if they don't care) because to think where is this person and that person (students) you are one supervisor and you have to think of 30 students where they are, why are they late, what is going on in their personal life, why are they doing academically bad, why are they late? If you are one supervisor and you have to think where (everyone is), it can become overwhelming. I agree with you, it is like that, but [I] am also a very open-minded person. It is important to understand what other people (clinical supervisors) are going through, … this is a very personal opinion.

People coming into the course, they are not taking up any responsibilities and that is much easier. It is much easier and a bit more chilled in comparison to those students who are willing to take up responsibility. That also falls on yourself. Wow, I feel so overwhelmed, but you chose to do all that … people having different levels of functioning no matter what their circumstances are.

P3: I totally agree with you what you are saying but for me personally, don't come to me when I am failing, asking what is going on, and my own clinical advisor do not tell me there must be some concern about my WB there needs to be some type of concern.

P2: Personally, [I] think the university provide enough support in all aspects. But I must say, in the first years, [as a] student, all this things was not familiar to you. The first week they will tell you this is your clinical advisor; this is your mentor. Then, when you

sit down, and you start to know people, …. and when you start to know people, and you decide who you can trust.

In the beginning, you have a meeting with whomever, and you feel you are repeating your story to a hundred people over and over. In the beginning, I received support from different levels from this university. I got support on all levels, but in the beginning, it was too much; it was overwhelming.

P2: Instead of forcing us, let us choose our clinical supervisors or mentor, do not force us to go and see a psychologist … let us choose who and how. I want to be supported; let us choose our Clinical Advisor/mentor, let us … Don't force us to see a psychologist.

P2: Let me decide who I want to see. Let that be my first person, and from there on we can decide what next.

In this discussion, it once again came up that students want to choose whom they want to talk to, not be "forced" to deal with a specific clinical advisor/mentor or told they can go to a counsellor or psychologist. Most in this group felt that the support is, at times, overwhelming and just too much. The perception that the support was too much was specifically voiced by the adult learners in this group.

P2: Guaranteed, one Clin Adv will end up with all the students and the rest with none.

P1: For sure.

P7: One person with one or none (Laughter).

Any suggestions on how support could be improved? How can we make it better? Are there any other matters to discuss regarding students' well-being?

P6: Less assignments because it takes up so much time. Less assignments ….

P2: For me, personally, I feel group assignments in the final year is a no-go. This is the point where you should go out as an independent practitioner. It (group work) maybe in [the] final year as you need to know each other it will work in final year …no group work in your final year; it is causing extra stress of a group, everyone is not on the same page, not working at the same pace, you are going to be an independent practitioner (soon). Let everything be a one-on-one thing…… not a group thing….

P2: Also, consistency is important. We have a module that is coordinated perfectly; everything flows, the dates follow … no hiccups, everything works perfectly. Then there are other modules [where] supervisors are not communicating with one another.

Module coordinators not communicating with one another, and they may not see the importance of communication between all these different types [of] people between the different modules, but it affects us at the end, and we are the people who it affects. We are the people having all these modules, so if one lecturer is great in communication and other one is not, it affects you can see it in the marks in modules – which subjects people do very well in, and you look at the module coordinator, and you compare. Then there is [an] obvious reason why some modules have great marks and participation, and others don't, so one lecturer is great at communication, and the other one isn't. You can see what subjects the students are doing well … in and others don't. There are obvious reasons why some modules have great marks and participation, and others [do] not.

P2: You can see in the marks in some modules, there is a flow (in the marks), and in other modules, not.

P7: For me, having four lecturers for one module, that for me, it makes it, firstly for you as a person studying, you have to remember who said what. It makes it very hard for us to navigate around this thing, having CLP and having five lecturers for one module. Ai no. It is good to know Mrs takes SCP and ortho, and the model is yours, and Dr N taking CLP, the module is yours, and …

P3: In the first year, there was a flow if you hear Mrs. SSD. This year everyone is teaching everything. Ms is saying for CLP, then [the] next session it is SCP. You [are] listening to one person the whole day, but lecturing three different modules, you really need to keep track.

P6: You make a connotation, it is like blue is for CLP, green for RAD. Everything blue is CLP, and this is how they ask questions now; there are green, red, purple, everything.

You cannot link, you feel as if your modules are melting together, so you get your theories wrong because this is part of that, and that is part of that, but it is also not linking.

P3: Is absolutely correct. I know when you lecture. It is a dark, blue background in white, yellow or red heading, and it sticks with me. I know where to find it, I know the page the heading stands for then.

P2: You link all that and make folders in your mind.

P2: But on the other side, you are not supposed to put things into certain compartments because you have to have everything together to go out and work, so if you put certain lectures from CLP in your brain, somewhere in a folder, like other lectures, for example ODS, which they should link, but you are compartmentalising and they don't link, then we get confused. Like with RAD, some of the lectures had the same work presented differently, and that is confusing; for example, the same thing is called a cyst and the other a tumour, so I think it is two different things, but it is actually the same thing? It is difficult, so it takes a bit longer to adapt to it. In the beginning, I was super confused, but by this year, it did not faze me that we had different lecturers for different subjects and like all mashed together. I was putting everything into one folder by this year, so if one lecturer is presenting lectures over three modules, it should be gradually brought in or gradually, like stopping uhmm ….

P2: May we suggest [that] if five lecturers for this module are lecturing this module, let one finish this section and then the next one carries on, but this thing, it is all over. The one lecturer is organised, but the next lecturer comes running in [and] needs to lecture you now, then we are also lost, like one lecturer should take a section and then finish Like ODS.

P6: Last year there was one lecturer for Perio. And this lecturer only did perio. That lecturer only does that, that helps you link that lecturer and that work. That is how my mind works.

P2: For CLP this year, there were different people, [but] there was still a flow for me, and then you get [redacted] … there my brain is all over the show because everyone is all over the show – no flow, but it is the same people (that lecture). Then you get modules where the supervisor is not a lecturer in the module, and there is no communication, and that causes unnecessary stress. You are lost, the supervisor is lost, and I can get [lost] very easily….

P7: For me, it works better [with] one lecturer, one module. One lecturer for one module. This is how it was at school: one teacher for maths, one person for life sciences, one for geography … that is my frame; if there are four people teaching … you adapt to that level of learning (finish).

P2: You cannot even apply critical thinking (referring to so many lecturers per module).

P4: I know this is far-fetched, but with regards to the environment … we did not know that this COVID thing …I think it is not applying for us, it is for years to follow, but can they not implement face-to-face again? It is so hard to learn online. You have things going on at home, you are not focusing, your environment is not what it is supposed to be, you need a quiet space, you are sharing a room with your sister or brother and they are also doing their thing, your parents need help with certain thing place even if we sit under a tree spaced out that will be OK We enjoyed f2f, and our marks reflected that. Online, we had no interaction. I think there was a huge shift…….

P2: I think a combination between online and f2f is good. People learn differently. For me, online is good. It was difficult because my attention sometimes, if they put the camera off, if I do not see, I do not listen, my mind drifts. Online was also nice because you had more time in a day to do what you need to do. You do not have to drive; you do not have to take an hour lunch and wait. You can start when you want to start. You are on your own pace; I like to work at my own pace. If people take too long, I become impatient. I don't like to wait.

P2: Online work for me [is] better. I get distracted easily, like she is drinking [a] cool drink now, and I look at that and not listen to Mrs …. So, for me, I function better when I am in my own space and alone. To come back to modules, how to improve, we get evaluation forms at the end of the year, to make suggestions for the person/ students coming in the next year. I feel [that] if we have that lecture for a month, then we should have the intervention session. How do you think we can improve? We should have that rather after every term. I must now make a suggestion for next year's 2nd years; it might not work for them because it is something I want.

P3: That is why the response may be is so bad.

P:5 It is not going to benefit me, so why fill it out?

P7: That is why we just mark off "strong" (Agree).

P3: So why should you?

P5: The second years are not going to appreciate the changes.

P2: It is not going to benefit you (me). Do it after every term and get suggestions. The lecturer gets a break to think about it. Maybe I should make minor changes for term two. This filling in a form when its [is] too late is very irritating.

P6: Next year, students will not appreciate the changes because they do not know what it was like.

P4: You had CLP. How could you improve to make it better next year?

P2: We have that in our university (curriculum development by students) as well when students are asked to participate in curriculum review, that is nice because I can take it back to the class and hear how it could be done.

P2: How big the change is, they wanted everything digitalised, and that does not happen overnight. You need the infrastructure.

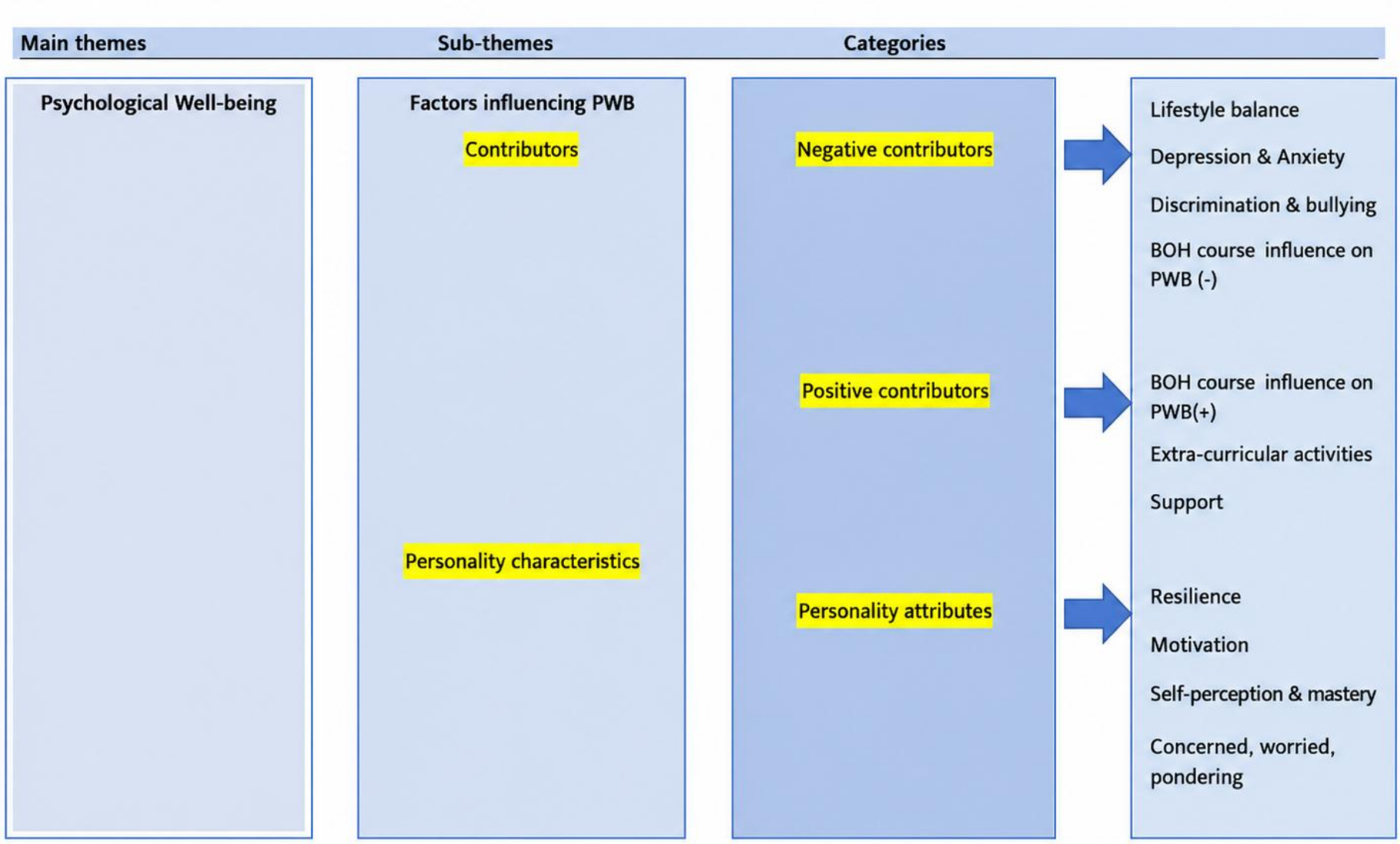
P5: And what about load shedding?

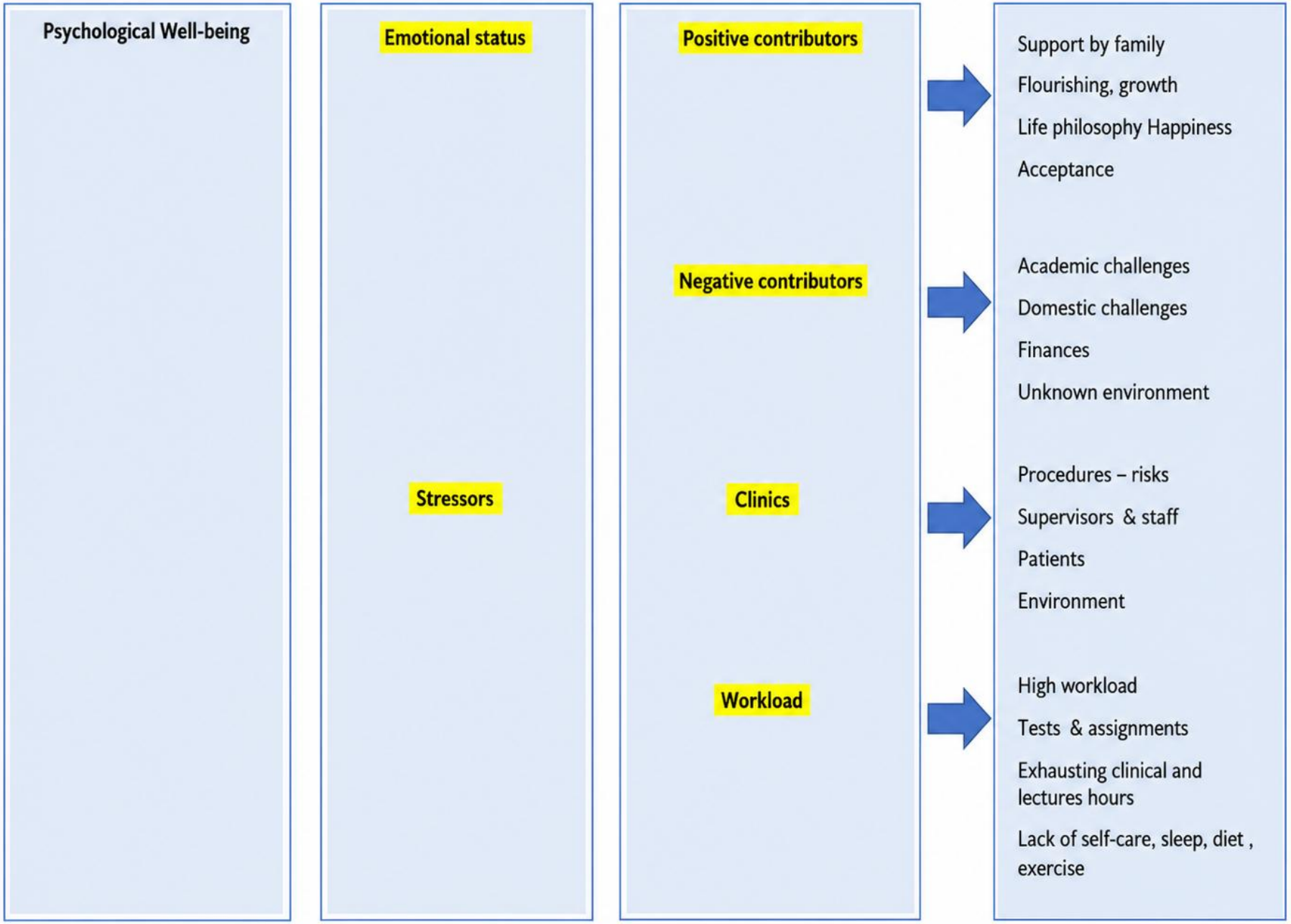
P7: At another university, my friend could, after each lecture, there will be a pop-up where the student assesses the lecturer's session, so that the lecturer knows how they have done online.

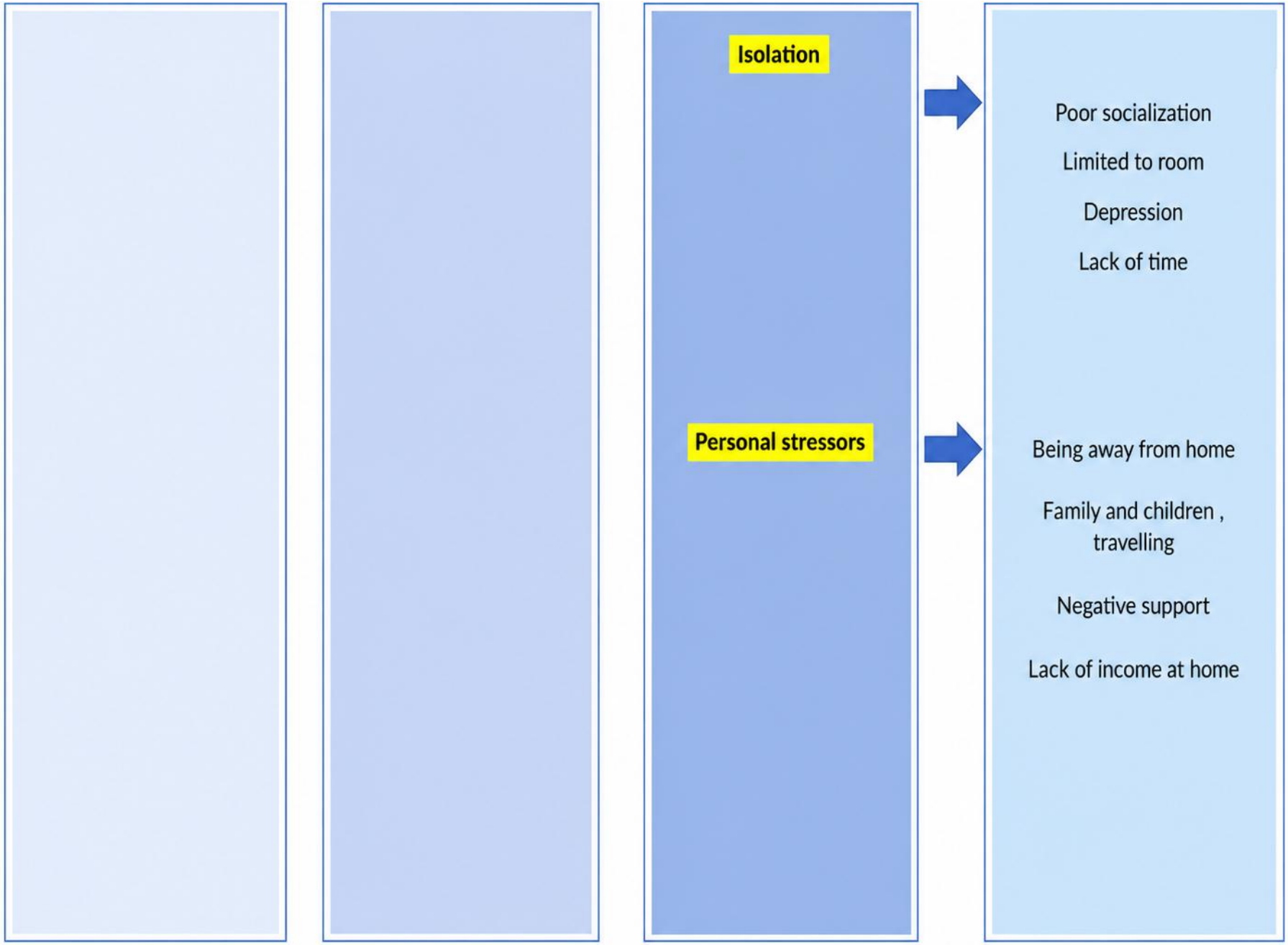
Who wants to add information regarding the topic being researched?

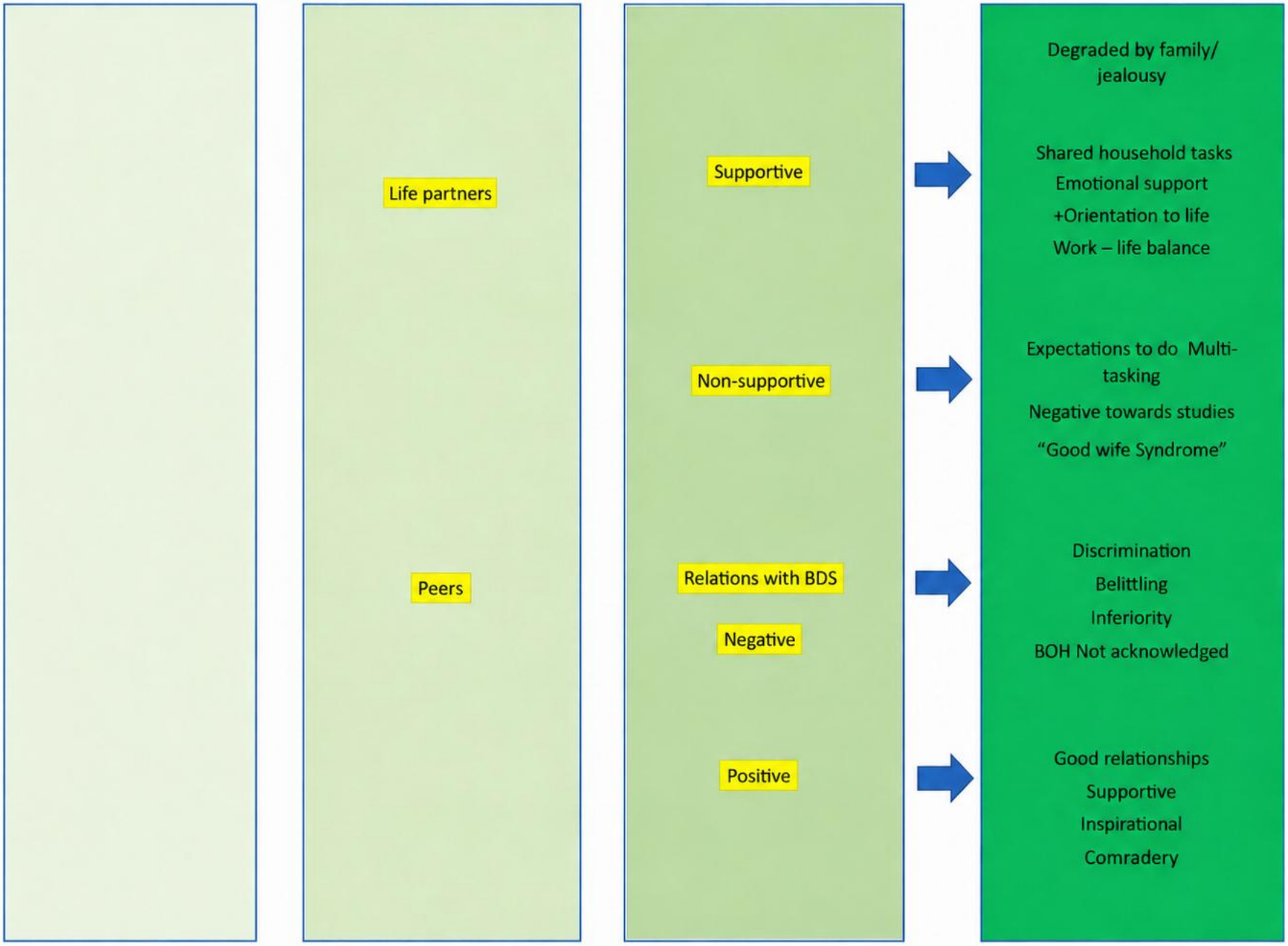
Thank you for your participation.

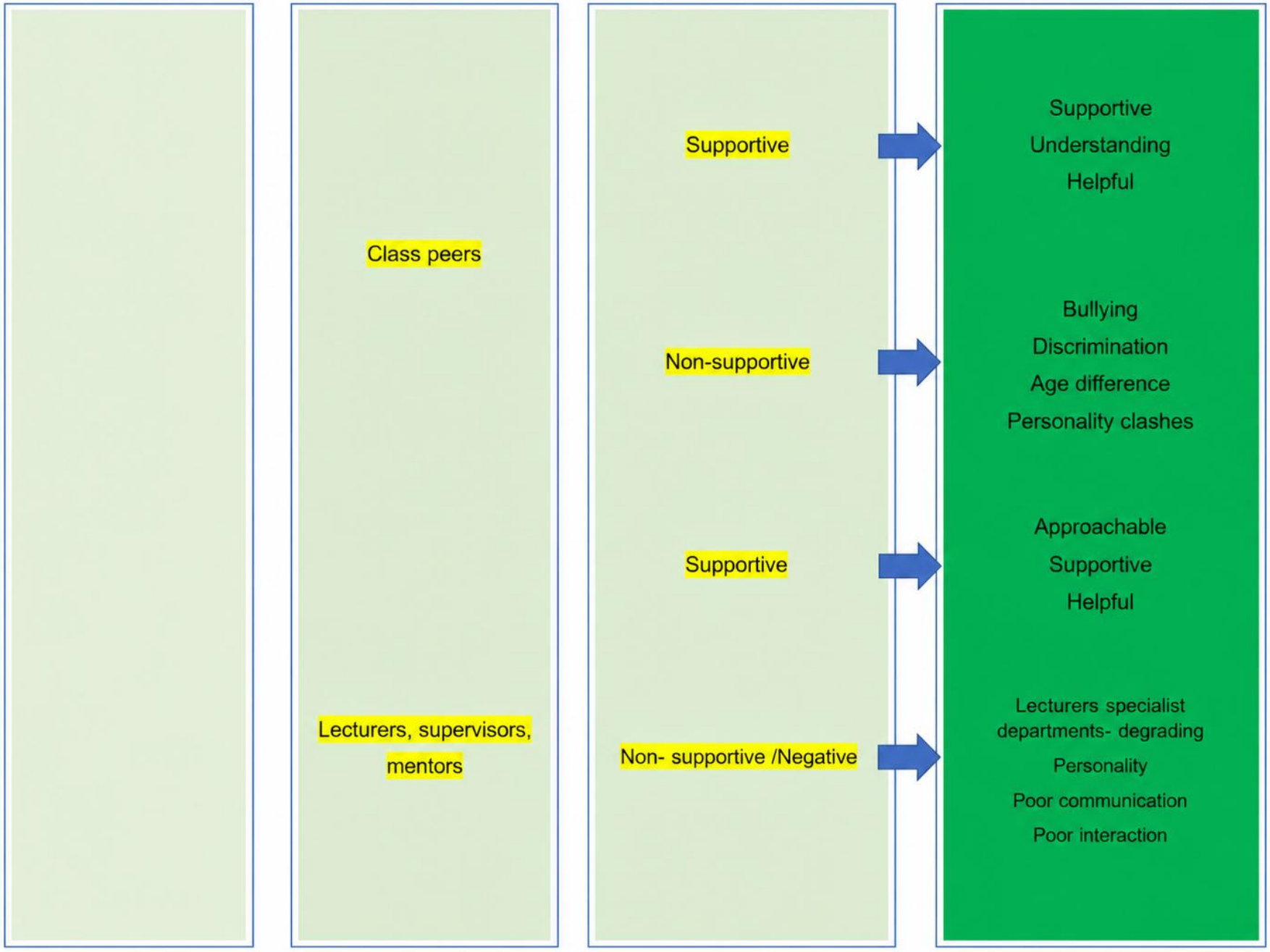
APPENDIX 18: EXAMPLE OF IDENTIFICATION OF CATEGORIES

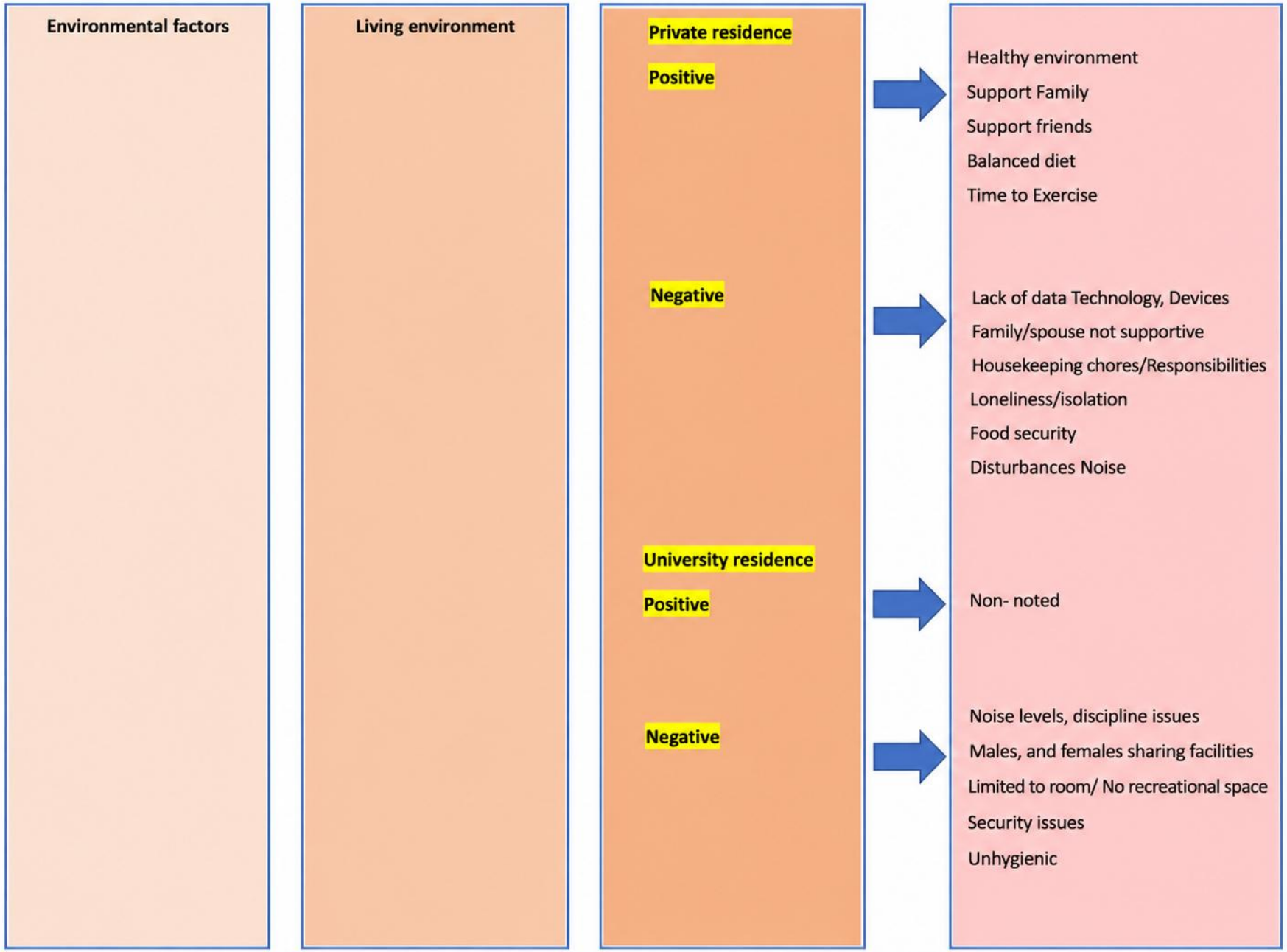


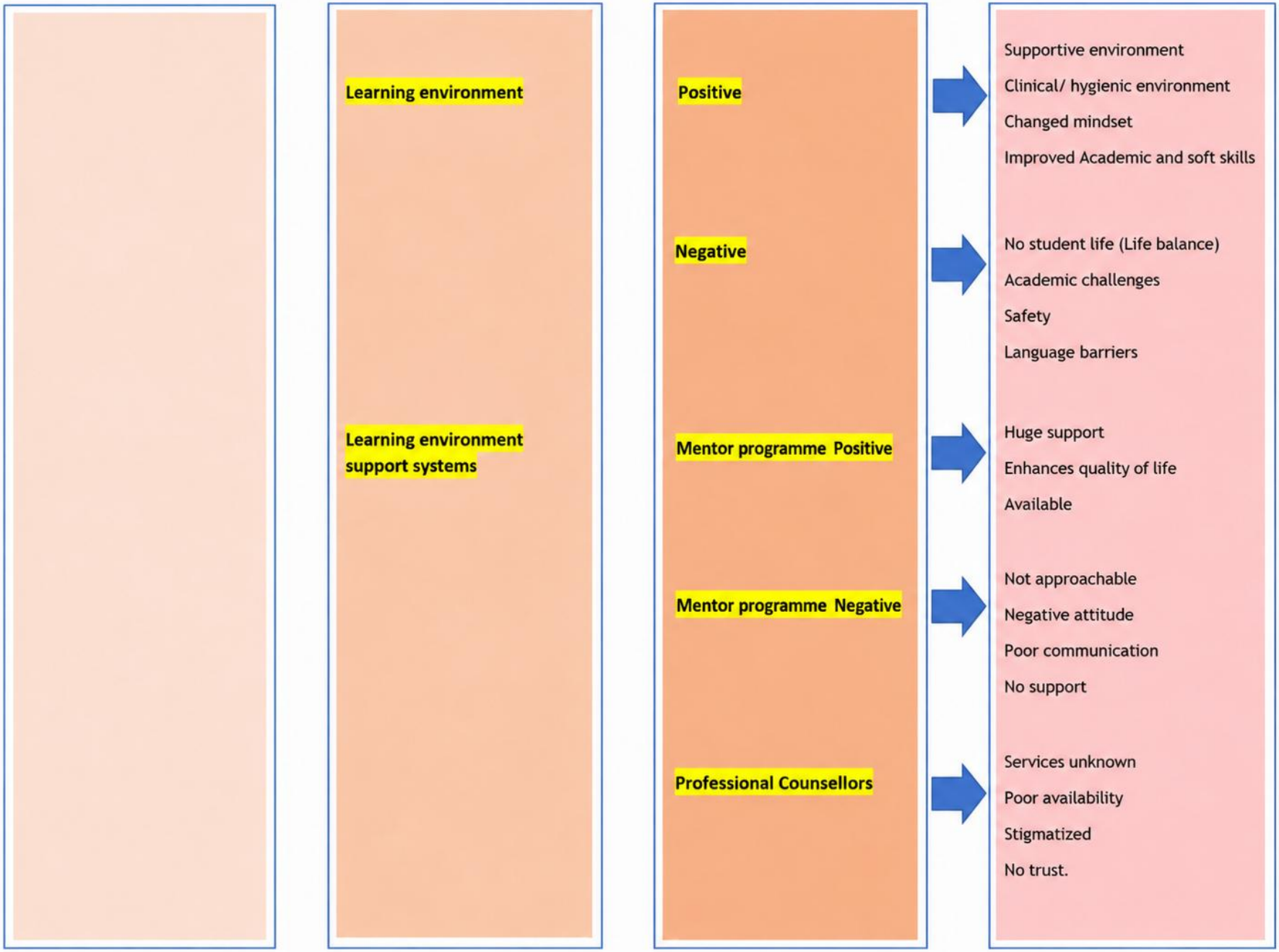

Psychological Well-being
Emotional status
Stressors
Positive contributors
Negative contributors
Clinics
Workload
Support by family
Flourishing, growth
Life philosophy Happiness
Acceptance
Academic challenges
Domestic challenges
Finances
Unknown environment
Procedures – risks
Supervisors & staff
Patients
Environment
High workload
Tests & assignments
Exhausting clinical and lectures hours
Lack of self-care, sleep, diet , exercise

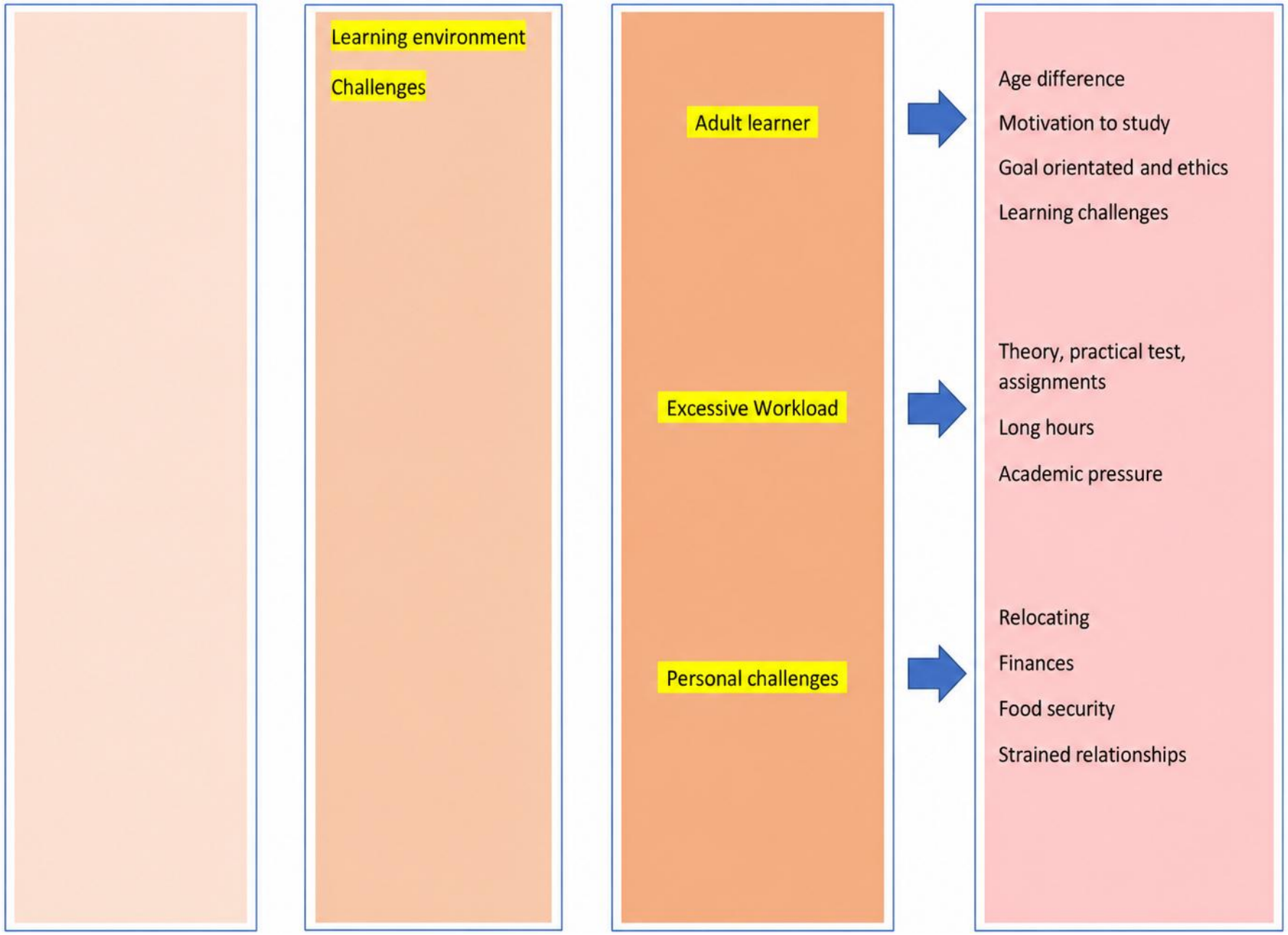

Isolation
Poor socialization
Limited to room
Depression
Lack of time
Personal stressors
Being away from home
Family and children , travelling
Negative support
Lack of income at home

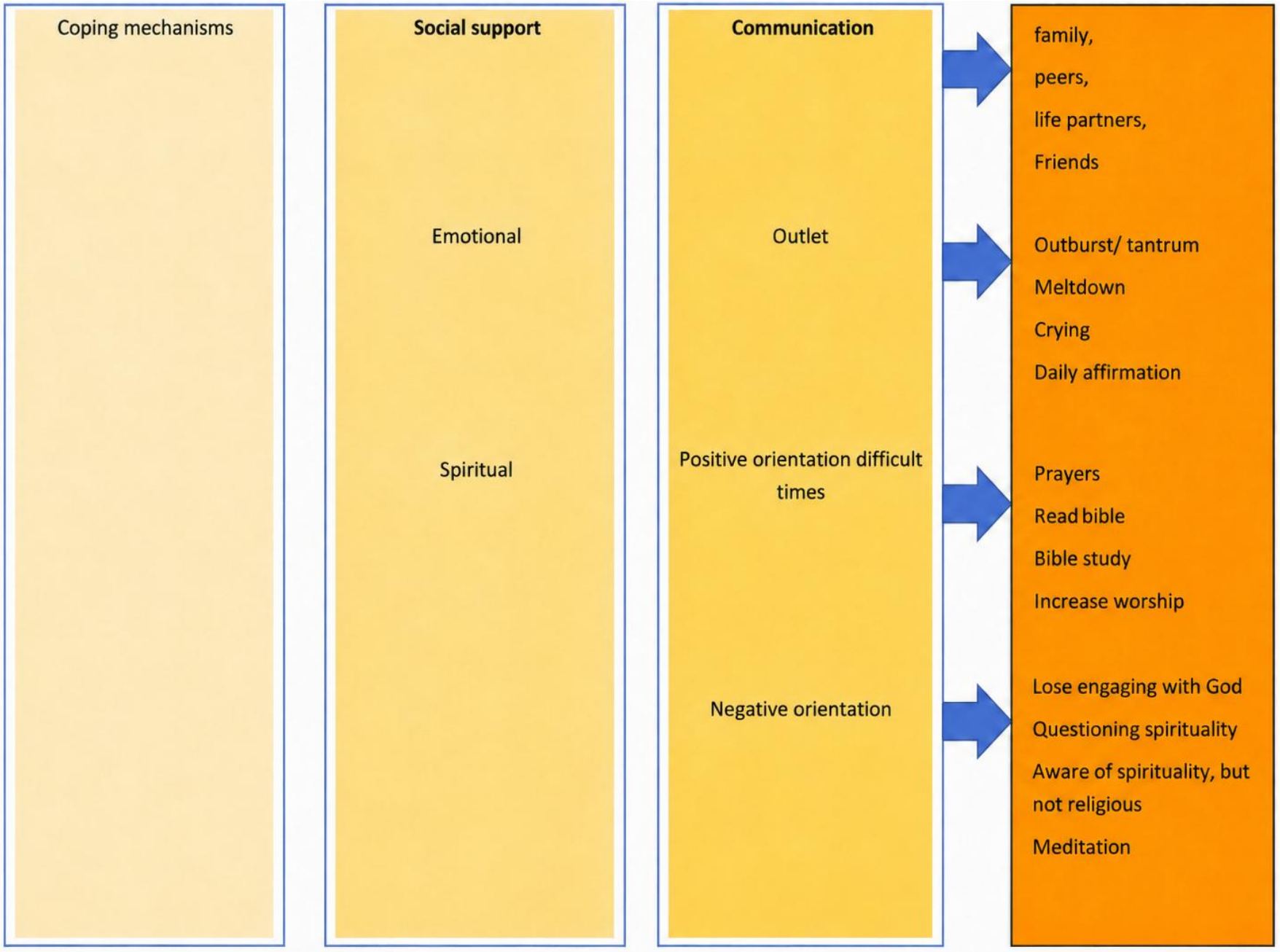

Life partners
Peers
Supportive
Non-supportive
Relations with BDS
Negative
Positive
Degraded by family/ jealousy
Shared household tasks
Emotional support
+Orientation to life
Work – life balance
Expectations to do Multi-tasking
Negative towards studies
"Good wife Syndrome"
Discrimination
Belittling
Inferiority
BOH Not acknowledged
Good relationships
Supportive
Inspirational
Comradery

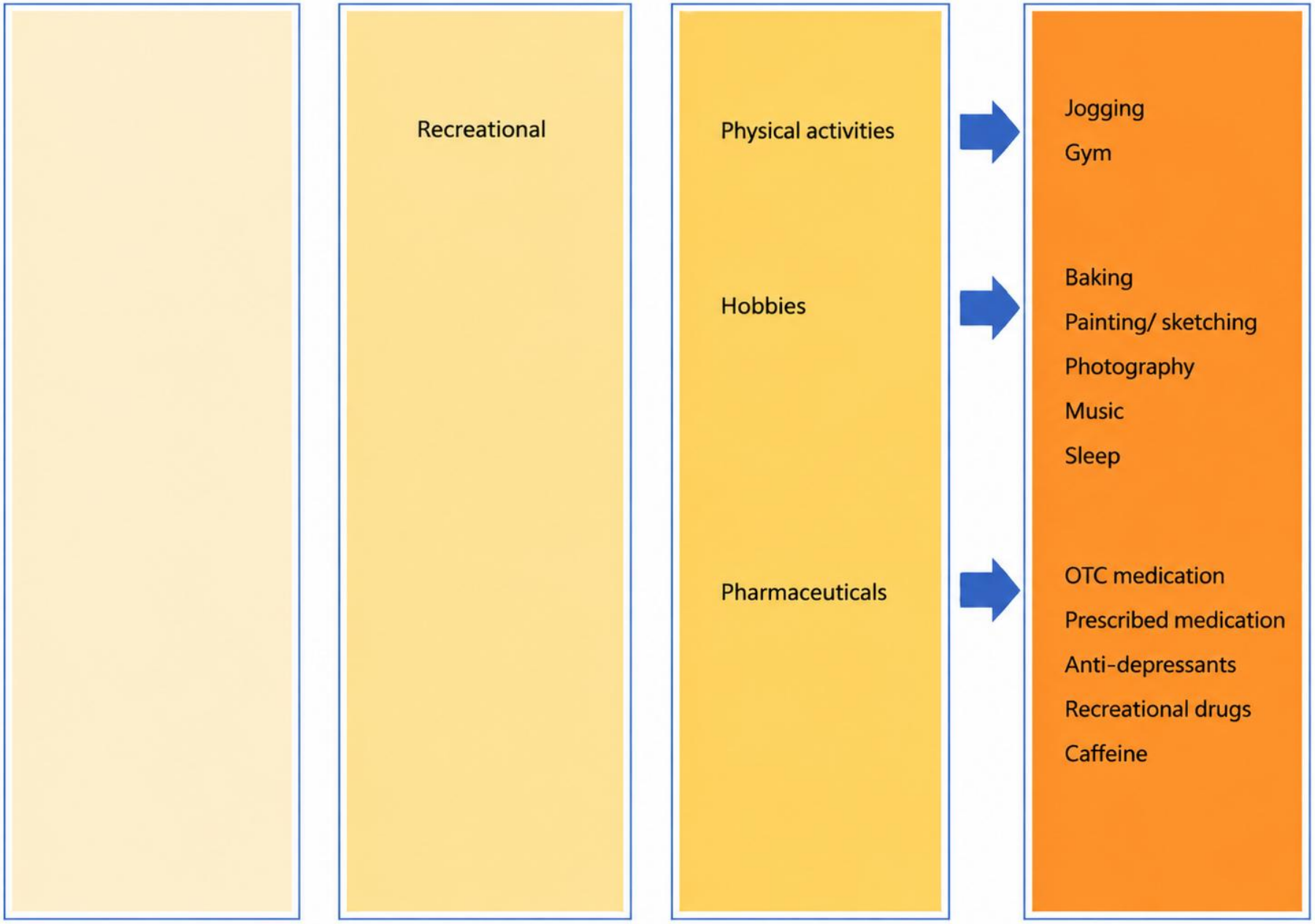

Class peers
Supportive
Non-supportive
Supportive
Understanding
Helpful
Bullying
Discrimination
Age difference
Personality clashes
Lecturers, supervisors, mentors
Supportive
Helpful
Non- supportive /Negative
Lecturers specialist departments- degrading
Personality
Poor communication
Poor interaction


Environmental factors
Living environment
Private residence
Positive
Healthy environment
Support Family
Support friends
Balanced diet
Time to Exercise
Negative
Lack of data Technology, Devices
Family/spouse not supportive
Housekeeping chores/Responsibilities
Loneliness/isolation
Food security
Disturbances Noise
University residence
Positive
Non- noted
Negative
Noise levels, discipline issues
Males, and females sharing facilities
Limited to room/ No recreational space
Security issues
Unhygienic


Learning environment
Learning environment support systems
Positive
Negative
Mentor programme Positive
Mentor programme Negative
Professional Counsellors
Supportive environment
Clinical/ hygienic environment
Changed mindset
Improved Academic and soft skills
No student life (Life balance)
Academic challenges
Safety
Language barriers
Huge support
Enhances quality of life
Available
Not approachable
Negative attitude
Poor communication
No support
Services unknown
Poor availability
Stigmatized
No trust.


Learning environment
Challenges
Adult learner
Excessive Workload
Personal challenges
Age difference
Motivation to study
Goal orientated and ethics
Learning challenges
Theory, practical test, assignments
Long hours
Academic pressure
Relocating
Finances
Food security
Strained relationships


Coping mechanisms
Social support
Emotional
Spiritual
Communication
Outlet
Positive orientation difficult times
Negative orientation
family,
peers,
life partners,
Friends
Outburst/ tantrum
Meltdown
Crying
Daily affirmation
Prayers
Read bible
Bible study
Increase worship
Lose engaging with God
Questioning spirituality
Aware of spirituality, but not religious
Meditation


Recreational
Physical activities
Hobbies
Pharmaceuticals
Jogging
Gym
Baking
Painting/ sketching
Photography
Music
Sleep
OTC medication
Prescribed medication
Anti-depressants
Recreational drugs
Caffeine

APPENDIX 19: PARTICIPANT CONSENT TO PARTICIPATE IN THE STUDY



CONSENT TO PARTICIPATE IN THIS STUDY (Return slip)

I, ____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree with the recording of the face-to-face interview and /or the focus group discussion. I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print): _____

Participant signature Date:

Researcher's Name & Surname (please print) Karin Viljoen

Researcher's signature Date: 20/01/2020

APPENDIX 20: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT THE UNIVERSITY OF [redacted]

Title: The psychosocial and emotional well-being of oral hygiene students at a South African university: A case study

Date: 20 /01/2020

Prof [redacted]

Section of the Dean

Acting Dean: [redacted]

Deputy Dean: Research [redacted] Tel number [redacted]

Dear Prof [redacted]/ Prof [redacted]

I, Karin Viljoen, am conducting a research project under the supervision of Prof K. Mohangi, a Professor in the Department of Education Psychology, towards my PhD degree in Psychology of Education at the University of South Africa.

I currently have funding from a UNISA bursary for financial support towards conducting this research project, with the purpose of obtaining the above-mentioned degree.

I hereby request permission to conduct this study titled: The psychosocial and emotional well-being of students studying oral hygiene at a South African university: A case study at the University [redacted] Dental Faculty in the Department [redacted]. Prospective participants will include second and third-year Bachelor of Oral Health students as well as lecturers and clinical supervisors in the oral hygiene department.

The study aims to explore the factors associated with the psychosocial and emotional well-being of oral hygiene students studying at a South African university. The purpose of the study is to investigate the factors that influence the psychosocial and emotional well-being of the undergraduate oral hygiene student and to develop a framework that could assist future students in their well-being development.

The specific Faculty of Dentistry has been selected as the site for this research study due to its status as the largest dental training facility in Southern Africa. The Faculty of Dentistry has the largest group of registered students in both the Bachelor of Dental Surgery degree and the Bachelor's degree in Oral Health.

The study will entail collecting data through a self-administered questionnaire, semi-structured interviews, and focus group discussions. Participants will voluntarily participate in this study.

The potential benefits of this study include identifying factors that influence the psychosocial and emotional well-being of students enrolled in this specific study programme, and the researcher aims to present a model that will assist faculty and students in the future.

There will be no reimbursement or any incentives for participation in the research.

The feedback procedure will entail that the researcher presents the results to all participants and staff in a PowerPoint presentation and provides the faculty and the university with a written report.

Yours sincerely

Karin Viljoen

Oral hygienist/ Lecturer

[redacted]

Supervisor: [redacted]

Tel: [redacted]

College of Education, UNISA,

E-mail: mohank@unisa.ac.za

APPENDIX 21: PROOF OF SERVICE LETTER FROM LANGUAGE EDITOR

Le Roux Academic Consulting

Editing & Proofreading Services

Dr Suzaan le Roux
Artillery Road
Door De Kraal
Bellville
7530
✉ proofreading@mweb.co.za
✆ +27 (0)82 3210 484

16 January 2026

To whom it may concern

DECLARATION OF LANGUAGE EDITING: KARIN VILJOEN (5998670)

This letter confirms that I have proofread/edited the doctoral dissertation of Ms Karin Viljoen titled "The psychosocial and emotional well-being of students studying oral hygiene at a South African university: A case study".

The editing service focused on improving the accuracy of language, overall readability, structure, and style, as well as checking spelling, grammar, and punctuation.

The editing service excluded re-writing any part of the dissertation or re-editing after editor comments were addressed.

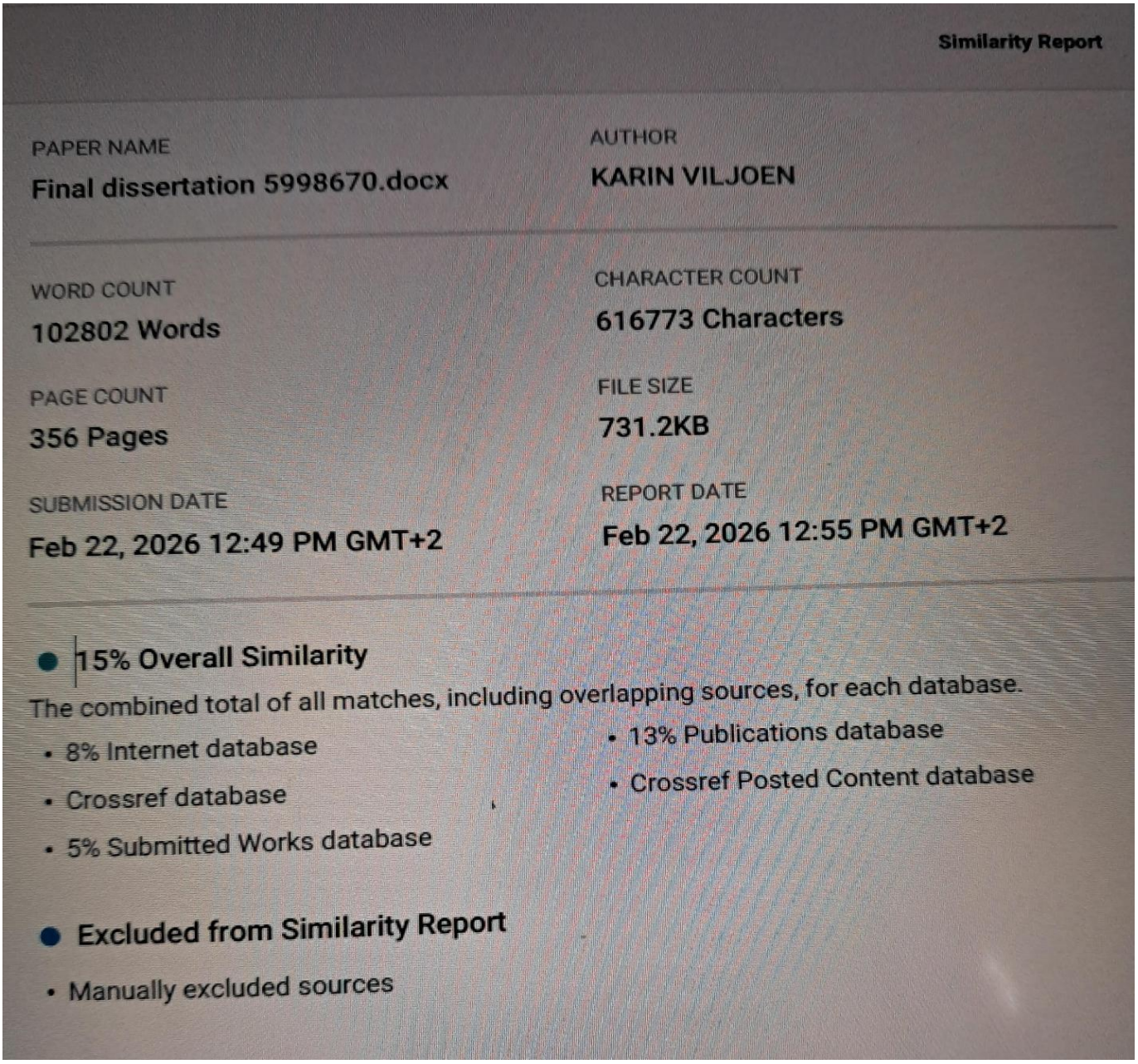
Yours sincerely

Dr mult Suzaan le Roux

Contributing towards your success

Moneyline 1838 CC, Reg. No. 1999/056460/23, trading as *Le Roux Academic Consulting*
Members: S le Roux, PD le Roux

APPENDIX 22: PROOF OF SIMILARITY REPORT



Similarity Report

PAPER NAME
Final dissertation 5998670.docx

AUTHOR
KARIN VILJOEN

WORD COUNT
102802 Words

CHARACTER COUNT
616773 Characters

PAGE COUNT
356 Pages

FILE SIZE
731.2KB

SUBMISSION DATE
Feb 22, 2026 12:49 PM GMT+2

REPORT DATE
Feb 22, 2026 12:55 PM GMT+2

● 15% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

- 8% Internet database
- Crossref database
- 5% Submitted Works database
- 13% Publications database
- Crossref Posted Content database

● Excluded from Similarity Report

- Manually excluded sources