

The self-concept and academic performance of learners with physical disabilities in  
Chitungwiza, Zimbabwe

by

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### **Declaration: Supervisor**

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**Date:** February 2026

## **DEDICATION**

This work is dedicated to my beloved husband, Ezera, my two precious daughters, Blessed and Moreblessings, and my three cherished sons, Blessings, Ezra (Jnr), Divine and to my late mother, Mavis. I cherish the values and ethos I learnt from my late mother. Mother, you were my unwavering support, my inspiration, my pillar of strength and my guiding light. I am forever grateful for your constant encouragement to strive for excellence.

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## **ABSTRACT**

Despite growing global focus on the self-concept of learners with disabilities, this pivotal issue remains significantly underexplored in public schools, particularly among learners with physical disabilities. Disproportionately burdened by complex psychosocial stressors that critically undermine their academic trajectories, these learners frequently endure heightened levels of anxiety, chronic stress, and clinical depression. Such pervasive mental health challenges erode self-esteem and cognitive capacity, impairing focus and motivation, and increasing vulnerability to social isolation. This study examines how self-concept affects academic achievement among physically disabled learners, highlighting its impact on both academic and social outcomes. By informing inclusive policies and interventions, it aims to promote self-actualisation and foster equitable, learner-centred education in Sub-Saharan Africa. The study is grounded in a humanistic paradigm, drawing on Carl Rogers' self-concept theory, Allport's personality constructs, and Harter's multidimensional self-perception model. This study adopts a quantitative research approach rooted in the positivist paradigm to ensure a systematic, objective, and reliable investigation. A descriptive survey design was used to quantify the experiences of learners with physical disabilities in public secondary schools. A randomly selected sample of 150 learners with physical disabilities from public secondary schools was used. Public secondary schools were selected using simple random sampling. Closed-ended, self-administered questionnaires ensured ease of use, standardisation, and reliable data collection. Data were analysed using structured coding, descriptive statistics, and Chi-square tests via SPSS 11.0, which supported accurate handling of large, complex datasets. The findings reveal that learners with physical disabilities face entrenched systemic deterrents that hinder their developmental and educational pursuits. Deficits in self-esteem and negative self-concept correlate with inadequate social support and exclusion, which hinder self-concept development and academic engagement. Limited physical activity further constrains psychological resilience and hampers holistic growth, ultimately impeding self-actualisation. Conclusively, learners with physical disabilities confront profound psychosocial and academic impediments that erode self-worth, self-concept and achievement. Urgent implementation of inclusive, multifaceted interventions is essential to cultivate resilience, affirm positive self-concept, and enhance holistic success.

**KEYWORDS.** Physical disability; psychosocial factors; self-concept; psychological well-being; social life; academic performance; motivation; resilience; stigma; inclusion.

## LIST OF ACRONYMS

| ACRONYM | MEANING                                               |
|---------|-------------------------------------------------------|
| ACEs    | Adverse Childhood Experiences                         |
| ASC     | Academic Self-Concept                                 |
| CRPD    | Convention on the Rights of Persons with Disabilities |
| DSPD    | Department of Social Policy and Development           |
| FMS     | Fundamental Motor Skills                              |
| IQ      | Intelligence Quotient                                 |
| MFD     | Mental Functioning Disabilities                       |
| OED     | Oxford English Dictionary                             |
| PSC     | Physical Self-Concept / Psychosocial Safety Climate   |
| PTSD    | Posttraumatic Stress Disorder                         |
| REM     | Reciprocal Effects Model                              |
| SDT     | Self-Determination Theory                             |
| SEB     | Social, Emotional, and Behavioural                    |
| SES     | Socioeconomic Status                                  |
| UPR     | Unconditional Positive Regard                         |

## TABLE OF CONTENTS

|                                                             |       |
|-------------------------------------------------------------|-------|
| DECLARATION BY THE CANDIDATE.....                           | ii    |
| DECLARATION BY THE SUPERVISOR.....                          | iii   |
| DEDICATION.....                                             | iv    |
| ACKNOWLEDGEMENTS.....                                       | v     |
| ABSTRACT.....                                               | vii   |
| LIST OF ACRONYMS .....                                      | ix    |
| LIST OF APPENDICES.....                                     | xvi   |
| LIST OF TABLES.....                                         | xvii  |
| LIST OF FIGURES .....                                       | xviii |
| CHAPTER 1 .....                                             | 1     |
| INTRODUCTORY ORIENTATION .....                              | 1     |
| 1.1 Introduction .....                                      | 1     |
| 1.2. Background of the Study.....                           | 1     |
| 1.3. Rationale for the Study.....                           | 10    |
| 1.4. Statement of the Problem .....                         | 12    |
| 1.5. Research Questions .....                               | 14    |
| 1.5.1. Main research question.....                          | 14    |
| 1.5.2. Sub-research questions .....                         | 14    |
| 1.6 Aim and Objectives of the Study .....                   | 15    |
| 1.6 .1 Main aim.....                                        | 15    |
| 1.6.2 Objectives .....                                      | 15    |
| 1.7 Significance of the Study .....                         | 15    |
| 1.8. Theoretical Framework .....                            | 17    |
| 1.8.1. Carl Rogers' theory of self-concept development..... | 17    |
| 1.8.2. Allport's ideas of identity formation.....           | 18    |

|                                                                     |    |
|---------------------------------------------------------------------|----|
| 1.8.3. Harter's self-perception profile for teenagers .....         | 18 |
| 1.9. Delimitations of the Study.....                                | 19 |
| 1.10. Definition of Key Concepts.....                               | 20 |
| 1.10.1. Physical disability.....                                    | 20 |
| 1.10.2 Psychosocial .....                                           | 21 |
| 1.10.3. Self-concept.....                                           | 21 |
| 1.10.4. Psychological well-being.....                               | 21 |
| 1.10.5 Social life.....                                             | 22 |
| 1.10.6. Academic performance.....                                   | 22 |
| 1.10.7 Motivation .....                                             | 22 |
| 1.10.8. Resilience.....                                             | 23 |
| 1.10.9. Stigma.....                                                 | 23 |
| 1.10.10 Inclusion .....                                             | 23 |
| 1.11 Outline of Chapters .....                                      | 23 |
| 1.12 Summary .....                                                  | 25 |
| CHAPTER 2 .....                                                     | 26 |
| THE THEORETICAL FRAMEWORK .....                                     | 26 |
| 2.1 Introduction .....                                              | 26 |
| 2.2. The Humanistic Perspective.....                                | 27 |
| 2.2.1. Carl Rogers' theory of self-concept development.....         | 28 |
| 2.2.2. Allport's ideas of identity formation.....                   | 43 |
| 2.2.3 Harter's self-perception profile for adolescents (SPPA) ..... | 52 |
| 2.2.4. Summary.....                                                 | 61 |
| CHAPTER 3 .....                                                     | 62 |
| LITERATURE REVIEW .....                                             | 62 |

|                                                                                        |     |
|----------------------------------------------------------------------------------------|-----|
| 3.1. Introduction .....                                                                | 62  |
| 3.2 Self-concept Overview .....                                                        | 65  |
| 3.2.1. Definition of self-concept .....                                                | 65  |
| 3.2 .2. Global overview of self-concept.....                                           | 68  |
| 3.3. A Disability Perspective on Self-concept and Education.....                       | 73  |
| 3.4. How Self-concept Affects Physically Disabled Learners' Academic Performance ..... | 74  |
| 3.4.1. Psychological self-concept .....                                                | 74  |
| 3.5. The influence of affective factors on psychological self-concept.....             | 80  |
| 3.5.1. The psychological self-concept, stress and anxiety .....                        | 81  |
| 3.5.2. The psychological self-concept and self-esteem .....                            | 83  |
| 3.5.3. Psychological self-concept and self-efficacy .....                              | 88  |
| 3.5.4. Psychological self-concept and mental health.....                               | 91  |
| 3.6. Social Self-concept.....                                                          | 94  |
| 3.7. The Influence of External Variables on Learners' Social Self-concept .....        | 100 |
| 3.7.1. Family.....                                                                     | 101 |
| 3.7.2. Socioeconomic status (SES).....                                                 | 108 |
| 3.7.3. The school.....                                                                 | 111 |
| 3.7.4. Peers.....                                                                      | 112 |
| 3.7.5. Culture and religion .....                                                      | 116 |
| 3.8. Social Self-concept and Social Support .....                                      | 119 |
| 3.9. Physical Self-concept .....                                                       | 123 |
| 3.9.1. Physical self-concept, physical activity and happiness .....                    | 128 |
| 3.10. Academic Self-concept .....                                                      | 134 |
| 3.10.1 Academic self-concept and academic performance .....                            | 135 |

|                                                                                                          |     |
|----------------------------------------------------------------------------------------------------------|-----|
| 3.10.2. The relationship between motivation, academic self-concept (ASC), and academic performance ..... | 148 |
| 3.11. Self-concept, Stigmatisation and Marginalisation .....                                             | 152 |
| 3.12. Discriminatory Legislation and Policies .....                                                      | 158 |
| 3.13. Inclusiveness and Academic Self-Concept .....                                                      | 159 |
| 3.14. Physically disabled learners and resilience .....                                                  | 164 |
| 3.15. Conceptual framework .....                                                                         | 169 |
| 3.15. 1. Interpretation of the framework.....                                                            | 169 |
| 3.15.2. The significance of the conceptual framework.....                                                | 171 |
| 3.16. Summary .....                                                                                      | 171 |
| CHAPTER 4 .....                                                                                          | 173 |
| RESEARCH METHODOLOGY.....                                                                                | 173 |
| 4.1. Introduction .....                                                                                  | 173 |
| 4.2 Research Paradigm.....                                                                               | 174 |
| 4.2.1. Positivism .....                                                                                  | 175 |
| 4.3. Research approach.....                                                                              | 175 |
| 4.3.1. Quantitative approach.....                                                                        | 176 |
| 4.4. Research Design.....                                                                                | 177 |
| 4.4.1. Descriptive survey .....                                                                          | 177 |
| 4.5. Population and Sampling .....                                                                       | 180 |
| 4.5.1. Population.....                                                                                   | 181 |
| 4.5.2. Sample .....                                                                                      | 182 |
| 4.6. Data Collection.....                                                                                | 189 |
| 4.6.1. Data collection methods .....                                                                     | 190 |
| 4.6.2. Data collection procedures .....                                                                  | 200 |

|                                                                                |     |
|--------------------------------------------------------------------------------|-----|
| 4.7. Data Analysis .....                                                       | 201 |
| 4.7.1 Coding .....                                                             | 203 |
| 4.7.2 Statistical analysis.....                                                | 204 |
| 4.7.3 Variables .....                                                          | 206 |
| 4.8. Validity and Reliability of the Questionnaire .....                       | 207 |
| 4.8.1. Reliability in research.....                                            | 208 |
| 4.8.2. Validity .....                                                          | 211 |
| 4.9. Ethical Considerations.....                                               | 212 |
| 4.9.1 Permission .....                                                         | 214 |
| 4.9.2 Anonymity.....                                                           | 214 |
| 4.9.3. Confidentiality .....                                                   | 215 |
| 4.9.4 Informed consent .....                                                   | 216 |
| 4.9.5 Protection from harm.....                                                | 217 |
| 4.9.6 Honesty .....                                                            | 218 |
| 4.10. Summary .....                                                            | 218 |
| CHAPTER 5 .....                                                                | 220 |
| DATA PRESENTATION, ANALYSIS AND DISCUSSION .....                               | 220 |
| 5.1 Introduction .....                                                         | 220 |
| 5.2. Data Analysis and Interpretation.....                                     | 221 |
| 5.2. 1. Biographical characteristics of the respondents .....                  | 221 |
| 5.2.2. Psychological self-concept of learners with physical disabilities ..... | 221 |
| 5.2.3. Social self-concept of learners with physical disabilities.....         | 224 |
| 5.2.4. Academic self-concept of learners with physical disabilities.....       | 226 |
| 5.2.5. The academic performance of learners with physical disabilities .....   | 229 |
| 5.2.6 Physical self-concept of the learners with physical disabilities .....   | 232 |

|                                                                                    |     |
|------------------------------------------------------------------------------------|-----|
| 5.3. Discussion of Results .....                                                   | 234 |
| 5.3.1. The psychological self-concept of learners with physical disabilities ..... | 234 |
| 5.3.2. The social self-concept of learners with physical disabilities .....        | 237 |
| 5.3.3 The academic self-concept of learners with physical disabilities.....        | 242 |
| 5.3.4. The academic performance of learners with physical disabilities .....       | 246 |
| 5.3.5 Physical self-concept of learners with physical disabilities .....           | 251 |
| 5.5. Summary .....                                                                 | 257 |
| CHAPTER 6 .....                                                                    | 259 |
| SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....                                     | 259 |
| 6.1 Introduction .....                                                             | 259 |
| 6.2. Summary of the Research Findings .....                                        | 259 |
| 6.2.1 Key findings of the literature review .....                                  | 259 |
| 6.2.2. Key findings of the empirical research.....                                 | 264 |
| 6.3. Conclusions .....                                                             | 269 |
| 6.3.1 Psychological self-concept of learners with physical disabilities .....      | 269 |
| 6.3.2 Social self-concept of learners with physical disabilities.....              | 270 |
| 6.3.3 Academic self-concept of learners with physical disabilities.....            | 271 |
| 6.3.4 Physical self-concept of learners with physical disabilities .....           | 272 |
| 6.4 Contribution of the Study.....                                                 | 273 |
| 6.5. Recommendations .....                                                         | 274 |
| 6.5.1. Recommendations for legislation and policy .....                            | 274 |
| 6.5.2 Recommendations for practice .....                                           | 276 |
| 6.5.3 Recommendations for further research.....                                    | 277 |
| 6.6 Limitations of the Study.....                                                  | 278 |
| 6.7. Concluding Remarks .....                                                      | 280 |

## **LIST OF APPENDICES**

|                                                                               |     |
|-------------------------------------------------------------------------------|-----|
| Appendix A: Ethics approval letter.....                                       | 324 |
| Appendix B : Letter requesting regional permission to conduct research .....  | 326 |
| Appendix C : Letter requesting school permission to conduct research.....     | 328 |
| Appendix D: Permission to conduct research in selected secondary schools..... | 329 |
| Appendix E: Letter to request participant`s consent.....                      | 330 |
| Appendix F : Letter to request parent/guardian`s consent .....                | 333 |
| Appendix G: Questionnaire for learners with physical disabilities .....       | 335 |
| Appendix H : Proof of language editing.....                                   | 344 |
| Appendix I: Turnitin report.....                                              | 345 |

## LIST OF TABLES

|                                                                                                       |     |
|-------------------------------------------------------------------------------------------------------|-----|
| Table 4.1:: Gender-School Cross-tabulation.....                                                       | 186 |
| Table 4.2. Gender-Form Cross-tabulation .....                                                         | 187 |
| Table 4.3: Form-Home Language Cross-tabulation. ....                                                  | 188 |
| Table 4.4: Apportionment of participants by form and religion/culture.....                            | 189 |
| Table 4.5: The results of the executed reliability tests for the physically disabled learners..       | 210 |
| Table 5.1: The distribution of respondents' gender by age, form, and family status. ....              | 221 |
| Table 5.2: A Chi-Square test for the learners' responses to the Psychological self-concepts.<br>..... | 222 |
| Table 5.3: A Chi-Square test for the learners' responses to the social self-concepts. ....            | 224 |
| Table 5.4: A Chi-Square test for the learners' responses to the academic self-concepts. ....          | 227 |
| Table 5.5: Academic Performance of Learners with Physical Disability .....                            | 229 |
| Table 5.6: Mathematics score in association with psychological self-concept .....                     | 230 |
| Table 5.7: English score in association with psychological self-concept. ....                         | 230 |
| Table 5.8: Mathematics score in association with gender .....                                         | 231 |
| Table 5.9: A Chi-Square test for the learners' responses to the physical self-concept.....            | 232 |

## LIST OF FIGURES

|                                                                                          |     |
|------------------------------------------------------------------------------------------|-----|
| Figure 3.1: Factors which can influence physically disabled learners' self-concept. .... | 64  |
| Figure 3.2: Factors affecting psychological self-concept .....                           | 80  |
| Figure 3.3: Social factors which can influence social self-concept .....                 | 101 |
| Figure 3.4: Family factors which affect social self-concept .....                        | 102 |
| Figure 3.5: Conceptual Framework .....                                                   | 169 |
| Figure 5.1: Responses to psychological self-concept statements .....                     | 223 |
| Figure 5.2: Responses to social self-concepts statements.....                            | 225 |
| Figure 5.3. Responses to the academic self-concept statements.....                       | 228 |
| Figure 5.4: Responses to the academic self-concept statements.....                       | 233 |

# **CHAPTER 1**

## **INTRODUCTORY ORIENTATION**

### **1.1 Introduction**

The focus of this chapter is to provide an introductory orientation to the study by emphasising the critical link between self-concept and academic performance. The chapter presents the background of the study, rationale for the study, statement of the problem, research questions, objectives of the study, significance of the study, theoretical framework, delimitations of the study, definition of key concepts, and outline of the thesis chapters. Furthermore, the chapter introduces the quantitative orientation of the study, which seeks to examine measurable relationships between dimensions of self-concept and academic performance among learners with physical disabilities within inclusive educational settings. The study focuses on the self-concept and academic performance of learners with physical disabilities in Chitungwiza, Zimbabwe.

### **1.2. Background of the Study**

Globally, academic performance is widely recognised as a key indicator of educational effectiveness and learner success within formal education systems. According to the World Health Organisation (2021), approximately 10–20% of children experience challenges in self-concept development, a condition increasingly associated with a range of adverse psychosocial and educational outcomes. Negative self-concept has been identified as a significant predictor of psychological distress, including anxiety, depression, and behavioural maladjustment, particularly during adolescence when identity formation is most salient. More critically, recent evidence links poor self-concept development to impaired educational functioning and heightened vulnerability to mental health disorders among learners aged 10 to 24 years (Melamed et al., 2024). Within educational settings, such psychological vulnerabilities translate into diminished academic engagement, reduced persistence, and compromised performance outcomes.

At the global level, academic performance is widely recognised as a key indicator of educational effectiveness and learner success within formal education systems. It is commonly assessed through examinations, continuous assessments, and progression rates, which reflect the extent to which learners achieve intended learning outcomes (UNESWorld Bank, 2023).

However, contemporary educational discourse increasingly challenges the narrow conceptualisation of academic performance as purely a measure of cognitive ability, instead framing it as a multidimensional outcome influenced by psychological, social, institutional, and structural determinants (Florian, 2021). Within this expanded perspective, learner self-concept has emerged as a significant psychological construct associated with academic outcomes, particularly through its influence on motivation, engagement, and persistence in learning.

From a developmental and policy perspective, academic performance is central to global human capital formation, economic productivity, and social mobility. Governments and international agencies prioritise educational attainment due to its demonstrated link with employment opportunities, poverty reduction, civic participation, and national development trajectories (World Bank, 2023). Consequently, global education systems have implemented a range of interventions aimed at improving learner outcomes and reducing educational disparities (UNESCO, 2020). Despite these efforts, inequalities in academic achievement persist, particularly among marginalised groups such as learners with physical disabilities.

In Sub-Saharan Africa, academic performance is shaped by persistent structural challenges, including inadequate funding, overcrowded classrooms, shortages of qualified teachers, and limited access to learning resources (Donohue & Bornman, 2019). These conditions disproportionately affect learners with physical disabilities, who also face barriers such as inaccessible infrastructure, limited assistive technologies, and inconsistent implementation of inclusive education policies. As a result, poor academic outcomes are often driven not by cognitive limitations but by environmental constraints that restrict participation and learning opportunities. Beyond structural barriers, learners with physical disabilities frequently experience stigma, discrimination, and social exclusion in school and community settings. These experiences negatively influence self-concept by undermining self-esteem, academic self-perception, and sense of belonging (Mpofu, 2018). Consequently, negative self-concept further reduces motivation, engagement, and academic self-efficacy, while positive self-concept may enhance resilience and academic persistence, depending on the level of environmental support.

These systemic constraints disproportionately affect vulnerable learners, particularly those with disabilities, who often face additional barriers to accessing quality and inclusive education. The inconsistent implementation of inclusive education policies has resulted in limited accessibility, insufficient assistive technologies, and weak psychosocial and institutional support systems. In Sub-Saharan Africa, learners with physical disabilities face multiple challenges that extend beyond their physical impairments and significantly influence their academic performance and overall well-being. Limited access to healthcare services, rehabilitation programs, and assistive devices often results in poor health outcomes, frequent absenteeism, and reduced participation in educational activities. Socially, these learners frequently experience stigma, discrimination, and exclusion, which may restrict peer interactions and opportunities for social integration. Such experiences can negatively affect self-concept, self-esteem, and academic self-efficacy, reducing motivation and engagement in learning (Trani et al., 2020; Donohue & Bornman, 2014).

The cumulative effects of social marginalisation, educational barriers, and inadequate support systems may contribute to elevated levels of stress, anxiety, and depression among learners with physical disabilities. In some cases, prolonged psychological distress and social isolation can result in more severe mental health challenges and adverse wellbeing outcomes. From an academic perspective, low performance is often linked to inaccessible learning environments, limited assistive technologies, and insufficient educational accommodations rather than cognitive ability. Consequently, the experiences of learners with physical disabilities in Sub-Saharan Africa reflect the interaction between disability and structural inequalities that jointly shape health, psychosocial wellbeing, and educational outcomes (Donohue & Bornman, 2014; Trani et al., 2020).

In Zimbabwe, academic performance remains a central focus of national education policy due to its implications for human capital development, economic recovery, and social transformation. Despite sustained reforms aimed at improving educational quality and expanding inclusive education, disparities in academic outcomes persist across different learner populations. Learners with physical disabilities continue to face significant academic disadvantages within the Zimbabwean education system. Although inclusive education policies have been adopted, their implementation is often constrained by infrastructural inadequacies, insufficient assistive devices, limited teacher preparedness, and weak psychosocial support

structures. These challenges are further compounded by macroeconomic instability, which affects resource allocation and the overall functioning of public education institutions.

Despite sustained policy commitments to inclusive education and ongoing curriculum reforms, persistent disparities in learner achievement remain evident, with learners with physical disabilities disproportionately affected. Their educational experiences are significantly shaped by entrenched structural and institutional constraints, including inadequate accessibility of school infrastructure, limited availability of assistive technologies, insufficiently trained educators, and weak institutional capacity to implement inclusive pedagogical practices effectively (Chuchu & Chuchu, 2016; Samkange, 2017). These challenges are further intensified by prolonged macroeconomic instability, characterised by constrained fiscal resources, deteriorating educational infrastructure, and inconsistent funding allocations, all of which collectively undermine the effective implementation of inclusive education policies.

Research indicates that learners with physical disabilities in Zimbabwe are particularly vulnerable to academic underperformance due to restricted access to learning materials, limited classroom participation, and exclusionary school environments. However, emerging scholarship suggests that these academic challenges are not only structural but also psychological, as learners' self-concept plays a significant role in shaping their motivation, engagement, and resilience in academic contexts.

Within this context, educational disadvantage among learners with physical disabilities reflects systemic exclusion rather than individual deficiency. Beyond academic constraints, these learners frequently experience social marginalisation, stigma, and discriminatory attitudes within both school and community environments. Such experiences have profound implications for psychological development, particularly the formation of self-concept, as repeated exposure to exclusion and low societal expectations may undermine self-esteem, academic self-concept, and perceived academic competence (Mpofu, 2018). A weakened self-concept, in turn, adversely affects motivation, academic self-efficacy, and sustained engagement in learning activities, thereby contributing to poorer educational outcomes.

The cumulative effect of these structural and psychosocial challenges often manifests in elevated levels of psychological distress, including stress, anxiety, and depressive symptoms, which further constrain cognitive functioning and academic participation. In more severe cases,

prolonged exposure to marginalisation and unmet psychosocial needs may increase vulnerability to hopelessness and suicidal ideation (Trani et al., 2020). Consequently, academic performance among learners with physical disabilities in Zimbabwe should be understood as a multidimensional and structurally conditioned phenomenon, shaped by the interaction of educational provision, socio-economic constraints, psychosocial well-being, and institutional responsiveness. This framing underscores the necessity of addressing both structural inequities and self-concept development in efforts to improve inclusive educational outcomes

In Chitungwiza, these challenges are more pronounced due to high population density, overcrowded classrooms, and strained educational resources. Public secondary schools in this urban high-density area operate under conditions characterised by overcrowded classrooms, limited instructional resources, infrastructural constraints, and inconsistent implementation of inclusive education policies. Public secondary schools in this area operate under conditions where infrastructure is often inadequate, inclusive education implementation is inconsistent, and psychosocial support services are limited. Learners with physical disabilities in this context frequently experience barriers such as restricted mobility within school environments, limited access to learning materials, and reduced participation in classroom activities. These structural constraints are often accompanied by psychosocial challenges, including low self-concept, social exclusion, and reduced academic engagement. Consequently, academic performance among these learners is shaped by an interaction between their psychological self-perceptions and the structural realities of their learning environments, making it difficult to attribute outcomes to either factor in isolation.

Within this context, approximately 150 learners with physical disabilities across ten public secondary schools represent a particularly vulnerable population facing multiple layers of educational disadvantage. These learners encounter barriers such as inadequate mobility support, limited access to assistive technologies, insufficient counselling services, peer discrimination, and low teacher expectations. These factors collectively contribute to restricted academic participation and lower performance outcomes.

Within this framework, self-concept becomes a critical explanatory variable for understanding academic performance among learners with physical disabilities. Self-concept is understood as an individual's organised perception of the self, developed through interaction with the environment and feedback from significant others (Marsh & Martin, 2011). In this

study, self-concept is conceptualised as a multidimensional construct comprising psychological, social, academic, and physical domains. Psychological self-concept relates to emotional stability, confidence, and self-worth; social self-concept reflects peer relationships, acceptance, and belonging; academic self-concept refers to perceived competence and intellectual capability; and physical self-concept concerns perceptions of bodily functioning and disability identity. These domains collectively influence how learners interpret educational experiences, respond to academic demands, and sustain engagement within learning environments that may either reinforce or undermine their self-perceptions.

Inclusive education implementation across the region remains uneven, with many schools lacking accessible infrastructure, assistive technologies, and adequately trained personnel to support diverse learning needs. As a result, learners with physical disabilities are often excluded from meaningful participation in learning processes, leading to lower academic achievement and reduced educational progression. Importantly, research in the region suggests that academic performance among learners with disabilities cannot be understood solely through cognitive explanations, but must also account for psychosocial factors such as self-concept, stigma, and social exclusion.

Within this discourse, self-concept becomes a critical explanatory variable. However, its influence is not uniform, as structural deprivation may weaken the relationship between self-concept and academic performance. This introduces a theoretical tension between psychological explanations of achievement, which emphasise individual agency, and structuralist perspectives, which locate academic outcomes within broader socio-economic and institutional inequalities.

Overall, academic performance among learners with physical disabilities emerges as a complex, multi-determined outcome that cannot be adequately explained through a single theoretical lens. While self-concept provides a significant psychological framework for understanding learner motivation, engagement, and persistence, its influence is continuously mediated by contextual realities such as school infrastructure, inclusive education practices, and socio-economic conditions. The interaction between psychological self-perceptions and structural constraints, therefore, becomes central to explaining variations in academic outcomes. This study is grounded in the need to empirically examine these interrelationships within Chitungwiza public secondary schools, to contribute to a more context-sensitive

understanding of how self-concept influences academic performance among learners with physical disabilities.

Empirical evidence suggests that learners with positive self-concept tend to demonstrate higher academic engagement and achievement, while those with negative self-concept often experience reduced confidence, increased anxiety, and lower performance outcomes (Marsh et al., 2021; Bong & Skaalvik, 2020). However, this relationship is not absolute, as structural inequalities within education systems can constrain performance even among learners with positive self-perceptions, introducing a theoretical tension between psychological explanations of achievement and structural perspectives that locate performance within broader socio-educational conditions.

Furthermore, limited attention has been given to how psychological domains of self-concept interact with structural educational conditions to influence academic performance in inclusive education settings. This study therefore addresses this gap by examining the impact of psychological, social, academic, and physical self-concept on academic performance among learners with physical disabilities in Chitungwiza public secondary schools.

Importantly, these structural constraints interact with psychological processes to shape learners' self-concept across multiple domains. Psychological self-concept is often undermined by repeated academic struggles and perceived inadequacy. Social self-concept is influenced by peer exclusion and limited social integration. Academic self-concept is shaped by perceived competence in learning tasks, while physical self-concept is influenced by disability identity and bodily perception within an often-inaccessible school environment. The interaction of these domains produces complex patterns of engagement and achievement among learners with physical disabilities.

Within this framework, self-concept becomes a critical explanatory variable for understanding academic performance among learners with physical disabilities. Self-concept is understood as an individual's organised perception of the self, developed through interaction with the environment and feedback from significant others (Marsh & Martin, 2011). It is widely accepted as a multidimensional construct that influences behaviour, motivation, and achievement outcomes. In this study, self-concept is conceptualised as comprising four interrelated domains, namely psychological, social, academic, and physical self-concept. Psychological self-concept relates to emotional stability, confidence, and self-worth; social

self-concept reflects peer relationships, acceptance, and belonging; academic self-concept refers to perceived competence and intellectual capability; and physical self-concept concerns perceptions of bodily functioning and disability identity. These domains collectively shape how learners interpret educational experiences, respond to academic demands, and sustain engagement within learning environments that may either reinforce or undermine their self-perceptions.

Empirical studies consistently indicate that positive self-concept is associated with improved academic engagement and achievement, while negative self-concept is linked to anxiety, withdrawal, low motivation, and poor academic outcomes. This is particularly relevant for learners with physical disabilities, whose self-concept is often shaped by both personal experiences and systemic barriers within the school environment. Consequently, understanding academic performance in this population requires an integrated perspective that considers both psychological and structural influences. Nevertheless, this relationship is not absolute, as structural inequalities within education systems may constrain academic performance even among learners with strong self-perceptions, thereby introducing a conceptual tension between psychological explanations of achievement and structuralist perspectives that locate performance within broader socio-educational conditions.

However, this relationship is not purely linear, as structural factors such as poverty, exclusion, and inadequate educational resources may limit the extent to which self-concept translates into academic success. This is particularly relevant for learners with physical disabilities, whose self-concept is shaped simultaneously by personal experiences and systemic barriers within the school environment. The interaction between psychological dispositions and structural constraints therefore produces varied academic outcomes, suggesting that neither self-concept nor environment alone is sufficient to explain performance differences.

Beyond this, the relationship between self-concept and academic performance is further complicated by mediating psychosocial factors such as social support, mental health, inclusiveness, and resilience. Social support from teachers, peers, and family enhances learners' sense of belonging and strengthens positive self-concept, thereby improving academic engagement (Rueger et al., 2016). Mental health influences concentration, motivation, and cognitive functioning, acting as a key pathway through which self-concept affects academic outcomes (Patel et al., 2018; WHO, 2022). Inclusiveness within schools determines the extent

to which learners with physical disabilities can participate meaningfully in learning, while weak inclusion tends to reinforce low self-concept and reduced achievement (Florian, 2021). Resilience is often presented as a protective factor that enables learners to persist despite adversity; however, its explanatory power remains contested, as scholars argue that it may overemphasise individual coping while underplaying structural inequality (Ungar, 2018). This reinforces the view that academic performance is shaped by both psychological adaptation and systemic conditions.

Overall, academic performance among learners with physical disabilities emerges as a complex and multidimensional outcome influenced by the interplay between self-concept and structural educational conditions. While self-concept plays a significant psychological role in shaping motivation, engagement, and persistence, its effects are mediated by environmental constraints within schools, particularly in under-resourced and high-density contexts such as Chitungwiza. The four domains of self-concept- psychological, social, academic, and physical- provide a structured lens through which learner experiences and academic outcomes can be understood, especially when examined alongside factors such as social support, mental health, inclusiveness, and resilience. This study is therefore grounded in the need to empirically examine how these interrelated factors shape academic performance among learners with physical disabilities in Chitungwiza public secondary schools, recognising academic achievement as an outcome of both individual psychological processes and broader structural realities.

Within this study, self-concept is conceptualised as a multidimensional construct consisting of four interrelated domains: psychological, social, academic, and physical self-concept. Psychological self-concept refers to emotional well-being, self-esteem, and perceived personal worth. Social self-concept relates to peer relationships, acceptance, and a sense of belonging within the school environment. Academic self-concept reflects learners' perceived competence and confidence in academic tasks. Physical self-concept refers to perceptions of bodily ability, disability identity, and physical functioning. These domains are theoretically grounded in the view that self-concept is hierarchical, context-dependent, and socially constructed through continuous interaction with environmental feedback (Marsh & Martin, 2011; Brummelman et al., 2022). In this study, self-concept is treated as a measurable psychological construct, typically assessed using validated instruments such as the Self-

Perception Profile for Adolescents (SPPA), which captures domain-specific self-evaluations with established reliability and validity.

The relationship between self-concept and academic performance is further shaped by mediating variables such as social support, mental health, inclusiveness, and resilience. Social support from teachers, peers, and family enhances learners' sense of belonging and strengthens positive self-concept, thereby improving academic engagement (Rueger et al., 2016). Mental health influences cognitive functioning, motivation, and concentration, thereby acting as a critical pathway between self-concept and academic performance (WHO, 2022; Patel et al., 2018).

Inclusiveness within schools determines the extent to which learners with physical disabilities can meaningfully participate in learning activities. Where inclusiveness is weak, self-concept tends to deteriorate due to exclusion and limited participation. Conversely, inclusive environments reinforce positive self-perception and academic engagement (Florian, 2021). Resilience, although often associated with adaptive success, remains contested in the literature, with critics arguing that it may obscure structural inequalities by overemphasising individual coping capacity (Ungar, 2018).

In summary, academic performance among learners with physical disabilities is best understood as an outcome of the interaction between multidimensional self-concept and structural educational conditions. While self-concept plays a significant psychological role in shaping learner engagement and achievement, its influence is mediated by broader systemic realities, particularly in under-resourced and high-density urban school environments. This study is therefore grounded in the need to empirically examine these dynamics within the Zimbabwean context, with a focus on Chitungwiza public secondary schools.

### **1.3. Rationale for the Study**

In-depth studies on self-concept and academic achievement reveal that children with physical disabilities in Zimbabwe, particularly in underrepresented areas such as the Chitungwiza district, face persistent and multifaceted challenges that severely hinder their educational progress and personal development. Despite global strides toward disability-inclusive development, these learners continue to confront a range of structural, social, and psychological barriers. These include inaccessible infrastructure, a scarcity of assistive

technologies, inadequately trained teachers, and pervasive societal stigma (Garcia-Lorenzo et al., 2022). Shields and Synnot (2016) identify unsafe and inaccessible environments, such as rugged terrain, steep access points, and overgrown vegetation, as physical hazards that further marginalise these learners. As a result, many are excluded from mainstream education or placed in settings that fail to support their cognitive, emotional, and psychological growth (Mapuranga, Dumba, & Musodza, 2015). Inclusive education, as defined by Walton and Engelbrecht (2022), requires significant adaptations to pedagogy, curriculum, and learning environments. However, without a clear understanding of the lived experiences of learners with disabilities, particularly their psychological self-concept and social integration, these policies risk becoming ineffective in practice.

Youth, spanning ages 10 to 24, are critical periods for identity formation and emotional development. Research underscores that learners during this stage are particularly vulnerable to mental health issues such as shame, stigma, guilt, and self-doubt (Nabors, 2020). When these psychological stressors are coupled with physical disability and social exclusion, the consequences on academic engagement, motivation, and self-esteem are profound. Nankung and Carr (2020) emphasise the importance of examining how physical disabilities intersect with psychosocial factors such as academic confidence and social interaction. Self-concept is a universally acknowledged developmental construct, recognised as a critical factor in both developed and developing countries. Zimbabwe has made strides toward supporting people with disabilities, yet there remains a gap in providing psychologically empowering environments for affected learners (Showers, 2015). Physically disabled students are often either relegated to poorly resourced special schools or denied education altogether. Mapuranga et al. (2015) note that widespread societal rejection and lack of tailored resources contribute to chronic psychological distress among this group, which is further exacerbated by high rates of stress-related disorders, depression, school dropouts, and substance abuse, particularly in socially disadvantaged contexts like Chitungwiza.

The urgency for context-specific research is clear. While international frameworks increasingly acknowledge the right to inclusive education, localised data, especially from marginalised communities, remain insufficient. Without such evidence, policies fail to adequately address the nuanced realities of disabled learners. Dammeyer and Chapman (2018) argue that persistent stereotypes and discrimination contribute significantly to chronic

psychological conditions, reinforcing the need for targeted interventions. Therefore, this study aims to investigate the effects of negative self-concept on physically disabled learners, with a focus on key psychosocial dimensions, namely, psychological self-concept (including emotional identity, self-worth, and resilience), academic self-concept (beliefs about one's learning ability and academic potential), and social self-concept (sense of belonging, peer acceptance, and social integration). A negative self-concept in these areas can significantly hinder motivation, participation, and overall academic achievement. By examining these effects in the context of Chitungwiza, this research seeks to highlight the psychological and educational struggles faced by physically disabled students.

The findings will contribute to Zimbabwean educational literature, inform policy, raise stakeholder awareness, and support the development of more inclusive, empowering learning environments that foster positive self-perception and equitable opportunities for all learners (Donohue & Bornman, 2019).

#### **1.4. Statement of the Problem**

Despite ongoing global and national commitments to inclusive education, learners with physical disabilities continue to experience persistent inequalities in academic performance, particularly in under-resourced educational contexts such as Zimbabwe. These disparities are driven not only by structural limitations within education systems but also by psychosocial factors, particularly the development of self-concept. Within many school environments, learners with physical disabilities are exposed to stigma, exclusion, and limited participation, conditions that often undermine both positive self-concept and academic engagement. As a result, academic performance in this group remains consistently lower compared to their peers, raising concerns about the effectiveness of inclusive education implementation and the adequacy of current support systems (Mpofu, 2018; Donohue & Bornman, 2019).

The problem is further compounded by the fact that self-concept development among learners with physical disabilities is frequently negatively influenced by both school-based and societal factors. Empirical studies have shown that repeated exposure to discrimination, inaccessible learning environments, and low academic expectations contributes to weakened self-esteem, reduced academic confidence, and poor self-perception across academic, social, psychological, and physical domains (Bong & Skaalvik, 2020; Orth & Robins, 2019). While

positive self-concept is consistently associated in journal literature with improved motivation, academic engagement, and resilience (Harter, 2012; Marsh et al., 2021), many learners in disadvantaged contexts are unable to develop or sustain it due to persistent structural and psychosocial barriers.

Despite the recognised importance of self-concept in educational psychology journals, there remains limited context-specific empirical understanding of how multidimensional self-concept influences academic performance among learners with physical disabilities in Zimbabwe, particularly in high-density urban settings such as Chitungwiza. This gap is consistently highlighted in African education research journals, which emphasise the lack of localized empirical studies on disability, self-concept, and achievement (Chuchu & Chuchu, 2016; Samkange, 2017). This lack of evidence limits the ability of educators, policymakers, and researchers to design targeted interventions that address both psychological and structural barriers to learning.

In many peer-reviewed studies, learners with physical disabilities are reported to experience higher levels of bullying, discrimination, stigma, and social exclusion within school and community environments (Rose et al., 2016). These experiences are strongly associated with weakened self-concept, reduced self-esteem, and diminished academic self-efficacy, which negatively affect engagement and academic performance.

Beyond the school environment, literature-based evidence indicates that learners with disabilities often experience limited social support from peers, teachers, families, and communities, which exacerbates psychological distress (Rueger et al., 2016; Patel et al., 2018). Studies published in clinical and educational psychology journals further link insufficient social support to anxiety, depression, and reduced resilience, all of which negatively influence academic participation and achievement (WHO, 2022). In severe cases, longitudinal studies have associated prolonged exclusion and unmet psychosocial needs with hopelessness and suicidal ideation among vulnerable adolescents (Trani et al., 2020).

In addition, literature shows that learners with physical disabilities are vulnerable to behavioural risks such as school dropout and substance abuse, often as maladaptive coping responses to persistent marginalisation and academic failure (Rose et al., 2016). These outcomes are associated with low self-concept, reduced school connectedness, and weak institutional support systems.

Structural education research further highlights that these challenges are intensified by inadequate infrastructure, insufficient assistive technologies, overcrowded classrooms, and limited teacher preparedness for inclusive education (Donohue & Bornman, 2019). Weak implementation of inclusive education policies continues to restrict meaningful participation in learning, reinforcing educational disadvantage and widening performance gaps.

Within this context, academic performance among learners with physical disabilities cannot be understood solely as a function of cognitive ability, but rather as an outcome shaped by the interaction between structural constraints and psychosocial factors, including self-concept. However, despite increasing attention in international education studies, there remains limited empirical evidence on how multidimensional self-concept interacts with social support, stigma, and institutional barriers to influence academic performance in Zimbabwe, particularly in high-density urban areas such as Chitungwiza (Rose et al., 2016). This gap is consistently identified as a key limitation in disability and education research in Sub-Saharan Africa (Munsaka & Charnley, 2022). This gap limits the development of targeted interventions aimed at improving both academic outcomes and psychosocial wellbeing among learners with physical disabilities.

## **1.5. Research Questions**

### **1.5.1. Main research question**

What is the self-concept and academic performance of learners with physical disabilities in Chitungwiza, Zimbabwe?

### **1.5.2. Sub-research questions**

The following sub-research questions will guide the researcher throughout the literature review as well as the empirical study:

1.5.2.1 What is the psychological self-concept of learners with physical disabilities?

1.5.2.2 What is the social self-concept of learners with physical disabilities?

1.5.2.3 What is the academic self-concept of learners with physical disabilities?

1.5.2.4. What is the physical self-concept of learners with physical disabilities?

1.5.2.5. What strategies or models can be used, if needed, to enhance the self-concept and academic performance of learners with physical disabilities in Chitungwiza?

## **1.6 Aim and Objectives of the Study**

### **1.6 .1 Main aim**

The main aim of the study is to investigate the self-concept and academic performance of learners with physical disabilities in Chitungwiza, Zimbabwe.

### **1.6.2 Objectives**

To do a literature study on:

1.6.2.1 The psychological self-concept of learners with physical disabilities.

1.6.2.2 The social self-concept of learners with physical disabilities.

1.6.2.3 The academic self-concept of learners with physical disabilities.

1.6.2.4. The physical self-concept of learners with physical disabilities

1.6.2.5. The strategies or models that can be used, if needed, to enhance the self-concept and academic performance of learners with physical disabilities in Chitungwiza.

To do an empirical study on:

1.6.2.1 The psychological self-concept of learners with physical disabilities.

1.6.2.2 The social self-concept of learners with physical disabilities.

1.6.2.3 The academic self-concept of learners with physical disabilities.

1.5.2.4 The physical self-concept of learners with physical disabilities?

## **1.7 Significance of the Study**

This study holds critical importance as it seeks to bridge a notable gap in the literature regarding the self-concept and academic achievement of physically disabled learners within public secondary education, an area that has historically received insufficient attention. By illuminating the challenges related to self-concept development and academic performance faced by this marginalised population, the research aims to inform the development of inclusive policies and targeted interventions that foster positive self-concept development and equitable learning environments. Moreover, the findings will offer valuable guidance to educators, policymakers, and advocacy groups, enhancing their capacity to support the holistic development and academic success of physically disabled learners. Ultimately, this study contributes to advancing disability-inclusive education frameworks within Zimbabwe, with

potential implications for broader educational reform and social inclusion initiatives at regional and national levels. By addressing the overlooked intersection between self-concept development and academic performance among physically disabled learners, the research not only fills a critical knowledge gap but also supports the creation of more equitable, responsive, and human-centred educational systems across Sub-Saharan Africa. This study promises to benefit a broad spectrum of stakeholders, including parents, learners, educators, school administrators, governmental bodies, particularly the Ministry of Education, Arts, Sports, and Culture, non-governmental organisations, and various Zimbabwean government agencies. School principals and teachers stand to gain critical insights from this research, as it illuminates the complex challenges related to self-concept deficiencies among physically disabled learners and the profound implications these have on their academic and social experiences.

By fostering heightened awareness of the detrimental effects of stigmatisation and labelling, the study advocates for more empathetic and inclusive approaches that uphold the dignity and identity of these learners. For physically disabled learners who have endured discrimination, the study holds profound significance by addressing issues that impact their self-concept development and academic achievement. It acknowledges the extraordinary resilience and determination these learners must exhibit to overcome systemic barriers and nurture a positive self-identity despite pervasive societal prejudices.

Furthermore, the findings offer vital evidence to policymakers and government officials, equipping them with the knowledge necessary to formulate and implement progressive legislation, policies, and frameworks that effectively regulate the education sector, curtail discriminatory practices, and guarantee equitable access to education for all. By targeting the root causes of discrimination, governmental institutions can significantly enhance both the self-concept and academic performance of learners with physical disabilities. The unique focus of this study positions it to contribute substantively to the development of legal and policy reforms in Zimbabwe. Additionally, given the growing prominence of self-concept as a subject of scholarly inquiry, this research enriches academic discourse and practical understanding alike. Although extensive literature exists on self-concept broadly, there remains a conspicuous gap regarding its specific influence on the academic outcomes of physically disabled learners in Zimbabwe's public secondary schools, a gap this study endeavours to bridge.

## **1.8. Theoretical Framework**

Theoretical frameworks provide critical lenses that facilitate the formation and development of self-concept, especially among physically disabled learners. Foundational theories, including. The humanistic perspective, particularly Carl Rogers' theory, emphasises that individuals have an inherent drive towards self-actualisation and personal growth. Central to this theory are the conditions of unconditional positive regard, empathy, congruence (genuineness), and freedom of expression, which are essential for the development of a healthy self-concept and positive self-perception. Rogers' self-concept theory, Allport's trait-based perspective, and Harter's self-perception profile, collectively explain how self-perceptions are shaped by personal experiences, social interactions, and environmental contexts (Wehrle & Fassbender, 2018). These frameworks highlight the multidimensional nature of self-concept, encompassing psychological, social, academic, and physical domains, and underscore its critical role in influencing motivation, well-being, and adaptive functioning. All the three theoretical frameworks will be discussed in detail in Chapter 2.

### **1.8.1. Carl Rogers' theory of self-concept development**

Carl Rogers' personality theory identifies self-actualisation as the core driver of human development, where personality evolves through an innate tendency in chapter and the alignment between the real self and the ideal self (Wehrle & Fassbender, 2018; Priest & Williams, 2018). Psychological wellbeing emerges when congruence exists between these selves, while incongruence may result in internal conflict but can also create opportunities for personal development (McLeod, 2023; Wouters et al., 2018). Self-concept theory further emphasises that individuals have an inherent drive towards self-actualisation and personal growth, supported by conditions of unconditional positive regard, empathy, congruence (genuineness), and freedom of expression, which are essential for developing a healthy self-concept and positive self-perception.

Rogers also highlights the importance of positive regard and self-worth in shaping self-concept, particularly among learners with physical disabilities. Unconditional positive regard enhances resilience, motivation, and self-esteem, whereas conditional regard may undermine intrinsic motivation and emotional stability (Bhoit & Shinde, 2019; Mendi & Eldelekliglu,

2016). Self-concept comprises self-image, self-worth, and the ideal self, which together influence cognition, emotion, and behaviour (Wozniak, 2018). Within this framework, empathy fosters emotional security and positive self-development by enabling understanding and acceptance without dependency, thereby strengthening self-concept and supporting the psychological and academic development of learners with physical disabilities.

### **1.8.2. Allport's ideas of identity formation**

Gordon Allport's theory of personality, particularly the concept of the *proprium*, explains identity formation as an organised, enduring, and coherent sense of self that guides behaviour over time (McAdams, 2001). The *proprium* integrates traits, self-perceptions, values, and experiences into a unified identity, forming the basis of self-concept, self-esteem, self-image, identity coherence, self-extension, and functional autonomy. This integrated self is essential for psychological maturity and purposeful living, as it allows individuals to maintain stability while adapting to life experiences (Kroger, 2017; Belamghari, 2020).

In the context of learners with physical disabilities, identity formation is strongly influenced by stigma, inclusion, peer relations, and the quality of educational support systems, which may either strengthen or fragment self-perception. Contemporary scholarship emphasises that identity is both internally constructed and socially shaped through interaction with families, peers, and institutions (UNESCO, 2020; Chatzitheochari & Butler-Rees, 2022). Learners with physical disabilities are therefore more vulnerable to identity diffusion, low self-esteem, and reduced psychosocial development when supportive environments are lacking, which may negatively affect confidence, participation, and academic performance (Branje et al., 2021; Pfeifer & Berkman, 2018).

### **1.8.3. Harter's self-perception profile for teenagers**

Harter's Self-Perception Profile for Adolescents (SPPA) conceptualises self-concept as a multidimensional and hierarchically organised construct in which adolescents evaluate themselves across distinct domains such as scholastic competence, social acceptance, behavioural conduct, physical appearance, and global self-worth (Harter, 2012; Juklová et al., 2022). The theory emphasises that self-concept is not unified but domain-specific, meaning learners may simultaneously hold positive perceptions in one area (e.g., academic ability) and

negative perceptions in another (e.g., physical appearance or social acceptance), thereby producing a complex overall self-system.

This framework is particularly relevant to learners with physical disabilities because disability-related experiences often affect specific self-concept domains differently. Their self-perceptions are shaped through perceived competence, social feedback, and lived experiences, which influence self-esteem, motivation, engagement, and social participation (Harter, 2012; Jekauc et al., 2019). However, scholars differ on the extent to which self-perceptions independently determine academic outcomes, with some emphasising their predictive value for achievement, while others highlight the strong influence of contextual factors such as school climate, accessibility, and inequality (OECD, 2019; UNESCO, 2020). Despite these debates, Harter's model remains essential for understanding how self-concept develops and operates within inclusive

### **1.9. Delimitations of the Study**

This study aims to investigate the self-concept and academic performance of learners with physical disabilities within the context of Chitungwiza, Zimbabwe. To ensure methodological precision and conceptual clarity, the research scope is carefully delimited across several dimensions. The investigation is explicitly confined to learners with physical disabilities enrolled in ten selected public schools in the Chitungwiza District. This restriction purposefully excludes learners without physical disabilities, as well as those with intellectual or sensory disabilities, to maintain a concentrated focus on the distinctive psychosocial and academic experiences of physically disabled learners (Ajmal & Rafique, 2018).

This delimitation facilitates a nuanced understanding of this demographic's unique challenges without dilution from heterogeneous disability categories. It is evident from the literature that children with physical disabilities are being maltreated and are abused the world over (World Health Organization, 2018). Far too regularly, they are the objects solely of distress or worse, discrimination and abuse (Stewart et al., 2020). The literature clearly shows that children with physical disabilities are mistreated, face neglect and are abused throughout the world (World Health Organization, 2018). They are frequently the victims of anxiety, stressful situations or mental disorders, and maltreatment (Stewart et al., 2020). Children in Chitungwiza District have several societal, individual, educational, and self-concept

development difficulties (Stewart et al., 2020). This delimitation facilitates a nuanced understanding of this demographic's unique challenges without dilution from heterogeneous disability categories. Geographically, the research is circumscribed to the Chitungwiza District, recognising that contextual factors intrinsic to this locale may limit the external validity of findings to other Zimbabwean regions or broader international settings (Mutiso, Musyimi, & Krolinski, 2019). Although these problems/challenges are typically solved globally, the implementation of educational and self-concept developmental therapies/ opportunities for children who have physical disabilities in Chitungwiza is impeded by numerous hardships and barriers, whose remedial solutions are still to be established (Mutiso, Musyimi, & Krolinski, 2019).

Ajmal and Rafique (2018) concur that there is a lot of negativity, mixed feelings and dissatisfaction about self-concept and academic achievement among physically disabled learners in the Chitungwiza district. As a result, there is an obligation to investigate and determine the difficulties children with physical disabilities have in terms of self-concept development and learning outcomes to strategise about how to overcome these obstacles. Collectively, these delimitations sharpen the study's focus on the intricate interplay between self-concept and academic performance among learners with physical disabilities in Chitungwiza. By delineating a clear population, geographical context, conceptual framework, and methodological approach, the study aspires to generate targeted, actionable findings that can inform the design and implementation of inclusive educational policies and psychosocial interventions tailored to this marginalised learner cohort.

## **1.10. Definition of Key Concepts**

### **1.10.1. Physical disability**

Physical disability is defined as a condition that restricts an individual's ability to perform physical tasks or engage in normal body movement and functioning (World Health Organization, 2018). It may involve physiological impairments, structural loss, or functional limitations affecting systems such as the neurological, musculoskeletal, or respiratory systems (World Health Organization, 2018). These impairments may be congenital, acquired, temporary, or permanent, and they can significantly affect an individual's ability to carry out daily activities, including social interaction and learning (Apgar, 2021). From a broader

perspective, physical disability refers to any limitation in physical functioning that affects full participation in everyday life, particularly within educational and social contexts.

### **1.10.2 Psychosocial**

Psychosocial refers to the dynamic interplay between a person's psychological condition and their social environment, which influences their thoughts, feelings, and behaviour. Merriam-Webster (2012) describes it as the relationship between social and psychological experiences, which emphasises the impact of social variables on mental processes. The American Psychological Association (2023) emphasises the importance of cultural, environmental, and societal effects on mental health. (Berx, Pintelon, & Decre, 2021) consider psychosocial elements to be critical to personal development, while Tuckman and Monetti (2011) believe they are crucial to identity creation. Overall, psychosocial phenomena are essential to comprehending human behaviour, mental health, and social functioning.

### **1.10.3. Self-concept**

Self-concept is a dynamic, multidimensional construct that reflects how people perceive, judge, and mentally engage with themselves (Xu, 2018). It embraces self-esteem, identity, and notions of proficiency across emotional, physical, interpersonal, and contextual domains (Arens & Schmidt, 2019). Individual encounters and social interactions affect one's self-concept, which influences behaviour, motivation, and adaptation. In educational settings, it is important to understand how students understand their abilities, identify their identity, and navigate academic and social problems (Arens & Schmidt, 2019).

### **1.10.4. Psychological well-being**

Psychological well-being incorporates optimal functioning, optimistic self-image, and beneficial interpersonal interactions, all of which reflect attributes like competency, mindfulness, and mental resilience (Rashid et al., 2015; Xu, 2018). It is predictive of cognitive performance, adaptive behaviour, and favourable feelings such as contentment and fulfilment. In this study, psychological well-being is defined as the intentional cultivation of positive attributes, strong social bonds, and ongoing personal development. Psychological ill-being, on

the other hand, is described as emotional distress characterised by worry, despair, and feelings of unworthiness, all reflecting imperfections in mental health (Rashid et al., 2015; Xu, 2018).

#### **1.10.5 Social life**

Social life is the assortment of interpersonal relationships and relationships formed in societal situations, such as interpersonal relationships, talks, and common pursuits (Bahn, Tell, & Zurayk, 2019). It is critical for humanity because prolonged social ties promote emotional stability, cultivate identity, and develop a sense of belonging. Extreme social isolation is unpleasant and harmful to growth (Bahn, Tell, & Zurayk, 2019). According to Michalski (2008), individuals require interpersonal interaction to thrive. Social life thus promotes communication, community cohesion, and emotional resiliency.

#### **1.10.6. Academic performance**

Academic performance is defined as a learner's demonstrated competence and achievement in formal schooling, reflecting cognitive engagement, skill acquisition, and mastery of curricular content over time (Gregory, 2019). It also refers to the effective application of knowledge across different academic tasks and contexts (Smith & Brown, 2020). In this study, academic performance is understood holistically as learners' overall scholastic progress, including cognitive engagement, intellectual curiosity, skill mastery, and academic competence within the school environment.

#### **1.10.7 Motivation**

Motivation can be understood from both psychological and educational perspectives. Psychologically, it is defined as the internal mechanism that initiates, directs, and sustains goal-directed behaviour, influencing effort, persistence, and engagement in tasks (Ryan & Deci, 2000). In contrast, an educational perspective highlights motivation as a product of both intrinsic factors, such as personal interest and satisfaction, and extrinsic factors, such as rewards, expectations, and external pressure.

#### **1.10.8. Resilience**

Resilience is defined both psychologically and sociologically. Psychologically, it refers to the ability to adapt positively to adversity through coping, emotional regulation, and problem-solving skills that support recovery (Rajabi & Ghezelsefloo, 2020; Wang & Guan, 2020). Sociologically, it is shaped by social, cultural, and institutional factors that influence how it develops (Howe et al., 2012). While the psychological view emphasises individual capacity, the sociological view highlights environmental influence, showing that resilience is a product of both personal and contextual factors. Resilience is best understood as a dynamic process shaped by both personal coping abilities and external social conditions.

#### **1.10.9. Stigma**

Stigma is a social process in which people are marginalised, stereotyped, or discriminated against because of perceived distinctions (Bond, 2017). It can cause social isolation, low self-esteem, and anxiety. Stigmatisation of learners with disabilities frequently inhibits their involvement in academic and social activities. To reduce stigma, we need to raise awareness, implement inclusive legislation, and engage in good social interactions. Stigma undermines identity development, motivation, and fulfilment in life.

#### **1.10.10 Inclusion**

Inclusion is the practice of guaranteeing equitable access, engagement, and support for all learners, irrespective of disparities or disabilities (Ainscow, 2005). It entails tailoring curricula, teaching practices, and school environments to fit varied needs. Inclusive education encourages social integration, acceptance, and a positive self-image among physically handicapped students. It addresses marginalisation, prejudice, and educational disparities. Effective inclusion promotes academic achievement, motivation, and psychosocial well-being.

### **1.11 Outline of Chapters**

Chapter 1: Introductory Orientation: This chapter delineates the study's background, articulating the problem statement, research questions, and objectives. It further presents the theoretical frameworks underpinning the research, defines the study's delimitations, highlights

its significance, clarifies key concepts, outlines the research methodology, and concludes with a comprehensive chapter summary.

#### Chapter 2: The theoretical framework

In Chapter 2, the theoretical framework that explains the impact of self-concept on the academic performance of the physically disabled learners in Chitungwiza, Zimbabwe, is explored. The study is informed mainly by the humanistic perspective, especially the ideas of Carl Rogers, Gordon Allport and Harter.

Chapter 3: The Review of Literature on the Psychological Self-Concept, Social Self-Concept, Physical Self-Concept and Academic Self-concept: This chapter undertakes an extensive review of pertinent international and local literature, with a focus on the multifaceted impacts of psychological, social, physical and academic self-concepts on the academic performance of learners with physical disabilities. It critically evaluates how the interplay of psychological and social factors collectively influences the educational outcomes of physically disabled students.

Chapter 4: Research Methodology: This chapter explains the decision on the study design and the process for examining the research questions. The ethical implications of this investigation are also discussed in the chapter.

Chapter 5: Data Presentation, Analysis and Discussion: By outlining the themes that emerged from the research design of the raw data, this chapter offers the research outcome. Responses from the questionnaire are used to extend and improve the discussion and the analysis. The research's findings are examined. The chapter presents the study's findings while contextualising them, considering the literature review carried out in Chapter 2 and the theoretical frameworks presented in Chapter 1. The questionnaire that will be utilised is an adaptation of several other questions; thus, efforts are made to determine the reliability of the final questionnaire. The method for putting the fourth chapter's hypotheses to the test is next addressed. The conclusions drawn from the tested hypotheses are discussed in detail. It includes the presentation, analysis, and discussion of data.

Chapter 6: Summary, Conclusions, and Recommendations: Based on the research's findings, analysis, and discussions presented, it presents the study's conclusions and suggestions. The study's conclusions describe how well the objectives are accomplished. This

chapter offers suggestions for how to eliminate discrimination against secondary school learners who are physically disabled.

### **1.12 Summary**

This chapter introduced the study on the relationship between self-concept and academic performance among learners with physical disabilities in Chitungwiza, Zimbabwe. The chapter provided the background to the study by discussing global, African, Zimbabwean, and local perspectives relating to inclusive education, disability, self-concept, and academic achievement. The discussion established that although inclusive education policies continue to promote equal educational opportunities for learners with disabilities, many learners with physical disabilities still experience educational, social, psychological, and environmental barriers that may negatively affect their academic performance and self-concept.

The chapter further highlighted self-concept as a multidimensional construct comprising psychological, social, physical, and academic dimensions that may influence learner participation, confidence, motivation, and educational achievement. Existing literature reviewed in the background indicated differing scholarly perspectives regarding the relationship between self-concept and academic performance, thereby justifying the need for further empirical investigation within the Zimbabwean context, particularly among learners with physical disabilities in Chitungwiza.

In addition, the chapter outlined the statement of the problem, research objectives, research questions, and hypotheses guiding the study. The theoretical and conceptual frameworks underpinning the study were also presented to provide a foundation for understanding the relationship between self-concept and academic performance. The significance of the study, delimitations, and definitions of key concepts were equally discussed. The chapter further introduced the quantitative research orientation adopted in the study. A positivist paradigm and correlational research design were identified as appropriate for examining measurable relationships between variables. The study intends to utilise structured Likert-scale questionnaires and learners' academic records to generate quantitative data for statistical analysis. Overall, the chapter established the foundation upon which the entire study is built and justified the need to investigate the relationship between self-concept and academic performance among learners with physical disabilities in Chitungwiza, Zimbabwe.

## **CHAPTER 2**

### **THE THEORETICAL FRAMEWORK**

#### **2.1 Introduction**

The theoretical framework (TF) serves as a critical scholarly scaffold that elucidates the existing theories pertinent to the study and delineates their interrelationships. It foregrounds the principal theoretical underpinnings that anchor the research, offering a coherent lens through which the study is conceptualised and executed. A theoretical framework provides the theoretical foundation that guides a study by organising key concepts, explaining relationships among variables, and positioning the research problem within an established body of knowledge (Ravitch & Carl, 2021). According to Salawu et al. (2023), a theoretical framework organises interconnected theoretical ideas that anchor a study within established scholarly perspectives. It, therefore, functions as a conceptual guide that informs the direction, interpretation, and analytical focus of the research process. Scholars widely acknowledge that theoretical frameworks strengthen the credibility, coherence, and analytical depth of research by linking studies to existing bodies of knowledge (Dickson, Emad, & Joe, 2018).

This study is anchored in Carl Rogers' theory of self-concept development, Allport's ideas of identity formation, and Harter's self-perception profile for teenagers. These theories collectively foreground self-concept as a significant factor influencing learners' educational experiences and academic performance. Nevertheless, scholarly debate persists regarding the extent to which self-concept independently determines academic outcomes among learners with physical disabilities.

While some scholars associate positive self-concept with improved academic engagement and achievement (Yang et al., 2023; Marsh et al., 2018), others emphasise the influence of broader structural factors such as poverty, discrimination, inaccessible learning environments, and inadequate educational support systems. Despite these debates, the theoretical framework remains valid for this study because it provides a relevant analytical lens for examining the influence of self-concept on academic performance among secondary school learners with physical disabilities within inclusive educational settings.

## **2.2. The Humanistic Perspective**

The humanistic approach is a school of thought that emerged during the 1950s as a reaction against the deterministic assumptions of psychoanalysis and behaviourism, placing emphasis on human agency, subjective experience, personal meaning, and self-development (Joseph, 2020; Hoffman et al., 2023). Humanistic psychology focuses on understanding individuals as whole persons with the capacity for choice, growth, and self-actualisation. Contemporary humanistic scholars describe the approach as one that emphasises personal experience, dignity, self-worth, and the inherent potential of individuals to achieve psychological growth (Bland & DeRobertis, 2020). Within education, the humanistic perspective has influenced learner-centred approaches that recognise the importance of self-beliefs, emotional well-being, and supportive learning environments in promoting achievement (McCombs, 2020). Given the increasing global emphasis on human rights and inclusive education, this research is guided by the humanistic approach because of its relevance to understanding the experiences of learners with physical disabilities.

Carl Rogers' self-concept theory remains one of the most influential humanistic explanations of how individuals' perceptions of themselves influence behaviour, emotional adjustment, and achievement. Rogers argued that self-concept develops through interactions with significant others and the social environment, influencing how individuals interpret their abilities, experiences, and personal worth. Contemporary interpretations of Rogers' theory continue to highlight the importance of self-concept, unconditional positive regard, and supportive relationships in promoting psychological well-being and personal development (Joseph, 2020). However, scholars debate the extent to which self-concept alone can explain academic outcomes, particularly among learners experiencing disability and social disadvantage. While positive self-concept is associated with increased motivation, engagement, and achievement, critical perspectives argue that psychological explanations must be considered alongside structural conditions such as poverty, discrimination, inaccessible learning environments, and unequal educational opportunities (Goodley, 2021; Slee, 2020).

Some scholars argue that humanistic psychology remains valuable because it recognises learners as active participants in their own development rather than passive recipients of external influences. Bland and DeRobertis (2020) maintain that humanistic theory

provides an important foundation for understanding education because it highlights confidence, autonomy, meaning-making, and the learner's capacity for growth. Similarly, McCombs (2020) argues that learner-centred educational practices informed by humanistic principles can enhance engagement by addressing learners' emotional and psychological needs.

However, critics argue that humanistic approaches may place excessive emphasis on individual agency while insufficiently addressing social and institutional barriers. In disability education, scholars caution that focusing primarily on learners' self-beliefs may unintentionally shift responsibility for educational difficulties onto learners rather than examining disabling environments and exclusionary practices (Goodley, 2021; Shakespeare, 2022). Therefore, while self-concept remains an important psychological construct, academic achievement among learners with physical disabilities should be understood as the outcome of interactions between personal beliefs, social relationships, school structures, and wider cultural conditions.

Despite these debates, the humanistic approach remains relevant for examining academic performance among learners with physical disabilities because it provides insight into how learners construct meaning about themselves within educational contexts. Its emphasis on self-worth, acceptance, belonging, and personal growth aligns with inclusive education principles that seek to promote participation and equity. Consequently, this study is guided by the humanistic approach through the contributions of Carl Rogers' self-concept theory, Allport's ideas on identity and personality development, and Harter's work on adolescent self-perceptions. Together, these perspectives provide a theoretical foundation for examining how self-concept influences academic experiences and performance among secondary school learners with physical disabilities.

### **2.2.1. Carl Rogers' theory of self-concept development**

Carl Rogers' theory holds profound relevance for understanding and supporting the self-concept of physically disabled learners. Rogers' approach underscores the necessity of creating a supportive and accepting environment that fosters positive self-image and psychological growth (McLeod, 2023; Joseph & Murphy, 2020). Personality evolves through an innate impulse toward growth, where individuals differentiate between the real self, their authentic characteristics, and the ideal self, representing aspirations and goals (Priest & Williams, 2018; McLeod, 2023; Sheldon & Kasser, 2020). Although Rogers' theory has been

widely used to explain how self-perceptions influence emotional well-being, behaviour, and academic engagement, scholars remain divided on its applicability to learners with physical disabilities (Hattie & Clarke, 2018; Marsh et al., 2018; Marsh et al., 2019). Supporters of the theory argue that concepts such as self-concept, self-worth, congruence, and unconditional positive regard help explain how acceptance and supportive relationships shape learners' confidence and academic participation (Marsh et al., 2018). From this perspective, negative educational experiences such as bullying, stigma, exclusion, and low teacher expectations may weaken self-concept and subsequently affect academic performance (Wang et al., 2021).

However, critics argue that Rogers' theory places excessive emphasis on individual psychological processes while underestimating structural and institutional barriers affecting learners with physical disabilities (Florian, 2021). Some scholars contend that factors such as inaccessible infrastructure, discriminatory schooling practices, and limited inclusive resources may shape educational outcomes more strongly than self-concept alone (World Bank, 2018). Others further argue that humanistic assumptions risk oversimplifying learners' lived realities by suggesting that self-acceptance and positive regard are sufficient for adjustment within unequal educational environments (Shakespeare, 2021).

Despite these criticisms, Rogers' theory remains relevant to this study as it provides a useful framework for understanding how learners interpret and internalise their educational and social experiences (Joseph & Murphy, 2020). The theory is particularly useful in explaining how negative societal attitudes, stigma, lack of social support and non-inclusive peer relations and school interactions may influence the development of self-concept among secondary school learners with physical disabilities (Slee, 2022). Furthermore, its emphasis on acceptance, self-worth, and subjective experience aligns with the study's focus on how self-concept shapes academic performance within inclusive educational settings (Marsh et al., 2018). Therefore, while acknowledging the influence of broader structural factors, the theory remains valuable for examining the psychological and educational experiences of physically disabled learners in contemporary schooling contexts (United Nations, 2022).

Positive regard can be conditional or unconditional (Joseph & Murphy, 2020). Unconditional positive regard implies accepting, recognising and respecting an individual regardless of what he/she has achieved or not achieved. Santrock (2007) view unconditional positive regard as the acceptance of the person as a worthy being, without any requirements or

preconditions. Rogers' unconditional positive regard implies that the teachers should accept the learners as they are, whether physically able or physically disabled, and irrespective of their socio-economic backgrounds. Many researchers have established that physically disabled children with a negative self-concept are sidelined, discriminated against, and labelled negatively. Consequently, they underperform in their studies (Florian, 2021). Hayes (2008:120) asserts that a person with a positive self-regard has a positive attitude towards himself/herself and is not dependent on the positive evaluation of significant others (Marsh, Pekrun & Parker, 2019; Orth, Robins & Roberts, 2022).

Rogers' humanistic approach emphasises that unconditional positive regard is essential for developing a strong self-concept and achieving self-actualisation. Rogers (1957) argued that individuals experience psychological growth when they are accepted and valued without conditions attached to their worth. Conversely, the absence of unconditional positive regard may contribute to incongruence, low self-esteem, and limited personal development (Joseph, 2020). For learners with physical disabilities, acceptance from teachers, peers, and families is important because stigma, exclusion, and negative social evaluations may weaken self-concept and academic engagement (Goodley, 2021; Shakespeare, 2021).

Unconditional positive regard is relevant to this study because supportive relationships can strengthen learners' confidence, belonging, and participation. However, scholars argue that emotional support alone cannot address all barriers faced by physically disabled learners, as inaccessible infrastructure, inadequate resources, and exclusionary practices also influence educational experiences (Slee, 2022). Therefore, Rogers' concept provides a useful framework for examining how both interpersonal relationships and school conditions shape self-concept development.

Conditional positive regard refers to acceptance that depends on meeting certain expectations or standards (Rogers, 1959). Rogers suggested that when individuals feel valued only when they achieve particular outcomes, they may develop conditions of worth that negatively affect self-perception. Among physically disabled learners, conditional acceptance may occur when approval from teachers, peers, or families is linked mainly to academic success or conformity. Such experiences may contribute to negative self-concept and reduced academic confidence (Marsh et al., 2019; Orth et al., 2022). However, appropriate expectations combined with support and encouragement can also promote effort and achievement (Hattie, 2021). In

this study, conditional positive regard is examined as a factor that may influence self-concept and academic performance among learners with physical disabilities. Positive regard, the warmth, acceptance, and appreciation received from others, strongly shapes self-concept, particularly for physically disabled learners. Its absence can disrupt self-actualisation, causing emotional distress and maladaptive behaviours (Mendi & Eldelekliglu, 2016).

Conditional positive regard is important because it explains how acceptance based on performance or conformity may negatively affect self-worth among physically disabled learners. Some scholars argue that learners with disabilities are often valued only when they outperform expectations or minimise the visibility of their disability, thereby creating pressure and fear of failure. Conversely, other scholars argue that high expectations can sometimes motivate learners toward academic achievement when combined with adequate support. This debate is important to the study because it highlights the complex relationship between societal expectations, acceptance, and self-concept formation among learners with physical disabilities. Carl Rogers' emphasis on the role of positive regard and the creation of a safe, non-judgmental environment holds significant implications across multiple domains, including counselling, education, and interpersonal relationships (McLeod, 2023). Teachers should treat physically disabled learners equally, be consistent in what they do, and indicate their love for their learners, regardless of their physical fitness or academic achievements. Given the above, factors such as socio-economic background, academic achievement, disciplinary behaviour, tribe, gender, and age should not be used to determine the conditions of positive regard.

#### **2.2.1.1. Unconditional positive regard**

Unconditional positive regard refers to acceptance and support given to learners without conditions or performance requirements (Joseph & Murphy, 2020). Scholars argue that it fosters healthy self-concept development, particularly in marginalised groups (Ryan & Deci, 2017). However, critics suggest that emotional acceptance alone may not be sufficient in the absence of structural educational support (Florian, 2021). In this study, unconditional positive regard is linked to improved self-concept and, consequently, better academic performance among learners with physical disabilities (Marsh, Pekrun & Parker, 2019; Lei, Cui & Chiu, 2023).

Rogers' humanistic approach demonstrates that unconditional positive regard is essential for nurturing a robust self-concept and achieving self-actualisation (Rogers, 2019; Sheldon & Kasser, 2020). Its absence can cause internal conflict, low self-esteem, and social marginalisation, limiting personal and academic growth (UNICEF, 2022; WHO, 2021). Applying Rogers' theory in educational settings is therefore critical to empower physically disabled learners, promote psychological congruence, and support holistic development (UNESCO, 2020).

Unconditional positive regard, acceptance irrespective of performance, fosters self-worth, resilience, and motivation, while conditional regard, based on meeting external expectations, undermines self-concept and intrinsic motivation (Bhoit & Shinde, 2019; Ryan & Deci, 2017). Rogers' concept of unconditional positive regard is highly relevant because it emphasises the importance of acceptance and support in developing positive self-concept (Joseph & Murphy, 2020; Hattie & Clarke, 2019).

Some scholars argue that supportive relationships with teachers, parents, and peers can strengthen confidence, participation, and emotional well-being among physically disabled learners (Lei, Cui & Chiu, 2023; Marsh, Pekrun & Parker, 2019). However, others contend that emotional support alone may be insufficient if schools lack accessible infrastructure, assistive resources, and inclusive teaching practices (UNESCO, 2020; World Bank, 2018; UNICEF, 2022). This concept is therefore important because it enables the study to critically analyse both interpersonal support and structural conditions influencing learners' self-concept development (Florian, 2021; United Nations, 2022).

Closely related to unconditional positive self-regard is self-concept. The self-concept is the individual's view of him- or herself, along the lines of thought processes, feelings, and experiences (Florian, 2021). Self-concept refers to an individual's organised perception of their abilities, values, and identity. In this study, it is the central variable explaining differences in academic performance among learners with physical disabilities. Some scholars argue that positive self-concept enhances academic engagement and persistence, while others suggest that self-concept is largely shaped by school conditions and social treatment rather than existing independently. The theory predicts that learners with a weaker self-concept are more likely to demonstrate lower academic performance due to reduced confidence and participation in learning activities.

The self-concept is an organised, continuous process of evaluation of the ‘I’ and ‘me’ in relation to how others view the ‘I’ and ‘me’, and various other aspects of life (Priest & Williams, 2018). Self-concept is composed of three interconnected facets: self-image, self-worth, and the ideal self (Bhoit & Shinde, 2019). Self-image, the mental representation of one’s attributes, influences cognition, emotion, and behaviour (Priest & Williams, 2018). Self-worth reflects evaluative judgments of one’s value (Wozniak, 2018). An individual therefore evaluates oneself according to how that individual perceive own abilities and capabilities and also in relation to what others say about the individual. Physically disabled learners with negative self-concept often feel stigmatised and have inferiority complexes. For physically disabled learners, a flexible and self-defined ideal promotes resilience, autonomy, and academic engagement, whereas rigid or socially imposed ideals can produce incongruence, low self-esteem, and emotional instability.

#### **2.2.1.2. Ideal self**

The ideal self represents the individual a physically disabled learner aspires to become academically, socially, or personally. In this study, it is relevant to explaining learners’ academic aspirations and goals. Some scholars argue that a large discrepancy between the ideal self and real self may lead to reduced motivation and academic disengagement. Others caution that aspirations among learners with disabilities may remain high despite structural limitations, suggesting that frustration is not universal. The theory anticipates that greater gaps between real and ideal self may be associated with lower academic performance.

Some scholars argue that a large discrepancy between the ideal self and real self may lead to reduced motivation and academic disengagement (Higgins, 2018; Marsh, Pekrun & Parker, 2019). Others caution that aspirations among learners with disabilities may remain high despite structural limitations, suggesting that frustration is not universal (Florian, 2021; WHO, 2021). The theory anticipates that greater gaps between real and ideal self may be associated with lower academic performance (Hattie & Clarke, 2019).

The ideal self, representing what one can best be, the real true self who is what one actually is, and the self-image, which is the person you think you are, may tally (match/congruence) or differ (incongruence) ( Rogers, 2019; Higgins, 2018). The differences between the individual’s real self and the ideal self are often the source of problems (Marsh,

Pekrun & Parker, 2019). Schultz (2009:237) posits that psychologically and physically healthy persons are able to perceive themselves and their environment (including other people) as they really are (Joseph & Murphy, 2020). The individual is said to be a fully functioning organism, whose attempts to self-actualise are not being interfered with (Rogers, 2019; Sheldon & Kasser, 2020).

The concept of the ideal self is relevant because it helps explain the tensions that may arise when physically disabled learners compare their aspirations with their perceived limitations and social experiences. Rogers argues that individuals strive toward an ideal version of themselves; however, some scholars contend that school environments characterised by bullying, exclusion, and low teacher expectations may widen the gap between learners' aspirations and self-perceptions. Conversely, other researchers argue that supportive, inclusive environments can reduce this gap by promoting acceptance and equal participation. This concept is therefore significant to the study because it assists in examining how educational and social experiences shape learners' academic aspirations and self-beliefs.

### **2.2.1.3. Real self**

The real self refers to how learners perceive themselves based on their lived experiences. For learners with physical disabilities, repeated exposure to stigma, exclusion, or low expectations may influence how they define their academic and social capabilities. However, alternative perspectives argue that lived experience does not automatically produce negative self-perception, as some learners may develop adaptive and resilient self-views. Within this study, the real self is linked to how learners' internalised experiences shape their academic effort and classroom engagement.

Self-esteem suffers when there is a big difference between one's ideal self and the self-image (Higgins, 2018; Marsh, Pekrun & Parker, 2019). Anxiety and defensiveness are common when the self-image does not match the true self (Joseph & Murphy, 2020). While conditional positive regard results in incongruence, leading to denial, frustration, and maladjusted behaviour, unconditional positive regard leads to self-actualisation (Sheldon & Kasser, 2020). The person becomes the real self. When he/she receives unconditional positive regard, it means that he or she is accepted as he or she is, with his or her specific needs, which are peculiar to him or her, and which are not measured against others (Ryan & Deci, 2017).

Rogers' notion of the real self is important to the study because it focuses on how learners interpret themselves based on lived experiences. Some scholars maintain that repeated exposure to discrimination, pity, and dependency may negatively influence how physically disabled learners perceive their abilities and worth. However, others argue that learners' self-perceptions are not universally negative, as some physically disabled learners develop resilience and positive identities despite adverse conditions. This analytical tension is important because it prevents the study from treating learners with physical disabilities as a homogeneous group and instead encourages a nuanced exploration of individual experiences and self-perceptions.

Educators who are aware of Rogers' concept of conditions of worth, which postulates that people may deny their true selves for the sake of being approved by others, will encourage the pupils to believe in themselves. They will be encouraged to appreciate individual differences and to note that others will ultimately accept them if they first establish sound self-images (Hattie & Clarke, 2019). Hayes (2008:184) mentions research studies that have been done to establish the influence of unconditional positive regard in the learning and teaching situation (Florian, 2021).

Evidence exists to support the view that the children whose parents are warm, loving, supportive, and full of respect for their children's opinions have high self-esteem and a positive self-concept (Orth, Robins & Widaman, 2018; Orth, Robins & Roberts, 2022). Numerous studies linking the self-concept to academic achievement have been carried out in Africa. In Uganda, UNESCO (2020) came to the conclusion that a child who feels more confident and more self-assured will perform better in the primary learning examinations. Hattie & Clarke (2019) hold the view that in Uganda, academic performance will suffer due to the pupils' lack of confidence, and not because of their impoverished backgrounds.

Marsh, Pekrun & Parker (2019) also established that there exists a connection between the self-concept and performance. He discovered that underachievers saw themselves as less adequate and less acceptable to others and concluded that underachieving, but capable, public secondary school physically disabled learners differ significantly from able-bodied achievers in their perceptions of the self. Yet another study by Masque (in Wang et al., 2021) of disabled children from Nigeria confirms that a pupil with a positive self-concept stands a chance of performing better than a pupil with a negative self-concept. It is important, therefore, that

educators in Africa, especially of physically disabled learners, bear in mind that a positive self-concept is essential in facilitating quality education, and that teachers can play a great role in this area.

Given the above, research studies have shown that positive self-concepts facilitate and enhance positive living in all its aspects, and that realistic self-appraisal, self-knowledge and self-understanding enable physically disabled children and teachers to learn more, achieve more, enjoy more, care more, relate better, make decisions wisely, and lead happier, more fulfilled, responsible, resourceful lives, also in their future careers (Orth, Robins & Widaman, 2018; Orth, Robins & Roberts, 2022). A research study by Robin (Wang et al., 2021) revealed that the self-esteem of physically disabled learners with negative self-concept dropped twice in comparison to that of able-bodied learners.

The main objective of this research is to develop a fully functioning physically disabled learner who exhibits an unconditional positive self-regard and maintains a congruent relationship with others. The exploration of the psychosocial effects of poverty on academic performance, focusing on the self-concept, is important in this study. Knowledge of the self and the self-concept will enable the girl child to express their personality positively.

Rogers' concept of self-concept is important to this study because it explains how learners' perceptions of themselves influence their academic participation, confidence, and social interaction. Some scholars argue that physically disabled learners who develop negative self-concept are more likely to experience poor academic engagement, emotional distress, and social isolation due to persistent exposure to stigma and exclusion within school environments. However, other scholars caution against reducing educational outcomes solely to psychological factors, arguing that inaccessible learning environments, discriminatory institutional practices, and limited educational support systems also shape learners' experiences. This concept is therefore important for the study because it provides a framework for analysing how self-perceptions interact with broader educational and social conditions affecting learners with physical disabilities.

#### **2.2.1.4 Freedom of expression**

Freedom of expression in Carl Rogers' humanistic theory refers to an enabling environment in which individuals are able to articulate their thoughts, emotions, and lived

experiences without fear of judgement or rejection. Rogers (1961) emphasises that such psychological safety is fundamental for the development of a coherent and positive self-concept, as individuals are better able to align their “real self” with their “ideal self” through open self-disclosure. In relation to learners with physical disabilities, this condition is particularly significant because it strengthens the four domains of self-concept, psychological, social, physical, and academic self-concept, by allowing learners to openly reflect on their capabilities and challenges within inclusive learning environments.

Recent empirical studies support this view. For example, Marsh and Martin (2011) and Marsh et al. (2019) highlight that academic self-concept is strongly shaped by classroom participation and learner voice, both of which are enabled through freedom of expression. Similarly, Orth, Robins, and Widaman (2012) demonstrate that self-esteem and psychological self-concept develop more positively in environments that encourage open emotional expression and perceived social acceptance. In the context of learners with disabilities, Mushoriwa (2018) found that restricted communication and stigma negatively affect social self-concept by limiting peer interaction and belongingness. Furthermore, physical self-concept is influenced by how comfortably learners can express concerns about their bodily limitations and accessibility needs, which affects confidence and self-perception (Harter, 2012).

Analytically, freedom of expression functions as a mediating educational condition that links self-concept domains to academic performance. When learners are encouraged to speak openly, they are more likely to develop integrated self-understanding across psychological (emotional security), social (peer acceptance), physical (body awareness), and academic (competence beliefs) dimensions. This integrated self-concept enhances motivation, engagement, and resilience, ultimately improving academic performance. Conversely, environments that suppress expression reinforce fragmented self-concept structures, leading to disengagement and underachievement, particularly among learners with physical disabilities in inclusive school settings such as Chitungwiza.

#### **2.2.1.5. Congruence**

Congruence refers to consistency between the real self and the ideal self. Some scholars argue that congruence promotes psychological stability, confidence, and improved academic functioning. However, critics note that achieving congruence may be constrained by external

barriers such as inaccessible learning environments and negative social attitudes. In this study, congruence is expected to be associated with better academic outcomes, as learners with more aligned self-perceptions are likely to participate more actively and confidently in school tasks. Psychological health and self-worth emerge when there is congruence between the real and ideal selves, fostering adaptive functioning across life domains (Wouters et al., 2018).

Moreover, congruence and authenticity in interactions empower learners to make autonomous choices, thereby fostering a greater sense of control and self-direction (Patall & Zambrano, 2019). Rogers' theory is instrumental in helping educators identify and challenge ableist attitudes, addressing stigma and bias that often marginalise physically disabled learners. By cultivating positive relationships, which serve as protective factors against adversity, the theory supports the development of resilience. It also contributes to improved self-esteem, increased motivation, stronger self-advocacy skills, enhanced social inclusion, and overall psychological well-being. Thus, by integrating Rogers' principles into educational practice, educators can establish nurturing environments that actively promote the development of a positive self-concept among physically disabled learners.

The concept of congruence is relevant because it explains how alignment between learners' self-perceptions and aspirations may contribute to emotional stability and academic confidence. Some scholars argue that inclusive and supportive school environments promote congruence by helping learners feel valued and capable regardless of disability. In contrast, other scholars suggest that many inclusive education systems remain structurally unequal, meaning that learners may continue to experience exclusion despite formal inclusion policies. This concept is therefore important because it allows the study to critically examine whether inclusive educational settings genuinely promote positive self-development among physically disabled learners.

#### **2.2.1.6. Incongruence**

Incongruence occurs when there is a mismatch between learners' perceived reality and their aspirations. Scholars suggest that incongruence may result in anxiety, reduced self-confidence, and disengagement from academic tasks (Higgins, 2018; Marsh, Pekrun & Parker, 2019). However, some argue that incongruence may also act as a motivational force under supportive conditions (Wang et al., 2021). Within this study, incongruence is linked to

anticipated lower academic performance among learners with physical disabilities due to emotional strain and reduced academic confidence. Incongruence, however, arises when experiences conflict with ideals, potentially causing internal conflict but also offering opportunities for personal growth (McLeod, 2023).

Incongruence is significant because it helps explain the psychological conflict that may occur when physically disabled learners' aspirations differ sharply from their social realities. Some researchers associate such incongruence with anxiety, frustration, low self-esteem, and reduced academic participation. Nevertheless, critical scholars argue that these emotional difficulties should not be understood purely as individual psychological weaknesses, since they are often reinforced by exclusionary school cultures and societal attitudes toward disability. This concept is therefore useful to the study because it highlights the interaction between internal self-perceptions and external educational conditions.

#### **2.2.1.7. Self-worth**

Self-worth refers **to** the value learners attach to themselves as individuals (Orth, Robins & Widaman, 2018; Orth, Robins & Roberts, 2022). Some scholars argue that self-worth is a strong predictor of academic persistence and resilience, while others emphasise that it is highly influenced by external validation from teachers, peers, and family (Marsh, Pekrun & Parker, 2019; Hattie & Clarke, 2019). In the context of this study, low self-worth among learners with physical disabilities is expected to correlate with reduced participation, lower achievement, and withdrawal from learning activities (Florian, 2021). Self-worth is central to this study because it helps explain how learners value themselves within educational and social contexts. Some scholars argue that negative societal attitudes toward disability may weaken learners' confidence and academic persistence by making them feel inferior or less capable than their peers. However, other researchers maintain that positive school climates, peer acceptance, and family support can strengthen self-worth even in challenging environments. This concept is therefore significant because it allows the study to examine how different school and social experiences shape learners' confidence and educational engagement.

### **2.2.1.8. Self-actualisation**

Carl Rogers' personality theory identifies self-actualisation as the core driver of human development (Wehrle & Fassbender, 2018). Self-actualisation refers to the process of realising one's full potential, while a fully functioning person is someone who demonstrates openness, adaptability, and self-acceptance. Some scholars argue that these concepts reflect ideal developmental outcomes, while others question their applicability in contexts marked by inequality and disability-related barriers. In this study, self-actualisation is associated with learners who demonstrate strong self-concept, resilience, and improved academic performance. Conversely, limited self-concept development may restrict learners' ability to achieve their full academic potential.

According to Rogers, individuals can only achieve self-actualisation if they possess a positive self-regard, a favourable perception of themselves (McLeod, 2023). This positive self-regard develops when individuals receive unconditional positive regard from others, particularly during childhood from primary caregivers. In other words, feeling valued and respected without conditions is essential for the development of a healthy self-concept. Self-actualisation becomes attainable only when there is congruence between an individual's self-concept (how they see themselves) and their ideal self (who they aspire to be).

Discrepancies between these two can result in incongruence, leading to psychological tension, anxiety, and emotional distress. A person is considered to be in a state of incongruence when parts of their experience are perceived as unacceptable and are, therefore, denied or distorted in their self-image. When the gap between the real self and the ideal self is substantial, negative feelings of self-worth arise, hindering the process of self-actualisation. The environment plays a critical role in this development; an oppressive or judgmental setting may inhibit self-growth, while a supportive and affirming environment can facilitate it. Incongruence, as a psychological mismatch between self-perception and the ideal self, poses a significant barrier to self-concept development. Carl Rogers' humanistic theory emphasises that aligning these dimensions is essential for emotional well-being and personal growth (Maroiu & Maricuțoiu, 2020).

Rogers emphasised two essential drives: self-actualisation (Priest & Williams, 2018). Rogers' idea of the fully functioning person is relevant because it challenges deficit-oriented perspectives that portray physically disabled learners primarily in terms of limitations and

dependency. Some scholars argue that inclusive education can promote independence, self-acceptance, and emotional growth among learners with disabilities when meaningful support structures are available. However, other scholars criticise overly idealistic interpretations of inclusion, arguing that structural inequalities and inadequate educational resources may continue to restrict learners' opportunities for personal growth. This concept is therefore important because it enables the study to critically evaluate the extent to which educational environments support the holistic development of physically disabled learners.

#### **2.2.1.9. Empathy**

Empathy is critical in Rogers' framework, defined as understanding another's internal experience while maintaining perspective (McLeod, 2023). Empathetic engagement from educators, peers, and caregivers fosters emotional security, dignity, and self-worth, enabling physically disabled learners to reconcile their real and ideal selves, build confidence, and navigate academic and social domains effectively (Wehrle & Fassbender, 2018). Unlike sympathy, which may emphasise dependency, empathy strengthens resilience and mitigates the internalisation of stigma.

The concept of empathy remains pivotal, especially when dealing with physically disabled learners from a low socioeconomic background and is quite relevant to this research. Joseph & Murphy (2020) indicates that empathy means "...trying to understand the thoughts, feelings, behaviours and personal meanings from the other's internal frame of reference". (O'Neil 2011:128). Hattie & Clarke (2019) asserts that to be in a position to help the child, "...one must find a way to stand in the person's shoes, not for judgement or diagnostic purposes but merely to facilitate the pupils' endeavours to gain congruence". Unlike sympathy, which further paralyses the child, empathy is meant to strengthen the child by enabling him or her to recognise the intrinsic resources at his or her disposal (Marsh, Pekrun & Parker, 2019) indicates that children who are victims of abject negative self-concept usually come to school feeling inferior, withdrawn, and emotionally distressed, which negatively affects their participation in classroom activities, social interaction with peers, socio-emotional, physical, behavioural, moral, and cognitive development, thus affecting their overall academic performance.

It is against this background that teachers need to seek to understand the self-concept backgrounds, physical disability of learners and challenges of the learners they teach, to be in

a position to help them. Marsh, Pekrun & Parker (2019) suggest that teachers should look at the problems, or whatever pupils are engaged in, from their perspective. Children with a negative self-concept need to be listened to when they talk about their concerns. Having empathy assist the teacher to understand the areas where the physically disabled learners need help so as to develop into fully functioning human beings. The teacher must be genuine in the way she/he interacts with the learners. Sprinthall et al. (2006) assert that genuineness means being real and honest. The teacher must openly and freely convey to the learners how she/he feels so that they may perceive his/her commitment as authentic.

Despite its strengths in explaining the experiences and development of children, Rogers' Humanistic Theory has been criticised for assuming that all individuals naturally strive toward self-fulfilment and possess the freedom and capacity to exercise free will (Florian, 2021; Hoffman, Cleare-Hoffman, & Jackson, 2023). Nevertheless, the theory's core concepts, such as unconditional positive regard, empathy, freedom of expression, self-concept, congruence (genuineness), positive self-regard, self-actualisation, and the use of discovery learning, provide a valuable theoretical framework for examining the effects of negative self-concept on the academic performance of physically disabled learners in Zimbabwe (Hoffman et al., 2023).

The theoretical frameworks, particularly Rogers' humanistic perspective, are critically relevant to this study as they illuminate the processes through which self-concept is shaped and sustained among physically disabled learners. By foregrounding the principles of unconditional positive regard, empathy, and congruence, the framework provides a robust foundation for analysing how supportive environments can mitigate stigma, foster resilience, and enhance psychological well-being. His humanistic approach highlights the importance of the individual's unique perspective and underscores the transformative power of empathetic connections in promoting psychological well-being and personal growth. This perspective not only enriches the interpretation of learners' lived experiences but also advances evidence-based strategies for educators to cultivate inclusive, empowering, and developmentally responsive learning contexts.

The present study examines the influence of self-concept (independent variable) on the academic performance (dependent variable) of learners with physical disabilities in public secondary schools. Self-concept is conceptualised through psychological, social, physical, and

academic dimensions, while academic performance refers to learners' educational achievement, participation, engagement, and learning outcomes. The three theories underpinning this study collectively explain how self-concept develops and how it may influence academic performance. Rogers' theory predicts that learners who develop positive self-concept through unconditional positive regard, empathy, acceptance, and supportive relationships are more likely to demonstrate confidence, motivation, classroom participation, and academic success (Joseph & Murphy, 2020; Marsh et al., 2018; Hattie & Clarke, 2019). Conversely, learners who experience stigma, rejection, discrimination, and conditional acceptance may develop negative self-concept, resulting in reduced academic engagement, low self-esteem, anxiety, and poor academic performance (Florian, 2021; Wang et al., 2021). The theory therefore predicts a positive relationship between self-concept and academic performance among learners with physical disabilities.

Rogers' theory has been widely applied in educational and counselling settings to explain how self-perceptions influence learning outcomes and psychosocial adjustment. Studies have consistently shown that positive self-concept is associated with increased academic achievement, self-confidence, and school participation, while negative self-concept is linked to withdrawal, emotional distress, and lower academic performance (Marsh et al., 2018; Orth, Robins & Roberts, 2022). Applying Rogers' theory in educational settings is therefore critical to empower physically disabled learners, promote psychological congruence, and support holistic development. Unconditional positive regard, acceptance irrespective of performance, fosters self-worth, resilience, and motivation, while conditional regard, based on meeting external expectations, undermines self-concept and intrinsic motivation (Bhoit & Shinde, 2019).

### **2.2.2. Allport's ideas of identity formation**

Gordon Allport's theory of personality, particularly his concept of the proprium, provides a useful framework for understanding identity formation among learners. It explains identity as a developing and organised sense of self that contributes to continuity in how individuals understand and evaluate themselves over time. Contemporary research similarly shows that self-concept clarity develops during adolescence and early adulthood and is associated with greater consistency and confidence in self-perceptions (Xiang et al., 2023).

In relation to learners with physical disabilities, these processes are particularly significant because identity formation is strongly influenced by experiences of stigma, inclusion, and educational support, which may either strengthen or weaken a coherent sense of self. Contemporary scholarship emphasises that while identity is partly internally constructed, it is also continuously shaped by social and institutional environments, including school systems and disability-related structures ( Chatzitheochari & Butler-Rees, 2022). Therefore, Allport's framework remains useful for explaining how identity formation contributes to self-concept development and academic performance in inclusive education contexts.

Although not explicitly developmental, Allport emphasised the integration of psychological, social, and physical dimensions into a coherent self, which is essential for maturity and purposeful living (Kroger, 2017; Belamghari, 2020). The *proprium* refers to the core self that integrates an individual's traits, self-perceptions, and experiences into a coherent sense of identity. It represents the core of the self and provides the basis for key processes such as self-concept, self-esteem, identity coherence, self-extension, and functional autonomy.

In the context of physically disabled learners, identity formation is often shaped by experiences of stigma, social inclusion or exclusion, and the quality of educational support systems. Allport's emphasis on a unified and coherent identity therefore offers a useful lens for understanding how learners construct self-understanding in ways that influence confidence, social participation, and academic performance within inclusive education settings. Key concepts such as self-concept, self-esteem, identity coherence, self-extension, and functional autonomy are central in explaining how individuals develop and maintain a stable sense of self over time. These concepts are particularly relevant for physically disabled learners, as their identity formation is frequently influenced by educational experiences, peer relations, and broader social attitudes. Allport's framework therefore helps to explain how self-organisation and identity integration shape learners' confidence, participation, and academic performance in inclusive schooling contexts.

Allport's theory continues to exert strong influence in personality and identity research, particularly in explaining how individuals develop a coherent and enduring sense of self through organised patterns of traits, values, and personal meaning. It remains widely utilised to account for systematic differences in behaviour and developmental trajectories across individuals. Contemporary scholarship largely affirms its conceptual value, especially when

interpreted within integrative, multi-level frameworks that link intrapersonal identity processes to broader educational and social contexts.

While some studies emphasise its explanatory strength in understanding identity formation and learner behaviour (McAdams, 2015), others extend its application by foregrounding the need to situate identity development within institutional, social, and disability-related conditions that shape educational outcomes (Cervone & Pervin, 2022). From this perspective, Allport's theory remains highly relevant to this study because it offers a rigorous structural lens for analysing how identity coherence, self-concept, and self-regulatory processes interact to influence academic performance among learners with physical disabilities in inclusive education settings.

For physically disabled learners, achieving such integration is more complex, as they must reconcile physical limitations with psychological and social dimensions. Without a cohesive identity, learners may experience feelings of inadequacy or fragmented self-perception (Branje et al., 2021). Allport's focus on a stable, integrated identity underscores the need for supportive environments that foster positive identity development. Contemporary theorists extend Allport's intrapersonal focus by viewing identity as socially and contextually constructed through ongoing interaction with family, peers, and the broader community (Kroger, 2017; Maxey & Beckert, 2017). Identity integrates psychological, social, and physical dimensions, forming the foundation of self-concept (Klimstra & Doeselaar, 2017). Physically disabled learners require supportive relationships to mitigate feelings of inferiority, enhance competence, and foster positive self-perception (Pfeifer & Berkman, 2017).

Research indicates that learners with physical disabilities are more prone to identity diffusion, low self-esteem, and delayed psychosocial maturation compared to able-bodied peers (Pfeifer & Berkman, 2018). Social environments both enable and constrain identity formation, with family and peers playing a central role (Klimstra & Doeselaar, 2017; Maxey & Beckert, 2017). Without such support, learners risk internalising negative self-perceptions, which adversely affect psychological well-being, social integration, and academic engagement (Malone et al., 2018). Identity development is a dynamic process shaped by conscious and unconscious experiences, social feedback, and personal reflection (Maxey & Beckert, 2017). During adolescence (ages 14–18), learners refine self-concept, cognitive schemas, and coping strategies, with successful consolidation promoting resilience and ego coherence (Klimstra &

Doeselaar, 2017; Malone et al., 2018). Conversely, fragmented identity increases vulnerability to reduced academic focus and psychological distress (Pfeifer & Berkman, 2018; Li, 2017).

Allport's theory highlights the interplay between self-concept and academic performance. Fostering competence during struggles with inferiority enhances self-concept, whereas overwhelming inferiority can lead to negative self-image (Pfeifer & Berkman, 2017). Contemporary discourse frames identity as socially co-constructed, emphasising self-perception and adaptation rather than fixed traits (Maxey & Beckert, 2017; Branje et al., 2021). Critics argue that Allport overemphasises individual uniqueness while underplaying environmental and social contexts. To address this, educators should design experiences that integrate personal identity with social dynamics, fostering both internal self-awareness and contextual understanding. Additionally, dismantling restrictive cultural norms and stigmas supports learners with disabilities in achieving functional autonomy, self-regulation, and positive identity consolidation (Klimstra & Doeselaar, 2017; Chatzitheochari & Butler-Rees, 2022).

Aligned with Allport's perspective, cultivating a coherent and positive identity enhances academic engagement and self-concept for physically disabled learners (Branje et al., 2021). Deliberate cognitive and emotional strategies aimed at strengthening self-perception and competence are essential for self-actualisation. Conversely, negative self-image can precipitate psychological distress, undermining identity development and scholastic performance (Chatzitheochari & Butler-Rees, 2022). Fostering positive self-perceptions is thus critical for holistic development, resilience, and academic achievement. Allport's theory of personality and identity formation explains how individuals develop a coherent and continuous sense of self through the integration of traits, experiences, and personal meaning over time. Identity formation, within this framework, is not a fragmented process but an organised construction of selfhood shaped by both internal dispositions and external influences (McAdams & Guo, 2021; Cervone & Pervin, 2022). The key concepts of traits, self-identity, the *proprium* (core self), functional autonomy, self-image, maturity, and individual uniqueness collectively explain how identity becomes stable and functionally adaptive.

### 2.2.2.1. Traits

Traits refer to enduring patterns of behaviour, thought, and emotion that influence how individuals respond across situations. Some scholars argue that traits such as resilience, confidence, and emotional stability may strengthen self-concept and academic engagement among learners with physical disabilities. For example, a learner who persists with schoolwork despite mobility challenges may demonstrate resilience. However, critics argue that traits alone cannot explain academic performance because behaviours such as withdrawal, anxiety, or low participation may reflect experiences of stigma, exclusion, and inaccessible learning environments rather than stable personality characteristics (WHO, 2021). Therefore, traits should be understood alongside the social and educational contexts that shape self-concept development and academic performance.

Allport's concept of traits remains influential in explaining self-concept development and academic performance. Traits refer to relatively enduring patterns of behaviour, thought, and emotion that shape how individuals perceive themselves and interact with their environment. Scholars argue that positive traits such as confidence, resilience, determination, and emotional stability may strengthen self-concept and promote academic engagement among learners with physical disabilities. For example, a learner who uses a wheelchair may demonstrate resilience and perseverance by consistently attending school and participating in academic activities despite mobility challenges. Similarly, a learner with a physical impairment who remains confident during classroom discussions may develop a more positive self-concept and greater academic engagement.

However, this view has been criticised for placing excessive emphasis on individual characteristics while underestimating the powerful influence of social and educational contexts. Critics argue that behaviours often interpreted as personality traits, such as withdrawal, anxiety, low participation, or lack of confidence, may reflect responses to bullying, stigma, inaccessible classrooms, negative teacher attitudes, and exclusion from peer activities rather than stable personal dispositions (WHO, 2021).

For instance, a physically disabled learner who avoids participating in group activities may not lack confidence inherently but may be responding to repeated experiences of social rejection. Consequently, the development of self-concept and academic performance among

learners with physical disabilities cannot be understood solely through traits but must also be examined within the broader context of inclusion, support, and educational opportunity.

Thus, cardinal, central, and secondary traits are relevant to this study as they explain how personality characteristics influence self-concept development, behaviour, and academic performance among learners with physical disabilities, as discussed below.

#### **2.2.2.2. Self-identity**

Self-identity refers to an individual's evolving understanding of who they are. Contemporary scholarship remains divided on how identity develops and influences educational outcomes among learners with physical disabilities. Some scholars argue that identity emerges through the interaction of internal psychological processes and social experiences, with a positive identity fostering self-concept, confidence, and academic engagement (Branje et al., 2021; McAdams & Guo, 2021). However, critical disability scholars contend that such explanations often understate the influence of structural inequalities, arguing that identity development is profoundly shaped by inaccessible learning environments, stigma, and exclusionary educational practices (Chatzitheochari & Butler-Rees, 2022). Consequently, physically disabled learners may develop either positive or negative self-concepts depending on how they negotiate personal experiences within broader social contexts. In this study, self-identity is used to explain how learners construct academic and social meanings of self that influence academic performance.

The concept of self-identity is highly relevant because it explains how learners define and understand themselves within social and educational contexts. Some scholars argue that physically disabled learners may struggle with identity formation due to stigma, labelling, and social marginalisation. However, other researchers maintain that inclusive environments and supportive relationships may strengthen positive identity development and self-acceptance among learners with disabilities (United Nations, 2022).

#### **2.2.2.3. Proprium (core self)**

The proprium refers to the core sense of self that provides unity and continuity in personality development. Some scholars argue that a stable core identity promotes psychological well-being, resilience, and positive self-concept (McAdams & Guo, 2021). In

contrast, others argue that for physically disabled learners, persistent experiences of discrimination, negative labelling, and social exclusion may disrupt identity coherence and weaken self-perceptions of competence and worth (WHO, 2021; UNICEF, 2022). This suggests that the development of a stable self cannot be separated from the social conditions within which learners are situated. In this study, the *proprium* is associated with the stability or vulnerability of self-concept and its implications for academic performance.

Allport's concept of *proprium*, referring to the core sense of self, is important because it highlights how learners develop a sense of personal value and individuality. Some scholars argue that physically disabled learners who are constantly treated with pity or low expectations may experience weakened self-perceptions. Nevertheless, critics caution against viewing disability experiences as universally negative, arguing that learners interpret and respond to their experiences differently depending on context and support systems (World Bank, 2018).

#### **2.2.2.4. Functional autonomy**

Functional autonomy refers to behaviours that continue even after the original motives that initiated them have changed. Some scholars argue that this concept explains why learners persist academically despite challenges, as motivation becomes internalised and self-directed (Ryan & Deci, 2020). However, others contend that persistence among physically disabled learners cannot be attributed solely to internal motivation because academic engagement is often shaped by teacher support, assistive resources, family encouragement, and inclusive educational practices (UNESCO, 2020). This debate suggests that academic persistence reflects both personal agency and contextual support. In this study, functional autonomy is linked to learners' ability to sustain academic effort despite adversity.

Functional autonomy is relevant because it suggests that individuals may continue pursuing goals independently of the original motivations behind their behaviour. Some scholars argue that physically disabled learners who develop strong internal motivation may persist academically despite negative societal attitudes. However, others argue that personal motivation alone cannot overcome structural disadvantages such as inaccessible school facilities, inadequate assistive devices, and poverty (United Nations, 2022; Human Rights Watch, 2020).

#### **2.2.2.5. Self-image**

Self-image refers to how individuals perceive their abilities, appearance, and social value. While some scholars maintain that self-image develops primarily through social comparison and interpersonal feedback, others argue that disability-related experiences of stigma, exclusion, and discrimination exert a particularly strong influence on how physically disabled learners perceive themselves (Chatzitheochari & Butler-Rees, 2022). Supportive educational environments may foster positive self-images that strengthen academic confidence and participation, whereas negative social experiences may undermine self-concept and reduce academic engagement. In this study, self-image is associated with learners' confidence, classroom participation, and academic performance.

The concept of self-image is central to this study because it explains how physically disabled learners perceive their appearance, abilities, and social value. Some scholars argue that negative societal stereotypes surrounding disability may weaken learners' self-image and confidence. In contrast, other scholars maintain that positive school climates and peer acceptance can strengthen self-image and encourage active participation in academic activities (Shogren et al., 2017; Lindsay et al., 2018; King et al., 2019).

#### **2.2.2.6. Maturity**

Maturity refers to emotional stability, self-regulation, and responsible behaviour. Some scholars argue that mature learners are better able to cope with academic challenges, regulate emotions, and maintain engagement with learning tasks (Soto, 2021; Zimmerman, 2013). However, others contend that maturity should not be viewed solely as an individual attribute because opportunities to develop self-regulation are strongly influenced by school climate, teacher support, and inclusive educational practices (Lei et al., 2023; Wang & Eccles, 2012; Bucker et al., 2018). For physically disabled learners, supportive environments may enhance emotional adjustment and self-concept, thereby promoting academic success.

Allport associates maturity with emotional stability, self-awareness, and healthy social relationships. This concept is important because it explains how physically disabled learners may develop coping skills and emotional resilience when exposed to supportive educational environments. However, some scholars argue that emotional maturity should not be viewed purely as an individual responsibility, since school culture, discrimination, and social

inequality may significantly influence emotional development (Lindsay et al., 2018; Mostert, 2016; Munsaka & Charnley, 2022).

#### **2.2.2.7. Individual uniqueness**

Individual uniqueness emphasises that each learner develops a distinct personality and identity. Some scholars regard this principle as essential because it recognises diversity in how learners experience disability, construct self-concept, and respond to educational challenges (McAdams & Guo, 2021; Shogren et al., 2017). However, critics argue that excessive emphasis on individuality risks obscuring the shared structural barriers that affect many physically disabled learners, including discrimination, inaccessible infrastructure, and limited educational opportunities (Mostert, 2016; Munsaka & Charnley, 2022; Lindsay et al., 2018).

The concept of individual uniqueness is particularly relevant because it challenges stereotypes that treat physically disabled learners as a homogeneous group. Some scholars argue that learners with disabilities experience self-concept differently depending on personality, family support, school climate, and social interactions. This concept is therefore important because it supports a nuanced and context-sensitive understanding of learners' educational and psychological experiences rather than generalised assumptions about disability (Shogren et al., 2017; King et al., 2019; Lindsay et al., 2018).

Although Allport's trait-based perspective has been widely recognised for explaining personality development and self-identity, scholars remain divided regarding its relevance to learners with physical disabilities. Supporters argue that the theory is valuable because it highlights how traits such as resilience, confidence, independence, and emotional stability may influence academic participation and social adjustment among physically disabled learners. The theory also recognises individual uniqueness, thereby challenging stereotypical assumptions that all learners with disabilities experience similar psychological outcomes (Shogren et al., 2017; King et al., 2019).

However, critics argue that Allport's theory places excessive emphasis on individual personality traits while paying inadequate attention to structural and environmental factors shaping learners' experiences. Some scholars contend that educational exclusion, inaccessible infrastructure, poverty, and discriminatory school practices may influence learners' self-concept and academic outcomes more significantly than personality traits alone. Others further

argue that trait theory may unintentionally individualise challenges faced by learners with disabilities by implying that success depends mainly on personal characteristics rather than systemic support (Mostert, 2016; Human Rights Watch, 2020; Munsaka & Charnley, 2022).

In this way, the theory supports a balanced understanding of academic performance as the outcome of both personal traits and contextual influences within inclusive education settings. While Allport's trait theory provides valuable insight into personality and self-concept development, its explanatory power is limited if applied in isolation. Although traits such as resilience and confidence may support academic engagement, environmental, social, and institutional factors often play a more decisive role in shaping self-concept and academic performance among learners with physical disabilities. Therefore, self-concept and academic performance are best understood as products of the interaction between individual personality characteristics and broader contextual influences within inclusive education settings.

Allport's theory predicts that learners who develop a coherent and positive identity characterised by resilience, self-esteem, self-image, functional autonomy, and emotional maturity are more likely to participate actively in educational activities and perform better academically (McAdams & Guo, 2021; Branje et al., 2021). In contrast, fragmented identity, identity confusion, low self-esteem, and negative self-image may reduce motivation, participation, and academic engagement among learners with physical disabilities (Pfeifer & Berkman, 2018; Chatzitheochari & Butler-Rees, 2022).

The theory has been applied extensively in personality, identity, and educational research to explain how self-understanding and identity development influence learner behaviour, psychosocial adjustment, and educational outcomes. Research demonstrates that positive identity formation contributes to resilience, confidence, self-regulation, and academic persistence, while identity diffusion is associated with emotional difficulties and reduced educational achievement (Klimstra & Doeselaar, 2017; Maxey & Beckert, 2017; Malone et al., 2018).

### **2.2.3 Harter's self-perception profile for adolescents (SPPA)**

Susan Harter's Self-Perception Profile for Adolescents (SPPA) is one of the most influential frameworks used in educational psychology to explain adolescent self-concept (Harter, 2017; Marsh et al., 2017). The theory is particularly useful in this study because it

explains how learners evaluate themselves across different areas of life, including academic competence, social acceptance, peer relationships, behavioural conduct, physical appearance and overall self-worth. This makes the theory relevant to learners with physical disabilities because their self-perceptions may be shaped by both personal experiences and the social conditions of the school environment.

For learners with physical disabilities, self-concept is not only an individual psychological matter but is also influenced by social interaction, school support, peer acceptance, accessibility, teacher attitudes and disability-related barriers (Shogren et al., 2017; Lindsay et al., 2018). A learner may have confidence in academic work but may still struggle with social belonging, physical self-perception or peer acceptance because of exclusion, stigma or limited support. Therefore, Harter's SPPA provides a useful framework for understanding how different dimensions of self-concept influence academic performance and psychosocial development among learners with physical disabilities.

Susan Harter's Self-Perception Profile for Adolescents conceptualises self-concept as a multidimensional and hierarchically organised construct (Harter, 2017). Unlike traditional approaches that view self-concept as one single and fixed idea, Harter argues that adolescents evaluate themselves differently across various domains of functioning. These domains include scholastic competence, social acceptance, physical appearance, behavioural conduct, peer relationships and global self-worth. The SPPA proposes that adolescents develop self-concept by evaluating their competence in these different domains. These domain-specific evaluations then contribute to the development of overall or global self-worth (Marsh et al., 2017). In this sense, a learner's self-concept is not formed from one experience only, but from cumulative experiences across academic, social, emotional and behavioural areas of life. This is important because learners with physical disabilities may experience strengths in some areas while facing challenges in others.

Harter's framework further suggests that self-concept develops through interactions between perceived competence, social feedback and lived experiences (Harter, 2017). Learners come to understand themselves through how they perform, how they are treated by others, and how they interpret their social and educational environment. In inclusive education settings, this means that teacher encouragement, peer support, family involvement, accessible infrastructure and inclusive classroom practices may all influence how learners with physical

disabilities perceive themselves (Schwab, 2018; Florian, 2019). The SPPA is particularly relevant to learners with physical disabilities because it focuses on domains that are often affected by disability-related experiences. These include social acceptance, physical appearance, behavioural conduct and scholastic competence. For example, a physically disabled learner may develop a strong academic self-concept when supported by teachers and provided with appropriate learning resources. However, the same learner may develop a weaker social self-concept if they experience peer rejection, stigma or exclusion from school activities (Lindsay et al., 2018; Munsaka & Charnley, 2022).

Harter's Self-Perception Profile Theory has been widely applied in educational psychology because it recognises that self-concept is multidimensional and develops through social interaction, feedback and lived experiences (Harter, 2017; Marsh et al., 2017). Supporters of the theory argue that it provides a more detailed understanding of adolescent development than theories that treat self-concept as a single, general construct. Harter's model allows researchers to examine how learners evaluate themselves in specific areas of life and how these evaluations influence motivation, engagement, self-esteem and academic outcomes.

Scholars such as Harter (2017) and Marsh et al. (2017) argue that domain-specific self-concept has predictive value for academic achievement. This means that how learners perceive their academic ability may influence how they participate in class, how motivated they are to learn and how they perform academically (King et al., 2019). In this regard, the SPPA is useful because it shows that academic performance is not only influenced by intellectual ability but also by learners' perceptions of their own competence.

However, other scholars argue that self-concept should not be understood only as an individual psychological characteristic. Researchers such as Goodley (2017), Florian (2019), and Munsaka and Charnley (2022) emphasise that school climate, educational opportunities, accessibility, institutional support and broader social inequalities significantly influence how learners evaluate themselves. This debate is important for disability research because learners with physical disabilities often experience barriers that are not caused by their own self-perception but by inaccessible environments, negative attitudes and unequal educational opportunities. Therefore, the debate around Harter's SPPA shows that self-concept must be understood from both psychological and contextual perspectives. While learners' self-perceptions are important, these perceptions are also shaped by the school, family, peers,

teachers and wider society. This makes the theory useful for the present study because it allows self-concept to be examined as both a personal and socially influenced construct.

Although Harter's SPPA is widely recognised, it has also been criticised. One major criticism is that the model places strong emphasis on individual self-perceptions while giving less attention to broader structural and contextual factors that shape learners' experiences (Goodley, 2017; Florian, 2019). Critics argue that factors such as poverty, inaccessible infrastructure, inadequate assistive technologies, discriminatory educational policies, negative societal attitudes and unequal educational opportunities may influence academic and psychosocial outcomes more strongly than self-perceptions alone (Goodley, 2017; Munsaka & Charnley, 2022).

From this perspective, self-concept cannot be fully understood without considering the environment in which learners function. Many challenges experienced by learners with physical disabilities originate from exclusionary systems rather than from individual psychological weakness (Goodley, 2017). Therefore, critics caution against explaining academic success or failure mainly through learners' self-evaluations. Another criticism concerns the multidimensional structure of the theory. Harter separates self-concept into different domains such as academic competence, social competence, behavioural conduct and physical appearance. While this is useful for analysis, some scholars argue that these domains may overlap in real life (Marsh et al., 2017). For example, social exclusion may affect a learner's academic confidence, emotional well-being, classroom participation and overall self-worth at the same time. This means that it may be difficult to separate one domain from another in inclusive education settings.

The theory has also been criticised for relying mainly on self-reported perceptions. Since adolescents report how they see themselves, their responses may not always fully reflect their actual experiences or behaviours. For this reason, some scholars argue that self-report data should be supported by other sources of information, such as teacher observations, parent views and peer experiences (Schwab, 2018; King et al., 2019). This is particularly important when studying learners with physical disabilities because their self-concept may be shaped by both internal perceptions and external responses from others. Despite these criticisms, Harter's SPPA remains relevant because it provides a structured way of understanding the multidimensional nature of adolescent self-concept. The theory becomes stronger when it is

used together with contextual and structural perspectives, especially in studies involving learners with physical disabilities.

### **2.2.3 .1. Key concepts**

Harter's Self-Perception Profile for Adolescents (SPPA) explains self-concept as a multidimensional construct. This means that adolescents do not evaluate themselves in one general way, but across different areas of functioning. The key concepts selected for this study are relevant because they explain how learners with physical disabilities perceive their academic ability, social acceptance, physical self-image, behaviour, support systems and overall self-worth within the school environment.

#### **2.2.3 .1.1. Multidimensional self-concept**

A central concept in Harter's SPPA is multidimensional self-concept. This means that self-concept is made up of different domains rather than one single general self-view. Harter's framework shows that adolescents evaluate themselves across several domains, including scholastic competence, social acceptance, physical appearance, behavioural conduct and global self-worth (Harter, 2012). Recent research also supports the view that adolescent self-concept develops across domain-specific areas, including academic, physical and social self-evaluations (van der Crujssen et al., 2023). This concept is relevant to the present study because learners with physical disabilities may not experience self-concept in one uniform way. A learner may be confident academically but may struggle socially because of peer rejection or stigma. Another learner may feel accepted by peers but may lack confidence in academic tasks because of limited support or inaccessible learning materials. Therefore, multidimensional self-concept helps the study examine the different areas in which learners with physical disabilities experience confidence, vulnerability or exclusion.

#### **2.2.3 .1.2. Scholastic or academic competence**

Scholastic competence refers to how learners perceive their academic ability and school performance. In Harter's SPPA, this domain focuses on whether learners believe they are capable of succeeding in schoolwork, completing tasks and performing well academically (Harter, 2012). Academic self-concept is also understood as learners' mental representation of

their own academic abilities in general and across specific academic domains (Arens et al., 2021). This concept is relevant to the study because academic self-concept is directly connected to academic performance. Learners with positive academic self-concept are more likely to participate in class, remain motivated and believe that they can succeed. However, learners with physical disabilities may develop low academic competence if they experience poor teacher support, inaccessible classrooms, a lack of assistive devices or exclusion from learning activities. Therefore, academic competence helps explain how self-belief influences academic motivation and performance.

### **2.2.3 .1.3. Social acceptance and peer relationships**

Social acceptance refers to the extent to which learners feel accepted, valued and included by their peers. Peer relationships are important because adolescence is a stage where belonging and social approval become highly significant. In Harter's framework, learners' perceptions of peer acceptance contribute to their social self-concept and overall self-worth (Harter, 2012). This concept is relevant to learners with physical disabilities because peer acceptance can strongly influence self-esteem, confidence and school engagement. Recent research on inclusive schools shows that social participation among learners with special needs involves joint activities, social behaviour, peer relationships and social self-perception, and that these learners may experience weak social participation and negative peer relationships when support is inadequate (Wang et al., 2025). Therefore, social acceptance and peer relationships are important for understanding the link between social self-concept and academic performance.

### **2.2.3.1.4 Physical appearance and physical self-concept**

Physical appearance is another important domain in Harter's SPPA. It refers to how adolescents evaluate their physical appearance and body-related self-perceptions (Harter, 2012). For learners with physical disabilities, physical self-concept may be influenced by bodily difference, disability visibility, assistive devices and societal attitudes towards disability. This concept is relevant because physical disability may affect how learners see themselves and how they believe others see them. Research has shown that children and adolescents with disabilities frequently experience stigma, social exclusion and negative peer

attitudes, which can affect their self-esteem, body image and participation in school activities (Oliveira et al., 2021; Magwa & Ngara, 2023). These experiences may influence how learners with physical disabilities understand their bodies, abilities and social value. However, supportive and inclusive school environments can help learners develop confidence, self-acceptance and a stronger sense of identity (Rugoho & Maphosa, 2017).

#### **2.2.3.1.5 Behavioural conduct**

Behavioural conduct refers to how learners evaluate their behaviour, discipline and ability to meet expected social or school standards. In Harter's model, this domain contributes to overall self-worth because adolescents often judge themselves according to whether they behave appropriately and meet social expectations (Harter, 2012). This concept is relevant because learners with physical disabilities may sometimes be misunderstood by teachers or peers. Limited participation may be wrongly interpreted as a lack of interest or poor behaviour, when it may actually result from physical barriers, inaccessible classrooms or lack of support. Studies on inclusive education indicate that school environments can either empower or marginalise learners depending on the level of support, accessibility and acceptance provided by teachers and peers (Florian, 2021; Schwab et al., 2022). Therefore, behavioural conduct helps the study examine how school expectations, teacher interpretations and classroom treatment may influence learners' self-concept.

#### **2.2.3.1.6 Global self-worth and self-esteem**

Global self-worth refers to the overall value and respect that learners have for themselves. In Harter's SPPA, global self-worth is shaped by experiences across different domains, including academic competence, social acceptance, physical appearance and behavioural conduct (Marsh et al., 2018; Brummelman & Sedikides, 2020). It is closely related to self-esteem because both concern the learner's general sense of personal value. This concept is relevant because learners with physical disabilities may develop either positive or negative global self-worth depending on their experiences of inclusion, support, discrimination or exclusion. Orth and Robins (2022) argue that self-esteem is linked to important outcomes across life domains, including relationships, work and health. In the school context, this

suggests that learners who feel valued, supported and accepted are more likely to develop stronger confidence and academic engagement (Bücker et al., 2018; Orth & Robins, 2022).

#### **2.2.3.1.7 Perceived competence**

Perceived competence refers to how capable learners believe they are in different areas of life. It is central to Harter's theory because learners' beliefs about their own competence influence motivation, behaviour and participation (Arens et al., 2021; Guay, Marsh, & Boivin, 2019). Perceived competence is not only about actual ability but also about how learners interpret their ability based on feedback, experience and support. This concept is relevant because learners with physical disabilities may perform better academically when they believe they are capable of succeeding. However, their perceived competence may be weakened by limited support, inaccessible learning environments, negative feedback or low expectations from others. Arens et al. (2021) emphasise that academic self-concept is multidimensional and hierarchical, meaning that learners' academic self-beliefs operate at both general and subject-specific levels. Therefore, perceived competence helps the study understand how learners' beliefs about their abilities affect academic confidence, participation and performance.

#### **2.2.3.1.8 Social feedback and social support**

Social feedback refers to the messages learners receive from others about their abilities, behaviour and value. Social support refers to the encouragement, assistance and acceptance learners receive from teachers, peers, family and the wider school community. Research shows that self-concept develops through interactions with significant others and through the feedback learners receive within their social environments (King et al., 2021; Oberle et al., 2019). This concept is relevant because learners with physical disabilities often develop self-concept through the way others respond to them. Positive teacher encouragement, peer acceptance, family involvement and inclusive school practices can strengthen self-concept. However, negative feedback, discrimination, exclusion and low expectations can weaken self-confidence and motivation. Recent studies on inclusive education indicate that supportive school climates, positive peer relationships and accessible learning environments are important predictors of participation, belonging and academic success among learners with disabilities (Schwab, Sharma, & Hoffmann, 2019; Koster et al., 2022). Therefore, social feedback and support are

important for understanding how the school community influences learners' academic and social development.

Harter's theory predicts that learners who perceive themselves positively across multiple domains, including scholastic competence, social acceptance, physical appearance, behavioural conduct, perceived competence, and global self-worth, are more likely to demonstrate higher levels of motivation, engagement, and academic achievement (Harter, 2017; Marsh et al., 2017). Conversely, negative perceptions in these domains may contribute to poor self-esteem, social withdrawal, low participation, and lower academic performance (King et al., 2019; Schwab, 2018).

The theory has been widely applied in educational psychology to investigate adolescent self-concept and its relationship with academic achievement, social adjustment, and psychosocial development. Previous studies have found that positive academic self-concept, social acceptance, and global self-worth are significant predictors of academic success and school engagement among adolescents, including learners with disabilities (Shogren et al., 2017; Lindsay et al., 2018; Orth & Robins, 2022).

The use of Rogers', Allport's, and Harter's theories is justified because each theory explains a different but complementary aspect of self-concept. Rogers' theory explains how self-concept develops through interpersonal relationships, acceptance, empathy, and positive regard. Allport's theory explains how self-concept is integrated into identity formation, personality development, and self-understanding. Harter's theory explains how self-concept operates across specific domains such as academic competence, social acceptance, physical self-concept, and global self-worth.

Collectively, the three theories provide a comprehensive framework for understanding the multidimensional nature of self-concept and its influence on academic performance among learners with physical disabilities. Rogers explains the development of self-concept, Allport explains the formation of identity and self-understanding, while Harter explains the specific domains through which self-concept affects educational outcomes. Together, the theories predict that positive self-concept will contribute to improved academic performance, whereas negative self-concept will be associated with reduced academic achievement, participation, and engagement among learners with physical disabilities

#### **2.2.4. Summary**

In conclusion, the three theories collectively provide a strong and coherent theoretical foundation for understanding the self-concept of learners with physical disabilities within inclusive education settings. Rogers' theory explains how acceptance, empathy, and supportive relationships foster self-worth and emotional adjustment, thereby shaping learners' confidence and engagement in learning. Allport's perspective contributes by showing how personality traits, self-identity, and individual uniqueness influence how learners respond to disability-related challenges and construct a stable sense of self. Harter's theory further strengthens this framework by demonstrating how learners evaluate themselves across academic, social, and physical domains, which directly affects confidence and academic performance.

Taken together, these theories highlight that self-concept is not developed in isolation but is shaped through continuous interaction between the learner and the school environment. Negative experiences such as stigma, discrimination, bullying, and low expectations may weaken self-concept among learners with physical disabilities, while supportive, inclusive, and affirming educational environments may strengthen resilience, self-worth, and academic engagement. Although the multidimensional nature of self-concept is widely acknowledged, some scholars argue that its academic, social, and physical dimensions are deeply interconnected and cannot be fully separated from broader institutional and societal conditions. This suggests that self-concept should be understood as a dynamic and interacting factor within wider educational and social systems rather than as an isolated determinant of academic performance.

Despite these debates, the theoretical framework remains valid and appropriate for this study, as it provides a robust lens for analysing how self-concept influences academic performance among secondary school learners with physical disabilities in inclusive education contexts

## **CHAPTER 3**

### **LITERATURE REVIEW**

#### **3.1. Introduction**

This chapter reviewed the literature on the social, psychological, physical and academic self-concept and the performance of learners with physical disabilities.

Despite heightened international efforts to bring more attention to disability and self-concept development, the most vulnerable children, the physically disabled learners, are still the most invisible. If the developing nations turn a deaf ear to the plight of physically disabled learners, this will perpetuate the cycle of negative self-concept development and poor academic performance. Several authorities and research studies were consulted to explore the impact of self-concept on the academic performance of disabled learners in Zimbabwe and the world over, thus establishing the relationship between negative self-concept and academic performance among physically disabled learners

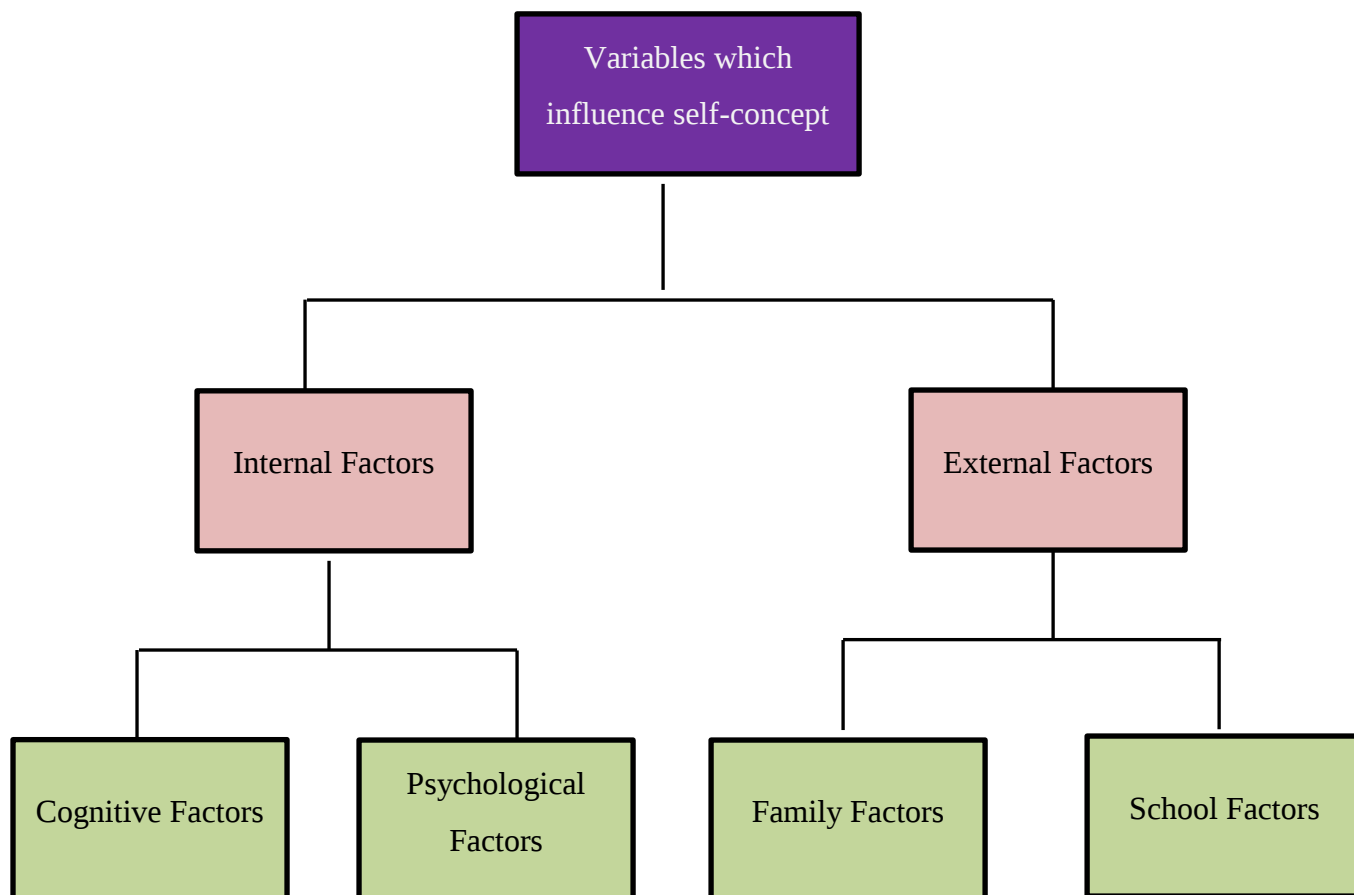
The number of physically disabled learners possessing negative self-concept in Zimbabwe and indeed, the world over, is continually increasing and has become a growing issue. Negative self-concept affects physically disabled learners' academic performance across multiple contexts, including the family, peers, culture and school (Shavelson et al., 2021), and has more detrimental effects on socio-emotional wellbeing, cognitive functioning, and academic achievement (Skaalvik & Skaalvik, 2018; Branje et al., 2021). Negative self-concept directly and indirectly creates multiple barriers to learning and is associated with a range of social, emotional, and psychological challenges that hinder educational participation and inclusion (Valenzuela et al., 2020; McAdams & Guo, 2021). The result is the reinforcement of poor educational conditions, which generate further barriers to learning and widen inequalities in access and achievement (Marsh, 2016). Self-concept is thus detrimental to the holistic development of physically disabled learners, with its impact being most strongly felt in developing contexts, and Zimbabwe is no exception. The researcher will elaborate on the study's variables in more detail, focusing on how learners with physical disabilities perceive their own academic performance. These specifics will be communicated, emphasising any

prospective relationships between psychosocial factors. According to research, a variety of variables, like interactions between peer relationships, parent-child ties, parenting styles, societal anxiety, perceived social support, and customised strategies for coping, can all have an impact on a learner's self-concept.

This study examines the interrelationship amongst several self-concept theories, including Carl Rogers' theory of self-concept development, Allport's ideas on self-concept, and Harter's self-perception profiling in learners with physical disabilities (Broc, 2014). As stated by McLeod (2023), Rogers' theory of self-concept development investigates a wide range of contextual and external variables which impact the formation of psychological, social, physical, and academic self-concepts in physically disabled learners in relation to academic achievement. There is now a growing body of research on the self-perceptions of research with disabilities.

Nonetheless, limited research has examined the psychological, social, academic, and physical self-concept of learners with physical disabilities (Skura, 2019). This gap in the literature is particularly noteworthy given that physical disabilities constitute a substantial proportion of childhood disabilities. Datta and Talukdar (2016) estimated that 59.8% of children with disabilities in Canada have a physical disability, representing approximately 3.2% of the overall child population. Understanding the self-concept of these learners is essential because self-concept significantly influences how individuals perceive themselves and interact with the world around them. It shapes their attitudes, behaviours, and communication with others across diverse social and cultural contexts (Martisan et al., 2016).

The factors that influence the psychological, social, academic and physical self-concepts of physically disabled individuals can be broadly categorised as internal (psychological) and external (social) aspects wholly unique to the learners, with particular emphasis on both risky and alleviating variables. As seen in Figure 3.1, the variables that are directly attributable to each unique learner are referred to as internal factors in this study.



**Figure 3.1: Factors which can influence physically disabled learners' self-concept.**

(Adopted from Bheemarasetty Praveena, 2014)

The internal aspects considered in this study include an individual's cognitive/psychological components. The psychological/ cognitive component encompasses self-efficacy, anxiety, self-esteem and coping with stress. It is possible to acquire a better understanding of how intrinsically embedded characteristics influence learners' capacity to construct their self-concept by looking at internal determinants (Jhoselle, 2020). A person's degree of environmental adaptation and mental health are significantly influenced by their capacity to manage stress (Helm, 2022). Among the peculiar and strange ideas about oneself that are explored are the social self-concept, psychological self-concept, and physical self-concept.

Peers, family, school, and cultural/religious beliefs are all considered external factors in this study. Social support plays an important role in shaping one's social self-concept. Robust social support can help learners with physical disabilities overcome obstacles on their own by improving their self-image and self-worth (Vaughn et al, 2004). Numerous investigations have shown that external factors play an important role in shaping how a person's self-concept evolves and grows.

## **3.2 Self-concept Overview**

### **3.2.1. Definition of self-concept**

It is difficult to provide a single, absolute and standardised definition of self-concept rather than defining it in relative terms. Different authors provide different definitions for the concept of self-concept. Self-concept is a widely debated construct within psychology and education, with scholars differing in their explanations of its nature, structure, and development. It is a broad, multifaceted, and multidimensional concept that involves the organised perceptions, beliefs, judgements, and feelings individuals hold about themselves, developed through experiences and interactions within social environments (Marsh et al., 2024; Bong & Skaalvik, 2023). In the World Bank Development Report (2024), self-concept is generally defined as an individual's perception, understanding, and evaluation of themselves, including their abilities, worth, identity, and social value. The report emphasises that self-concept is shaped through social interaction, environmental experiences, and institutional contexts such as family, school, and community.

It further suggests that positive self-concept contributes to confidence, motivation, resilience, and academic achievement, while negative self-concept may hinder personal development and educational participation. Self-concept is therefore a clearly developed and deeply held perception of oneself, shaped by experience and social interaction, which influences how an individual thinks, feels, and behaves (Orth & Robins, 2014). Self-concept is an individual's overall awareness and perception of who they are, formed through their experiences and interactions, and reflected in how they view their abilities, identity, and value. Self-concept encompasses the totality of an individual's perceptions, beliefs, and evaluations about themselves, forming a multidimensional understanding of "who I am." (Grimm, 2012; Connell, 2010:141).

Self-concept is characterised by its multidimensional, dynamic, and structured nature, encompassing self-image, self-esteem, self-identity, the ideal self, and the social self, which together reflect how individuals perceive and define themselves across different life domains (Hogg & Vaughan, 2018; Fiske, 2018). It is dynamic rather than fixed, as it develops and changes over time through ongoing social interaction, feedback, and lived experiences (Hogg & Vaughan, 2018; McAdams, 2019). It is also hierarchical and organised, with a global self-concept shaped by more specific domain-based self-perceptions and beliefs about particular abilities and roles (Hogg & Vaughan, 2018; Fiske, 2018). Furthermore, self-concept is subjective, meaning it is based on personal interpretation rather than objective reality, and it significantly influences behaviour, motivation, and emotional adjustment across the lifespan (McAdams, 2019; Hogg & Vaughan, 2018). Implicit in the above, self-concept therefore indicates the extent to which an individual does without a positive self-concept. In most cases, people with a negative self-concept lack the capability to function effectively in society; hence, they feel marginalised and stigmatised. Although there is consensus that self-concept influences behaviour, motivation, emotional adjustment, and achievement, disagreements remain regarding whether it should be understood primarily as a stable psychological structure, a socially constructed phenomenon, or a dynamic context-dependent process.

Humanistic theorists view self-concept as central to personal identity and psychological adjustment. Rogers defines it as an organised set of perceptions and beliefs about oneself, with individuals striving for congruence between self-perception and experience. Positive self-concept develops through acceptance, empathy, and unconditional positive regard, and remains influential in education and counselling contexts (McInerney, 2020). However, critics argue that Rogers' approach overemphasises individual experience while underestimating broader social and structural influences such as disability, poverty, and discrimination that also shape self-concept (Orth & Robins, 2022).

In contrast to the humanistic view, Shavelson, Hubner, and Stanton describe self-concept as a multidimensional and hierarchical system consisting of global self-concept and domain-specific areas such as academic, social, emotional, and physical self-concepts. This model shows that individuals can hold different self-perceptions across domains, being confident in one area and less confident in another. Contemporary research supports this structure, especially in education, where learners display varying self-concepts across contexts

(Marsh et al., 2019; Arens et al., 2022). However, critics argue that hierarchical models may overstate stability and structure, with sociocultural and postmodern perspectives suggesting that self-concept is more fluid and continuously constructed through interaction, discourse, and context (Bong, 2020).

Debate also exists concerning the extent to which self-concept is socially constructed. Cooley's "looking-glass self" theory and Mead's symbolic interactionist perspective maintain that self-concept emerges through social interaction and individuals' interpretations of how others perceive them (Cooley, 2021; Mead, 2020). These perspectives remain influential in contemporary studies examining the effects of peer relationships, teacher attitudes, family support, and societal labelling on self-perception (Harter, 2019; Owens & Stryker, 2022; Thoits, 2021). Recent studies further demonstrate that learners with disabilities often internalise societal stereotypes, exclusion, and negative attitudes, which may significantly affect self-concept formation (Schutz & Lanehart, 2023). However, critics argue that these theories underemphasise personal agency and resilience, as individuals do not always uniformly internalise negative social evaluations (Orth & Robins, 2022).

Contemporary perspectives conceptualise self-concept as a dynamic, multifaceted, and context-dependent construct rather than a fixed personal attribute. Although Herbert W. Marsh and Rhonda G. Craven (2006) argue that self-concept develops through reciprocal interactions between personal experiences and environmental feedback, more recent research extends this view by demonstrating that self-concept continuously changes across contexts and developmental stages. Longitudinal evidence indicates that self-concept both influences and is influenced by individuals' experiences and achievements over time, highlighting its reciprocal and evolving nature. Furthermore, contemporary neurocognitive research suggests that self-concept is shaped by ongoing processes of social comparison, self-evaluation, and environmental support, reinforcing the idea that it is continuously reconstructed through interactions with changing social contexts.

Recent research in educational and personality psychology shows that self-concept is continuously shaped through ongoing interactions between individuals and their environments, particularly through feedback from peers, teachers, and social contexts (Marsh & Craven, 2016; Orth & Robins, 2022). This position is reinforced by the Reciprocal Effects Model, which proposes that self-concept both influences and is influenced by achievement and social

experiences over time. Recent longitudinal studies support this reciprocal relationship, indicating that positive experiences enhance self-concept while negative experiences weaken it (Seaton et al., 2021; Arens et al., 2022). Nonetheless, some researchers caution that reciprocal models may overemphasise measurable educational outcomes while neglecting broader emotional, cultural, and existential dimensions of self-perception (Bong, 2020).

Further debate surrounds the cultural applicability of dominant self-concept theories. Much of the foundational literature on self-concept originates from Western individualistic contexts that emphasise independence, autonomy, and personal achievement. Contemporary cross-cultural scholars argue that self-concept may be constructed differently in collectivist societies where identity is more closely linked to social relationships, communal values, and cultural expectations (McInerney, 2020). Consequently, some scholars question the universal applicability of Western self-concept models in African and other non-Western educational contexts. Within African settings, self-concept development may be strongly influenced by communal identity, family interconnectedness, and social belonging rather than purely individual evaluation (Nsamenang, 2019). This critique suggests that culturally responsive interpretations of self-concept are necessary to avoid imposing Eurocentric assumptions on diverse populations.

Despite these debates, there is broad scholarly agreement that self-concept is a multidimensional and evolving construct shaped by interactions between personal experiences, social relationships, and environmental conditions. Current literature increasingly recognises that self-concept cannot be understood solely through psychological or structural explanations but requires an integrative perspective acknowledging emotional, social, cultural, and contextual influences. Consequently, self-concept remains a significant concept in educational and psychological research because it influences physically disabled learners' academic performance, behaviour, motivation, resilience, adjustment, and overall wellbeing.

### **3.2 .2. Global overview of self-concept**

Self-concept is widely recognised as a multidimensional psychological construct that develops through continuous interactions between individual characteristics, family relationships, school experiences, peer interactions, and broader social environments (Harter, 2012). It encompasses individuals' perceptions of their abilities, identity, worth, and

competence across academic, social, emotional, and physical domains. Among physically disabled learners, self-concept is strongly influenced by the extent to which they experience acceptance, inclusion, equal participation, and support within their families, schools, and communities. Conversely, experiences of discrimination, inaccessible learning environments, and social exclusion may undermine confidence and contribute to the development of negative self-concept (Shakespeare, 2021; Banks & Polack, 2022; Douma et al., 2022).

Globally, the mental health and well-being of children and adolescents remain important public health concerns because they influence identity formation, educational participation, and psychosocial development. The World Health Organization (WHO, 2022) estimates that approximately one in seven adolescents experiences a mental health condition, while depression and anxiety remain among the leading causes of illness among young people. Similarly, Solmi et al. (2022) argue that many mental health disorders emerge during adolescence, a developmental period during which self-concept is rapidly evolving and highly susceptible to environmental influences. Although these statistics refer to mental health rather than self-concept directly, they demonstrate the psychosocial vulnerabilities that may influence how young people perceive themselves, particularly those with disabilities who frequently encounter additional educational and social barriers.

Educational inequality further compounds these challenges. UNESCO (2023) reports that millions of children worldwide remain out of school, with children living with disabilities consistently being among the least likely to enrol, attend regularly, or complete their education. Likewise, the World Bank (2023) argues that disability intersects with poverty, gender inequality, and weak education systems to deepen educational disadvantage, particularly in low- and middle-income countries. Such barriers reduce opportunities for academic achievement, peer interaction, and meaningful participation, all of which are important contributors to the development of positive self-concept.

Across Sub-Saharan Africa, physically disabled learners continue to experience multiple barriers that influence both educational participation and psychosocial development. Although many African countries have adopted inclusive education policies, implementation remains inconsistent because of inadequate educational resources, inaccessible infrastructure, shortages of trained teachers, limited assistive technologies, and persistent negative societal attitudes towards disability (World Bank, 2023). Collectively, these structural and social

barriers reduce learners' opportunities to participate fully in school life, thereby influencing their perceptions of competence, belonging, and self-worth.

Evidence from several African countries illustrates these challenges. In South Sudan, prolonged conflict, fragile educational systems, widespread poverty, and limited rehabilitation services continue to restrict educational opportunities for physically disabled learners. Banks et al. (2019) and Shakespeare (2018) report that these conditions contribute to social marginalisation, poor school attendance, limited psychosocial support, and diminished academic confidence, thereby undermining the development of positive self-concept.

Similarly, studies conducted in Ethiopia demonstrate that physically disabled learners frequently experience inaccessible school environments, discrimination, inadequate institutional support, and limited participation in classroom activities (Tekola et al., 2020). These barriers weaken learners' sense of belonging and reduce opportunities for meaningful peer interaction, resulting in diminished confidence and impaired identity development. In Kenya, despite policy reforms promoting inclusive education and the introduction of free primary education, physically disabled learners continue to encounter inaccessible learning environments, inadequate assistive resources, and persistent stigma (Mitra, 2023; World Bank, 2023). UNICEF (2023) further reports that some learners experience school admission barriers, segregation into under-resourced units, and limited participation in classroom activities. These experiences weaken learners' academic and social self-concept by reinforcing perceptions of exclusion and reduced capability.

Comparable challenges have been documented in Tanzania, where policy commitments to inclusive education have not always translated into equitable educational experiences. Inadequate infrastructure, shortages of specialised resources, insufficient teacher preparation, and persistent negative societal attitudes continue to limit participation among learners with physical disabilities. Consequently, many learners experience diminished confidence, social isolation, and reduced perceptions of their own abilities, demonstrating the close relationship between educational inclusion and positive self-concept. Overall, evidence from Sub-Saharan Africa consistently demonstrates that disability intersects with poverty, weak policy implementation, and discrimination to sustain educational exclusion (Banks & Polack, 2022; Douma et al., 2022). While Banks and Polack (2022) emphasise the influence of structural barriers such as inaccessible schools and limited institutional support, Shakespeare

(2021) highlights the role of stigma and discriminatory social attitudes in shaping learners' self-perceptions. Together, these perspectives indicate that positive self-concept depends not only on individual characteristics but also on supportive educational and social environments.

The Zimbabwean context reflects many of the broader challenges identified across Africa. Although Zimbabwe has adopted policies promoting inclusive education, implementation remains uneven, particularly within under-resourced schools (Chireshe, 2019; Mpofu & Shumba, 2018). Physically disabled learners continue to experience inaccessible school infrastructure, shortages of specialised learning materials, limited assistive technologies, inadequate teacher preparation, bullying, discrimination, and insufficient institutional support (Ministry of Primary and Secondary Education Zimbabwe, 2021). These barriers restrict meaningful participation in classroom learning, leadership activities, sports, and peer interaction, thereby influencing learners' academic, social, and physical self-concept.

Research further indicates that many physically disabled learners experience reduced confidence, emotional distress, anxiety, and limited classroom participation because of persistent experiences of exclusion and negative peer attitudes (Skaalvik & Skaalvik, 2020; Harter, 2019). For example, Mpofu (2018)) report that some learners avoid classroom participation because of fear of ridicule or exclusion from peer activities. Such experiences weaken learners' sense of belonging and reduce confidence in both academic and social settings.

Physical self-concept is similarly influenced by environmental conditions. Inaccessible classrooms, inadequate sanitation facilities, and the absence of mobility-support infrastructure continue to restrict independent participation among learners with physical disabilities. Research indicates that environmental barriers within schools, including inaccessible buildings and limited assistive support, reduce participation opportunities and negatively influence learners' perceptions of competence, independence, and self-worth (Shakespeare et al., 2017; Anaby et al., 2018). Dependence on peers or teachers for movement around the school environment may reduce learners' sense of autonomy, while exclusion from physical education and sporting activities may reinforce perceptions of physical limitation rather than capability (WHO, 2022; Mpofu, 2018).

Nevertheless, the literature also demonstrates that disability does not inevitably result in negative self-concept. Studies conducted in Zimbabwe indicate that supportive teachers,

accessible infrastructure, differentiated instruction, positive peer relationships, parental involvement, and community acceptance significantly improve learners' confidence, resilience, educational participation, and overall self-perception (Chataika & McKenzie, 2020; Masten & Barnes, 2018; Ungar, 2021; UNESCO, 2023). These findings suggest that the quality of educational and social environments plays a more significant role in shaping self-concept than disability itself.

Within Chitungwiza District, physically disabled learners experience many of the challenges identified nationally. Studies conducted in Zimbabwe indicate that inaccessible school infrastructure, overcrowded classrooms, limited assistive devices, and inadequate implementation of inclusive education continue to restrict meaningful participation in learning and school life (Mpofu & Shumba, 2013). These barriers reduce opportunities for academic achievement, social interaction, and participation in co-curricular activities, thereby influencing learners' confidence and overall self-concept.

Research also shows that stigma, negative peer attitudes, and exclusion from classroom, group, and extracurricular activities weaken learners' sense of belonging and self-worth (Shakespeare, 2018). However, schools that implement inclusive educational practices, including adapted teaching strategies, peer-support programmes, accessible infrastructure, and participation in school clubs, report improved confidence, stronger peer relationships, and more positive self-concept among physically disabled learners (UNESCO, 2023). These findings demonstrate that supportive school environments have the potential to strengthen learners' academic, social, and emotional development.

Literature consistently demonstrates that self-concept among physically disabled learners is shaped by the interaction between personal experiences and educational, family, community, and societal environments. Inclusive educational practices, supportive teachers, positive peer relationships, accessible infrastructure, and family support contribute to the development of positive self-concept, whereas discrimination, inaccessible learning environments, inadequate institutional support, and poverty undermine learners' confidence, sense of belonging, and educational participation.

Although international, regional, and Zimbabwean studies have examined disability, inclusive education, and psychosocial well-being, limited empirical evidence specifically explores the multidimensional self-concept of physically disabled learners attending inclusive

focused on educational access and the implementation of inclusive education rather than examining how psychological, academic, physical, and social environmental experiences collectively shape learners' self-concept. This study therefore seeks to address this gap by examining the self-concept of physically disabled learners attending inclusive secondary schools in Chitungwiza District, thereby contributing context-specific evidence to inform inclusive educational practice, policy development, and learner support programmes in Zimbabwe. Existing Zimbabwean research has largely

### **3.3. A Disability Perspective on Self-concept and Education**

A disability perspective on self-concept recognises that learners' perceptions of themselves are shaped not by impairment alone but by the educational and social environments in which they participate. The social model of disability argues that disability results primarily from environmental, institutional, and attitudinal barriers rather than from the impairment itself (Shakespeare, 2018). Consequently, inaccessible school environments, discrimination, and exclusion from learning opportunities may weaken learners' confidence, sense of belonging, and self-concept, whereas inclusive educational environments promote autonomy, competence, and positive identity development (Harter, 2012; Shakespeare, 2021).

Globally, scholars generally agree that inclusive education is fundamental to promoting positive self-concept among learners with physical disabilities, although they emphasise different factors. Shakespeare (2018) highlights the influence of social and environmental barriers, arguing that exclusion arises primarily from inaccessible environments rather than impairment itself. In contrast, Harter (2012) emphasises that self-concept develops through experiences of acceptance, competence, and meaningful participation within supportive environments. Similarly, Banks and Polack (2022) contend that structural barriers, including inaccessible infrastructure, inadequate assistive technologies, and limited institutional support, restrict learners' participation and negatively affect their academic and social self-concept. Collectively, these perspectives demonstrate that positive self-concept depends largely on the extent to which educational environments promote inclusion and remove barriers to participation.

Within Zimbabwe, learners with physical disabilities continue to experience barriers including inadequate resources, inaccessible infrastructure, limited teacher preparedness, stigma, and weak implementation of inclusive education policies (Mpofu & Sefotho, 2024; Mpofu & Shumba, 2018). These challenges reduce participation in academic and social activities, limiting opportunities to develop confidence, independence, and positive self-perceptions. Although the Education Amendment Act (2020) promotes inclusive education, implementation remains inconsistent, particularly in under-resourced schools (Mpofu, 2024).

Overall, the literature demonstrates that self-concept among learners with physical disabilities is shaped largely by the degree of inclusion within educational environments rather than by disability itself. When schools remove environmental and social barriers through accessible infrastructure, supportive teaching practices, and meaningful participation, learners are more likely to develop positive self-concept, confidence, and educational engagement.

### **3.4. How Self-concept Affects Physically Disabled Learners' Academic Performance**

Self-concept is widely recognised as a significant determinant of the academic performance of learners with physical disabilities because it influences how learners perceive their abilities, respond to academic challenges, interact with others, and engage in learning activities (Marsh & Martin, 2011; Harter, 2012). The four dimensions of self-concept examined in this study—psychological, social, physical, and academic self-concept—may either facilitate or constrain academic achievement by shaping learners' motivation, confidence, participation, and persistence. Examining these dimensions therefore provides a conceptual basis for understanding how self-perceptions influence the educational outcomes of physically disabled learners.

#### **3.4.1. Psychological self-concept**

Psychological self-concept refers to an individual's internalised perception of identity, competence, worth, and emotional functioning, influencing behaviour, relationships, motivation, and developmental outcomes, particularly during adolescence. It is a dynamic and multidimensional construct shaped by interacting psychological factors such as self-esteem, self-efficacy, stress, anxiety, trauma, and mental health (Mohamed et al., 2022; Halbreich, 2021). Within educational contexts, psychological self-concept provides an important

explanation of academic performance because learners' responses to academic tasks are influenced not only by their actual abilities but also by their beliefs about their competence and capacity to succeed.

Psychological self-concept affects academic performance through its influence on motivation, cognitive engagement, persistence, and responses to academic challenges. Learners with positive self-beliefs are more likely to demonstrate confidence, establish academic goals, persist when difficulties arise, and actively engage with learning activities. In contrast, learners with negative self-concept may experience reduced motivation, avoidance behaviours, anxiety, and limited classroom participation. Therefore, psychological self-concept operates as a mechanism through which educational experiences influence academic outcomes. In particular, self-efficacy influences learners' willingness to attempt challenging tasks, apply learning strategies, and sustain effort, whereas self-esteem influences participation, confidence, and resilience following academic setbacks.

The relationship between psychological self-concept and academic functioning is further explained through theoretical perspectives. Rogers' self-concept theory suggests that psychological wellbeing depends on congruence between an individual's perceived self and desired self (Mynott, 2018). Within educational settings, repeated experiences of academic failure, exclusion, or discrimination may create incongruence, weakening learners' sense of competence and self-worth. Conversely, supportive relationships, positive feedback, and acceptance promote self-confidence and academic engagement. Similarly, adolescence represents a critical period for self-concept development because learners become increasingly influenced by peer evaluation, social acceptance, and academic feedback (Karakayali, 2021).

Current international evidence demonstrates that psychological self-concept and academic performance are closely interconnected. Recent empirical research indicates that learners' perceptions of their academic competence significantly influence motivation, persistence, engagement, and achievement outcomes. Wang et al. (2023) found that positive academic self-beliefs are associated with stronger learning engagement, greater academic resilience, and improved educational outcomes, whereas negative self-perceptions contribute to avoidance behaviours and reduced motivation. Similarly, longitudinal evidence from contemporary educational research shows that self-concept and academic achievement operate through a reciprocal process, where successful academic experiences reinforce positive self-

beliefs, while stronger self-beliefs encourage sustained effort and improved performance (Pinxten et al., 2024). These findings support the view that psychological self-concept influences academic performance not simply through learners' abilities, but through psychological mechanisms involving confidence, goal orientation, persistence, and responses to academic challenges.

More recent empirical evidence continues to support this relationship, showing that learners with stronger academic self-concepts are more likely to demonstrate adaptive learning behaviours, resilience, and sustained participation, whereas negative self-perceptions are associated with avoidance, reduced motivation, and poorer academic outcomes (Wang et al., 2023). Therefore, psychological self-concept influences academic performance not through ability alone, but through mechanisms involving motivation, persistence, classroom participation, emotional regulation, and responses to academic challenges.

Among physically disabled learners, the relationship between self-concept and academic performance may be more complex because psychological processes are shaped by educational and social experiences. Repeated exposure to exclusion, limited participation opportunities, dependence on others, or negative expectations may weaken learners' academic confidence and reinforce perceptions of inability. Consequently, physically disabled learners may experience reduced engagement with academic tasks, lower persistence during challenging activities, and diminished educational aspirations. Thus, psychological self-concept functions not only as an individual psychological characteristic but also as a mediating mechanism through which disability-related experiences influence academic achievement.

However, contemporary scholarship recognises that self-concept does not develop independently of social and educational environments. Teacher support, school climate, accessibility of learning environments, and availability of educational resources significantly influence how learners perceive their abilities and academic potential (Wang et al., 2023). Within disadvantaged contexts, poverty, exclusion, discrimination, and limited educational support may weaken learners' perceptions of competence and belonging (Buchmann et al., 2022; Heiman & Olenik-Shemesh, 2023). For learners with physical disabilities, these challenges are intensified by inaccessible infrastructure, inadequate assistive technologies, limited psychosocial support, and negative societal attitudes.

Banks and Polack (2022) argue that disability-related disadvantage is frequently produced by environmental and social barriers rather than impairment itself. This perspective challenges purely individual explanations of negative self-concept by demonstrating that learners' perceptions of themselves develop through continuous interaction between personal experiences and their surrounding environments. A critical debate therefore exists between psychological and disability perspectives. Psychological approaches emphasise internal factors such as self-esteem, self-efficacy, and emotional regulation as central influences on self-concept development. In contrast, disability scholars argue that self-concept cannot be separated from structural conditions because exclusionary environments, inaccessible systems, and discriminatory practices may generate negative self-perceptions. Therefore, psychological self-concept among physically disabled learners should be understood as the outcome of an interaction between internal psychological processes and external educational experiences.

Across African contexts, learners with physical disabilities frequently encounter educational barriers that influence both psychological self-concept and academic participation. Limited implementation of inclusive education policies, inadequate teacher preparation, insufficient specialist support, poverty, and disability stigma restrict opportunities for meaningful participation in school activities (Mugo et al., 2023; Donohue & Bornman, 2019). These conditions may contribute to reduced confidence, dependency, and negative perceptions of academic competence. Consequently, disability and self-concept are increasingly understood as socially constructed processes, where inclusive environments can strengthen identity formation, autonomy, psychological wellbeing, and academic engagement (Shakespeare, 2021; Banks & Polack, 2022).

In Zimbabwe, particularly in semi-urban settings such as Chitungwiza, learners with physical disabilities continue to experience barriers including inaccessible school infrastructure, limited assistive devices, inadequate teacher preparation, and negative peer attitudes. Recent studies indicate that although Zimbabwe has strengthened its commitment to inclusive education, implementation remains affected by resource limitations, inconsistent support systems, and gaps between policy intentions and school-level practices (Mpofu & Sefotho, 2024; Mangena & Chidakwa, 2024). These challenges may influence academic performance by restricting classroom participation, limiting opportunities for independent learning, weakening academic self-efficacy, and reducing motivation to engage with learning

tasks. However, while existing Zimbabwean research provides important evidence regarding disability inclusion challenges, limited empirical studies have examined the psychological mechanisms through which these barriers influence academic outcomes, particularly the relationship between psychological self-concept, self-efficacy, and academic achievement among physically disabled learners in secondary schools.

This gap is particularly significant in semi-urban districts such as Chitungwiza, where variations in resource availability, school support systems, and implementation of inclusive education practices may shape learners' experiences of competence, belonging, and academic participation. Although national evidence provides insights into disability and educational access in Zimbabwe, limited attention has been given to how psychological factors mediate the relationship between educational experiences and academic performance among physically disabled learners within specific local contexts.

Recent evidence from Southern Africa further illustrates that the relationship between disability, psychological self-concept, and academic performance is shaped by the quality of educational inclusion. In Zimbabwe, research has largely highlighted challenges related to resource constraints, limited specialist support, and inconsistent implementation of inclusive education practices, which restrict learners' opportunities for participation and academic development (Mpofu & Sefotho, 2024; Mangena & Chidakwa, 2024). In contrast, South African studies demonstrate that even within a stronger legislative framework for inclusive education, a persistent gap exists between policy expectations and classroom realities. Hove and Phasha (2023) found that inadequate teacher support, limited classroom adaptation, and negative peer experiences continue to affect learners' engagement and sense of belonging. These comparative findings suggest that improving academic outcomes for physically disabled learners requires attention not only to access and policy implementation but also to the psychological processes through which learners develop confidence, motivation, and academic identity.

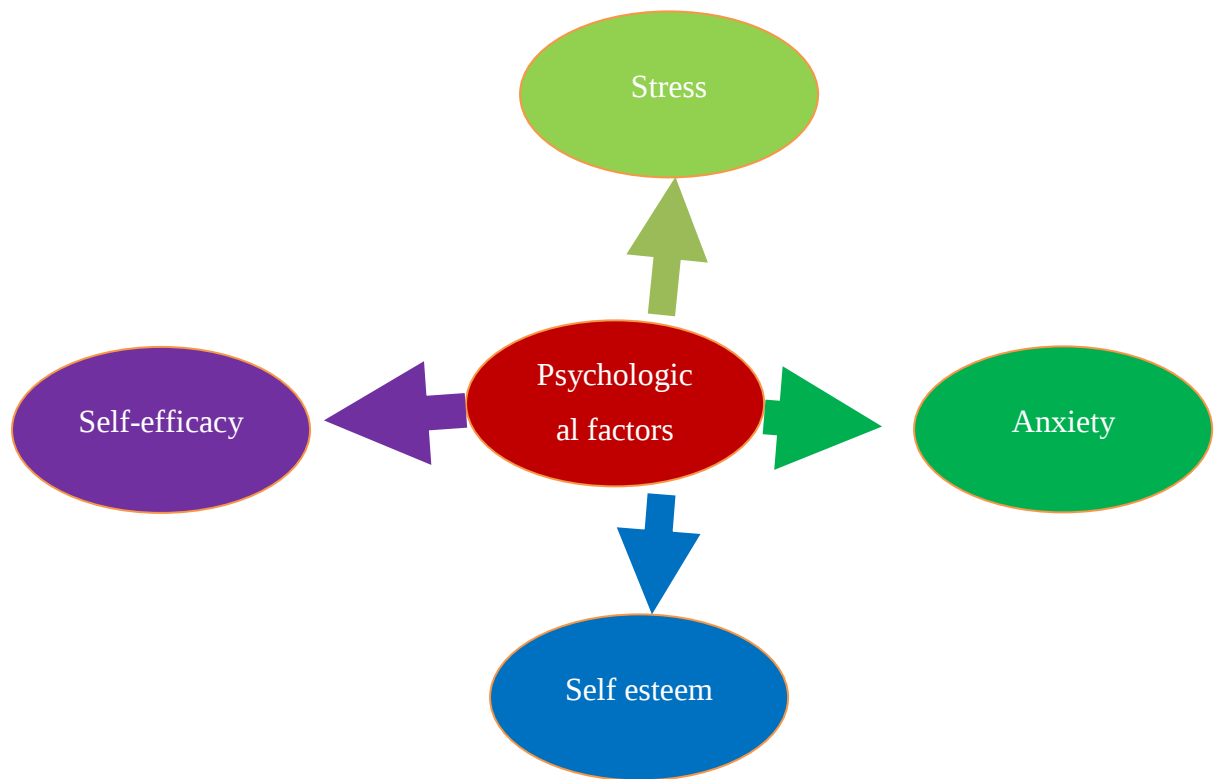
Despite these challenges, psychological self-concept is not fixed and can be strengthened through supportive educational experiences. Inclusive teaching practices, accessible environments, positive teacher-learner relationships, peer acceptance, and opportunities for meaningful participation can enhance confidence, autonomy, and academic engagement among learners with disabilities (Chataika & McKenzie, 2020). Schools therefore

play a critical role in either reinforcing negative self-perceptions or creating conditions that promote positive psychological development and improved academic outcomes.

Psychological self-concept is also closely associated with mental health outcomes among learners with physical disabilities. Experiences of stigma, loneliness, limited social support, and exclusion increase vulnerability to anxiety, depression, and emotional distress, which may negatively affect concentration, persistence, and academic engagement (Solmi et al., 2022).

Affective factors play a critical role in shaping psychological self-concept because learners' emotional experiences influence how they perceive their competence, worth, and ability to succeed. Among physically disabled learners, experiences of stress, anxiety, stigma, limited social support, and exclusion may weaken self-concept, whereas positive psychosocial experiences enhance confidence, resilience, and academic engagement. Conversely, positive self-esteem and self-efficacy strengthen learners' ability to cope with academic challenges, regulate emotions, and maintain motivation towards educational goals. Therefore, psychological self-concept represents a central mechanism linking learners' beliefs, emotional experiences, educational environments, and academic outcomes. The literature demonstrates that self-concept influences academic performance through interconnected pathways involving stress, anxiety, self-efficacy, self-esteem, motivation, persistence, and psychosocial wellbeing. The relationship between psychological self-concept, its psychological components, and academic performance is summarised in Figure 3.2 below.

### 3.5. The influence of affective factors on psychological self-concept



**Figure 3.2: Factors affecting psychological self-concept**

Central to this process is building a solid psychological self-concept, which is essential, since resilient people who have positive self-perceptions are less likely to experience anxiety or despair. Therefore, to address the interconnectedness between psychological self-concept and mental well-being in this marginalised community, inclusive interventions must incorporate identity development with mental health assistance. The influence of affective factors on psychological self-concept is profound, particularly for learners with physical disabilities. Emotions such as stress, anxiety, and self-esteem shape how individuals perceive themselves and their capabilities.

High levels of emotional distress can distort self-perception, leading to low confidence and poor mental health. In contrast, positive emotional experiences can foster resilience, motivation, and a stronger sense of self. For disabled learners, these affective factors often arise

from social stigma, discrimination, or environmental stressors. Understanding their impact is essential for supporting healthy self-concept development.

### **3.5.1. The psychological self-concept, stress and anxiety**

The extent to which psychological self-concept influences academic performance remains a contested and methodologically complex issue within contemporary educational and psychological research. While a substantial body of literature supports the view that learners' perceptions of their competence significantly shape academic outcomes, other scholars caution against treating psychological self-concept as a direct or universal causal determinant. Instead, it is increasingly conceptualised as part of a broader, reciprocal system of psychological and educational influences that interact over time rather than operating in isolation.

Psychological self-concept, understood as learners' beliefs, evaluations, and perceptions of their identity and capabilities, is closely associated with academic functioning, particularly through its interaction with emotional and cognitive variables. Current evidence indicates that factors such as stress and anxiety are strongly implicated in shaping how learners interpret academic demands and evaluate their own competence (American Psychological Association, 2022). However, scholarly debate persists regarding whether these variables exert their influence primarily by weakening psychological self-concept or whether they function as independent predictors of academic performance.

On one hand, several researchers argue that elevated stress and anxiety contribute to the development of a negative psychological self-concept, which in turn undermines academic performance by reducing concentration, confidence, and sustained engagement in learning tasks (Zhu et al., 2016). Within this interpretation, learners who internalise feelings of inadequacy or fear of failure are more likely to disengage academically and demonstrate lower achievement outcomes. This position aligns with self-concept theory, which emphasises the role of self-perception in regulating behaviour and motivation.

Stress and anxiety are important affective factors influencing psychological self-concept because they shape learners' perceptions of competence, personal worth, and ability to manage academic demands. Psychological self-concept develops through continuous interaction between emotional experiences, social relationships, and educational environments. Recent psychological research indicates that persistent emotional distress during adolescence

can negatively influence self-perceptions by reducing feelings of competence, control, and belonging, which are important foundations for academic engagement and achievement (WHO, 2022; Li et al., 2022; Wang et al., 2023). Among physically disabled learners, these experiences may be intensified by stigma, exclusion, limited social support, and educational barriers, increasing vulnerability to psychological distress and reduced participation in learning activities (Arslan et al., 2021).

Chronic stress and anxiety influence academic performance through their effects on concentration, emotional regulation, persistence, and participation in learning activities. Learners experiencing prolonged psychological distress may develop fear of failure, reduced academic confidence, and avoidance of challenging tasks, which can weaken engagement and achievement. Recent empirical studies demonstrate that anxiety symptoms and sustained stress are associated with poorer academic functioning because they interfere with cognitive processes, motivation, and adaptive learning behaviours (Pascoe et al., 2020; Solmi et al., 2022; Wang et al., 2023). For physically disabled learners, these effects may be amplified because repeated experiences of exclusion, dependency, or limited participation may influence how learners evaluate their own academic abilities and future possibilities.

The relationship between stress, anxiety, psychological self-concept, and academic performance is complex and multidirectional. Some scholars argue that stress and anxiety directly influence academic outcomes by disrupting attention, memory, emotional regulation, and learning behaviours, whereas others suggest that their effects occur indirectly through changes in learners' perceptions of competence and belonging (American Psychological Association, 2023). This suggests that psychological self-concept may operate as an important mechanism linking emotional experiences with academic outcomes. Learners who develop positive perceptions of themselves are more likely to engage with academic challenges, whereas persistent emotional distress may contribute to negative self-perceptions that reduce motivation, participation, and academic persistence.

For physically disabled learners, stress and anxiety are closely connected to broader social and educational experiences. Barriers such as inaccessible learning environments, negative peer attitudes, discrimination, and inadequate support systems may create continuous psychological pressure that affects learners' identity development and academic confidence. Contemporary disability scholarship emphasises that psychological difficulties among disabled

learners are not solely consequences of impairment but are often produced through interaction with disabling social and educational environments (Shakespeare, 2021; Banks & Polack, 2022). Therefore, understanding stress and anxiety among physically disabled learners requires consideration of both internal psychological processes and external conditions that influence inclusion and participation.

The relationship between emotional experiences and psychological self-concept is further explained through humanistic and developmental perspectives. Rogers' self-concept theory proposes that psychological wellbeing depends on congruence between individuals' experiences and their perceptions of themselves. Experiences of rejection, failure, or discrimination may create incongruence, weakening confidence and academic identity. Similarly, Harter's developmental perspective highlights that adolescents construct self-concept through social feedback, perceived competence, and evaluation from significant others, meaning that negative educational experiences may influence learners' perceptions of their academic capabilities (Harter, 2012; Christner et al., 2020). These theoretical perspectives demonstrate that emotional experiences do not only affect psychological wellbeing but also influence academic behaviours and achievement outcomes.

Although international and African research has examined disability-related stress, mental health challenges, and educational barriers, limited empirical evidence has investigated how stress and anxiety influence academic performance through psychological self-concept among physically disabled learners in Zimbabwean secondary schools. Existing Zimbabwean research has largely focused on inclusive education implementation, accessibility challenges, and participation barriers rather than the psychological mechanisms linking emotional experiences with academic achievement (Mpofu & Sefotho, 2024; Mangena & Chidakwa, 2024). This gap is particularly significant in semi-urban contexts such as Chitungwiza, where variations in school support, accessibility, and inclusion practices may influence learners' psychological self-concept and academic outcomes.

### **3.5.2. The psychological self-concept and self-esteem**

The manner in which psychological self-concept affects academic performance remains a subject of considerable debate within educational psychology. While many scholars argue that learners' perceptions of themselves influence their academic engagement and

achievement, others question whether positive self-perceptions are the cause of academic success or merely a consequence of it. This debate is particularly evident in discussions of self-esteem, which is often viewed as a key component of psychological self-concept. Self-esteem refers to an individual's overall evaluation of their worth and value, whereas psychological self-concept encompasses the broader system of beliefs individuals hold about their identity, abilities, competencies, and social roles (Orth & Robins, 2022). Although these constructs are conceptually distinct, scholars generally agree that they interact in ways that may shape academic experiences, motivation, and educational outcomes.

Self-esteem is generally defined as an individual's overall evaluative judgment of their own worth or value, reflecting the extent to which they perceive themselves positively or negatively (Orth & Robins, 2022; Rosenberg, 2015). In contrast, psychological self-concept refers to the broader cognitive framework through which individuals organise beliefs, perceptions, and understandings about who they are, including their identity, abilities, attributes, and social roles. While self-esteem focuses primarily on the evaluation of personal worth, psychological self-concept encompasses a wider system of self-beliefs that influences how individuals interpret experiences, evaluate competence, and respond to social and educational environments. However, scholars disagree on the relationship between these constructs. Marsh et al. (2019) suggest that global self-esteem provides an important foundation for the development of more specific self-concepts, whereas other scholars argue that self-esteem and psychological self-concept should be treated as related but distinct constructs. Consequently, the relationship between self-esteem and psychological self-concept remains theoretically contested, reflecting broader disagreements regarding the structure and organisation of the self.

One prominent argument is that psychological self-concept affects academic performance by influencing how learners perceive their academic capabilities and respond to educational challenges. Marsh et al. (2019) suggest that learners who possess positive self-beliefs are more likely to approach academic tasks with confidence, persistence, and a willingness to engage with difficult work. From this perspective, psychological self-concept functions as an interpretive framework through which academic experiences are understood and evaluated. Learners who perceive themselves as capable may be more inclined to participate actively in learning, persist when faced with obstacles, and interpret setbacks as

opportunities for improvement rather than evidence of inability. In this process, self-esteem plays an important role because learners' evaluations of their own worth influence the confidence with which they approach academic tasks and construct their academic identities.

However, this interpretation is not universally accepted. Harter (2012) argues that positive self-perceptions may emerge from successful academic experiences rather than necessarily preceding them. According to this view, academic achievement contributes to the development of a positive psychological self-concept by reinforcing perceptions of competence, capability, and personal worth. Consequently, psychological self-concept and self-esteem may develop through continuous interactions between academic experiences and personal interpretations of competence rather than through a single direction of influence.

A more integrated perspective is offered by Orth and Robins (2022), who propose that psychological self-concept and academic performance may influence one another reciprocally over time. Positive self-perceptions may encourage greater academic engagement, persistence, and resilience, which contribute to improved performance. In turn, positive academic outcomes may strengthen learners' perceptions of their competence and worth, reinforcing positive psychological self-concept and self-esteem. Conversely, negative self-perceptions may contribute to reduced participation, avoidance of challenging tasks, and diminished academic confidence, while poor academic outcomes may further reinforce negative self-beliefs. Therefore, psychological self-concept and self-esteem appear to influence academic performance through a dynamic interaction between individual perceptions, academic experiences, and broader social and educational contexts.

The influence of psychological self-concept on academic performance remains a highly contested issue within contemporary educational psychology. Although numerous studies report positive associations between self-perceptions and academic achievement, disagreement remains regarding the nature and direction of this relationship. At the centre of this debate is self-esteem, commonly understood as an individual's overall evaluation of personal worth, which some scholars view as a crucial mechanism through which learners develop psychological self-concept and academic identities (Orth & Robins, 2022). However, the assumption that positive self-evaluations automatically translate into improved academic outcomes has increasingly been questioned because the influence of self-esteem depends on

contextual factors such as social support, educational opportunities, inclusion, and individual experiences.

One perspective suggests that self-esteem shapes psychological self-concept by influencing how learners interpret their abilities, competence, and likelihood of success. From this standpoint, learners with positive self-esteem may develop stronger academic identities, leading to greater motivation, engagement, persistence, and achievement. Recent reviews continue to identify positive associations between academic self-concept and educational outcomes, suggesting that learners' self-perceptions influence motivation and subsequent achievement. However, this interpretation remains contested. Hübner et al. (2023) argue that evidence supporting reciprocal effects between self-concept and achievement requires careful interpretation because methodological assumptions may influence conclusions regarding causality. Their findings suggest that the relationship between psychological self-concept and achievement is more complex than simple cause-and-effect explanations suggest.

The debate between the self-enhancement and skill-development perspectives further demonstrates the complexity of this relationship. Proponents of self-enhancement maintain that positive self-beliefs encourage effort, persistence, and resilience, thereby promoting academic success. Conversely, advocates of skill-development argue that successful academic experiences generate positive self-perceptions rather than the reverse. Although this debate remains unresolved, contemporary research increasingly supports a reciprocal interpretation. Rather than viewing self-esteem and psychological self-concept as isolated causes or consequences of achievement, they are better understood as components of a dynamic process in which learners' experiences, perceptions, and educational outcomes continually influence one another (Hübner et al., 2023; Orth & Robins, 2022).

For learners with physical disabilities, this relationship must be understood within the context of disability-related experiences. Disability-related barriers, including stigma, discrimination, social exclusion, inaccessible learning environments, bullying, and limited educational support, may negatively influence learners' perceptions of their own worth, competence, and academic potential. These experiences may weaken self-esteem by creating feelings of inadequacy and reduced belonging, which subsequently affect psychological self-concept. When learners develop negative beliefs about their abilities, they may become less

willing to participate, persist with challenging academic tasks, or engage fully in learning activities.

Conversely, supportive and inclusive educational environments may strengthen self-esteem and psychological self-concept by promoting acceptance, belonging, competence, and academic confidence. This interpretation challenges deterministic assumptions that low self-esteem inevitably leads to poor academic achievement. Instead, the academic consequences of psychological self-concept are mediated by contextual factors such as educational support, peer relationships, inclusion, and opportunities for success. Consequently, contemporary scholarship increasingly portrays the relationship between psychological self-concept, self-esteem, and academic performance as reciprocal, dynamic, and socially situated rather than as a simple linear process (Wang & Yu, 2023; Hübner et al., 2023).

Recent disability-focused empirical research further demonstrates that psychological wellbeing, belonging, and positive self-perceptions are important factors influencing educational participation among learners with disabilities. Studies conducted between 2022 and 2025 indicate that learners with disabilities who experience stronger social support, inclusive practices, and positive school belonging tend to report higher psychological wellbeing, stronger academic confidence, improved self-esteem, and greater engagement in learning. Conversely, exclusionary experiences are associated with reduced self-esteem, poorer psychological adjustment, weakened self-concept, and lower academic participation. Within Southern African contexts, emerging research similarly highlights that disability-related educational barriers remain significant predictors of learners' psychosocial experiences and educational outcomes. However, empirical evidence directly examining the relationship between self-esteem, psychological self-concept, and academic performance among physically disabled secondary learners remains limited, particularly within Zimbabwean school settings. This limitation highlights the need for context-specific research examining how psychological self-concept functions as a mechanism linking disability experiences with academic achievement.

Within this broader debate, self-esteem remains an important mechanism through which psychological self-concept influences academic behaviour. Orth and Robins (2022) argue that self-esteem is associated with a range of positive developmental outcomes; however, commentators such as Krueger, Baumeister, and Vohs caution that the benefits of high self-

esteem may be less evident when objective performance indicators are examined. This highlights that self-esteem should not be viewed as an isolated predictor of academic success but as part of a wider psychological process involving competence beliefs, motivation, persistence, resilience, and educational experiences.

Overall, psychological self-concept and self-esteem influence academic performance through a complex reciprocal process shaped by individual perceptions, disability-related experiences, educational environments, and social relationships. For physically disabled learners, understanding this relationship requires recognition of how disability experiences influence feelings of worth, competence, belonging, and academic confidence. Therefore, psychological self-concept should be understood as a dynamic construct that develops through interactions between learners and their environments rather than as a fixed personal characteristic.

### **3.5.3. Psychological self-concept and self-efficacy**

Psychological self-concept affects academic performance, although the nature of this influence remains widely contested rather than conclusively established. Psychological self-concept refers to the cognitive framework through which learners organise and interpret beliefs about their identity, abilities, and academic competence, while self-efficacy denotes more specific judgments about one's capability to successfully execute particular academic tasks. Within this broader structure, learners form perceptions about whether they are capable, competent, and able to meet academic demands. Some scholars argue that these self-beliefs shape academic behaviour by influencing task engagement, effort regulation, persistence, and responses to academic challenges (Honicke & Broadbent, 2016; Talsma et al., 2018). However, other researchers caution that observed effects may be indirect or influenced by previous academic achievement rather than self-belief functioning as an independent causal factor (Hübner et al., 2023).

Psychological self-concept and self-efficacy are interdependent constructs that shape human functioning. Self-concept represents an individual's general beliefs about personal worth, abilities, and social identity, whereas self-efficacy refers to confidence in performing specific activities. Although conceptually different, these constructs influence one another: a positive psychological self-concept can strengthen self-efficacy beliefs, while repeated mastery

experiences reinforce self-concept by confirming perceptions of competence (Huang, 2013). Together, these dimensions influence motivation, emotional resilience, self-regulation, and academic accomplishment because self-efficacy shapes expectations regarding effort, persistence, and behavioural outcomes (Jonsson et al., 2017).

For learners with disabilities, self-efficacy may be particularly important because disability-related experiences can influence how learners evaluate their competence and academic potential. Empirical evidence indicates that learners with disabilities often report lower self-efficacy compared with their non-disabled peers, partly due to experiences of exclusion, limited participation opportunities, negative expectations, and reduced access to supportive learning environments (Shim, 2018). Bandura argues that self-efficacy beliefs represent individuals' judgments about their ability to organise and execute actions required to achieve desired outcomes, making them important predictors of task engagement and performance (Bandura, 2018). Consequently, physically disabled learners who develop stronger self-efficacy beliefs are more likely to regulate their learning, persist through challenges, and maintain academic motivation.

Low self-efficacy may influence learners with disabilities when it develops alongside negative psychological self-concepts. Such perceptions may contribute to anxiety, reduced confidence, avoidance of challenging tasks, and weakened academic engagement (Shim, 2018). Because physically disabled learners may encounter additional barriers within educational environments, strengthening self-efficacy and psychological self-concept is essential for supporting self-regulation and autonomous functioning (Jonsson et al., 2017). High self-efficacy encourages confidence in task completion, whereas low self-efficacy is associated with expectations of failure and reduced willingness to engage with academic demands (Shim, 2018). Academic self-efficacy therefore represents an important mechanism through which psychological self-concept influences educational participation and performance among learners with disabilities.

From a self-enhancement perspective, psychological self-concept is considered a meaningful contributor to academic performance because learners who hold positive beliefs about their abilities are more likely to develop stronger self-efficacy, which enhances confidence to engage in academic tasks, sustain effort, and persist when confronted with difficulties. In this interpretation, self-efficacy functions as the mechanism through which

broader psychological self-concept is translated into academic behaviour and performance outcomes (Bandura, 2018; Talsma et al., 2018).

Psychological self-concept influences academic performance through its relationship with self-efficacy, particularly among learners with physical disabilities. When learners perceive themselves as capable and competent, this strengthens self-efficacy beliefs, increasing their willingness to engage in academic tasks, apply effective learning strategies, and persist despite challenges (Honicke & Broadbent, 2016; Talsma et al., 2018). However, among physically disabled learners, these processes are shaped not only by individual ability but also by contextual factors such as accessibility of learning environments, teacher expectations, social support, and experiences of inclusion or exclusion. Supportive educational environments provide opportunities for mastery experiences, which strengthen self-efficacy and psychological self-concept (Bandura, 2018; Klassen & Usher, 2021). Conversely, barriers such as stigma, discrimination, inaccessible facilities, and low expectations may weaken confidence and reinforce negative perceptions of competence.

Recent disability-focused research further demonstrates the importance of inclusion, belonging, and social support in developing positive self-beliefs among learners with disabilities. Studies between 2022 and 2025 indicate that learners with disabilities who experience supportive relationships, inclusive educational practices, and a sense of belonging are more likely to demonstrate stronger psychological wellbeing, academic confidence, and engagement. Conversely, exclusionary experiences are associated with poorer psychological adjustment, reduced self-efficacy, and weaker participation in educational activities.

Research within Southern African contexts similarly highlights that disability-related barriers, limited resources, and inadequate inclusion practices continue to influence learners' psychosocial experiences and educational opportunities. For example, studies examining inclusive education implementation in Southern Africa emphasise that teacher support, school belonging, and accessible learning environments are important conditions for strengthening learner confidence and participation (Donohue & Bornman, 2022; Mafa & Makuba, 2023). However, empirical research specifically examining the relationship between psychological self-concept, self-efficacy, and academic performance among physically disabled secondary learners remains limited, particularly within Zimbabwean school settings.

The development of strong self-efficacy among learners with physical disabilities is therefore critical for strengthening psychological self-concept and promoting academic achievement. Communities and educational environments that balance academic challenges with appropriate support can facilitate autonomy, self-regulation, and positive identity development. Ultimately, cultivating self-belief enables learners to negotiate disability-related barriers and participate more effectively in academic activities.

Overall, psychological self-concept and self-efficacy influence academic performance through a dynamic process involving individual beliefs, disability-related experiences, and educational environments. For physically disabled learners, these relationships are shaped by how disability experiences influence perceptions of competence, belonging, and academic capability. Psychological self-concept should therefore be understood as a developing construct that interacts with self-efficacy, motivation, and persistence rather than as a fixed personal characteristic.

#### **3.5.4. Psychological self-concept and mental health**

The relationship between psychological self-concept and academic performance has attracted increasing scholarly attention, with recent studies suggesting that this relationship is often mediated by learners' mental health. Psychological self-concept refers to individuals' perceptions and evaluations of their psychological attributes, including self-confidence, emotional stability, self-worth, and perceived competence (Orth & Robins, 2022). Researchers argue that these self-perceptions influence not only learners' academic behaviours but also their psychological well-being, making mental health an important explanatory mechanism in educational outcomes.

Mental health has been defined in various ways within psychological and educational literature. The World Health Organization (WHO, 2022) conceptualises mental health as a state of well-being in which individuals recognise their abilities, cope effectively with everyday stressors, work productively, and contribute to society. Similarly, Keyes (2002) views mental health as encompassing emotional, psychological, and social well-being rather than merely the absence of mental illness. However, contemporary scholars challenge individualistic perspectives by arguing that mental health is also shaped by broader social, economic, and institutional conditions. Patel et al. (2018) contend that psychological well-being cannot be

separated from contextual factors such as poverty, inequality, discrimination, and access to social support systems. This perspective is particularly relevant when examining learners with physical disabilities, whose psychological experiences are influenced by both impairment-related challenges and exclusionary educational environments.

Empirical studies consistently demonstrate a strong association between psychological self-concept and mental health. Learners with positive psychological self-concept generally report lower levels of anxiety, stress, and depressive symptoms and demonstrate greater emotional resilience and self-regulation (Hübner et al., 2023). In contrast, learners with negative psychological self-concept are more vulnerable to emotional distress, reduced self-efficacy, and poor psychological adjustment (Marraccini & Brier, 2023). Orth and Robins (2022) further argue that positive self-perceptions enhance individuals' capacity to cope with challenges, thereby promoting psychological well-being and reducing vulnerability to mental health difficulties.

Recent literature increasingly suggests that the influence of psychological self-concept on academic performance operates through psychological processes rather than through a direct linear relationship. Mental health represents an important mechanism through which learners' self-perceptions influence educational participation and achievement. Learners who possess positive psychological self-concept are more likely to experience emotional stability, stronger motivation, improved concentration, and greater persistence in academic activities (Suldo et al., 2022). Conversely, poor psychological self-concept may contribute to emotional distress, reduced academic confidence, and lower engagement with learning activities (Orth & Robins, 2022).

The literature also highlights the contextual nature of this relationship. Lavy (2022) and Korpershoek et al. (2023) argue that school climate, teacher support, peer acceptance, and access to psychosocial services influence the extent to which psychological self-concept affects mental health and educational outcomes. Supportive educational environments strengthen positive self-perceptions and resilience, whereas experiences of stigma, exclusion, and discrimination may undermine psychological well-being and academic participation. Therefore, the relationship between psychological self-concept, mental health, and academic performance must be understood within the social and institutional environments in which learners develop.

Among learners with physical disabilities, the interaction between psychological self-concept, mental health, and academic performance is particularly significant. Disability-focused research indicates that learners with disabilities are at increased risk of psychological distress due to experiences of stigma, social exclusion, limited participation opportunities, and negative perceptions of disability. Recent studies have shown that disability-related exclusion and lack of belonging are associated with poorer psychological well-being, reduced confidence, and weaker educational engagement, whereas inclusive school environments and supportive relationships promote resilience and positive self-perceptions among learners with disabilities (Miyahara & Poudel-Tandukar, 2022; Cologon, 2023).

Within Southern African contexts, empirical research similarly demonstrates that disability experiences are strongly influenced by educational accessibility, teacher attitudes, availability of support services, and school inclusion practices. Studies on inclusive education in South Africa and neighbouring contexts indicate that learners with disabilities often experience barriers related to inadequate resources, limited accommodation, and social exclusion, which may negatively affect psychological adjustment and participation (Donohue & Bornman, 2022; Mafa & Makuba, 2023). Although Zimbabwe has increasingly emphasised inclusive education policies, empirical evidence directly examining the relationship between psychological self-concept, negative psychological self-concept and mental health, regarding academic performance among physically disabled secondary learners remains limited. This limitation highlights the need for context-specific research examining how disability experiences shape learners' psychological resources and educational outcomes.

Within this context, psychological self-concept should not be viewed as an isolated personal characteristic but as a psychological resource that develops through interactions between learners and their environments. Positive self-concept may strengthen emotional adjustment and resilience, enabling learners to manage academic challenges more effectively, while negative self-concept may increase vulnerability to psychological distress and reduced educational participation. Consequently, mental health represents an important pathway through which psychological self-concept influences academic outcomes among learners with physical disabilities.

Overall, the literature suggests that mental health plays a central mediating role in the relationship between psychological self-concept and academic performance. However, this

relationship is dynamic and context-dependent, shaped by disability-related experiences, educational environments, social relationships, and individual psychological processes. Understanding academic performance among learners with physical disabilities therefore requires consideration of the interconnected relationship between disability experiences, psychological self-concept, mental health, and educational participation.

### **3.6. Social Self-concept**

Social self-concept refers to learners' perceptions of their social value, acceptance, and competence within peer and classroom interactions, which contemporary scholarship links to academic engagement and achievement through psychological and motivational pathways. While some scholars argue that a positive social self-concept enhances academic performance by strengthening belongingness, motivation, and persistence in learning environments (OECD, 2021; Orth & Robins, 2022), others contest this linear assumption, suggesting that its influence is indirect, context-dependent, and often mediated by emotional and structural factors such as mental health and school climate (Meyer et al., 2022).

A further line of critique within socio-ecological and disability studies argues that overemphasis on social self-concept risks individualising academic outcomes, thereby obscuring institutional inequalities that shape participation and achievement (Ungar & Theron, 2023). In contrast, cognitive-developmental perspectives maintain that social self-concept becomes a stable predictor of achievement through repeated social comparison and feedback processes within schooling environments (Marsh et al., 2019). This divergence in scholarship highlights a persistent tension: whether social self-concept functions as a direct driver of academic performance or as a reflective construct shaped by broader educational and socio-cultural conditions.

The influence of social self-concept on academic performance remains a contested and methodologically sensitive issue within contemporary educational psychology, particularly given the difficulty of isolating social factors from cognitive and motivational determinants of achievement (Allen et al., 2018; Hübner et al., 2023). Social self-concept refers to learners' perceptions of their social value, peer acceptance, and sense of belonging within the school environment; however, there is no consensus on whether this construct independently predicts academic performance or whether it primarily reflects broader academic positioning and

institutional dynamics (Wang & Eccles, 2016; Allen et al., 2018). While some scholars position social self-concept as a meaningful antecedent of academic engagement, others argue that its explanatory power is limited because it is difficult to disentangle from prior achievement, classroom status, and teacher expectations (Allen et al., 2018; Hübner et al., 2023).

One influential position proposes that a positive social self-concept enhances academic performance by strengthening learners' sense of belonging, which subsequently promotes classroom participation, cooperation, and sustained engagement in learning activities (Wang & Eccles, 2016; Allen et al., 2018). From this perspective, belonging is not merely affective but instrumental, functioning as a motivational resource that supports persistence and adaptive academic behaviour (Allen et al., 2018; Hübner et al., 2023). However, this interpretation is not without critique. Opposing scholars argue that academically successful learners are more likely to receive peer acceptance and teacher approval, suggesting that academic performance may construct social self-concept rather than result from it (Hübner et al., 2023; Wang & Eccles, 2016). This reversal of causality complicates claims that social self-concept can be treated as an independent predictor of academic outcomes (Allen et al., 2018).

This debate is further complicated by reciprocal and developmental models which propose that social self-concept and academic performance are mutually reinforcing over time (Hübner et al., 2023; Allen et al., 2018). In such accounts, positive peer relationships and inclusive school climates may strengthen learners' sense of belonging, thereby increasing engagement and achievement, while academic success may simultaneously enhance social status and perceived acceptance (Wang & Eccles, 2016; Allen et al., 2018). Nevertheless, scholars remain divided on the strength, stability, and generalisability of these effects across different educational contexts and learner populations (Hübner et al., 2023; Allen et al., 2018). For learners with physical disabilities, this complexity is particularly pronounced, as experiences of stigma, exclusion, or restricted peer interaction may weaken social self-concept and indirectly constrain academic participation, whereas inclusive environments and supportive peer networks may disrupt this cycle and promote both belonging and achievement (Allen et al., 2018; Wang & Eccles, 2016). Consequently, contemporary scholarship increasingly resists linear explanations, instead framing social self-concept as a dynamic, context-dependent construct whose relationship with academic performance remains

empirically and theoretically unresolved (Hübner et al., 2023; Allen et al., 2018; Wang & Eccles, 2016).

Social self-concept refers to how a learner perceives themselves in relation to other people, including their sense of acceptance, belonging, and ability to interact socially. It reflects how learners think and feel about their social relationships and how they believe others view them. Social self-concept influences academic performance because learning happens within social systems such as family, peers, school, and cultural settings. When a learner feels socially accepted, they are more likely to participate, communicate, and engage in learning activities, which improves academic performance.

Research shows that social self-concept is a major predictor of physically disabled learners' academic failure (Deighton et al., 2022). In terms of self-concept development, recent longitudinal research indicates that children exposed to chronic family stress and reduced parental responsiveness tend to develop lower self-concept, higher emotional insecurity, and poorer academic outcomes over time. Orth, Robins, and Widaman (2019) demonstrated that self-concept is a strong longitudinal predictor of academic achievement, showing that declines in self-concept are followed by declines in academic performance. Similarly, Kurniawan et al. (2021) found that reduced parental involvement is associated with weaker self-concept development and lower academic achievement among learners, particularly in contexts where children experience limited emotional and educational reinforcement at home.

At the same time, persistently low social self-concept has been linked to poorer academic performance among learners with disabilities. Recent research shows that learners who consistently perceive themselves as socially unaccepted or less competent tend to demonstrate lower academic engagement, reduced participation in classroom activities, and weaker academic achievement compared to their peers with positive social self-concept (Orth, Robins, & Widaman, 2019; Sainz et al., 2025).

From the above analysis, it can be concluded that social self-concept plays a critical role in the academic performance of physically disabled learners. Family factors such as parental involvement, parenting styles, and socioeconomic status significantly influence the development of social self-concept. High parental involvement, supportive authoritative parenting, and favourable socioeconomic conditions promote positive self-concept, confidence, and academic engagement (Barger et al., 2019; Kurniawan et al., 2021). In contrast,

low parental involvement, authoritarian or permissive parenting styles, and socioeconomic disadvantage may contribute to negative self-concept, social insecurity, and reduced academic motivation (Sibley & Dearing, 2022; Orth et al., 2019). Consequently, physically disabled learners with poor social self-concept are more likely to experience difficulties in their cognitive, social, emotional, and behavioural development, resulting in lower academic achievement (Van Ryzin, Murray, & Roeth, 2024; Sainz et al., 2025).

Social self-concept refers to how a learner perceives themselves in relation to other people and social environments. It reflects how individuals think and feel about their social acceptance, relationships, communication skills, and sense of belonging. It includes factors such as peer relationships, social confidence, communication ability, and social anxiety. Social self-concept affects academic performance because learning takes place within a social environment where interaction with family, peers, teachers, and cultural systems is important.

A positive social self-concept increases confidence, participation, and willingness to engage in classroom activities. Learners who feel socially accepted are more likely to communicate freely, participate in group work, and interact positively with teachers and peers. This improves understanding, motivation, and academic performance. In contrast, a negative social self-concept leads to feelings of rejection, isolation, and low self-worth in social settings. Such learners may avoid participation, fear speaking in class, and withdraw from group activities. This reduces learning opportunities, weakens classroom engagement, and negatively affects academic performance.

Many physically disabled children face social instability (Shifrer, 2016; McCoy & Banks, 2018). In disadvantaged contexts, there is a higher prevalence of factors such as depression, poor health, behavioural difficulties, and low academic performance among learners with disabilities due to persistent social and environmental stressors (Emerson et al., 2020; WHO, 2022). Recent research shows that the complex web of social relationships learners experience with peers, teachers, and family members has a strong influence on academic performance, more than previously assumed (Wang & Eccles, 2019; Wentzel, 2020). This process begins with early caregiver relationships, where learners develop either secure or insecure attachment patterns that later influence school behaviour and academic engagement. Securely attached learners generally demonstrate better behaviour and stronger academic adjustment in school settings (Madigan et al., 2019).

Once learners are in school, socialisation processes and social status dynamics further shape academic performance. Learners often experience pressure to conform to peer norms to avoid rejection, while also seeking social status through achievements in academics, sports, or other activities, which influences motivation and engagement (Juvonen & Wentzel, 2020). Children living with disabilities face additional daily challenges that affect learning, including accessibility barriers, stigma, and chronic stress, which negatively impact emotional regulation, cognition, and school performance (Shonkoff et al., 2020; Blair & Raver, 2020). Combined, these factors create significant barriers to academic and social success, although improved understanding of these challenges supports more inclusive educational strategies that enhance learner outcomes.

Research seems to be divided on the aspect as to whether the self-concept status contributes to the physically disabled children's academic performance, including antisocial behaviour. However, recent research indicates that self-concept is a significant predictor of academic achievement. A positive self-concept enhances learners' confidence, persistence, and engagement in school tasks, whereas a negative self-concept is associated with behavioural difficulties and lower academic performance (Steinberg et al., 2024; Gao & Ali, 2024).

A further layer of debate concerns the mechanisms through which social self-concept is assumed to operate in academic settings. Some scholars argue that its influence is primarily indirect, functioning through emotional and behavioural pathways such as school engagement, classroom participation, and reduced academic anxiety (Wang & Eccles, 2016; Allen et al., 2018). From this standpoint, learners who perceive themselves as socially accepted are more likely to experience emotional security in school, which may enhance concentration and willingness to participate in learning activities. However, this interpretation is not universally accepted, as other researchers caution that emotional adjustment and academic engagement may be driven more strongly by instructional quality and classroom structure than by perceived social acceptance alone (Hübner et al., 2023; Allen et al., 2018).

In addition, there is ongoing disagreement regarding whether social self-concept should be treated as a distinct predictor of academic performance or as an embedded dimension of broader psychological and academic self-beliefs. Some scholars maintain that separating social self-concept from academic self-concept provides analytical clarity, allowing researchers to identify specific social influences on learning outcomes. In contrast, others argue that such

distinctions may be artificial, as learners' social and academic identities often develop simultaneously and cannot easily be disentangled in real educational contexts (Allen et al., 2018; Hübner et al., 2023). This conceptual ambiguity complicates attempts to draw firm conclusions about causality and limits the explanatory precision of existing models.

Furthermore, methodological concerns continue to shape interpretations of the social self-concept–achievement relationship. Critics highlight that many studies rely on cross-sectional designs, which make it difficult to determine whether social self-concept influences academic performance or whether academic success shapes social perceptions over time (Hübner et al., 2023). Even longitudinal studies, while more robust, often produce mixed findings, with effect sizes varying depending on age group, educational context, and measurement approach. As a result, scholars remain cautious about making strong causal claims, instead emphasising the probabilistic and context-dependent nature of observed associations (Allen et al., 2018; Wang & Eccles, 2016).

Taken together, these debates suggest that social self-concept cannot be understood as a stable or universally predictive determinant of academic performance. Instead, it is increasingly conceptualised as a fluid construct shaped by ongoing interactions between learners' social experiences, institutional environments, and academic trajectories. For learners with physical disabilities, this fluidity is especially significant, as their social self-concept may be more sensitive to environmental inclusivity, peer attitudes, and structural accessibility than to individual disposition alone. Consequently, the relationship between social self-concept and academic performance is best understood as dynamic, contested, and deeply embedded within broader educational systems rather than as a direct or isolated causal pathway (Allen et al., 2018; Wang & Eccles, 2016; Hübner et al., 2023).

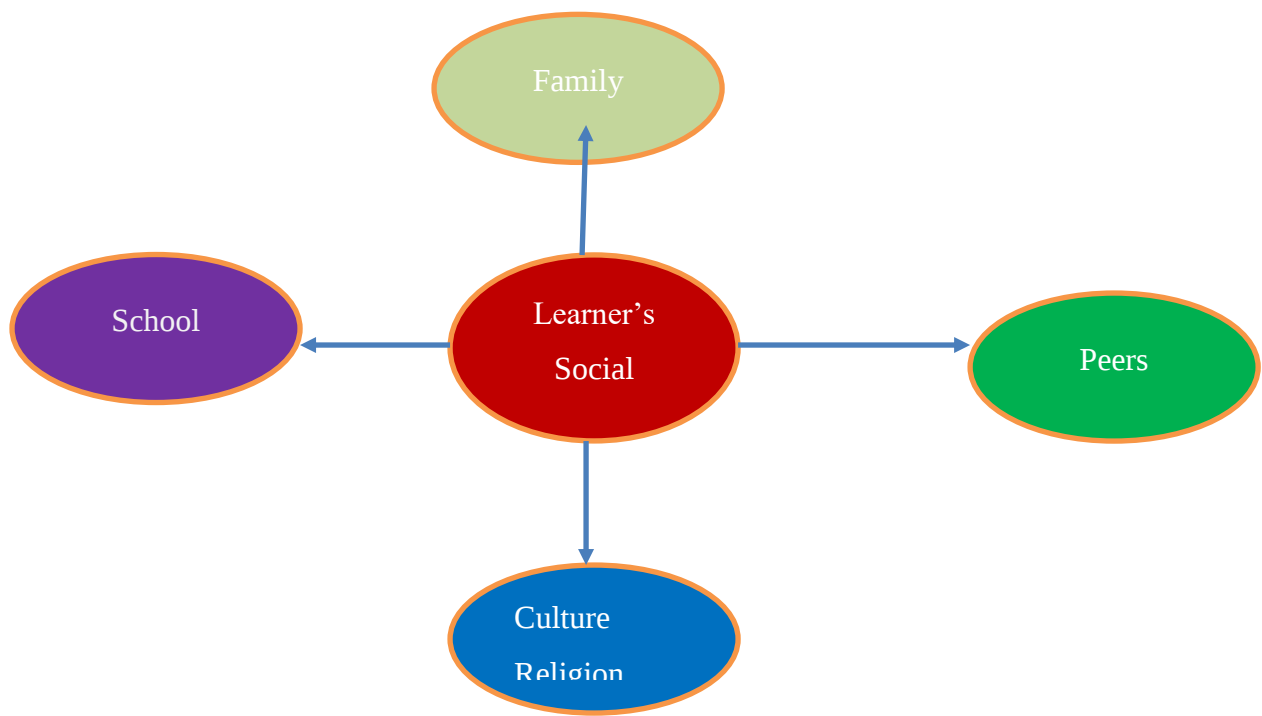
However, living in a family with low cohesion is associated with less supportive home environments, which can hinder the healthy development of physically disabled learners. Recent studies indicate that poor family functioning and limited parental involvement reduce educational support and literacy stimulation at home, negatively affecting both self-concept and academic performance (Barger et al., 2019; Kurniawan et al., 2021). Consistent and supportive parenting, on the other hand, is associated with stronger academic skills, higher self-esteem, and better school achievement (Sainz et al., 2025). Furthermore, exposure to negative self-concept, abuse, discrimination, and stigmatization can increase psychological distress,

reduce self-worth, and undermine academic engagement, contributing to poorer academic performance among physically disabled learners (Lindsay et al., 2021; Fang et al., 2022; Orth, Robins, & Widaman, 2019). Therefore, social self-concept affects academic performance through family (parental involvement, parental styles, and socioeconomic status), peer relationships, school environment, and cultural or religious influences. Positive experiences in these areas strengthen confidence, participation, and academic success, while negative experiences weaken engagement and reduce performance.

Family, school, peers, and culture all play a significant role in shaping social self-concept and academic performance among learners with disabilities.

### 3.7. The Influence of External Variables on Learners' Social Self-concept

External variables play a pivotal role in shaping social self-concept, particularly through the environments and relationships that individuals navigate daily. External influences, notably the situations and connections that people encounter daily, play a critical role in forming their social self-concept. The impact of society and parental participation on children's social self-concept is critical in their development.



### **Figure 3.3: Social factors which can influence social self-concept**

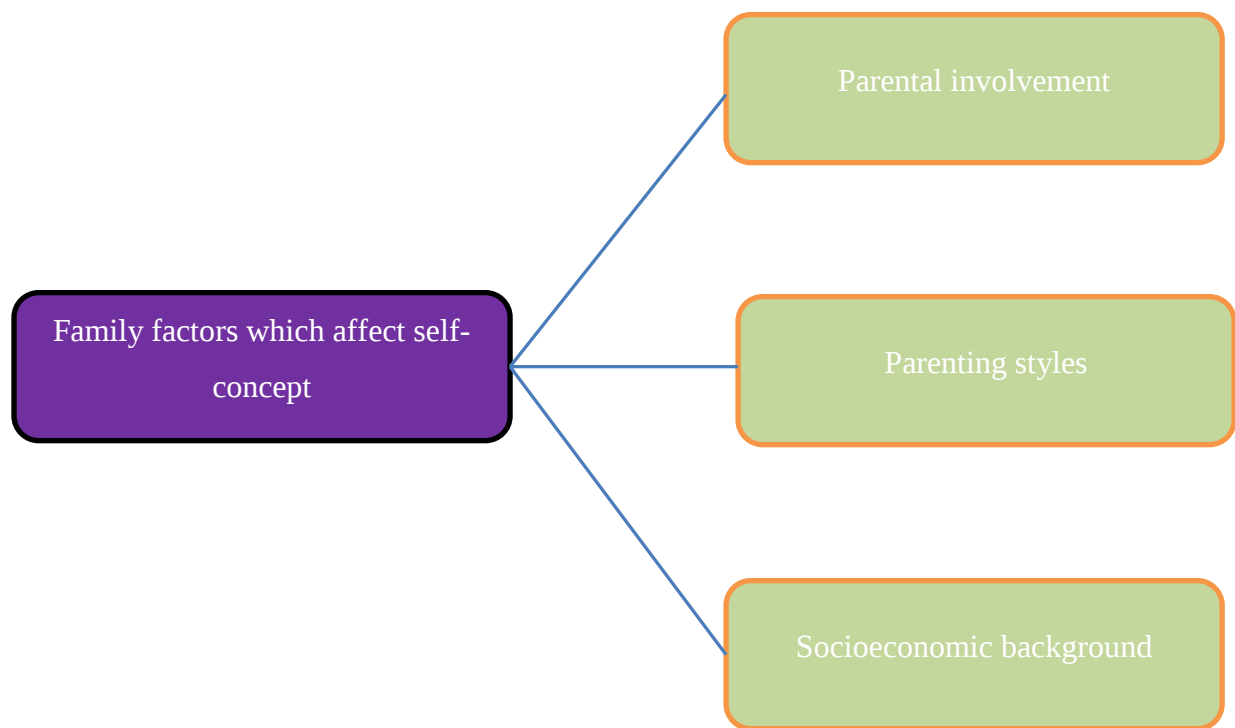
Recent research indicates that parental involvement, supportive peer relationships, and positive school climates strengthen social competence, self-perceptions, and educational engagement (Barger et al., 2019; Wang & Eccles, 2019; Allen et al., 2018). Among learners with disabilities, inclusive relationships and supportive educational environments promote confidence and belonging while reducing the effects of stigma and exclusion (Miyahara & Poudel-Tandukar, 2022; Cologon, 2023). Peer support is particularly important in enhancing social competence and facilitating successful academic transitions (Lehrl et al., 2020). Furthermore, broader social factors, including socioeconomic conditions and cultural expectations, influence how learners evaluate themselves and develop their social identities. These environmental influences provide feedback, affirmation, and social comparison experiences that continuously shape social self-concept.

Arguably, contemporary research emphasises that academic achievement depends on the interaction between learners' internal characteristics, such as motivation, self-beliefs, and cognitive abilities, and the support provided within home and school environments (Honicke & Broadbent, 2016; Wang & Eccles, 2019). This justifies studying outside factors. However, the repercussions of social interactions are complex, and they can occasionally reinforce or impede the development of a social self-concept (Dowson & McInerney, 2003). To determine the unique benefits of each variable to the academic performance of disabled learners, negative social self-concept, inherently correlated psychosocial status, parental interaction, school, culture/religion, and peer variables will be examined.

#### **3.7.1. Family**

The family has a vital function in enhancing academic performance and social self-concept development in individuals with disabilities by offering an indispensable nurturing culture before formal education (Gerri et al., 2019). Emotional support from family members has a significant impact on adaptive or maladaptive self-beliefs, providing the initial scaffolding for social identity and emotional resilience (Whitehead, 2017). Parental practices, including Baumrind's typology of parenting styles, the degree of parental engagement, and socio-economic factors, modulate these developmental trajectories (Woolfolk, 2007).

Early family experiences provide the basis for a robust and cohesive social self-concept, having a significant impact on motivation, identity, and academic performance (Birjandi et al., 2012). Learners with high academic aspirations frequently rely on their families for emotional support and enthusiastic engagement in school (Martinez-Yarza et al., 2024). Collaborative involvement between teachers and parents boosts learners' psychological, social, and behavioural capabilities, promoting the development of crucial traits for all-encompassing development (Frenzel et al., 2021; Bell, 2016). Family-related characteristics, such as parenting style, parental participation, and socioeconomic position, represent critical determinants in the formation and development of social self-concept (see Figure 3.4).



**Figure 3.4: Family factors which affect social self-concept**

Family plays a major role in shaping social self-concept through parental involvement, parental styles, and socioeconomic status. The families in which physically disabled learners reside are another pathway through which self-concept may negatively affect the children's educational outcomes. Negative self-concept limits the aspirations, confidence, and educational attainment of physically disabled learners, constraining them to live in

neighbourhoods characterised by high levels of crime and unemployment, low levels of resources, and a lack of collective efficacy among the residents.

Families from low socioeconomic backgrounds often experience overcrowding, poor sanitation, substance abuse, inadequate services, and other social challenges that increase stress within the home. Such conditions can reduce parental involvement and support, weakening the development of a positive self-concept among physically disabled learners. As a result, learners may develop low confidence, poor academic self-beliefs, and reduced engagement in school, leading to lower academic performance (Orth, Robins, & Widaman, 2019; Sainz et al., 2025).

Physically disabled learners who live in discriminatory households and neighbourhoods are significantly more likely to experiment with drugs, alcohol, and risky sexual behaviour (Emerson et al., 2020). Recent research acknowledges the multiple environmental influences that occur at the same time and interact over time on children and families, and the influences of families and children on their environment (Luthar, 2006:785; Shonkoff & Phillips, 2000). Physically disabled learners who live in discriminatory and unsupportive family and community environments are at greater risk of engaging in maladaptive behaviours and experiencing poor psychosocial outcomes. Recent research shows that stigma, social exclusion, and lack of family support are associated with increased emotional distress, risk-taking behaviours, and poorer educational outcomes among learners with disabilities (Emerson et al., 2020; Lindsay et al., 2021). Contemporary research further acknowledges that children's development is shaped by multiple interacting environmental influences, including family relationships, social support, school experiences, and community conditions, which operate together over time to affect self-concept, well-being, and academic performance (Bronfenbrenner & Morris, 2021; Prime, Wade, & Browne, 2020).

Family factors such as parental involvement, parenting styles, and socioeconomic status strongly influence self-concept development. High parental involvement enhances learners' confidence and academic engagement, while low involvement is associated with reduced self-concept and poorer academic outcomes (Kurniawan et al., 2021). Authoritative parenting supports positive self-concept, whereas authoritarian and permissive styles may weaken social confidence and learning performance (Sainz et al., 2025). As shown in Figure 2.3 below, these family factors affect the development of self-concept, which subsequently influences the academic performance of physically disabled learners.

### **3.7.1.1. Parental involvement**

Parental involvement significantly influences children's academic achievement by strengthening home-school collaboration and reinforcing learning expectations. Recent research shows that when parents are actively involved in school activities, they are better able to support homework, understand teacher expectations, and reinforce positive academic behaviour at home, which improves learners' engagement and performance (Wilder, 2019; Castro et al., 2020). Consistent communication between parents and schools also helps establish clear behavioural and academic standards that are reinforced in both environments, leading to improved school outcomes (Garbacz et al., 2021).

In contrast, parents who are actively involved in schooling help strengthen learners' self-concept, particularly academic and social self-concept, by providing consistent encouragement, guidance, and positive feedback. This support helps learners develop confidence in their abilities, a stronger sense of competence, and a belief that they can succeed academically, which in turn enhances engagement, persistence, and achievement (Barger et al., 2019; Sibley & Dearing, 2022). When self-concept is strengthened through parental involvement, learners are more likely to participate in class, attempt challenging tasks, and maintain motivation, leading to improved academic performance.

Parental involvement strengthens social self-concept when parents actively support schoolwork, attend school meetings, encourage learning, and show interest in their child's education. This makes learners feel valued and socially secure, improving confidence and participation in school. Low parental involvement can lead to feelings of neglect, low self-worth, and reduced social confidence, which negatively affect academic engagement.

Thus, families' social involvement may have its greatest impact on externalising behaviours in their most severe form. Recent research indicates that physically disabled learners who experience discrimination, stigma, or low family and social support are more likely to develop low self-concept, which negatively affects their academic performance and school adjustment. Douma et al. (2024) found that learners with disabilities exposed to negative social environments reported significantly poorer self-concept and lower academic achievement compared to their peers in supportive environments. In addition, Sainz et al. (2025) reported that low self-concept among learners with disabilities was associated with

weaker academic performance and reduced school achievement outcomes, highlighting the strong influence of self-perception on educational success.

In addition, Orth, Robins, and Widaman (2019) demonstrated that self-concept is a strong longitudinal predictor of academic achievement, showing that lower social self-concept leads to declining academic performance over time. Similarly, Sainz et al. (2025) reported that low self-concept among learners with disabilities was associated with weaker academic performance and reduced educational attainment, highlighting the consistent impact of self-perception on learning outcomes. Recent research indicates that lack of parental involvement in the education of physically disabled learners has significant negative effects on both self-concept development and academic performance. When parents are overwhelmed by stressors such as low self-esteem, depression, and limited coping capacity, they are often less able to provide consistent emotional support, academic guidance, and encouragement. This reduced engagement may lead children to internalise feelings of low worth and academic inadequacy, which weakens their self-concept and undermines school performance.

Recent studies show that parental involvement is a strong predictor of both academic achievement and self-concept among learners with disabilities, as supportive parenting fosters confidence, motivation, and persistence in learning (Kurniawan et al., 2021). Similarly, Hughes and Chen (2020) also found that learners who receive limited parental support are more likely to experience lower academic engagement and weaker self-perceptions of competence, particularly in inclusive education settings. In addition, a longitudinal study by More recently, Sainz et al. (2025) highlighted that self-concept in learners with disabilities is strongly shaped by both family and school environments, with a lack of parental involvement contributing to reduced academic performance and weaker educational outcomes. Collectively, these findings suggest that lack of parental support can indirectly hinder both the development of positive self-concept and the academic performance of physically disabled learners.

Parental involvement is a critical, pivotal determinant in the social and cognitive development of physically disabled learners, offering emotional support as well as lobbying to alleviate societal restraints (Frenzel et al., 2021). Parents serve as the main socialisation agents, moulding their children's self-perceptions and developing core social competences, interpersonal abilities, and perseverance. Such early familial experiences provide the foundation for learners to create internalised self-worth, which is then reinforced by

interactions with schools, peers, and larger societal structures (Crosnoe & Ressler, 2019; Lehl et al., 2020).

Empirical evidence confirms that intentional and persistent parental involvement has a significant impact on learners' academic outcomes, with social and emotional support functioning as a critical means for overcoming barriers to learning, articulating individual hardships, and gaining validation of academic achievements. Bressoud et al. (2018) indicate that negative parental opinions of disabled individuals have a significant impact on their psychological, societal, and financial status. Current global ethical systems oppose discriminatory behaviours and promote inclusiveness and balance. Crosnoe and Ressler (2019) emphasise that parental mind-sets and behaviours have a critical role in developing a disabled individual's confidence, identity, and competence, emphasising the importance of family in the development of social self-concept.

Active parental involvement, which includes affective association, continuous appreciation for dedication, and intellectual coaching, protects children from social and scholastic stressors by encouraging adaptive coping, identity formation, and self-efficacy. Secure emotional bonds and reliable interaction within the family establish the framework for beneficial social relationships and positive self-concept development. Negative or stigmatising parental views, on the other hand, might undermine social competence, self-esteem, and overall psychosocial functioning, passing on internalised stigma to the child (Bressoud et al., 2018; Boonk et al., 2018). Deficits in familial compassion, warmth, or trust might inhibit a child's capacity to develop solid interpersonal relationships and assert themselves socially.

Parenting styles mediate such results and profoundly influence the impact of parental involvement on the social self-concept of physically disabled learners. Authoritarian parenting, characterised by warmth, high expectations, and constant supervision, promotes active participation in children's academic and social domains, boosting resilience, self-efficacy, and proficiency in society (Feldman, 2009). In contrast, authoritarian, permissive, or uninvolved methods frequently hinder emotional and educational support, hampering social development, self-esteem, and motivation (Monaco et al., 2019). Parental involvement serves as an operational pathway that allows efficient parenting styles to reinforce positive self-concept, allowing learners to internalise versatile behavioural traits and manage interpersonal conflicts with greater autonomy. Parental influence operates within a larger sociocultural structure.

Schools, media, judicial systems, and prevalent cultural expectations either support or contradict disability-related narratives. Multicultural legislation and cultural appreciation strengthen the influence of parental involvement, supporting equitable academic and social gains (Crosnoe & Ressler, 2019; Bressoud et al., 2018).

Social self-concept is a socially mediated fabrication that evolves continually through the interaction of familial nurture and cultural context. Effective parental involvement, including emotional, social, and intellectual support, is the foundation of positive social self-concept development in physically handicapped students. This entire efficacy, nevertheless, hinges upon enhancing cultural integration, underlining the need for both micro-level familial support and macro-level societal reform to ensure equal developmental paths.

#### **3.7.1.2. Parenting styles**

Parenting styles influence academic performance through their effect on social self-concept. Authoritative parenting strengthens self-concept by promoting confidence, social skills, and positive relationships, which enhances academic engagement and achievement. In contrast, authoritarian parenting can weaken self-concept by creating fear and low confidence, while permissive parenting may reduce self-regulation and social competence. These weakened forms of self-concept are linked to lower participation, reduced motivation, and poorer academic performance.

Parenting styles also significantly influence social self-concept. An authoritative parenting style, which is warm, supportive, and combines clear expectations with emotional responsiveness, promotes high self-esteem, social confidence, and healthy communication skills. Learners from such families tend to interact positively with peers and teachers and show better academic engagement. In contrast, an authoritarian parenting style, which is strict, controlling, and less emotionally supportive, may lead to fear, low confidence, and poor social interaction skills. A permissive parenting style, which is overly lenient with limited boundaries, may result in poor self-regulation and difficulties in peer relationships, which can also weaken social self-concept (Sainz et al., 2025; Kurniawan et al., 2021; Orth, Robins, & Widaman, 2019).

### **3.7.2. Socioeconomic status (SES)**

Socioeconomic status (SES)–related self-concept is increasingly understood as a critical dimension of psychological self-concept because it shapes how learners interpret their academic identity, access to resources, and likelihood of success. Contemporary literature suggests that psychological self-concept does not develop in isolation but is embedded within material and social conditions, meaning that socioeconomic disadvantage can systematically shape learners’ academic self-perceptions and, in turn, their performance (OECD, 2019; Sirin, 2016). From this perspective, SES influences academic performance not only through material deprivation but also through the internalisation of one’s learning environment, where repeated exposure to limited resources may contribute to lower academic self-concept and reduced academic engagement.

Scholars adopting a developmental and ecological perspective argue that learners from low-SES backgrounds are more likely to develop weakened psychological self-concept because they are exposed to constrained learning environments characterised by limited educational resources, reduced parental academic support, and heightened household stress (OECD, 2019; Bradley & Corwyn, 2002). These conditions may reduce opportunities for mastery experiences, thereby undermining confidence and academic self-belief, which can negatively affect academic performance. In contrast, learners from higher-SES households often benefit from richer cognitive stimulation, greater access to learning materials, and stronger academic socialisation, which may reinforce positive self-concept and support sustained academic achievement (Sirin, 2016). However, this explanation remains contested because it may overemphasise structural determinism while underestimating individual resilience and school-level protective factors.

Socioeconomic status (SES) is another important factor influencing social self-concept. Learners from higher SES backgrounds often have access to better resources, educational support, and social opportunities, which enhance confidence and social participation (Reardon, 2021; Sirin, 2020). In contrast, learners from low SES backgrounds may experience poverty-related stress, limited resources, and social stigma, which can reduce social self-concept by increasing feelings of inferiority and lowering peer confidence (OECD, 2023; Bradbury et al., 2022). This may negatively affect participation, motivation, and academic performance. Families experiencing socioeconomic disadvantage often have fewer

social and educational resources, which may limit future opportunities and weaken learners' confidence in their abilities (Nieuwenhuis & Hooimeijer, 2021; UNICEF, 2023). However, studies continue to show that parents from higher socio-economic backgrounds are more likely to participate in school activities and support learning at home compared to those from lower socio-economic backgrounds, which contributes to disparities in academic achievement and social self-concept development (Barger et al., 2019; Sibley & Dearing, 2022).

Socioeconomic status (SES) continues to play a significant role in shaping educational outcomes, with recent research confirming that learners from higher SES backgrounds consistently achieve better academic performance across subjects and grade levels (OECD, 2023). This pattern reflects persistent educational inequalities, where SES—often measured through parental education, income, and occupation—strongly predicts access to quality schooling and learning resources (Sirin, 2020; Reardon, 2021). In many low-income and rural settings, access to schools for physically disabled learners remains limited due to inadequate infrastructure, shortage of specialised institutions, and long travel distances, which reduces school enrolment and participation (UNICEF, 2023). Furthermore, recent studies highlight that poverty and disability stigma can reduce the perceived value of education for disabled children, leading to lower educational investment and support from families (World Bank, 2022). As a result, physically disabled learners from disadvantaged SES backgrounds are more likely to experience reduced access to schooling and lower academic achievement compared to their more advantaged peers.

Learners from higher SES backgrounds often benefit from better learning resources, stable home environments, and stronger educational support, which contribute to the development of a positive self-concept and higher academic achievement (Reardon, 2021). In contrast, learners from low SES backgrounds may experience poverty-related stress, limited educational opportunities, and reduced parental support, which can weaken self-concept and negatively affect academic performance. Self-concept acts as a psychological pathway between SES and academic outcomes. When learners believe in their academic abilities, they are more likely to stay motivated, engage in learning, and perform better, even in challenging socioeconomic conditions. However, a negative self-concept associated with disadvantaged SES can lead to low confidence, reduced participation, and poorer academic achievement

(Sirin, 2020; UNESCO, 2022). Overall, SES influences academic performance both directly and indirectly through its impact on learners' self-concept.

Socioeconomic status (SES) has substantial consequences on how learners with physical disabilities develop their social self-concept. Lower socioeconomic families frequently struggle to get excellent healthcare, inclusive schools, and therapeutic spaces, rendering disabled children marginalised academically and socially (Chatterjee & Ranganathan, 2020). This lack of resources hinders their potential to nurture substantial peer relationships, leading to diminished esteem, enhanced self-stigma, and social disengagement.

Physically disabled learners, particularly physically disabled learners, are disproportionately disadvantaged by the combination of disability, financial hardship, and sex disparity. According to research, disability and self-concept mutually reinforce each other, with disabled children in low-income households being more likely to experience marginalisation, nutritional deficiencies, and disrupted schooling. These settings limit social contact and lower learners' perceptions of competency and engagement.

Parental expectations, triggered by socioeconomic status, also play a considerable role. Families with better incomes and educational backgrounds are likely to advocate for their children, prioritise assistive technology, and establish supportive surroundings that promote social involvement (Keller-Schneider, 2018). Low-income parents, on the other hand, may have financial difficulties, job insecurity, or diminished skills, limiting their involvement in their child's education and reducing support, thus adversely impacting the child's self-concept (Manstead, 2018).

More recent empirical syntheses suggest that SES effects on academic performance are not direct but are mediated through multiple psychological and contextual pathways, including self-concept, motivation, and school engagement (Hübner et al., 2023). Within this framework, psychological self-concept is viewed as a mechanism through which socioeconomic conditions become translated into academic outcomes. However, critics caution that these pathways are difficult to isolate empirically because SES simultaneously shapes school quality, teacher expectations, peer composition, and access to learning resources, making it challenging to determine whether self-concept independently drives performance or merely reflects broader structural inequalities (Hübner et al., 2023; Marsh et al., 2019).

For learners with physical disabilities, the interaction between SES and psychological self-concept may be even more pronounced. Low-SES disabled learners often experience compounded disadvantage through limited access to assistive technologies, inadequate school infrastructure, and reduced specialised support, which may weaken psychological self-concept by restricting participation and limiting mastery experiences. At the same time, stigma and exclusion linked to both poverty and disability may further undermine academic self-beliefs and reduce engagement. Nevertheless, contemporary research also acknowledges variability in outcomes, as some learners demonstrate resilience when supported by inclusive educational practices and positive teacher–learner relationships. Consequently, current scholarship increasingly conceptualises SES, psychological self-concept, and academic performance as dynamically interrelated rather than linearly connected, with self-concept functioning as one of several context-dependent mediating mechanisms rather than a stable predictor of achievement (Sirin, 2016; Hübner et al., 2023).

Moreover, low SES exacerbates exposure to stigma. Communities in impoverished communities sometimes have more cultural beliefs regarding disability, linking it with misfortune or shame (DSPD, 2016). This exacerbates societal exclusion and causes several families to withdraw their children from peer groups to prevent prejudice, thus damaging the child's social identity. Thus, SES operates not merely as an economic indicator but also as a systemic determinant of possibilities, parental involvement, societal perceptions, and, ultimately, the social self-concept of disabled learners.

Overcoming these discrepancies needs comprehensive solutions that integrate poverty alleviation, inclusive education, and parental involvement, ensuring that learners with disabilities can develop resilient and positive self-identities amidst socioeconomic constraints.

### **3.7.3. The school**

The school environment also plays a critical role in shaping social self-concept. Inclusive and supportive classrooms promote acceptance, participation, and positive teacher–learner relationships, which strengthen confidence and academic performance. In contrast, discrimination, negative teacher attitudes, and lack of support reduce self-concept and lead to lower academic achievement (Van Ryzin, Murray, & Roseth, 2024). Schools function as primary socializing institutions in which learners with physical disabilities negotiate their

identity, sense of belonging, and perceived competence. Supportive and inclusive schools strengthen social self-concept by promoting acceptance, respect, and cooperation. Positive teacher attitudes and inclusive practices encourage learners to participate actively. In contrast, discrimination or lack of support within schools weakens social self-concept and reduces academic success.

For learners who have physical disabilities, schools serve as the main socializing settings where they navigate their identity, sense of belonging, and internalized competence. In order to promote positive social self-concepts, schools must be inclusive, characterized by equity, acceptance, and nurturing instructional connections. Social and academic development are supported by empirical research showing that teacher empathy and peer recognition improve students' mental resilience, drive, and feelings of belonging (Hines, Fink, & Jenkins, 2016). On the contrary, exclusionary dynamics erode self-esteem, diminish prosocial participation, and intensify sentiments of marginality, regardless of whether they are exhibited through institutionalized neglect, marginalization, or peer rejection (Mulvey et al., 2017). According to Bressoud et al. (2018), these kinds of settings interfere with the iterative feedback loops required for the consolidation of one's self-concept, making one more susceptible to depression, disengagement, and self-criticism.

These developmental consequences are further mediated by the leadership styles of teachers. In line with Baumrind's authoritative parenting model, democratic and authoritative pedagogical orientations that emphasize cooperation, responsiveness, and constructive criticism help challenged learners develop their autonomy, self-esteem, and academic confidence (Krista & Kikas, 2012). On the other hand, educational environments that are authoritarian or uncaring undermine autonomy, stifle natural drive, and strengthen reliance (Moore, 2019). Ultimately, schools that actively foster inclusivity through anti-bullying initiatives, sympathetic teaching methods, and fair peer structures act as protective environments. Such settings help learners with disabilities build resilient, self-assured, and socially integrated self-concepts in the process of protecting them from stigma.

#### **3.7.4. Peers**

Peers significantly influence social self-concept through acceptance, interaction, and social inclusion. Positive peer relationships enhance belonging and confidence, improving classroom

participation and academic outcomes, while peer rejection, bullying, and isolation weaken self-concept and reduce academic performance (Falk & Sansour, 2024). Data from a study by Schwab and colleagues (2018) found that learners with disabilities who perceived themselves as socially accepted and valued by their peers demonstrated higher levels of school engagement and academic achievement than those with negative social self-perceptions. The researchers concluded that social self-concept and academic success reinforce one another, such that poor social self-concept can contribute to lower academic outcomes. Similarly, Van Ryzin, Murray, and Roseth (2024) examined students with disabilities and found that positive peer relations and peer support significantly enhanced classroom engagement. Their findings revealed that learners who experienced poor peer relationships were less engaged in classroom activities, thereby reducing opportunities for academic success

Furthermore, research by Pijl and Frostad found that learners with disabilities who experienced peer rejection and social isolation reported lower social self-concept and poorer school adjustment. Their findings suggest that exclusion from peer networks reduces confidence and participation in classroom activities, thereby negatively affecting academic achievement. The study suggests that poor social self-concept, arising from weak peer connections, can indirectly undermine academic performance. Falk and Sansour's (2024) systematic review of studies involving individuals with disabilities found that social attitudes, peer interactions, and school placement significantly influenced self-concept development. The review concluded that negative social experiences often lead to poor self-concept, which in turn affects educational achievement and social integration.

Data from Sainz, Álvarez-Arjona, and Gómez-Gutiérrez's (2025) longitudinal study of 112 students with learning difficulties and special educational needs revealed a significant positive correlation between self-concept and academic performance. The researchers found that improvements in self-concept were accompanied by improvements in academic achievement, demonstrating that learners with more positive perceptions of themselves achieved better educational outcomes. Physically disabled children experiencing negative self-concept were at a greater risk of performing badly in class and producing poor grades than able-bodied children with positive self-concept.

Data from Pijl and Frostad's study involving 498 seventh-grade students, including 37 learners with disabilities, revealed that peer acceptance was significantly associated with social

self-concept. The researchers found that learners with disabilities who experienced rejection and isolation from their peers were more likely to develop a poor social self-concept, which negatively affected their participation and engagement in school activities. The findings suggest that social exclusion undermines the confidence necessary for academic success.

Similarly, Ju, Zhang, and Katsiyannis (2013), using data from 2,950 students with disabilities aged 8–14 years in the Special Education Elementary Longitudinal Study (SEELS), found that self-concept significantly predicted later academic achievement. Their analysis demonstrated that learners with negative perceptions of themselves were more likely to experience lower academic performance over time, indicating that poor self-concept can contribute to persistent educational difficulties among learners with disabilities.

More recently, Van Ryzin, Murray, and Roseth (2024) found that positive peer relations and peer support enhanced classroom engagement among students with disabilities. Their findings showed that learners who reported stronger peer connections participated more actively in classroom learning, whereas those with weaker peer relationships demonstrated lower engagement. Since classroom engagement is a strong predictor of academic achievement, the study suggests that poor social self-concept resulting from negative peer experiences can indirectly undermine academic performance.

Collectively, these studies indicate that poor social self-concept adversely affects the academic performance of physically disabled learners by reducing peer acceptance, classroom participation, school engagement, and confidence in learning activities (Van Ryzin, Murray, & Roseth, 2024; Falk & Sansour, 2024; Sainz, Álvarez-Arjona, & Gómez-Gutiérrez, 2025). The evidence suggests that physically disabled learners who develop poor social self-concept as a result of peer rejection, stigma, discrimination, and limited social participation are more likely to experience reduced classroom engagement, lower motivation, and poorer academic performance than those who perceive themselves as socially accepted and supported (McCoy & Banks, 2018; Van Ryzin et al., 2024; Sainz et al., 2025). As a result, physically disabled learners with negative social self-perceptions are more likely to experience lower academic achievement than those who perceive themselves as socially accepted and valued. This study will explore these pathways in order to investigate the impact of the self-concept on the academic performance of learners with physical disabilities in Zimbabwe.

Peer rejection also has a strong negative impact on social self-concept. Learners who are bullied, excluded, or ignored by peers often develop low social confidence and feelings of inferiority. This reduces participation in classroom activities and limits collaboration, which negatively affects academic performance.

Peers constitute a pivotal determinant in the formation of social self-concept among physically disabled learners, often complementing parental guidance by providing emotional support, companionship, and social affirmation (Bressoud et al., 2018). Peers play an integral part in aiding learners with disabilities to develop their social self-concept by offering emotional support, company, and social validation, frequently enhancing parental guidance. Peer groups have a substantial function as "moral propagators" during adolescence, influencing interpersonal behaviours, passing along social norms, and helping individuals separate from their families (Chatzitheochari & Butler-Rees, 2022). Positive peer relationships that are marked by empathy, reciprocity, and trust help students become more socially adept, psychologically resilient, and self-assured (Bell, 2016). Conversely, self-worth, academic engagement, and emotional well-being are seriously threatened by peer rejection, societal exclusion, and stereotypes (Mulvey et al., 2017; Bressoud et al., 2018). Intergroup exclusion might result from prejudices related to disability, financial standing, culture, or other social categories, while interpersonal exclusion can be driven by personal traits including timidity, social disengagement, or physical disparities.

Contemporary research underscores that adolescents develop their sense of self in part through reflected assessments, in which their perceptions of themselves are shaped by how they believe others see them (Wentzel & Ramani, 2020). Exclusionary dynamics worsen social disengagement, anxiety, and low self-efficacy among learners with physical disabilities, while supportive and inclusive peer contexts foster positive identity formation (Mulvey et al., 2017). Moreover, negative, adverse childhood experiences, such as peer-perpetrated verbal, physical, or social abuse, may severely damage mental health and social self-concept (Bressoud et al., 2018). On the other hand, adaptive psychosocial development is facilitated by regular, supportive peer contacts, especially when reinforced by familial and educational support. These interactions foster interpersonal proficiency, resilience, and self-esteem (Crosnoe & Ressler, 2019).

Collectively, this body of research suggests that peers have a dual role of enhancing

and possibly undermining disabled learners' social self-concept. Evidence indicates that peers function as both a supportive and a potentially detrimental influence on the social self-concept of physically disabled learners. Learners' self-perceptions, emotional aptitude, and psychological resilience are significantly influenced by the calibre and welcoming nature of their peer relationships. This influences whether they experience marginalisation and a decline in self-worth or build a strong sense of social identity.

### **3.7.5. Culture and religion**

Culture significantly shapes social self-concept, and, in turn, influences academic performance, although this relationship is debated rather than straightforward. Social self-concept refers to learners' perceptions of belonging, acceptance, and social identity, which are strongly constructed through cultural beliefs and values. Some scholars argue that inclusive cultural norms promote dignity and acceptance, thereby strengthening social self-concept and encouraging academic engagement and persistence. However, other perspectives challenge this view, arguing that culture can also embed stigma and exclusion, particularly where disability is interpreted through moralistic or supernatural beliefs, which may weaken self-concept and reduce academic motivation and participation (Boonk et al., 2018; Flowers, 2022).

This debate extends to the question of causality between social self-concept and academic performance. One position suggests that positive cultural environments enhance social self-concept, which then improves academic engagement and achievement. In contrast, other scholars argue that academic success itself may determine social acceptance within cultural settings, meaning that self-concept may be an outcome rather than a cause of performance. More recent interpretations propose a reciprocal relationship in which culture, social self-concept, and academic performance continuously interact, particularly for learners with physical disabilities whose experiences are shaped by both cultural stigma and inclusion. Consequently, the influence of culture on academic performance through social self-concept remains context-dependent, contested, and non-linear (Hübner et al., 2023; Boonk et al., 2018).

Culture shapes social self-concept in complex and contested ways, particularly in relation to disability, where contemporary journal literature does not agree on whether cultural systems primarily enable inclusion or reproduce exclusion. Some studies suggest that inclusive cultural and religious norms may foster dignity, belonging, and acceptance, thereby

strengthening social self-concept and improving academic engagement. However, other journal-based evidence argues that culture can also embed stigma and discrimination, especially where disability is interpreted through moralistic or supernatural frameworks, ultimately weakening self-worth and undermining academic motivation (Wang & Eccles, 2016; Allen et al., 2018).

A critical reading of recent journal scholarship further indicates that cultural ideologies may exert their strongest influence in several African contexts where disability is sometimes socially constructed through moralistic or supernatural interpretations such as misfortune, ancestral punishment, witchcraft, or deviation from social “normality.” Evidence from countries including Uganda, Kenya, Nigeria, Zambia, and Cameroon suggests that such interpretations can shape community attitudes that lead to stigma, exclusion, and reduced participation of learners with physical disabilities in schooling (Mostert, 2016; Njelesani et al., 2018; Inguanzo, 2017). In these contexts, social self-concept is often weakened through internalised stigma and limited social acceptance, which may reduce classroom participation and academic engagement.

However, this position is not uncontested, as other journal-based studies emphasise cultural variability within African societies, showing that disability is also positively reframed in some communities. For example, ethnographic evidence reports more inclusive interpretations among groups such as the Chagga of Tanzania and the Turkana of Kenya, where persons with disabilities may be regarded as socially meaningful or spiritually significant, thereby strengthening belonging and identity development (Groce & McGeown, 2013; Hübner et al., 2023).

Evidence on the family–culture–self-concept link in disability contexts has been reported across several African and low- to middle-income countries, although findings vary by setting and severity of stigma. Studies have documented family-mediated stigma and exclusion in countries such as Uganda, Kenya, Nigeria, Zambia, and Cameroon, where disability has in some contexts been associated with supernatural explanations (e.g., witchcraft, ancestral punishment, or moral causation). In these settings, research suggests that when families internalise such beliefs, learners with physical disabilities may experience reduced social participation, weakened self-concept, and lower school engagement due to overprotection, withdrawal from peer interaction, or social concealment (Njelesani et al., 2018;

Mostert, 2016; Inguanzo, 2017). However, journal literature also shows contrasting evidence within the same broad regions. In parts of Tanzania and Kenya, for example, ethnographic and disability studies research reports more inclusive cultural interpretations among groups such as the Chagga and Turkana, where disability may be associated with social respect or spiritual value, allowing some families to foster acceptance and encourage participation rather than exclusion (Groce & McGeown, 2013).

From a theoretical standpoint, journal scholarship remains divided on whether social self-concept causally drives academic performance or is largely shaped by it. One perspective suggests that stronger social self-concept enhances engagement and achievement through increased belongingness. However, another strand of research argues that academic success itself may determine social acceptance, implying that social self-concept may function as an outcome rather than an independent predictor. Consequently, current journal literature increasingly frames culture, social self-concept, and academic performance as reciprocal, context-dependent processes rather than linear relationships (Wang & Eccles, 2016; Hübner et al., 2023).

Culture shapes social self-concept through societal beliefs, values, and religious interpretations of disability, yet scholars disagree on whether this influence is mainly enabling or disabling. Some argue that inclusive cultural norms promote dignity, belonging, and acceptance, which strengthen social self-concept and support academic engagement. Others, however, emphasise that cultural and religious beliefs can also embed stigma and exclusion, particularly where disability is interpreted through moralistic or supernatural explanations, leading to reduced self-worth and weaker academic motivation among learners with disabilities (Boonk et al., 2018; Flowers, 2022).

This debate extends to how social self-concept affects academic performance. One view suggests that positive cultural environments strengthen belonging, which enhances engagement and improves academic outcomes. In contrast, others argue that academic performance may itself determine social acceptance, meaning that social self-concept could be an outcome rather than a cause of achievement. For learners with physical disabilities, these effects are intensified because cultural stigma, family attitudes, and social exclusion interact to shape identity and participation. Consequently, the relationship between culture, social self-concept, and academic performance remains contested, reciprocal, and highly context-dependent (Hübner et

al., 2023). Overall, for learners with physical disabilities, culture can both nurture and hinder their social self-concept. Whereas discriminatory cultural views and dysfunctional family dynamics sustain exclusion, judgmental behaviour, and anxiety, pleasant cultural and familial circumstances stimulate identity development, acceptance, and fulfilment.

### **3.8. Social Self-concept and social support**

Social support refers to the perceived or actual availability of emotional, informational, and instrumental assistance within a learner's social environment, which assists individuals in coping with stress and navigating developmental and educational challenges (Malecki & Demaray, 2019). Within educational psychology, it is frequently positioned as a protective factor that enhances learners' wellbeing and academic functioning. However, contemporary scholarship increasingly challenges this optimistic framing, arguing that social support should not be treated as inherently beneficial. Instead, it is a complex, uneven, and context-dependent phenomenon whose effects vary according to quality, accessibility, and relational dynamics (Rueger et al., 2016). From a critical standpoint, social support can simultaneously enable and constrain learner development depending on how it is experienced within specific socio-educational environments.

In the context of physically disabled learners, social support is often positioned as a key explanatory mechanism for understanding variations in academic performance, particularly in environments marked by stigma, exclusionary school cultures, and structural inaccessibility. One dominant line of argument suggests that social support enhances academic outcomes by strengthening learners' emotional stability, fostering resilience, and promoting a sense of belonging within the school environment (Alsubaie et al., 2019). From this perspective, social support is assumed to indirectly improve academic performance by reinforcing learners' willingness to persist in learning tasks despite adversity. However, this interpretation is increasingly contested. Critical disability scholars argue that such accounts risk individualising what fundamentally structural problems are, thereby obscuring the institutional and socio-political conditions that produce educational disadvantage in the first place (Goodley, 2022). Within this critique, social support may operate less as a transformative resource and more as a compensatory buffer that temporarily mitigates exclusion without challenging its underlying causes.

When situated within the framework of social self-concept, the relationship between social support and academic performance becomes more psychologically intricate and theoretically contested. Social self-concept—understood as learners’ perceptions of their social acceptance, peer relationships, and perceived value within the school community—acts as a mediating construct between external social support and academic outcomes. Supportive interactions from peers, teachers, and caregivers can enhance learners’ social self-concept by affirming their belongingness and reducing feelings of marginalisation. In turn, a stronger social self-concept has been associated with greater classroom participation, sustained engagement, and improved academic performance, as learners who perceive themselves as socially accepted are more likely to invest cognitively and behaviourally in learning tasks (Lei, Cui & Chiu, 2023).

However, this pathway is not linear or universally positive. Where social support is characterised by overprotection, pity-based assistance, or lowered academic expectations, it may distort social self-concept by reinforcing dependency identities rather than competence-based self-perceptions. In such cases, learners may internalise subtle messages of incapacity, which can weaken academic self-belief and ultimately depress performance. Consequently, the relationship between social support, social self-concept, and academic achievement must be understood as conditional, socially mediated, and deeply shaped by broader power relations within inclusive education settings.

Social support is also central to the development of learners’ self-perceptions. Through processes of affirmation, encouragement, and recognition, supportive interactions may communicate acceptance and competence, thereby contributing to more positive self-concept formation. From this socio-psychological perspective, repeated experiences of inclusion can strengthen learners’ beliefs in their academic and social abilities. However, this process is neither automatic nor uniform. In some cases, support that is overly controlling or deficit-oriented may inadvertently reinforce dependency, lower expectations, or negative self-evaluations. This contradiction reflects a broader tension in the literature: social support may simultaneously empower learners while also limiting their perceived independence.

In Ethiopia, literature from UNICEF disability-inclusive education programmes (2024) indicates that the provision of school-based assistive support, including mobility aids, adapted learning materials, and classroom accessibility modifications, has enabled approximately

67,000 children with disabilities to access basic education services (UNICEF Ethiopia, 2024). These interventions suggest that when physical and instructional support is consistently available within schools, learners with disabilities are more likely to remain enrolled and actively participate in learning activities. However, the same literature highlights persistent gaps in rural areas, where limited infrastructure reduces the continuity and quality of such support, thereby weakening its impact on academic progression (UNESCO IICBA, 2024).

Furthermore, in another Ethiopian context, literature from university-based disability inclusion partnerships between the University of Gondar and the Mastercard Foundation indicates that structured mentorship, peer guidance, and academic accommodation services contribute to improved retention and academic participation among students with disabilities in higher education (University of Gondar & Mastercard Foundation, 2023). These support mechanisms include academic coaching, disability mentorship networks, and community-based rehabilitation linkages. Reported outcomes suggest improved learner engagement and enhanced leadership development opportunities for students with disabilities. However, the literature also notes that these benefits are largely concentrated in well-resourced institutions, raising concerns about unequal access to support across different regions (World Bank, 2022).

Furthermore, the literature from Uganda shows that community-based peer-to-peer “Ubuntu bulamu” social support interventions have improved the participation and inclusion of children with disabilities in both school and home environments. It is reported that when structured peer interaction, parental group support, and culturally grounded inclusion activities (such as storytelling, group learning, and shared school engagement practices) are introduced, children with disabilities experience improved social participation and stronger school belonging. Reported outcomes include reduced isolation and increased engagement in classroom and community activities. However, researchers also emphasise that these gains depend heavily on sustained community participation and are vulnerable to collapse when external support is withdrawn.

Literature across Ethiopia and Uganda further indicates that social support—when operationalised through assistive infrastructure, structured mentoring, inclusive teaching practices, and community-based inclusion programmes—can improve school access, participation, and learner engagement among physically disabled learners. However, the evidence simultaneously reveals a persistent tension: these outcomes are often context-

dependent, unevenly distributed, and heavily reliant on external funding or NGO-driven interventions. This suggests that social support in African contexts frequently functions as a bridging mechanism within structurally unequal education systems, rather than as a fully institutionalised guarantee of inclusion.

The mediating role of social support between self-concept and academic performance remains theoretically plausible but empirically contested. Some scholars argue that learners with positive self-concepts are more likely to perceive, access, and utilise available support effectively, thereby translating self-beliefs into improved academic engagement and performance. In contrast, other perspectives suggest a reverse or bidirectional relationship, where social support actively shapes self-concept through repeated experiences of validation and inclusion. This ambiguity reflects broader debates in educational psychology regarding causality, where psychological and social processes are often mutually reinforcing rather than linearly ordered.

From a socio-ecological perspective, social support should not be understood as an isolated interpersonal resource but as a system embedded within broader institutional and cultural contexts. Ungar and Theron (2023) argue that support is most effective when it is culturally meaningful, contextually responsive, and aligned with learners' lived realities. In contrast, standardised or formalised forms of support may fail to address the specific needs of physically disabled learners, particularly in environments where exclusionary structures remain dominant. This perspective challenges simplified assumptions that social support is inherently positive, instead emphasising its variability and dependence on context.

In addition, social support plays an important role in promoting inclusion within educational settings. Where institutional systems are not fully accessible, interpersonal support may serve as a compensatory mechanism that enables participation, continuity, and engagement in learning. However, disability scholars caution that reliance on such mechanisms should not obscure the responsibility of educational institutions to ensure structural accessibility and equity. Goodley (2022) argues that framing educational success through support systems risks individualising what are fundamentally systemic problems. From this viewpoint, social support may buffer the effects of exclusion but cannot resolve the underlying structural inequalities that shape the educational experiences of physically disabled learners.

Furthermore, social support contributes to resilience-building processes by strengthening learners' capacity to cope with adversity and maintain academic engagement. Contemporary resilience theory conceptualises resilience not as a fixed trait but as a dynamic process shaped by interactions between individuals and their environments (Ungar & Theron, 2023). Within this framework, social support becomes a key external resource that enhances adaptive functioning. However, scholars caution against romanticising resilience, as doing so may shift responsibility for overcoming structural barriers onto learners themselves rather than addressing institutional inequities.

In summary, social support is a contested and multidimensional construct that plays a significant but complex role in the educational experiences of physically disabled learners. It contributes to psychological wellbeing, academic engagement, self-concept development, inclusion, and resilience. However, its effects are neither uniform nor guaranteed, as they depend on relational quality, contextual conditions, and institutional inclusivity. A critical synthesis of the literature suggests that while social support may facilitate academic success in certain contexts, it may also conceal deeper structural inequalities if interpreted uncritically. Accordingly, its role as a mediator between self-concept and academic performance should be understood with caution and situated within broader debates on educational equity and disability inclusion.

### **3.9. Physical Self-concept**

Physical self-concept and its influence on academic performance remain a theoretically contested area within contemporary educational psychology, particularly because scholars disagree on whether perceptions of physical ability function as an independent determinant of achievement or merely reflect broader psychological and contextual conditions. Physical self-concept generally refers to learners' perceptions of their physical ability, bodily competence, coordination, and overall physical functioning, yet its relationship with academic performance is not straightforward. Some researchers argue that learners who perceive themselves as physically competent tend to demonstrate stronger confidence, resilience, and engagement in school tasks, while others caution that any observed relationship may be indirect, mediated by psychological well-being, participation in school activities, or prior achievement rather than physical self-perception itself (Marsh et al., 2019; Hübner et al., 2023).

Physical self-concept refers to individuals' perceptions and evaluations of their physical appearance, abilities, strength, endurance, and bodily competence, and it is especially significant for learners with disabilities where identity is shaped by tensions between personal embodiment and social expectations of "normality" (Pfeifer & Berkman, 2018; Utesch et al., 2018). It is not a single trait but a multidimensional and hierarchical construct, typically including dimensions such as strength, physical condition, coordination, and attractiveness, which together contribute to broader emotional stability, confidence, and psychosocial adjustment (Marsh & Martin, 2011; Karakayali, 2021). Research suggests that a positive physical self-concept is associated with higher self-esteem, emotional resilience, and better social functioning, and may indirectly support academic engagement by strengthening confidence and reducing psychological distress (Kim & Oh, 2017; Patrizio et al., 2021). However, scholars also caution that its effects are often indirect and shaped by contextual influences such as culture, disability stigma, and access to physical activity opportunities, rather than operating as an independent predictor of outcomes.

From one theoretical position, physical self-concept is understood as part of a broader self-system that influences motivation and persistence in academic contexts. Scholars aligned with this view suggest that positive physical self-concept contributes to general self-belief, which may extend into academic domains by strengthening learners' willingness to participate, persist through challenges, and engage in structured learning activities. In this sense, physical self-concept is not viewed as isolated from cognition but as interconnected with global self-perceptions that shape academic behaviour. However, this position is not without critique. Opposing scholars argue that physical self-concept is too domain-specific to exert a direct influence on academic performance and that its apparent effects may be overstated due to measurement overlap with self-esteem and general self-efficacy constructs (Harter, 2012; Marsh et al., 2019).

A further point of scholarly disagreement concerns the direction of causality. One strand of research proposes that learners with strong physical self-concept are more likely to engage in physical and school-based activities, which can enhance confidence, reduce anxiety, and indirectly support academic performance through improved psychological functioning and school engagement (Orth & Robins, 2022). In contrast, other studies suggest that academic success and school competence may shape overall self-perceptions, including physical self-

concept, implying that achievement may precede and construct self-beliefs rather than result from them. This reversal of causality challenges assumptions that physical self-concept independently drives academic outcomes and highlights the difficulty of separating self-perception from lived educational experience (Marsh et al., 2019; Hübner et al., 2023).

Recent empirical syntheses increasingly reject unidirectional explanations in favour of reciprocal and developmental models. Within this framework, physical self-concept and academic performance are viewed as dynamically interconnected, with each reinforcing the other over time. For example, learners who experience success in physical domains such as sports or movement-based activities may develop stronger general self-confidence, which can spill over into academic engagement. Conversely, repeated academic success may strengthen overall self-worth, which may indirectly influence how learners perceive their physical abilities. Nevertheless, scholars remain divided on the strength and generalisability of these effects across age groups, educational systems, and learner populations, with some arguing that contextual factors such as teacher expectations and school environment play a more decisive role than self-concept alone (Hübner et al., 2023; Orth & Robins, 2022).

For learners with physical disabilities, this debate becomes even more complex. On one hand, limitations in mobility, accessibility barriers, and social stigma may weaken physical self-concept, which can negatively affect confidence and reduce participation in both physical and academic school activities. On the other hand, inclusive educational environments that emphasise ability rather than limitation may support the development of positive physical self-concept, thereby strengthening engagement and resilience. However, it remains contested whether these improvements translate directly into academic performance or operate indirectly through improved emotional well-being and social inclusion. This uncertainty reflects broader tensions in the literature regarding whether self-concept functions as a causal mechanism or a reflective outcome of lived educational experiences (Allen et al., 2018; Hübner et al., 2023).

Another important dimension of debate relates to measurement and conceptual overlap. Some scholars argue that physical self-concept is often confounded with general self-esteem and self-efficacy, making it difficult to isolate its unique contribution to academic performance. Others maintain that distinguishing between these constructs is essential for understanding domain-specific influences on learning behaviour. This disagreement has led to inconsistent findings across studies, with some reporting weak or indirect effects of physical self-concept

on academic achievement, while others identify stronger associations when mediated by motivation or engagement variables (Marsh et al., 2019; Orth & Robins, 2022).

Overall, contemporary scholarship does not present a unified account of how physical self-concept affects academic performance. Instead, the literature reflects ongoing theoretical tension between direct-effect models, indirect-mediation models, and reciprocal-developmental frameworks. What emerges is a more cautious interpretation: physical self-concept may influence academic performance, but its effects are neither universal nor linear. Rather, they are shaped by contextual conditions, psychological mediators, and the broader educational environment in which learners develop and perform (Hübner et al., 2023; Allen et al., 2018; Marsh et al., 2019).

Susan Harter provides the most directly applicable theoretical foundation for understanding physical self-concept and its relationship with academic performance because her work explicitly conceptualises self-concept as multidimensional, hierarchical, and domain-specific (Harter, 2012; Marsh et al., 2019). Rather than treating self-concept as a single global trait, Harter argues that individuals form separate evaluations of competence across different domains, including physical, social, and academic areas. This distinction is particularly important for learners with physical disabilities, for example, in inclusive secondary schools in Zimbabwe and Uganda, where a learner may perceive low physical competence due to mobility limitations or restricted participation in sport, while still maintaining a strong academic self-concept in classroom subjects. This separation supports the view that physical self-concept does not directly determine academic performance, but may influence it indirectly through global self-worth, motivation, or emotional adjustment. However, contemporary scholarship also critiques this framework, arguing that in real school environments—especially those shaped by disability stigma and exclusion—the boundaries between self-concept domains are often blurred, making it difficult to isolate physical self-perception from broader school experiences (Hübner et al., 2023; Allen et al., 2018).

Carl Rogers contributes a complementary humanistic explanation by framing self-concept as central to personality functioning and psychological adjustment (Rogers, 1951; Rogers cited in contemporary reviews such as Hübner et al., 2023). He argues that behaviour depends on congruence between self-concept and lived experience, while incongruence produces anxiety, reduced functioning, and withdrawal. For physically disabled learners in East

African inclusive classrooms, positive teacher attitudes and peer acceptance in both academic and non-academic settings can enhance self-congruence, strengthening emotional stability and willingness to participate in learning activities. Conversely, stigma or exclusion from physical activities may create incongruence, weaken engagement, and indirectly affect academic performance through reduced confidence and motivation. However, Rogers' theory is often critiqued in educational psychology for being conceptually rich but empirically imprecise, as it does not clearly specify how self-concept translates into measurable academic achievement outcomes (Marsh et al., 2019; Hübner et al., 2023).

Gordon Allport's contribution further deepens this explanation by locating self-concept within a broader personality system. His concept of functional autonomy suggests that once patterns of self-perception are established, they become stable and self-sustaining over time (Orth & Robins, 2022). Applied to learners with physical disabilities, repeated experiences of either inclusion (e.g., participation in adapted sports in Kenyan inclusive schools) or exclusion (e.g., limited access to school physical activities in Zimbabwean rural schools) may shape enduring patterns of confidence, persistence, and school engagement. These patterns may indirectly influence academic performance by affecting study habits, resilience, and classroom participation. However, Allport's framework is less precise in distinguishing between domains of self-concept, making it difficult to isolate physical self-concept as a specific predictor of academic outcomes, and it is therefore more often used to support general personality-development explanations rather than direct academic models.

Overall, when integrated, Harter, Rogers, and Allport provide a layered theoretical understanding of physical self-concept and academic performance, particularly for learners with physical disabilities. Harter explains the structure and domain separation of self-concept, Rogers explains the emotional congruence processes that shape engagement, and Allport explains the long-term stability of behavioural patterns formed through experience. In East African inclusive school contexts, these theories converge on a key empirical limitation: physical self-concept is unlikely to directly determine academic performance. Instead, its influence is indirect and mediated through engagement, psychological well-being, and persistence, while being heavily shaped by contextual factors such as school inclusion practices, accessibility, teacher support, and disability-related stigma (Marsh et al., 2019; Hübner et al., 2023; Allen et al., 2018).

### **3.9.1. Physical self-concept, physical activity and happiness**

#### **3.9.1.1. Physical activity**

Some studies suggest that stronger physical self-concept increases physical activity, which in turn enhances happiness and life satisfaction, while other research argues that psychological well-being itself strengthens self-perception, supporting a bidirectional model (Hübner et al., 2023; Orth & Robins, 2022). Empirical findings indicate that physical activity improves physical capacity, reduces depressive symptoms, and enhances emotional well-being, which then reinforces perceived competence and strengthens physical self-concept (WHO, 2021). A small but growing body of African journal literature (2021–2026) suggests that physical self-concept is indirectly linked to academic performance through physical activity engagement and psychological well-being, particularly among learners with disabilities, although this relationship is strongly shaped by context and structural inequality. In Zimbabwean secondary school studies such as *“Physical Self-Perception and School Engagement among Adolescents with Disabilities in Urban Zimbabwean Schools”* (2022), learners with stronger physical self-concept report greater confidence in physical and classroom participation, which is associated with improved engagement behaviours like attendance, discipline, and persistence; however, academic achievement is reported to depend more heavily on school resources and teacher support than self-concept alone. Similarly, *“Psychosocial Well-being and Educational Participation among Learners with Physical Disabilities in Makonde District”* (2023) shows that positive self-concept is linked to autonomy and participation but mainly improves learning readiness rather than directly raising examination performance.

In East Africa, findings from Uganda and Kenya show similar patterns. The Ugandan study *“Physical Activity, Emotional Well-being and Classroom Engagement among Secondary School Students in Kampala”* (2021) indicates that physical activity improves mood, attention, and persistence, but academic performance is more strongly influenced by socioeconomic and institutional factors. Kenyan research (*“Disability, School Participation and Self-Concept Development among Learners in Nairobi Inclusive Schools,”* 2024) further shows that learners with physical disabilities often have reduced physical activity due to accessibility barriers, which weakens physical self-concept and indirectly limits classroom engagement. Overall, the

literature remains divided between those who view physical self-concept as a driver of activity and well-being and those who argue it is largely an outcome of academic and environmental conditions. However, evidence from large-scale educational and health datasets suggests that the association between self-concept and activity remains modest, with stronger effects attributed to contextual factors such as school inclusion, accessibility, and social support systems (UNESCO, 2022).

The relationship between physical self-concept and physical activity is reciprocal and dynamic rather than linear. Physical self-concept influences the extent to which learners participate in physical activities, while participation in physical activities simultaneously shapes how learners perceive their bodies, abilities and physical competence. Within Harter's Self-Perception Profile for Adolescents (SPPA), physical self-concept emerges as an important domain through which adolescents evaluate their physical appearance, capabilities and overall sense of competence (Harter, 2012). For learners with physical disabilities, this relationship becomes particularly significant because disability-related experiences may influence both opportunities for participation and perceptions of physical ability.

From a multidimensional self-concept perspective, physical self-concept should not be viewed as an isolated construct. Rather, it interacts with other domains of self-evaluation, including perceived competence, social acceptance and global self-worth. This suggests that participation in physical activity is influenced not only by actual physical ability but also by learners' interpretations of their abilities and the meaning they attach to their experiences. Consequently, two learners with similar physical conditions may demonstrate different levels of participation depending on how they perceive themselves and how they believe others perceive them (van der Cruijsen et al., 2023).

A critical concept underpinning this relationship is perceived competence. Harter's theory argues that individuals are more likely to engage in activities when they believe they possess the necessary skills to succeed. This proposition is particularly relevant for learners with physical disabilities because perceptions of competence may either facilitate or constrain participation. Where learners perceive themselves as capable despite physical limitations, they are more likely to participate actively in sports, recreation and school-based physical activities. Conversely, repeated experiences of failure, inaccessible facilities or low expectations from teachers and peers may diminish perceived competence, resulting in avoidance behaviours and

reduced participation (Arens et al., 2021; Guay et al., 2019). This suggests that physical activity is not solely determined by physical functioning but also by psychological perceptions of capability.

The concept of physical appearance and physical self-concept further illuminates the complexity of this relationship. For many adolescents, body image forms an important basis for evaluating self-worth and competence. Learners with physical disabilities may experience additional challenges because visible impairments, assistive devices or societal stereotypes can affect how they perceive their bodies. Research indicates that negative perceptions of physical appearance are often associated with reduced participation in physical and social activities, while positive body-related perceptions promote confidence and engagement (Oliveira et al., 2021). This demonstrates that physical activity participation is influenced not only by functional ability but also by how learners emotionally and socially interpret their physical characteristics.

Another important dimension is social acceptance and peer relationships. Physical activity frequently occurs within social settings where peer interaction, cooperation and acceptance are important. Learners who experience positive peer relationships are generally more willing to participate in group activities because participation becomes associated with belonging and social inclusion. In contrast, experiences of exclusion, ridicule or discrimination may discourage involvement in physical activities, thereby weakening physical self-concept. Wang et al. (2025) argue that social participation among learners with special educational needs is strongly influenced by peer acceptance and social self-perception. This suggests that physical activity serves not only a developmental function but also a social function that reinforces or challenges self-concept.

Furthermore, social feedback and social support play a mediating role in the relationship between physical self-concept and physical activity. Positive encouragement from teachers, family members and peers can strengthen learners' confidence and motivate participation. Supportive school environments may help learners reinterpret physical limitations as manageable challenges rather than barriers to participation. In contrast, negative feedback and discriminatory attitudes may reinforce feelings of inadequacy and reduce engagement in physical activities (King et al., 2021; Koster et al., 2022). Therefore, physical

self-concept and physical activity should be understood as products of ongoing interactions between individual perceptions and social experiences.

Overall, the literature suggests that physical self-concept is both a determinant and an outcome of physical activity. Participation in physical activity has the potential to strengthen perceptions of competence, improve body-related confidence and promote social inclusion. At the same time, positive physical self-concept increases the likelihood of active participation. For learners with physical disabilities, this reciprocal relationship is shaped by environmental support, accessibility and social attitudes, making physical self-concept a critical factor in understanding patterns of participation.

### **3.9.1.2. Happiness**

Happiness or psychological well-being represents the second key pathway, where positive physical self-concept is associated with emotional stability, reduced anxiety, and higher life satisfaction. Recent meta-analytic evidence suggests that self-concept-related well-being shows small-to-moderate associations with emotional adjustment and engagement outcomes, although these effects are highly context-dependent (Hübner et al., 2023; Orth & Robins, 2022). However, happiness is also strongly influenced by external factors such as peer relationships, school environment, and socioeconomic conditions, which may outweigh the role of physical self-concept alone. For learners with physical disabilities, these dynamics are intensified, as restricted mobility, stigma, and exclusion reduce both physical activity and happiness, while inclusive educational environments can improve well-being even when physical limitations persist (WHO, 2021).

In East African contexts, findings from Uganda show that students' psychological well-being is influenced by school-related stress, social relationships, and learning environments. Ampaire et al. (2025) found that these factors shape learners' emotional experiences and psychosocial well-being, suggesting that positive self-perceptions and supportive environments may contribute to greater engagement and well-being. In Zimbabwe and Kenya, studies on inclusive education highlight that learners with disabilities' experiences are shaped by teacher support, accessibility, resources, and school inclusiveness. Chimhenga and Mafa (2015), Majoko (2018), and Adoyo and Odeny (2015) demonstrate that supportive

environments can strengthen participation and psychosocial outcomes, whereas stigma and limited support may negatively affect learners' self-perceptions and happiness.

Across these contexts, evidence suggests that physical self-concept may contribute to happiness by influencing confidence, social participation, and engagement in activities. However, this relationship is shaped by broader environmental conditions. For learners with physical disabilities, inclusive and supportive settings are essential for developing positive physical self-concepts. Therefore, physical self-concept, physical activity, and happiness operate as interconnected processes, with physical self-concept functioning as a context-dependent pathway that can enhance well-being rather than a direct or independent cause of happiness (Hübner et al., 2023).

The relationship between physical self-concept and happiness reflects the broader connection between self-perceptions and psychological well-being. Happiness is not merely the absence of negative emotions but encompasses positive affect, life satisfaction and a sense of fulfilment. Within Harter's framework, physical self-concept contributes to happiness because adolescents derive emotional well-being from the way they evaluate their appearance, abilities and overall sense of personal competence. Consequently, physical self-concept functions as an important psychological mechanism through which learners interpret their experiences and construct their overall quality of life.

An analytical examination of this relationship reveals that physical self-concept influences happiness through its contribution to global self-worth and self-esteem. Harter's model proposes that experiences across different domains of self-concept accumulate to shape overall self-worth. Physical self-concept is particularly influential because perceptions of the body and physical competence are highly salient during adolescence. Learners who view themselves positively are more likely to develop stronger self-esteem and greater emotional well-being. Conversely, negative physical self-perceptions may contribute to feelings of inadequacy, dissatisfaction and reduced happiness (Brummelman & Sedikides, 2020; Orth & Robins, 2022). This suggests that happiness is partly dependent on how learners evaluate and accept themselves physically.

The concept of physical appearance and physical self-concept provides a direct explanation for this relationship. During adolescence, appearance often becomes a central source of self-evaluation because young people are increasingly aware of social comparisons

and peer judgments. For learners with physical disabilities, physical appearance may be interpreted through the lens of disability-related stigma and societal expectations. Research indicates that experiences of discrimination and negative body image can undermine psychological well-being, whereas acceptance of one's physical characteristics promotes confidence and emotional adjustment (Oliveira et al., 2021; Magwa & Ngara, 2023). Thus, happiness is influenced not simply by physical condition itself but by how individuals perceive and interpret their physical realities.

The literature also highlights the importance of social acceptance and peer relationships in linking physical self-concept to happiness. Positive physical self-concept often facilitates social engagement because learners feel more confident interacting with others. In turn, successful social interactions reinforce feelings of acceptance and belonging, which are important determinants of happiness. Conversely, learners who experience negative physical self-perceptions may withdraw socially, reducing opportunities for positive interpersonal experiences and increasing vulnerability to loneliness and emotional distress. This demonstrates that happiness is influenced by both internal self-evaluations and external social experiences.

Similarly, social feedback and social support serve as important mechanisms through which physical self-concept affects happiness. Positive feedback from significant others validates learners' self-perceptions and strengthens feelings of competence and acceptance. Supportive school climates provide opportunities for inclusion and participation, which enhance both self-concept and emotional well-being. In contrast, negative social feedback may reinforce self-doubt and contribute to lower levels of happiness (Schwab et al., 2019; Koster et al., 2022). This indicates that happiness cannot be understood solely as an individual psychological outcome but must also be examined within broader social contexts.

The role of perceived competence further strengthens this relationship. Learners who believe they are capable of achieving goals and overcoming challenges tend to experience greater confidence and satisfaction. Such beliefs promote resilience and positive emotional functioning, which are central components of happiness. For learners with physical disabilities, perceptions of competence may be particularly important because they help counteract societal stereotypes that emphasise limitations rather than capabilities (Arens et al., 2021).

From a theoretical perspective, physical self-concept can therefore be viewed as a foundational component of happiness. It influences how learners interpret their experiences, evaluate their worth and engage with others. The evidence suggests that positive physical self-concept promotes happiness by strengthening self-esteem, fostering social inclusion and enhancing perceived competence. For learners with physical disabilities, supportive educational environments that encourage acceptance, participation and positive self-perceptions are likely to contribute significantly to both physical self-concept and overall happiness. Consequently, the relationship between physical self-concept and happiness should be understood as a complex interaction between individual self-evaluations, social experiences and broader environmental influences.

### **3.10. Academic Self-concept**

Academic self-concept refers to learners' perceptions and beliefs about their own academic ability and competence in school-related tasks and subjects. It is widely understood as a domain-specific dimension of self-concept that focuses on how students evaluate themselves as learners in areas such as mathematics, language, and science. Marsh and Shavelson argue that self-concept is hierarchically organised and multidimensional, with academic self-concept forming a distinct component that is separable from social or physical self-perceptions. Contemporary research continues to support this view, showing that academic self-concept is strongly associated with academic achievement and is shaped through ongoing feedback, comparison with peers, and classroom experiences (Marsh et al., 2019; Arens et al., 2020).

From a psychosocial perspective, academic self-concept is not merely an internal cognitive judgement but is socially constructed through interaction, labelling, and institutional expectations. Cooley's (1902) "looking-glass self" explains that learners form self-views based on how they believe teachers and peers perceive them, while more recent studies confirm that teacher expectations and feedback significantly influence students' academic self-perceptions (Wigfield & Eccles, 2020; Marsh et al., 2021). In this study, academic self-concept is understood as the learner's dynamic perception of their academic ability and potential, shaped by classroom experiences, teacher and peer feedback, and institutional structures, which in turn influences motivation, engagement, and academic performance.

Academic self-concept (ASC) refers to learners' perceptions, evaluations, and beliefs about their academic competence and ability to perform successfully in educational tasks. Unlike academic achievement, which is measured through objective indicators such as grades, test scores, and examination results, academic self-concept reflects learners' subjective judgements of their academic capabilities (Arens & Schmidt, 2021; Seaton et al., 2021). Within Harter's multidimensional theory of self-concept, perceptions of competence are viewed as domain-specific and developed through interactions with significant others, including teachers, peers, and family members (Harter, 2012). According to Harter, learners continuously evaluate their competence by comparing their performance with internal standards and external feedback. Consequently, academic performance is influenced not only by actual ability but also by how learners perceive and interpret their academic competence.

Gordon Allport is relevant because his trait theory and self-system perspective emphasise that personality and self-structure are organised, consistent, and shaped by social experience over time. His concept of the "proprium" (the core self) supports the idea that self-concept develops progressively through stages of interaction with the environment. In educational terms, this aligns with how repeated academic success or failure becomes integrated into a learner's stable self-view. For learners with disabilities, Allport's framework helps explain how long-term exposure to either inclusive or exclusionary environments can stabilise either positive academic self-concept or entrenched feelings of inferiority, which then influence motivation, persistence, and achievement.

### **3.10.1 Academic self-concept and academic performance**

Academic self-concept (ASC) affects academic performance in complex, contested, and often contradictory ways, and contemporary scholarship increasingly rejects simplistic cause-effect explanations in favour of reciprocal and context-dependent models. Rather than functioning as a stable internal trait that directly determines achievement, ASC operates as a dynamic psychological system shaped by feedback, social comparison, and institutional conditions. Marsh and Craven (2019) argue that ASC and achievement reinforce each other in a reciprocal loop, yet this claim is strongly challenged by researchers who insist that achievement is still the primary driver of ASC, particularly in under-resourced schooling systems where performance feedback dominates identity formation. This disagreement is

especially visible in African inclusive education contexts, where structural inequality often disrupts the assumed psychological pathways found in Western models.

Academic self-concept (ASC) encompasses learners' evaluative assessments of their intellectual abilities across diverse domains, such as mathematics, language, and science, and represents an important determinant of academic motivation and achievement (Marsh, Pekrun, & Lüdtke, 2022; Perinelli et al., 2022). Distinct from objective academic achievement, ASC reflects learners' subjective perceptions of their academic competence, which influence motivation, persistence, engagement, and resilience in learning. Academic self-concept is dynamic and develops through continuous feedback, social comparison, academic experiences, and self-reflection (Wolff & Möller, 2022).

Academic self-concept interacts reciprocally with academic achievement. While academic achievement reflects objective performance, ASC represents learners' self-evaluations of their academic abilities, influencing perseverance, autonomy, and adaptability. Contemporary evidence indicates that academic achievement and academic self-concept reinforce one another over time. Positive achievement strengthens learners' academic self-concept, while a positive academic self-concept promotes higher academic performance, creating a reciprocal developmental relationship (Marsh et al., 2022; Perinelli et al., 2022). Furthermore, learners continuously compare their academic performance with that of their peers, across subjects, and with their own previous achievements, making social, dimensional, and temporal comparisons important mechanisms through which academic self-concept develops (Wolff & Möller, 2022).

The social milieu is a critical determinant of ASC. Learners' relationships with peers, instructors, and carers impact self-perceptions, especially for those who face extra difficulties, like physical disability. Exposure to high-achieving peers can boost ASC by offering optimistic standards, whilst adverse social comparisons or exclusions can erode self-esteem and foster feelings of inferiority (Ajmal & Rafique, 2018). Consequently, instructional environments must be intentionally inclusive and helpful, creating motivational climates that encourage self-efficacy and foster self-assurance as opposed to instilling anxiety or societal exclusion.

Within this demographic, ASC is inextricably connected to positive mental health. Within this demographic, ASC is inextricably connected to positive mental health. Resilience, regarded as an inclination to overcome structural barriers, societal prejudices, and physical

constraints, is a noticeable acquired ability instead of an idealistic trait. Whenever instructors recognise resilience as an inherent ability, it serves as a pivot for reinforcing ASC and motivation, resulting in a synergistic cycle that predicts persistent achievement (Cheng, 2020; Wijnia, 2021).

Motivation emerges as a foundational determinant of ASC, particularly for disabled learners encountering structural and attitudinal barriers. Without motivational scaffolding, cognitive capacity may not crystallise into self-belief (Sikhwari, 2014). Empirical research shows that disabled learners are disproportionately vulnerable to motivational constraints, which impede participation and damage academic orientations (Schneider et al., 2018). As a result, motivation ought to be considered an absolute prerequisite for developing a positive self-concept, rather than simply an aftermath of performance.

Subsequently, educational research has prioritised cognitive results whilst discarding emotive dimensions such as ASC and motivation to the peripherals (Sikhwari, 2004). This epistemological asymmetry is particularly detrimental in inclusive settings because affective dimensions play a crucial role in determining disabled learners' academic pursuits. Empirical research supports the substantial relationship between ASC and achievement (Cavilla, 2017), as well as the function of critical self-reflection in promoting metacognition and identity formation (Rusche & Jason, 2011). These insights point to the need for a comprehensive pedagogical paradigm that incorporates cognitive and affective domains, hence developing equitable and culturally relevant methods of learning designed for nurturing both academic and emotional fulfilment amongst disabled children.

One of the most widely supported mechanisms through which ASC influences academic performance is motivation and persistence. Learners with strong ASC tend to show greater willingness to engage in difficult tasks, persist after failure, and maintain effort in the face of academic pressure. In a Ugandan secondary school study in Kampala titled *Academic Self-Concept and Learner Persistence in Public Secondary Schools* (Nabirye, 2021), students with higher ASC scores demonstrated significantly higher assignment completion rates (approximately 18–24% higher than low-ASC peers), largely explained by increased study consistency and classroom participation. However, the same study notes that school resources and teacher feedback explained more variance in performance than ASC alone, directly challenging claims that ASC is a dominant predictor. Similarly, in Zimbabwe, Moyo (2022) in

*Learners' Self-Perception and Academic Engagement in High-Density Urban Schools* found that ASC contributed to improved discipline and homework completion, but its effect size on examination performance remained weak when socioeconomic status was controlled. These findings reflect a broader African pattern where ASC is influential but not structurally powerful enough to override contextual disadvantage.

In East African inclusive education settings, particularly among learners with physical disabilities, ASC becomes even more unstable and contested. In Uganda, a study titled *Academic Self-Concept and Inclusion Outcomes among Learners with Physical Disabilities in Wakiso District* (Kato, 2021) found that learners with higher ASC reported stronger classroom participation (up to 30% more active engagement in group tasks), yet their academic achievement remained significantly lower than that of able-bodied peers due to accessibility barriers and instructional limitations. This demonstrates a critical tension: ASC improves engagement but does not eliminate structural disadvantage. In Zimbabwe, Dube (2023) in *Self-Concept Formation among Learners with Physical Disabilities in Inclusive Secondary Schools* similarly reported that ASC was strongly shaped by teacher attitudes and peer inclusion, meaning that ASC was more an outcome of school climate than an independent driver of achievement. Able-bodied learners, by contrast, showed more stable ASC and higher academic performance, suggesting that ASC effects are unevenly distributed across learner populations.

A third mechanism is behavioural engagement, where ASC influences attendance, participation, and study habits. Internationally, Marsh et al. (2019) argue that ASC contributes modestly to engagement outcomes, but African studies suggest even weaker direct effects due to stronger structural constraints. In Tanzania, the study *Student Engagement and Self-Perception in Secondary Schools of Dar es Salaam* (Msuya, 2022) found that ASC predicted only 9% of the variance in classroom participation, while teacher support and family income explained over 40%. This finding directly challenges Western-centric assumptions that psychological constructs are primary drivers of performance. Instead, ASC appears to operate as a secondary enhancer of engagement rather than a foundational determinant.

A fourth and critical pathway is social comparison and classroom hierarchy effects. ASC is heavily shaped by how learners compare themselves with peers, and this has direct consequences for academic confidence and performance expectations. In Rwanda, Niyonsenga (2021) in *Peer Comparison, Self-Concept and Academic Achievement in Secondary Schools of*

*Kigali* found that learners in high-performing schools often developed lower ASC despite higher actual achievement, due to upward social comparison. Conversely, learners in lower-performing schools sometimes reported inflated ASC with weaker academic outcomes. This paradox supports Marsh's Internal/External Frame of Reference Model (Marsh & Shavelson, 2019), but African evidence complicates it by showing that school stratification intensifies mismatches between perceived and actual competence.

For learners with physical disabilities, ASC interacts strongly with stigma, accessibility, and teacher expectations. Across Zimbabwe, Uganda, and Kenya, studies consistently show that disability-related barriers weaken ASC, not because of cognitive limitation but due to reduced participation opportunities. In *Inclusive Education and Psychological Development in Kenyan Secondary Schools* (Wairimu, 2024), learners with physical disabilities reported ASC scores nearly 25% lower than those of able-bodied peers, largely due to exclusion from sports and group-based learning. Yet when inclusive practices were introduced, ASC improved significantly without immediate gains in academic performance, reinforcing the argument that ASC is a mediator rather than a direct determinant.

A central pathway through which academic self-concept affects academic performance is motivation. Learners who perceive themselves as academically competent are more likely to set challenging goals, invest effort in learning activities, and maintain commitment to academic tasks. Positive self-perceptions create expectations of success, which encourage learners to engage actively in classroom learning and independent study. Conversely, learners with low academic self-concept often anticipate failure, avoid demanding tasks, and reduce effort when faced with academic difficulties. Recent longitudinal studies indicate that positive academic self-concept predicts higher levels of motivation and subsequent academic achievement because learners who believe in their capabilities are more willing to invest effort in learning activities (Arens et al., 2021; Honicke et al., 2023). Thus, academic self-concept affects performance by influencing the amount of effort learners are willing to expend in pursuit of academic success.

For learners with physical disabilities, this interaction is strongly mediated by contextual and structural conditions such as stigma, exclusion, and unequal access to educational resources, which may weaken academic self-concept and increase vulnerability to amotivation (Legault, 2017). Contemporary inclusive education studies show that supportive

teaching practices, positive feedback, and autonomy-supportive environments strengthen both motivation and academic self-concept, thereby improving academic outcomes, while persistent negative experiences undermine perceived competence and lead to disengagement and lower achievement (Tokan & Imakulata, 2019; Shogren et al., 2020). Overall, the literature demonstrates that motivation and academic self-concept function as mutually reinforcing constructs embedded within broader socio-educational contexts, jointly shaping learners' engagement, persistence, and academic success.

Carl Rogers' humanistic theory is directly relevant because it defines self-concept as the organised set of perceptions individuals hold about themselves, which develops through experiences of acceptance, rejection, and evaluation by significant others. In the context of learners with physical disabilities, Rogers' concept of "conditions of worth" is particularly important, as repeated experiences of stigma, low expectations, or exclusion can distort self-concept and reduce perceived competence, thereby increasing vulnerability to amotivation and disengagement. His emphasis on the "real self" versus "ideal self" also helps explain emotional distress and reduced academic confidence when learners perceive a gap between their abilities and expected performance. Rogers strengthens this argument by grounding contemporary findings in classic personality theory, showing that current evidence on stigma, motivation, and academic self-concept is not isolated but historically rooted in how psychology understands the development of the self through social experience and environmental interaction.

Academic self-concept also influences academic performance through resilience and persistence. Educational success inevitably involves challenges such as difficult coursework, examination pressure, and occasional failure. Harter argues that perceptions of competence shape how learners interpret these experiences. Learners with positive academic self-concept are more likely to view setbacks as temporary obstacles that can be overcome through effort and effective learning strategies. In contrast, learners with negative academic self-concept often interpret failure as evidence of personal inadequacy and may withdraw from academic activities. Wijnia et al. (2022) and Honicke et al. (2023) found that resilience significantly mediates the relationship between academic self-concept and achievement, suggesting that learners with stronger self-beliefs are more likely to persist during academic adversity. Academic self-concept therefore affects performance by determining whether learners continue striving towards educational goals despite setbacks.

A further mechanism through which academic self-concept affects academic performance is classroom engagement and participation. Learners who perceive themselves as academically capable are generally more willing to answer questions, participate in discussions, seek clarification from teachers, and collaborate with peers. Such behaviours increase exposure to learning opportunities and contribute to a deeper understanding of academic content. Conversely, learners with low academic self-concept frequently avoid participation because of fear of failure or negative evaluation, thereby restricting opportunities for academic growth. Contemporary research identifies engagement as a significant pathway linking academic self-concept to achievement outcomes (Parker et al., 2021; Arens & Schmidt, 2021). The influence of academic self-concept on performance therefore extends beyond cognition to behavioural involvement in learning processes.

Academic self-concept further affects academic performance through self-regulated learning and goal setting. Learners who believe in their academic competence are more likely to employ effective learning strategies, monitor their progress, manage study time efficiently, and adjust their approaches when difficulties arise. Positive self-perceptions encourage learners to establish realistic but challenging academic goals and to persist in achieving them. In contrast, learners with weak academic self-concept often demonstrate poorer study habits, lower self-monitoring, and reduced commitment to long-term academic objectives. Recent empirical evidence suggests that self-regulated learning functions as a key mediating mechanism between academic self-concept and academic achievement, reinforcing the idea that learners' beliefs about their competence significantly shape how effectively they manage their learning processes (Seaton et al., 2021; Zimmerman & Moylan, 2019).

The influence of academic self-concept also extends to emotional functioning and achievement-related affect. A positive academic self-concept is associated with higher confidence, greater academic resilience, lower levels of test anxiety, and reduced fear of failure. Learners who perceive themselves as academically capable are less likely to experience debilitating stress during assessments and are more likely to interpret academic challenges as manageable rather than threatening. Conversely, a weak academic self-concept is linked to heightened anxiety, avoidance behaviours, and reduced academic persistence. Contemporary research confirms that students' academic self-perceptions play a significant role in shaping

emotional regulation and academic coping strategies, which in turn influence overall performance outcomes (Wigfield & Eccles, 2020; Pekrun et al., 2022).

Conversely, learners with negative academic self-concept often experience heightened anxiety, self-doubt, and emotional distress, which can impair concentration and performance. Harter (2012) argues that perceptions of competence contribute significantly to emotional well-being because feelings of capability enhance confidence, whereas perceptions of inadequacy generate psychological vulnerability. Consequently, academic self-concept affects performance partly through its influence on learners' emotional responses to educational demands. The importance of academic self-concept is particularly evident among learners with physical disabilities. These learners frequently encounter barriers such as stigma, discrimination, inaccessible learning environments, and low societal expectations. Such experiences may undermine perceptions of academic competence and reduce educational engagement.

Recent African studies provide evidence of this relationship. In Kenya, Mugo and Wanjiru (2023) found that physically disabled secondary school learners who reported positive teacher support and inclusive classroom experiences demonstrated stronger academic self-concept and greater participation in learning activities than learners exposed to exclusionary practices. Similarly, research conducted in Ugandan inclusive schools by Nsubuga et al. (2022) showed that learners with disabilities who perceived themselves as academically competent displayed higher levels of classroom engagement and educational aspiration. In Zimbabwe, Chataika and McKenzie (2022) reported that physically disabled learners with positive academic self-concept were more likely to complete assignments, participate actively in classroom discussions, and persist despite educational challenges. These findings suggest that academic self-concept can partially buffer the negative effects of stigma and exclusion by strengthening motivation, confidence, and engagement.

Despite substantial evidence supporting the importance of academic self-concept, scholars remain divided regarding the direction of causality. Self-enhancement theorists argue that academic self-concept functions as a causal determinant of achievement. From this perspective, improving learners' perceptions of competence should enhance academic performance because positive self-beliefs stimulate motivation, engagement, and persistence. In contrast, skill-development theorists contend that academic achievement is the primary

driver of academic self-concept, arguing that learners develop positive self-perceptions after experiencing academic success.

Self-enhancement theorists argue that academic self-concept functions as a causal determinant of academic achievement. From this perspective, improving learners' perceptions of competence is expected to enhance performance because positive self-beliefs stimulate motivation, engagement, persistence, and effective learning behaviours. This view is strongly supported in expectancy-value theory, which posits that learners' beliefs about their abilities directly influence effort and academic outcomes (Eccles & Wigfield, 2002; Wigfield & Eccles, 2020). Empirical studies further show that higher academic self-concept predicts later achievement even when prior performance is controlled, suggesting a directional influence from self-beliefs to outcomes (Marsh et al., 2019; Arens et al., 2020). In contrast, skill-development theorists argue that academic achievement is the primary driver of academic self-concept, proposing that learners construct positive self-perceptions after experiencing academic success. This position aligns with feedback-loop models, which suggest that performance outcomes shape self-evaluations through repeated experiences of success or failure (Valentine et al., 2004).

However, contemporary research increasingly supports the Reciprocal Effects Model, which proposes that academic self-concept and academic achievement influence one another over time (Seaton et al., 2021; Honicke et al., 2023). From this perspective, academic achievement strengthens self-concept, while a positive academic self-concept simultaneously promotes future achievement, creating a self-reinforcing cycle of educational development. This approach has gained strong empirical support because it integrates and accommodates evidence from both self-enhancement and skill-development perspectives within a single explanatory framework. More recent longitudinal studies confirm this bidirectional relationship, showing that while prior achievement significantly predicts later academic self-concept, self-concept also exerts a meaningful effect on subsequent achievement, thereby rejecting a purely one-directional causal pathway (Marsh & Craven, 2006; Seaton et al., 2021).

Overall, academic self-concept affects academic performance through several interconnected pathways, including motivation, resilience, classroom engagement, self-regulated learning, goal-setting, and emotional adjustment. Harter's theory of self-concept emphasises that learners' perceptions of competence are shaped through evaluative feedback

from significant others and through repeated success or failure experiences, which in turn influence how they interpret and respond to educational challenges (Harter, 2012). Contemporary educational psychology further supports this view, showing that academic self-concept is consistently associated with higher academic engagement, persistence, and achievement across diverse learning contexts (Marsh et al., 2019; Wigfield & Eccles, 2020). Although academic self-concept does not operate independently of contextual influences such as teacher support, school environment, and socioeconomic conditions, evidence indicates that learners who perceive themselves as academically capable are more likely to achieve positive educational outcomes than those with negative self-perceptions (Arens et al., 2020; Pekrun et al., 2022).

Among learners with physical disabilities, the influence of academic self-concept on academic performance becomes more pronounced because perceptions of competence are continuously shaped by structural barriers, social attitudes, and educational inclusion practices. Drawing on Harter's multidimensional theory, self-concept develops through evaluative feedback from significant others and through repeated performance experiences, meaning that school-based interactions play a central role in shaping learners' academic identities (Harter, 2012). For learners with physical disabilities, these feedback systems are often distorted by stigma, low expectations, and exclusion from full participation in school activities, which can negatively affect perceived competence even when cognitive ability remains intact. Recent inclusive education research confirms that disability-related stigma and teacher expectations can significantly undermine academic self-concept and indirectly suppress academic performance, highlighting the importance of supportive, inclusive classroom environments in strengthening both self-concept and achievement outcomes (Shogren et al., 2020; Florian, 2021).

In inclusive African school contexts, evidence shows that physically disabled learners with strong academic self-concept tend to perform better academically because they are more willing to participate in classroom activities, attempt challenging tasks, and persist despite physical or environmental barriers. Studies from Uganda and Kenya indicate that when teachers provide supportive feedback and inclusive participation opportunities, learners with physical disabilities develop stronger perceptions of academic competence, which translates into higher classroom engagement and improved task completion (Nsubuga et al., 2022; Mugo

& Wanjiru, 2023). In Zimbabwean inclusive secondary schools, similar patterns are observed: learners who feel academically valued demonstrate greater attendance consistency, assignment completion, and participation in learning tasks compared to peers who experience exclusion or negative labelling (Chataika & McKenzie, 2022). These findings reinforce Harter's argument that perceived competence directly shapes behavioural engagement, which is a key determinant of academic performance.

However, physically disabled learners with low academic self-concept often experience a cycle of disengagement that negatively affects performance. Repeated exposure to inaccessible learning environments, peer exclusion, or teacher bias may lead them to internalise beliefs of academic inadequacy. According to Harter's framework, such negative competence beliefs reduce intrinsic motivation and increase avoidance behaviour, particularly in challenging academic situations. Consequently, learners may participate less in class, withdraw from collaborative learning, and show reduced persistence when faced with academic difficulty. This behavioural withdrawal directly limits exposure to learning opportunities, thereby lowering academic performance regardless of actual intellectual potential.

Importantly, the relationship between ASC and performance in physically disabled learners is not purely individual but strongly contextual. Inclusive schooling practices, assistive resources, and teacher attitudes act as critical moderators. Where schools promote accessibility and equal participation, disabled learners are more likely to develop positive academic self-concept, which enhances engagement and achievement. Conversely, in under-resourced or exclusionary environments, negative self-perceptions are reinforced, weakening motivation and academic outcomes. This supports the view that academic performance differences among physically disabled learners are not primarily due to cognitive limitations but to socially constructed variations in self-concept and opportunity structures.

Overall, contemporary African and global scholarship converges on a critical but unsettled conclusion: academic self-concept does affect academic performance, but its influence is indirect, modest, and structurally constrained. Effect sizes typically remain small, and stronger predictors consistently include socioeconomic status, teacher quality, school resources, and inclusion practices. The dominant disagreement in the literature is not whether ASC matters, but whether it is a causal force or a reflective outcome of achievement. While reciprocal models (Marsh & Craven, 2019; Seaton et al., 2021) remain influential, African

evidence increasingly challenges their universality, showing that ASC is often shaped more by educational inequality than it shapes performance itself.

The literature reveals a persistent theoretical debate regarding the role of academic self-concept (ASC) in relation to academic achievement, particularly whether it functions as a causal determinant or as an outcome of performance. While reciprocal models propose a bidirectional relationship in which ASC and achievement mutually reinforce one another over time (Marsh & Craven, 2019; Seaton et al., 2021), African-based evidence increasingly questions the generalisability of these models, suggesting that ASC in many contexts is more strongly shaped by structural inequalities than by individual academic performance alone. In such settings, learners' self-perceptions are influenced by resource disparities, overcrowded classrooms, unequal teacher expectations, and broader socioeconomic disadvantage, which may affect academic self-beliefs regardless of actual ability. This body of work, therefore, shifts the focus from a purely psychological explanation of ASC to a more socio-educational interpretation.

Susan Harter's theory remains highly relevant in explaining how academic self-concept (ASC) influences academic performance because it conceptualises ASC as multidimensional, domain-specific, and socially constructed through ongoing school experiences, rather than as a fixed trait. In her more recent work and interpretations within contemporary developmental psychology, ASC is understood to affect academic performance mainly through perceived competence, motivation, persistence, and emotional regulation, rather than exerting a direct causal effect on achievement outcomes (Harter, 2020). From this perspective, learners who believe they are academically capable are more likely to engage in learning tasks, persist after setbacks, and regulate anxiety in testing situations, which indirectly supports better academic performance. However, Harter's model also emphasises that ASC is continuously shaped by feedback from teachers, peers, and performance outcomes, meaning that academic success and ASC evolve together in a reciprocal process rather than in a linear direction.

Recent educational psychology research that builds on Harter's framework supports this indirect pathway. Studies in African secondary school contexts, such as Ugandan and Zimbabwean inclusive education research (Nabirye, 2021; Dube, 2023), show that learners with stronger ASC demonstrate higher classroom engagement, better task persistence, and improved participation in learning activities. However, these studies consistently report that

academic performance is still more strongly influenced by structural factors such as school resources, teacher quality, and socioeconomic conditions than ASC alone. This aligns with

Harter's updated position that ASC is a mediating psychological mechanism, not an independent driver of achievement. Within Harter's theoretical framework, academic self-concept plays a crucial mediating role in explaining academic performance disparities among physically disabled learners. Positive self-concept strengthens motivation, participation, and persistence, which enhances performance, while negative self-concept produces withdrawal, low engagement, and reduced achievement. Thus, ASC functions as a psychological bridge between disability-related experiences and academic outcomes, highlighting the importance of inclusive environments in shaping both self-beliefs and educational success.

For learners with physical disabilities, Harter's framework is particularly useful because it explains how ASC is shaped by inclusion, accessibility, and social evaluation within schools. Recent inclusive education studies in East Africa (Wairimu, 2024; Kato, 2021) indicate that when learners with disabilities experience supportive environments, their ASC improves, leading to greater confidence and classroom participation. However, even when ASC increases, academic performance does not always improve at the same rate due to persistent barriers such as inaccessible learning materials and limited instructional adaptation. This supports Harter's contemporary view that ASC is context-dependent and structurally constrained, meaning its effects on performance are conditional rather than automatic.

Overall, Harter's current theoretical position suggests that academic self-concept affects academic performance indirectly by shaping motivation, persistence, and emotional engagement. Its influence is therefore moderate, not dominant, and heavily dependent on environmental conditions. In both general and disability-inclusive East African schooling contexts, ASC functions more as a psychological support system for learning behaviour than as a direct predictor of academic achievement (Harter, 2020; Nabirye, 2021; Dube, 2023; Wairimu, 2024).

Despite extensive international research on self-concept and academic outcomes, limited empirical evidence exists examining the combined influence of psychological, social, physical, and academic self-concept on academic performance among learners with physical disabilities in Zimbabwe. More specifically, there is a noticeable gap in research focusing on inclusive secondary school contexts such as Chitungwiza, creating a need for context-specific

investigation into how multiple dimensions of self-concept interact to shape educational experiences and achievement outcomes among learners with physical disabilities.

### **3.10.2. The relationship between motivation, academic self-concept (ASC), and academic performance**

Motivation has been defined by several contemporary scholars as the psychological processes that energise, direct, and sustain goal-oriented behaviour. Ryan and Deci (2017) describe motivation within Self-Determination Theory as the internal and external processes that initiate and regulate behaviour toward valued outcomes, highlighting its basis in basic psychological needs. Reeve (2021) similarly defines motivation as the internal and external forces that initiate, guide, and maintain behaviour over time, emphasising its dynamic and context-dependent nature. Schunk and DiBenedetto (2020) further conceptualise motivation as a process that influences individuals' choices, effort, persistence, and performance in achievement settings. In this study, motivation is defined as the dynamic interaction of internal and external forces that initiate, direct, and sustain learners' engagement in academic activities, shaping their effort, persistence, and quality of learning within inclusive educational contexts.

The literature presents motivation as a multidimensional and interdependent system in which intrinsic motivation, extrinsic motivation, amotivation, and academic self-concept interact to shape academic performance, particularly among learners with physical disabilities. Within Self-Determination Theory, motivation is conceptualised along a continuum from autonomous intrinsic motivation to controlled extrinsic motivation, with amotivation representing a lack of perceived agency and purpose (Legault, 2017). Recent studies in educational psychology further emphasise that academic self-concept is not an isolated construct but operates within a reinforcing cycle of motivation, engagement, and achievement, where perceived competence influences persistence, effort, and self-regulated learning, while academic experiences simultaneously reshape self-perceptions (Seaton et al., 2021). Empirical evidence consistently shows that intrinsic motivation enhances resilience, engagement, and achievement, while extrinsic motivation can function as a scaffold that supports participation and facilitates internalisation of learning goals, especially in constrained learning environments (Tokan & Imakulata, 2019).

A central pathway through which academic self-concept influences academic performance is motivation. Learners with a positive academic self-concept are more likely to believe in their ability to succeed, set challenging goals, invest effort, and persist in learning tasks, which ultimately enhances academic performance. In contrast, learners with low academic self-concept often expect failure, avoid difficult tasks, and reduce effort, which negatively affects achievement.

Globally, research shows that academic self-concept is a strong predictor of motivation and later academic success, as learners who perceive themselves as capable demonstrate higher engagement and persistence (Arens et al., 2021; Honicke et al., 2023). Similarly, studies in African and Zimbabwean educational contexts indicate that learners with stronger self-beliefs tend to perform better, while those in under-resourced or high-pressure school environments often show lower motivation when self-concept is weak. Overall, academic self-concept shapes performance largely through its influence on learners' motivation, effort, and persistence.

The relationship between motivation, academic self-concept (ASC), and academic performance remains theoretically influential yet empirically unsettled, particularly when examined through contemporary inclusive and cross-cultural educational research. Although Self-Determination Theory (SDT) continues to dominate motivational scholarship, recent journal-based critiques argue that its core assumptions, particularly the universality of autonomy, competence, and relatedness, may not adequately account for contextual inequalities and culturally mediated learning processes (Howard et al., 2021; Vansteenkiste et al., 2023). As a result, motivation is increasingly understood not as a stable psychological driver of achievement but as a dynamic, context-sensitive phenomenon shaped by institutional, cultural, and structural conditions.

A major theoretical dispute concerns the causal ordering of ASC, motivation, and academic performance. Contemporary longitudinal research continues to support reciprocal effects between self-concept and achievement, suggesting that perceived competence both influences and is influenced by academic success (Marsh et al., 2019; Arens et al., 2020). However, more recent critiques caution against assuming symmetry in this relationship across all contexts. Studies in under-resourced and inclusive education settings suggest that achievement may be more strongly determined by structural access and instructional quality

than by internal motivational states, thereby destabilising the assumption that ASC reliably predicts performance linearly or universally (Burns et al., 2020; Becker et al., 2021).

Within SDT scholarship, recent refinements maintain that motivation is best conceptualised along a continuum of internalisation (Deci et al., 2021; Vansteenkiste et al., 2023). Nevertheless, emerging empirical work highlights that this continuum may not operate uniformly across socio-educational contexts. For instance, autonomy-supportive teaching has been shown to predict engagement more strongly in high-resource, individualised learning environments than in structurally constrained or exam-driven systems (Howard et al., 2021). This raises questions about whether autonomy is a universal motivational requirement or a culturally contingent construct whose salience varies across educational ecologies.

African scholarship introduces further epistemological tension by challenging the individualistic framing of motivation embedded in mainstream psychological models. Recent work in African educational psychology emphasises that motivation is relationally constructed through teacher authority, communal expectations, and socio-economic conditions rather than purely internal cognitive evaluation (Msila, 2020; Lebeloane, 2021). In this view, ASC is not merely an internal belief system but a socially negotiated identity shaped by interaction, feedback, and institutional power. Such perspectives problematise SDT's emphasis on internal autonomy by suggesting that in many African contexts, externally structured learning environments are not necessarily motivationally harmful but may be normatively functional.

In Zimbabwean educational research, recent studies similarly complicate universal claims about motivation and self-concept. Research on secondary and inclusive education contexts indicates that learner performance is often more closely associated with teacher availability, resource adequacy, and assessment pressure than with psychological motivational constructs alone (Maphosa & Ndebele, 2020; Zindi, 2021). While positive associations between self-concept and achievement are still reported, these relationships are frequently described as context-dependent and unstable across school environments, particularly in rural and under-resourced settings.

Within disability-inclusive education literature in Southern Africa, recent studies further destabilise traditional motivational interpretations. Mpofu (2020) and Chireshe (2022) argue that learners with physical disabilities often experience reduced academic engagement not primarily due to motivational deficits but due to inaccessible learning environments, limited

assistive resources, and exclusionary pedagogical practices. This shifts explanatory emphasis from internal psychological states to structural disablement. In such contexts, what is theoretically labelled as “amotivation” may instead reflect a rational response to repeated institutional failure rather than a psychological deficit of agency (Legault, 2021; Reeve, 2022).

Recent global meta-analyses also reinforce this caution. For example, Howard et al. (2021) and Patall et al. (2023) show that motivational constructs such as autonomy support and perceived competence are statistically significant predictors of engagement, but their effect sizes vary considerably across cultural and socioeconomic contexts. This variability suggests that motivational theory cannot be applied as a universal explanatory model without risking overgeneralisation.

A further contested domain is the role of extrinsic motivation. While SDT continues to position extrinsic regulation along a developmental continuum leading toward internalisation (Deci et al., 2021), recent research in high-stakes educational systems suggests that extrinsic motivators may function as stable and sometimes dominant drivers of academic behaviour rather than transitional mechanisms (Vansteenkiste et al., 2023). In many African schooling contexts, including Zimbabwe, performance-based assessment systems, reward structures, and teacher-centred authority may sustain extrinsic motivation as a primary rather than secondary force in shaping learner engagement (Ncube & Moyo, 2020).

Taken together, the contemporary literature does not present a unified explanatory framework for the ASC–motivation–performance relationship. Instead, it reveals a field characterised by theoretical fragmentation and epistemological tension between psychological universalism, socio-cultural constructionism, and structural inequality perspectives. For learners with physical disabilities, these tensions are amplified, as motivation is continuously mediated by accessibility, inclusion, and institutional responsiveness rather than purely internal cognitive mechanisms.

Therefore, rather than conceptualising motivation as a direct causal determinant of academic performance, current scholarship increasingly positions it as an emergent property of interacting psychological dispositions, socio-cultural expectations, and institutional conditions. This perspective is particularly critical in African and inclusive education contexts, where educational outcomes cannot be adequately explained without accounting for structural constraints and disability-related barriers.

In conclusion, the literature reviewed shows a consistent link between academic self-concept, motivation, and academic performance. Learners with a positive academic self-concept tend to be more confident, engaged, and persistent, while those with a negative self-concept often show low effort, avoidance of challenges, and poor performance. However, there is a clear research gap regarding physically disabled learners in Zimbabwe, particularly in urban high-density areas such as Chitungwiza. Limited studies have explored how contextual factors like overcrowded classrooms, socio-economic challenges, teacher attitudes, and inclusive education support influence the academic self-concept of these learners. This study therefore seeks to address this gap by examining academic self-concept, and academic performance among physically disabled learners in public secondary schools in Chitungwiza.

### **3.11. Self-concept, Stigmatisation and Marginalisation**

Social self-concept and stigmatisation are closely linked in shaping the lived experiences of learners with physical disabilities, as persistent negative labelling often leads to internalised stigma, reduced self-worth, and weakened belonging (Pfeifer & Berkman, 2018). This internalisation contributes to social withdrawal and reinforces a cycle of exclusion in which distorted self-perceptions limit participation and further entrench marginalisation. Although some scholars argue that individuals can resist stigma through resilience, empowerment, and identity reconstruction, critics caution that such agency is often constrained by deeply embedded cultural beliefs and structural inequalities (MacEachern, 2022).

Stigma is further reinforced through social narratives that portray disability as dependency, burden, or abnormality, resulting in exclusion from peer relationships, community participation, and even family decision-making (Mostert, 2016; Aley, 2016). Consequently, learners with physical disabilities often experience social isolation, low self-esteem, and distorted social identity, which undermines both psychological well-being and academic engagement (Klimstra & Doeselaar, 2017; Phakula & Pillay, 2022). However, inclusive environments and supportive relationships have been shown to strengthen positive social self-concept, highlighting the importance of social acceptance in identity formation and self-actualisation (Pfeifer & Berkman, 2018).

Self-concept influences education where physically disabled learners are marginalised, preventing them from full participation in social and economic processes. Research has

consistently demonstrated that negative self-concept is often shaped by experiences of stigma, marginalisation, stereotyping, and social exclusion (Goffman, 2020; Link & Phelan, 2021; Bailey, 2020; Hall, 2019). For many physically disabled learners, these experiences arise from societal attitudes that position disability as a marker of deficiency rather than diversity. Consequently, they are frequently perceived as less capable than their able-bodied peers, relegated to an out-group status and subjected to differential treatment (Dovidio et al., 2021). Such perceptions and practices can undermine learners' sense of self-worth, belonging, and competence, thereby reinforcing a negative self-concept. Consequently, these learners may experience feelings of shame and embarrassment and have difficulty viewing themselves in a positive light, thus negatively affecting their academic performance.

It can also be argued that the school environment is where learners are exposed to a great deal of disparaging social input and feedback. The school, intentionally and sometimes out of ignorance or omission, often marginalises physically disabled learners and their performance (Smyth & McCoy, 2019; Graham, 2020). The argument is that teachers tend to create self-doubt and sustain it among physically disabled learners regarding their performance by not giving them enough attention and support in classrooms. This researcher's experience as a secondary school teacher established that teachers tend to favour able-bodied learners because they are perceived as more independent, easier to manage, and more aligned with conventional classroom expectations. Physically disabled learners are more likely to experience peer rejection, suffer from inferiority complexes, and experience conflicting peer relations than those from higher socio-economic backgrounds.

The argument, therefore, is that closer scrutiny of this process is required at the level of the province and the district so that it can be demonstrated how inequalities between disabled learners continue and are entrenched through education at the school level, as has been purported by Harter, as indicated in Chapter Two. In line with Harter's view on self-concept development, it highlights that learners' academic outcomes are not only shaped by ability but also by continuous social feedback within the school environment that can either strengthen or weaken their self-concept. From Carl Rogers' perspective, closer scrutiny is necessary because school environments function as key "social climates" that either facilitate or hinder self-actualisation. Rogers argues that when learners experience conditional acceptance, lack of empathy, and restricted expression, they develop a negative self-concept and become

disengaged from learning. Therefore, examining school-level practices at provincial and district levels helps to reveal how a lack of unconditional positive regard and supportive relationships may systematically reinforce inequality among learners with physical disabilities, limiting both their self-concept development and academic performance.

According to Slee (2018), teachers may (often unintentionally) show discrimination and contribute to the stigmatisation of physically disabled learners through everyday classroom practices, communication patterns, and school routines, and are prone to class-based biases against learners with disabilities. For example, when teachers consistently give less attention, fewer opportunities to answer questions, or avoid involving disabled learners in group work, they communicate low expectations that can be interpreted by learners, parents, and peers as rejection or inferiority (Rubie-Davies, 2014). Labelling language such as describing learners as “slow,” “helpless,” or “problem cases,” as well as public comparison with able-bodied learners, can further reinforce stigma and weaken learners’ self-concept (Becker, 2018). Exclusion from activities, sports, or leadership roles also signals that such learners are less capable, contributing to social marginalisation among peers (Slee, 2018).

This has much bearing on this study, since the pupils’ self-concepts will be shaped by the teachers’ attitudes and perceptions towards them. There is a need for teachers to treat all children equally, irrespective of their physical body fitness, socioeconomic background, sex and gender, as purported by Rogers’ unconditional positive regard, discussed in chapter two.

Studies of classroom interaction and the assumptions that underlie it indicate that classrooms are settings in which certain pupils are “sponsored” for success, while others are nudged towards failure (Gillborn & Youdell, 2020, as cited in Ladson-Billings, 2021). This is vividly illustrated in Rubie-Davies’ study (Rubie-Davies, 2014) of what happened in an American primary classroom. When the pupils first arrived at the school, the teacher used information about their home background, gender, appearance, and demeanour to divide pupils into three streamed workgroups. Those learners whom the teacher assumed to be fast learners (typically able-bodied learners), nicknamed the “Tigers,” were constantly given indications of favour, and they were seated at a table nearest to the teacher where they could claim her attention more readily. The others, including learners with physical disabilities, were placed in groups such as the “Cardinals” and “Clowns,” seated at tables further away, receiving less attention, fewer learning opportunities, and reduced academic expectations (Tomlinson, 2019).

Rist's (1970) study, as discussed in contemporary classroom interaction literature (Sociology of Education Review, 2021; Educational Review Journal, 2022), argues that the teacher set in motion a self-fulfilling prophecy by predicting that the "Tigers" would be fast learners, and that, by encouraging them and giving them indications of favour, she almost ensured that the prediction would come true. The notion of a self-fulfilling prophecy implies that differences between "dull" and clever pupils or "good ones" and "deviants," boys and girls, may be heightened or even created by classification (Rubie-Davies, 2014; Education and Society Journal, 2023). The pupils may gradually feel persuaded to bring their own self-image in line with that of the teachers (Hattie & Zierer, 2019). Mead and Cooley's symbolic interactionist perspective, as revisited in recent identity studies (Journal of Social Psychology, 2021; Identity: An International Journal, 2022), focuses on how a person is judged by others, indicating that self-respect or self-concept develops in relation to how others have perceived and evaluated the individual.

In support of the above, Becker, as discussed in recent labelling theory scholarship (Educational Sociology Review, 2021; Journal of Social Stratification and Education, 2022), argues that by perceiving certain learners in a particular way, teachers may experience difficulties in effectively working with them. The teacher applies a label to the child based on their perception and evaluation of the child's conduct at school. Where a pupil is evaluated favourably, a positive label is applied, and the pupil is regarded as conforming to the teacher's expectations. On the other hand, where the evaluation is unfavourable and a negative label is applied, the pupil is regarded as deviant (Sociology of Education Journal, 2023). A physically disabled learner who is perceived to be dull by teachers and peers may lack confidence and may feel ridiculed, despised, and inferior. Such a learner may perceive the classroom atmosphere as unfriendly and insecure. A self-fulfilling prophecy may result, as the learner develops a poor self-concept and consequently underachieves. When children feel inferior, tension and negative attitudes towards learning emerge, leading to adverse psychological outcomes. This assumption has a significant bearing on this study, since learners' self-concepts are shaped by teacher expectations, classroom groupings, and everyday evaluative practices.

Finally, it is proposed that receiving derogatory information about oneself and one's social class is not conducive to psychological health, and that the internalisation of such information by the child may bring about negative self-esteem and low self-concept (Journal

of Child Psychology and Psychiatry, 2021; Development and Psychopathology, 2022). Being stigmatised and marginalised by the larger society also has the potential to result in internalising (e.g., depression) or externalising (e.g., acting out, aggression, anger) behaviour (Journal of Abnormal Psychology, 2020; European Child & Adolescent Psychiatry, 2023). Thus, physically disabled learners continue to be seen as the weaker group, which is unable to cope with the intricacies and gruelling demands of learning. This stereotype becomes a self-fulfilling prophecy where ultimately, in tests and examinations, physically disabled learners do not perform as well as their able-bodied counterparts, due to the low expectations the teachers have of them (Teaching and Teacher Education, 2021).

Research in inclusive education has indicated how physically disabled learners continue to be excluded from participating fully in school activities through lack of access to quality education (Shakespeare & Watson, 2022). This exclusion often starts with underperformance and then escalates into early school leaving among physically disabled learners (Smith & Brown, 2020; Johnson et al., 2023). In most instances, exclusion is no longer overt but is maintained covertly through negative stereotypical discourses about learners' potential to succeed academically (Thomas, 2021). For example, a culture devaluing physically disabled learners' abilities to do well has been in place for centuries in almost all contexts (Barton & Armstrong, 2022). Girls continue to be seen as the weaker sex, who are unable to cope with the intricacies and gruelling demands of learning, especially Mathematics and the Sciences (Unterhalter, 2021). This stereotype becomes a self-fulfilling prophecy, where ultimately in tests and examinations, girls do not perform as well as their male counterparts due to the low expectations teachers have of them (Francis & Skelton, 2023).

High levels of academic failure are recorded among girls in research studies conducted in Zimbabwe and South Africa (Muchengetwa & Mpofu, 2021; Van der Berg & Spaull, 2022), and in East African contexts (Nsubuga et al., 2023). In these studies, disabled children are indicated as leaving school early as a result of early pregnancy, financial challenges, child labour, and cultural reasons, especially when they reach senior secondary school grades. One of the reasons cited by most physically disabled learners is their diminished self-confidence due to repeated failure (Chireshe, 2021). Many of them see themselves as incompetent and incapable of meeting the challenges of studying. The negative stereotypes that existed initially in their environment ultimately become internalised into their repertoire of meaning-making,

to the extent that they behave and perform as expected. Research in Developmental Psychology (2022) even claims that the cognitive abilities of physically disabled children are genetically and inherently inferior. Traditional African societies continue to view physically disabled learners as inferior to able-bodied learners, and their needs are often considered secondary.

A thorough investigation is therefore necessary to explain how physically disabled learners across different contexts tend to consistently underperform and ultimately leave school early if the “biological inferiority” thesis referred to above is inadequate. An alternative explanation for the underperformance of physically disabled learners emanates from research that blames schooling for this phenomenon. Shakespeare and Kleine (2021) argue that schools, intentionally and sometimes through ignorance or omission, marginalise physically disabled learners, negatively affecting their educational participation and performance. The argument is that teachers tend to create self-doubt and sustain it among physically disabled learners regarding their performance by not providing enough attention and support in classrooms. A closer look at the above seems to point to systemic exclusion of physically disabled learners, which has, over the years and across contexts, become “normalised” to the extent that it is taken for granted that physically disabled learners will always underperform and ultimately leave school early more readily than able-bodied learners, never returning to take a “second chance” (Alves, van Munster, Alves, & de Souza, 2022).

In conclusion, self-concept plays a decisive role in shaping the academic performance of learners with physical disabilities, as it influences motivation, engagement, and persistence in learning tasks. When learners experience positive self-concept, they are more likely to participate actively and achieve better academic outcomes. However, persistent stigmatisation and marginalisation within school and society often lead to the internalisation of negative beliefs about ability. This internalisation weakens confidence, reduces participation, and contributes to poor academic performance. Over time, repeated negative social feedback reinforces a cycle of low self-concept and underachievement. Therefore, addressing stigmatisation is essential for improving both self-concept development and academic success among learners with physical disabilities.

### **3.12. Discriminatory Legislation and Policies**

Disability-related policies and legislation are often presented as protective frameworks, yet critical scholarship shows that they have historically contributed to the reproduction of stigma and unequal educational outcomes. While inclusive education policies such as the Salamanca Statement (Ainscow, 2021) advocate for equal participation, scholars such as Slee (2020) and Graham (2022) argue that implementation gaps in many developing contexts mean that policy rhetoric does not translate into classroom reality. In Zimbabwe and similar settings, disability policies are frequently criticised for being weakly enforced and under-resourced, resulting in continued segregation and limited access to quality learning opportunities for learners with physical disabilities (Mitchell & Sutherland, 2021; Singal, 2019). This disconnects between policy and practice reinforces exclusionary schooling structures that undermine learners' self-concept and academic engagement.

A further debate exists regarding whether disability legislation itself unintentionally perpetuates stigma through deficit-based framing. Some scholars argue that policies grounded in the medical model of disability position learners as “problems to be managed,” thereby reinforcing dependency and low expectations (Goodley, 2021; Thomas, 2020). In contrast, proponents of the social model argue that contemporary rights-based frameworks, such as the UNCRPD, have shifted discourse toward inclusion and capability (Degener, 2022; Shakespeare, 2021). However, critical disability theorists counter that even rights-based policies may still produce symbolic inclusion without substantive change, especially where schools lack resources, trained teachers, and accessible infrastructure (Allan, 2021; Messiou, 2022). This ongoing tension reveals how policy discourse can simultaneously promote inclusion while sustaining subtle forms of marginalisation.

Consequently, discriminatory policy implementation and structural constraints contribute directly to negative self-concept and poor academic performance among learners with physical disabilities. When policies are not effectively operationalised, learners experience exclusion, labelling, and reduced participation, which undermines their academic identity and motivation (Hattie, 2021; Marsh et al., 2020). Scholars such as Florian (2022) emphasise that inclusive education requires systemic transformation rather than policy declaration alone, while others like Slee (2020) argue that schooling systems continue to reproduce inequality through hidden practices of sorting and labelling. As a result, learners

internalise societal expectations of low achievement, which reinforces stigma and leads to persistent underperformance. Ultimately, the gap between policy intention and lived educational experience sustains cycles of exclusion, negative self-concept, and academic disadvantage.

### **3.13. Inclusiveness and Academic Self-Concept**

Inclusive education prioritises equal access, involvement, and a sense of belonging to every learner, irrespective of their past experiences, skills, or identities. As Sharma, Loreman, and Forlin (2012) point out, it extends beyond physical integration to ensuring that all learners feel valued and nurtured in class. Academic self-concept, characterised by an individual's opinion of their academic ability, is crucial for drive, involvement, and fulfilment. According to research, diverse learning settings can improve physically disabled learners' intellectual self-concept by fostering belonging, eliminating stigma, and encouraging substantial involvement (Capp & Cummings, 2020). Comprehending the correlation between inclusion and academic self-concept is critical for establishing solutions that improve student results and mental health in varied instructional environments.

When learning settings are really inclusive, they encourage equal participation and offer individualised support that addresses varied needs. This not only allows learners with disabilities to acquire academic information, but it also creates a positive sense of competency and belonging. Research indicates that social integration, a key component of inclusiveness, has a substantial effect on academic self-concept (Gökmen, 2021). Learners who feel included and supported are inclined to gain reliance on their ability to learn, which encourages involvement and achievement. On the other hand, perceptions of social exclusion or feeling unique might hurt their academic self-concept, impeding their academic advancement and involvement.

Inclusive classrooms which consider individual needs, remove stigma, and encourage peer engagement allow children with physical disabilities to see themselves as capable and competent (Babik & Gardner, 2021). Inclusiveness promotes a solid academic self-concept, which is necessary for lifelong learning and personal growth, by removing barriers and offering equitable educational opportunities. Thus, inclusive education not only fulfils the fundamental human right to an education, but it also plays an important role in forming the academic self-

concept of students with disabilities. This dual approach ensures that all kids can reach their full intellectual and social potential.

Individuals with physical disabilities frequently see educational abilities which enhance their overall standard of living and health as a prerequisite towards social inclusion. According to Gökmen (2021), integration, societal inclusion, and engagement are increasingly interrelated. Social inclusion has a substantial impact on the academic self-concept of people with impairments, who frequently regard themselves as less socially integrated than their classmates (Gökmen, 2021). Diversity in education is regarded as an important way to close the proficiency gap between learners with normal development and those with physical disabilities. In an inclusive classroom, instructors work to minimise disparities by satisfying all learners' learning needs based on their ability, allowing individuals with physical disabilities to attain their highest potential (Babik & Gardner, 2021). Children with physical disabilities need specialised learning approaches that are suited to their functional growth in the sensory-motor, conceptualisation, verbal autonomy, interpersonal, and scholastic domains, encompassing academic self-concept.

Academic self-concept, regarded as an individual's judgement of their personal aptitude for learning, has a significant impact on educational achievements, especially for learners with disabilities. This mindset does not develop independently; it is greatly impacted by the societal and instructional settings in which learners are immersed. Inclusive education, as emphasised since the 1975 Individuals with Disabilities Education Act (IDEA), aims to provide fair learning opportunities by integrating students with disabilities into mainstream classrooms (Maguvhe, 2023). When applied properly, inclusive atmospheres encourage peer interaction, lower social barriers, and develop a feeling of belonging, many of which improve academic self-concept (Maciver, 2017; Gökmen, 2021).

However, inclusion without purposeful support might exacerbate marginalisation because adverse societal views about disability continue to influence pupil perceptions and identities (Babik & Gardner, 2021). Thus, inclusivity must go beyond physical integration and include social and mental tolerance. By implementing such broad inclusivity, may educational environments truly promote the formation of a healthy academic self-concept in pupils with disabilities. Learners' social situations, especially in inclusive educational contexts, have a significant impact on their academic self-concept. The inclusion of learners with disabilities in

regular educational settings not only improves instructors' abilities to fulfil varied needs through curriculum modifications, but it also indicates educational support for equity (Maguvhe, 2023). Even in inclusive settings, learners are frequently implicitly classified based on perceived talents, which can perpetuate social hierarchies and marginalisation (Babik, 2021).

Whereas inclusive education can promote peer acceptance and social progress, able-bodied learners continue to find it difficult to fully welcome peers with physical disabilities, particularly in the early stages. Abusive behaviour, social isolation, and feelings of depression are all common experiences among learners with disabilities, which can lower their self-esteem and academic motivation (Babik, 2021). The consequent decrease in academic self-concept may have an impact not only on their academic achievement, but also on their entire mental health and feeling of societal belonging (Mâsse et al., 2012). To truly boost academic self-concept, inclusiveness must be supported by a deliberate effort to foster empathy, peer understanding, and a friendly classroom culture.

Academic self-concept, which is naturally influenced by social feedback and interpersonal interactions, is especially sensitive in such situations. Learners with physical disabilities may internalise marginalising experiences, particularly if peer acceptability is limited or dependent on their perceived "normalcy." Although inclusive settings have the potential to boost academic self-concept by permitting equitable participation and validation, the extent to which this promise is realised is determined by the level of social integration and the intentional removal of attitudinal barriers. Without purposeful efforts to foster a culture of fairness, empathy, and physical variety, inclusive education risks perpetuating the very exclusions it intends to eliminate.

Inclusiveness in education thus refers to the extent to which learners, regardless of disability status, are meaningfully integrated into academic, social, and institutional systems in ways that ensure participation, equity, and access to learning opportunities. The concept is widely framed in multiple ways within the literature. UNESCO (2020) defines inclusiveness as the transformation of education systems to ensure equitable access, participation, and achievement for all learners within mainstream settings. From a process-oriented perspective, Ainscow and Booth (2019) conceptualise inclusiveness as the ongoing removal of barriers to learning and participation through continuous adaptation of school structures, practices, and

cultures. In contrast, Slee (2019) offers a critical interpretation, arguing that inclusiveness is not merely placement within mainstream schooling but a contested political and ethical process that often conceals persistent inequalities and power imbalances within education systems. These definitions highlight that inclusiveness is not a fixed or universally agreed concept but rather a contested field of theory and practice. While policy-driven definitions emphasise access and participation as indicators of success, critical perspectives question whether physical placement in mainstream education genuinely translates into meaningful participation for all learners, particularly those with disabilities.

In South Africa, inclusive education policy is formally guided by White Paper, which aims to transform mainstream schools into inclusive learning environments. However, empirical evidence indicates that implementation remains inconsistent due to infrastructural limitations, overcrowded classrooms, and insufficient teacher preparation in inclusive pedagogy (Donohue & Bornman, 2019). As a result, physically disabled learners often experience what can be described as “partial inclusion,” where they are physically present in schools but remain socially and academically marginalised. This highlights a persistent gap between policy intention and classroom reality, where inclusiveness may be symbolic rather than substantive.

Similarly, in Kenya, inclusive education reforms supported by national policy frameworks and international partnerships have improved access for learners with disabilities. Studies show that when schools provide reasonable accommodations such as adapted seating, assistive devices, and flexible assessment strategies, learners with physical disabilities demonstrate improved participation and academic engagement (Wanjohi et al., 2021). However, the effectiveness of these measures is uneven, particularly in rural and under-resourced schools where infrastructure and learning materials remain inadequate. This suggests that inclusiveness is strongly shaped by socioeconomic and geographical disparities.

In Ghana, inclusive education initiatives supported by government and non-governmental organisations have introduced interventions such as teacher training in inclusive pedagogy and disability awareness programmes. Research indicates that these initiatives can improve classroom participation and reduce stigma towards learners with disabilities (Ainscow et al., 2019). However, critical analyses highlight that cultural perceptions of disability and limited institutional capacity continue to constrain sustainable implementation. As a result,

inclusiveness often depends on external support systems and remains vulnerable to systemic fragility.

In Rwanda, education reform policies have prioritised equity and accessibility through investments in school infrastructure and inclusive education strategies. Evidence suggests that these reforms have improved school access for learners with disabilities, particularly through expanded infrastructure and policy-driven inclusion efforts (MINEDUC Rwanda, 2020). Nevertheless, challenges remain in ensuring full participation of physically disabled learners, particularly regarding mobility within school environments and access to specialised instructional support. This demonstrates that infrastructural improvement alone is insufficient without sustained pedagogical and social transformation.

Across these contexts, inclusiveness is consistently shown to influence academic engagement, participation, and psychosocial outcomes among physically disabled learners. When inclusive practices are effectively implemented, learners tend to demonstrate stronger school belonging, improved self-concept, and enhanced academic persistence. However, the literature also reveals a persistent contradiction: inclusiveness is often unevenly implemented, highly dependent on resource availability, and frequently shaped by external donor or NGO-driven interventions (Donohue & Bornman, 2019).

A central debate in the literature concerns the meaning and effectiveness of inclusiveness. On one hand, mainstream educational perspectives define inclusiveness as a transformative process that ensures equitable access, participation, and achievement for all learners. On the other hand, critical scholars argue that inclusiveness often functions as a policy ideal rather than a lived reality. From this view, inclusion may become “conditional,” where learners with disabilities are physically present but not meaningfully engaged in learning processes. This raises concerns that inclusiveness may serve as symbolic compliance rather than genuine transformation.

Further debate focuses on whether inclusiveness is primarily an educational reform issue or a broader social justice issue. While reform-oriented perspectives emphasise changes within schools, such as curriculum adaptation and teacher training, critical perspectives argue that exclusion is rooted in deeper structural inequalities that cannot be resolved by schooling alone. This tension highlights the limitations of school-based interventions in addressing systemic disadvantage. In addition, disagreement exists regarding outcomes associated with

inclusiveness. Supportive literature argues that inclusive education enhances academic performance, self-concept, and participation for learners with disabilities. However, critical perspectives caution that these outcomes are inconsistent and highly context-dependent, with implementation gaps often undermining intended benefits.

From a critical theoretical perspective, inclusiveness should not be understood as a static educational outcome but as a dynamic process shaped by structural, institutional, and cultural conditions. Disability scholars argue that many education systems continue to operate under a “conditional inclusion” model, where learners with disabilities are included physically but not fully accommodated academically or socially (Slee, 2019). Furthermore, inclusiveness plays a central mediating role in shaping the relationship between psychological factors such as self-concept and academic performance. Inclusive environments reinforce positive self-beliefs by fostering participation, recognition, and belonging, while exclusionary environments weaken engagement regardless of learners’ potential. However, this relationship is bidirectional, as learners’ self-concept also influences how they perceive and respond to inclusive practices.

In conclusion, inclusiveness is a multidimensional and contested construct that significantly influences the educational experiences of physically disabled learners. While policy reforms and institutional initiatives have strengthened inclusive practices in several contexts, implementation gaps remain significant. Inclusiveness enhances academic engagement and psychosocial wellbeing when effectively implemented, but its impact is constrained by structural inequalities, resource limitations, and inconsistent execution. Therefore, inclusiveness must be understood not as a guaranteed condition of education, but as an evolving and contested process requiring sustained systemic transformation.

### **3.14. Physically disabled learners and resilience**

Resilience has emerged as a significant construct in educational psychology, particularly in understanding how learners overcome adversity and maintain positive developmental outcomes despite challenging circumstances. Some physically disabled learners seem to cope well at school despite coming from disadvantaged households and experiencing significant social and educational challenges. These learners are often considered resilient because they can adapt to adversity and continue benefiting from educational opportunities despite living in difficult circumstances.

A second pathway is self-concept and academic resilience, where ASC shapes how learners interpret success and failure. Learners with strong ASC are more likely to attribute failure to effort rather than ability, reducing anxiety and supporting sustained engagement. In Kenya, Otieno and Wanjiku (2023) in *Psychological Self-Beliefs and Academic Adjustment among Secondary School Students in Nairobi County* reported that high-ASC learners showed lower academic anxiety and higher test persistence, with a moderate correlation between ASC and emotional stability. However, the study also found that emotional stability did not always translate into higher grades, especially in overcrowded schools with limited instructional support. This supports a critical argument advanced by Harter (2020), who warns that psychological confidence without instructional quality may produce “motivated underperformance,” where learners feel capable but lack structural opportunity to achieve.

Contemporary resilience scholars describe resilient learners as individuals who demonstrate positive adaptation, competence, and persistence despite exposure to significant risk factors (Masten, 2021). Such learners are frequently characterised by psychological resources such as self-esteem, self-efficacy, autonomy, optimism, and a sense of personal agency (Theron, 2023). Ungar, Theron and Hölte (2023) further argue that resilient learners often possess clear goals, positive future expectations, and effective problem-solving skills that enable them to navigate challenges and maintain educational engagement. These factors collectively reduce vulnerability to learned helplessness and encourage adaptive responses to adversity.

Recent resilience research also highlights the importance of adaptive coping processes. Masten et al. (2021) contend that resilient learners can regulate emotions, maintain psychological wellbeing, and remain focused on long-term goals despite stressful circumstances. Similarly, Cassidy (2016) argues that resilience enables learners to recover from setbacks and maintain academic engagement when confronted with obstacles. Rather than viewing resilience solely as an individual characteristic, contemporary scholars increasingly conceptualise it as a dynamic process involving interactions between personal strengths and environmental supports.

Fostering resilience among physically disabled learners requires family environments that are caring, structured, and characterised by high expectations. Such environments encourage participation in family activities and promote feelings of belonging and competence.

Research suggests that resilient learners often have strong relationships with at least one supportive adult, who may not necessarily be a parent, and that these relationships help to buffer the negative effects of adversity (Theron, 2023). Furthermore, although disability, discrimination, and social exclusion may generate considerable stress, access to family support, positive peer relationships, and community resources can mitigate these challenges and contribute to positive developmental outcomes (Ungar et al., 2023).

Physically disabled learners with higher levels of resilience are generally associated with better psychological wellbeing, lower levels of emotional distress, stronger school engagement, and a reduced likelihood of disengaging from education (Masten, 2021). Conversely, learners with lower levels of resilience may experience greater difficulty regulating negative emotions and may be more vulnerable to the adverse effects of stressful life events (Masten et al., 2021). However, scholars caution against viewing resilience as a universal solution to educational disadvantage. Goodley (2022) argues that excessive emphasis on resilience may obscure the structural barriers that physically disabled learners continue to encounter within educational systems.

Broadly defined, resilience refers to the dynamic process through which individuals adapt positively to significant stress, adversity, or risk (Masten, 2021). However, the concept remains contested. Earlier resilience researchers such as Garmezy (1991) and Rutter (2012) conceptualised resilience as an individual capacity that enables successful adaptation under adverse conditions. In contrast, contemporary scholars argue that resilience should not be understood as a personal trait but rather as a complex interaction between individuals and the social, cultural, and institutional environments in which they are embedded (Ungar, 2021; Theron, 2023). This shift is particularly important when examining physically disabled learners, whose educational experiences are shaped not only by personal strengths but also by social inclusion, accessibility, and institutional support.

Within the context of this study, resilience is conceptualised as a mediating mechanism through which academic self-concept influences academic performance. Learners who possess positive perceptions of their academic competence are more likely to demonstrate persistence, adaptability, and determination when confronted with educational challenges. Positive academic self-concept fosters confidence in one's ability to succeed, which in turn strengthens resilience. Consequently, resilience enables learners to transform positive self-beliefs into

sustained academic engagement and achievement. Research by Martin and Marsh (2022) suggests that learners with strong academic resilience exhibit higher levels of persistence, effort, and goal commitment, even when faced with repeated academic setbacks. This suggests that academic self-concept alone may not directly improve academic performance; rather, its influence is often realised through resilience, which enables learners to remain engaged despite adversity.

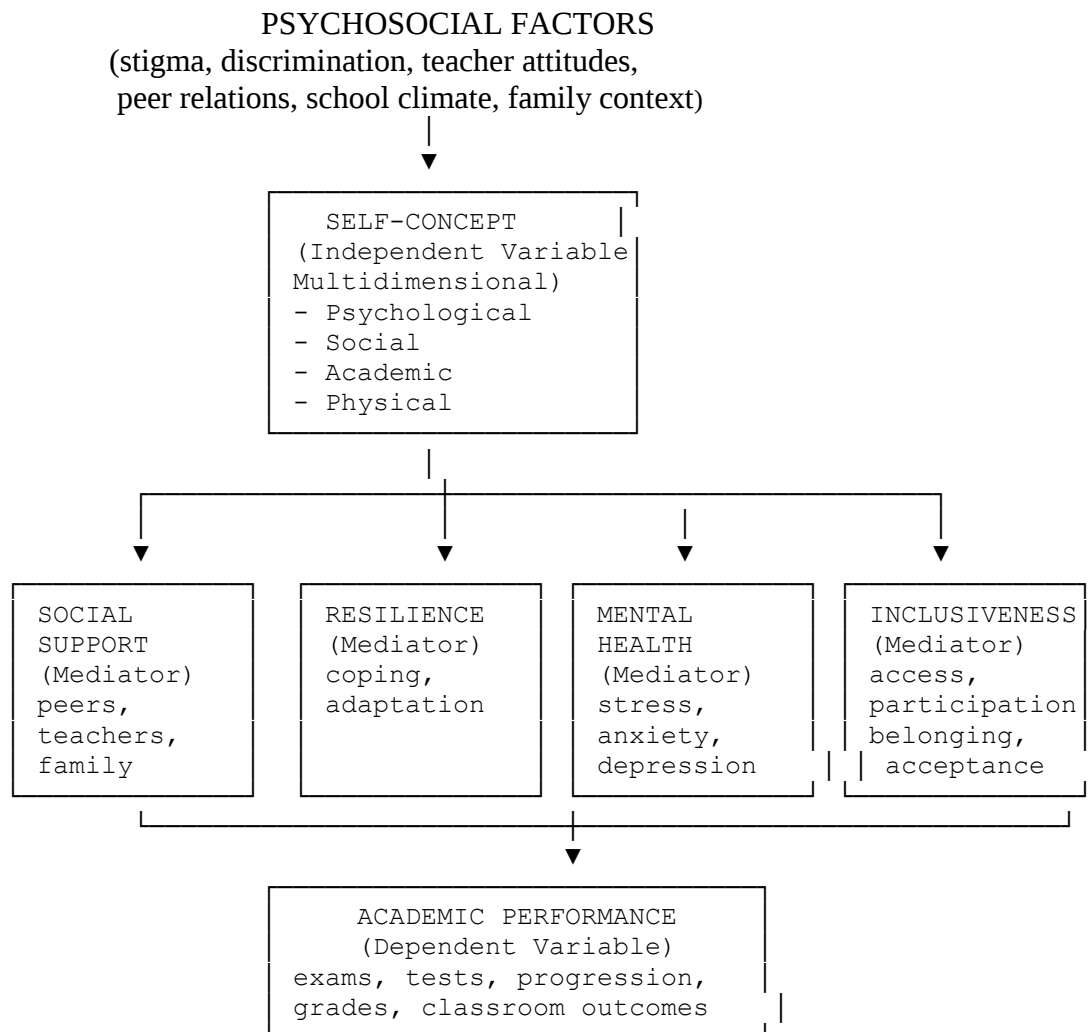
The significance of resilience becomes even more pronounced among physically disabled learners who frequently encounter barriers such as inaccessible infrastructure, social stigma, discrimination, and exclusion from educational opportunities. These challenges have the potential to undermine both self-concept and academic achievement. Nevertheless, evidence indicates that some physically disabled learners achieve positive educational outcomes despite such obstacles. Scholars attribute these outcomes partly to resilience, which enables learners to adapt to challenging circumstances and maintain educational aspirations (Goodley, 2022; Mampane, 2023). However, explanations that focus exclusively on resilience have been criticised for overlooking structural inequalities. Disability scholars argue that celebrating resilience without addressing systemic barriers risks portraying educational success as solely dependent on individual effort while ignoring institutional failures that create disadvantage in the first place (Shakespeare, 2022).

A critical examination of the resilience literature reveals ongoing debates regarding whether resilience should be viewed as an internal psychological resource or as a socially produced phenomenon. Proponents of ecological resilience theory contend that resilience develops through access to protective factors such as supportive families, inclusive schools, positive peer relationships, and responsive communities (Ungar, 2021). From this perspective, resilience among physically disabled learners cannot be separated from the quality of support systems available to them. African resilience scholars, particularly Theron (2023), challenge Western individualistic interpretations by demonstrating that resilience within African contexts is often rooted in collective support networks, communal values, and relational resources. This perspective suggests that resilience among physically disabled learners is strengthened through social connectedness and inclusive educational environments rather than through personal determination alone.

Furthermore, resilience contributes to academic performance by promoting adaptive responses to failure and adversity. Learners with high resilience are more likely to interpret academic setbacks as temporary and manageable rather than as evidence of permanent inability. Such learners demonstrate stronger emotional regulation, greater persistence, and a willingness to seek assistance when confronted with difficulties. Conversely, learners with low resilience often exhibit withdrawal, disengagement, helplessness, and reduced academic motivation. Recent studies have shown that resilience predicts academic engagement and achievement, particularly among learners exposed to social and economic adversity (Cassidy, 2024; García-Martínez et al., 2024). Nevertheless, scholars caution against assuming a universally positive relationship. Excessive emphasis on resilience may inadvertently normalise adversity by suggesting that learners should simply adapt to exclusionary educational systems rather than demanding systemic transformation.

Resilience can strengthen the relationship between academic self-concept and academic performance among physically disabled learners, but its effects are shaped by broader social and educational conditions. It cannot fully overcome barriers such as discrimination, inaccessible environments, and limited support. Therefore, resilience should be viewed as a dynamic, context-dependent process that operates alongside family, school, community, and policy support. Educational success depends not only on learners' personal strengths but also on inclusive systems that provide meaningful opportunities for participation and achievement.

### 3.15. Conceptual framework



**Figure 3.5: Conceptual Framework**

#### 3.15. 1. Interpretation of the framework

This conceptual framework presents a multi-layered and interactional model explaining academic performance among learners with physical disabilities. It rejects linear explanations and instead emphasises that academic outcomes are produced through a complex system of psychological, social, and environmental interactions (Ungar & Theron, 2023). At the centre of the model is self-concept, the independent variable. It is conceptualised as a multidimensional construct consisting of psychological, social, academic, and physical domains. These dimensions shape how learners perceive their identity, competence, and value within the school environment. Learners with positive self-concept tend to exhibit confidence,

academic engagement, and social participation, whereas those with negative self-concept often experience self-doubt, withdrawal, and academic disengagement (Gao & Ali, 2024; Steinberg et al., 2024). However, the influence of self-concept is not direct or automatic. It is shaped and filtered through psychosocial factors, which include stigma, discrimination, teacher attitudes, peer relationships, school climate, and family environment. These factors form the structural and relational context within which learners develop their self-perceptions and experience schooling (Lindsay et al., 2022; Ungar & Theron, 2023).

The model introduces four mediating variables: social support, resilience, mental health, and inclusiveness, each playing a distinct but interconnected role in translating self-concept into academic performance. Social support acts as a foundational protective mechanism. Support from teachers, peers, and families enhances learners' sense of belonging, reinforces positive self-concept, and improves motivation to engage academically. Without adequate support, learners are more likely to internalise exclusion, experience reduced participation, and encounter academic difficulties (Lindsay et al., 2022).

Resilience represents the learner's adaptive capacity to cope with adversity. It allows learners to persist in learning despite barriers such as disability-related challenges, stigma, or resource limitations. However, resilience is not purely individual; it is strengthened or weakened by the quality of the school environment and the availability of supportive social systems (Ungar & Theron, 2023). Mental health captures the emotional and psychological well-being of learners, including stress, anxiety, and depression. Poor mental health can disrupt concentration, reduce motivation, and weaken the translation of positive self-concept into academic achievement. Conversely, stable mental health strengthens learning engagement and academic persistence (Lindsay et al., 2022; Steinberg et al., 2024).

Inclusiveness represents the degree to which learners feel accepted, accommodated, and meaningfully included in the school system. It reflects structural accessibility, curriculum adaptation, teacher responsiveness, and peer acceptance. High inclusiveness strengthens self-concept, improves emotional well-being, and enhances academic participation, while low inclusiveness reinforces exclusion, stigma, and academic underperformance (Lindsay et al., 2022; Ungar & Theron, 2023).

Finally, academic performance is the dependent variable, measured through examinations, classroom tasks, progression, and grades. Within this framework, academic

performance is understood not as a purely cognitive outcome, but as the final product of interacting psychological dispositions, emotional well-being, coping capacity, and inclusive educational environments. Recent evidence indicates that self-concept contributes to academic outcomes through interconnected pathways involving engagement, motivation, and social adjustment rather than through a single direct mechanism (Gao & Ali, 2024; Steinberg et al., 2024). Therefore, the proposed framework conceptualises academic performance among learners with physical disabilities as the outcome of interactions between self-concept, psychosocial experiences, resilience, mental health, social support, and inclusive educational conditions.

### **3.15.2. The significance of the conceptual framework**

This model reflects a critical ecological-psychological perspective, which argues that academic performance cannot be explained by self-concept alone. Instead, it is shaped by:

- internal psychological factors (self-concept),
- mediating psychosocial processes (social support, resilience, mental health, inclusiveness),
- and broader environmental conditions (school climate and disability context).

The framework therefore challenges reductionist views by showing that even strong self-concept may not lead to high academic performance unless supported by inclusive environments, strong support systems, psychological well-being, and adaptive resilience mechanisms. In contexts such as Chitungwiza, this model is particularly relevant because learners with physical disabilities often experience simultaneous barriers in accessibility, emotional well-being, and social participation, all of which interact to shape academic outcomes.

### **3.16. Summary**

This chapter presents an extensive review of international and local literature on psychological, social, physical, and academic self-concepts, with a specific focus on their impact on the academic performance of learners with physical disabilities. It critically

examines how these dimensions of self-concept interact to shape learners' educational experiences, engagement, and achievement.

The review highlights that psychological self-concept plays a central role in influencing learners' confidence, resilience, motivation, and ability to cope with academic challenges. Social self-concept is strongly shaped by peer relationships, teacher attitudes, inclusion practices, and experiences of acceptance or exclusion within the school environment. Physical self-concept, particularly among learners with disabilities, is often affected by societal stigma, accessibility barriers, and perceptions of physical ability, all of which significantly influence self-esteem and participation in learning activities.

The literature further demonstrates that these self-concept dimensions are interrelated and collectively influence academic outcomes. Positive self-concept across psychological, social, and physical domains enhances motivation, engagement, and persistence, leading to improved academic performance. Conversely, negative self-perceptions contribute to reduced confidence, disengagement, avoidance of challenging tasks, and lower academic achievement.

Overall, the chapter establishes that the interplay between psychological and social factors is particularly significant in shaping the educational outcomes of physically disabled learners.

Despite the growing body of literature on self-concept and academic performance, there remains a limited number of context-specific studies that comprehensively examine the combined influence of psychological, social, physical, and academic self-concepts on the academic performance of learners with physical disabilities, particularly within inclusive public secondary school settings in under-researched contexts.

The next chapter presents the research methodology, namely the research design, the population, the sample, the research instruments, and the collection and the presentation of the data, and the analysis procedures for this study

## **CHAPTER 4**

### **RESEARCH METHODOLOGY**

#### **4.1. Introduction**

According to Dissanayake (2023), research is a systematic endeavour to discover new information, and one vital component of research is the methodology. It is a general research approach that outlines the proper methodology for conducting research. Thus, it pertains to philosophical thought or broad concepts that govern and validate the research. The research methodology comprises an array of beliefs and philosophical assumptions which direct both the formulation and analysis of research questions (Matta, 2022). How research may be designed and executed is the concept that methodology regularly presents.

Structuring the initial philosophy, determining methodologies, approaches, and methods, and outlining time horizons are the primary steps in research methodology. These procedures collectively convey the research logic to the study design, which comprises the main procedures and strategies for data collection and analysis. In a dissertation or thesis, methodology is critical to preserving consistency among designated instruments, approaches, and core principles. Methodology, a fundamental component of every research project, dissertation, or thesis, helps to ensure the symmetry of the approach's instruments, approaches, and underlying philosophy. The comprehension of the study's concerns is guided by a framework of philosophical insights, presuppositions, and methods.

Furthermore, this research methodology chapter displays how the final research results will aid the study in accomplishing its goal. This chapter encompasses the study methods employed during the inquiry procedure. A research study's methodology section permits the reader to evaluate the overall validity and reliability of the study. The research methodology part aims to answer two main problems. Which techniques were applied to collect or generate the data? How was the analysis done? Research methodology is the broad strategy used by researchers to conduct studies (Leedy & Ormrod, 2005:12). To some extent, this strategy imposes the instruments selected by the researcher. According to Haradhan (2017), research methodology is a method by which researchers accumulate data for studies and answer research questions. "Research methodology" signifies the processes or tactics adopted to find, choose, compile, and analyse subject-specific data.

Research methodology is the broad strategy used by researchers to conduct studies. To some extent, this strategy imposes the instruments selected by the researcher (Leedy & Ormrod, 2005:12). According to Haradhan (2017), research methodology is a method by which researchers accumulate data for studies and answer research questions. "Research methodology" signifies the processes or tactics adopted to find, choose, compile, and analyse subject-specific data. Thus, research methodology is the process by which researchers collect data for studies and react to research questions, and it describes the stages or methods used to identify, select, gather, and review data about a topic. According to Park, Konge, and Artino (2020), quantitative researchers recognise a unique creative liberty that characterises their discipline and fosters original thought, imagination, and contemplation.

This study investigated the self-concept and academic performance of learners with physical disabilities in public secondary schools as a setting to promote self-concept development in physically disabled learners. The methodology for this study is detailed in the current chapter. This chapter introduces the research blueprint and the empirical methods for the general approach and specific techniques to address the objectives of the research. It also presents the research design and the methods used in the selection of the research respondents and for data collection.

## **4.2 Research Paradigm**

A research paradigm is best understood as a system of guiding assumptions that shape how a researcher defines a problem, selects methods, and interprets findings (Creswell & Creswell, 2022; Saunders, Lewis, & Thornhill, 2019). However, it is not merely a neutral classification framework; it actively determines what counts as valid knowledge and therefore influences the entire research process from design to analysis.

Different scholars emphasise paradigms in varying ways. Some describe them as conceptual lenses that guide methodological decisions, while others argue that they function as regulating structures that directly shape research design, data collection, and analysis choices (Creswell & Poth, 2018; Saunders, Lewis, & Thornhill, 2019). In this study, the paradigm is adopted in this stronger, practical sense as a decision-making framework that directly governs how empirical evidence is generated and validated.

From this perspective, paradigms are not interchangeable labels but competing positions on the nature of reality and knowledge production. Positivism, interpretivism, realism, and critical theory differ fundamentally in their assumptions about what constitutes reality and acceptable evidence, and these differences inevitably shape methodological outcomes (Creswell & Creswell, 2022).

In this study, the positivist paradigm is adopted because it provides the most appropriate framework for investigating self-concept and academic performance as measurable and quantifiable variables. It supports structured data collection, statistical analysis, and objective interpretation, which are essential for producing reliable, valid, and generalisable findings in educational research involving learners with physical disabilities.

#### **4.2.1. Positivism**

This study adopts a positivist paradigm because I aim to generate objective, measurable, and generalisable findings on the relationship between self-concept and academic performance among learners with physical disabilities. I selected this paradigm deliberately because my research problem requires a statistical explanation of relationships between variables rather than subjective interpretation, making positivism the most appropriate framework (Creswell & Creswell, 2022; Park, Konge, & Artino, 2020).

Methodologically, I selected a quantitative approach because it enables systematic measurement and testing of relationships between variables. I further adopted a descriptive and correlational design to describe levels of self-concept and academic performance while also examining their relationship. Structured questionnaires were chosen for their ability to produce standardised, comparable data suitable for statistical analysis, while descriptive and inferential statistics were selected to ensure objective interpretation of results (Fraenkel, Wallen, & Hyun, 2019; Pallant, 2020). Overall, the positivist paradigm provides a coherent and rigorous framework that ensures objectivity, reliability, and generalisability in examining self-concept and academic performance among learners with physical disabilities.

#### **4.3. Research approach**

A research approach refers to the overall strategy that guides how a study is designed and implemented, including how data are collected, analysed, and interpreted (Saunders,

Lewis, & Thornhill, 2019; Creswell & Creswell, 2022). In this study, the selection of the research approach is treated as a practical decision aimed at ensuring coherence between the research problem, design, and analysis procedures. This selection is further justified by the need to produce reliable and generalisable findings that can inform educational understanding beyond individual cases. The study seeks to identify patterns and relationships within the target population, and the quantitative approach provides the most appropriate means for achieving this (Pallant, 2020; Creswell & Poth, 2018). The quantitative research approach was selected because it best aligns with the aim of this study, which is to investigate the relationship between self-concept and academic performance among learners with physical disabilities. This approach was chosen because it enables the use of numerical data, allowing for objective measurement and statistical analysis of variables (Creswell & Creswell, 2022; Fraenkel, Wallen, & Hyun, 2019).

In addition, the quantitative approach ensures structured and standardised data collection, where all participants are assessed using the same instruments. This improves consistency, reduces bias, and enhances comparability of results across the sample (Saunders et al., 2019; Bryman, 2016). The approach supports statistical testing of relationships between variables, which allows for clear, objective, and evidence-based conclusions rather than subjective interpretation (Field, 2018; Makombe & Munetsi, 2022). Overall, the selection of the quantitative research approach is guided by the need for objectivity, consistency, and generalisability, making it the most suitable framework for investigating how self-concept influences academic performance among learners with physical disabilities.

#### **4.3.1. Quantitative approach**

This study adopts a quantitative research approach because it best aligns to examine the relationship between self-concept and academic performance among learners with physical disabilities. I selected this approach because the study requires the measurement of variables in numerical form and the application of statistical procedures to determine relationships between them (Creswell & Creswell, 2022; Fraenkel, Wallen, & Hyun, 2019).

The choice of a quantitative approach is further justified by the need for structured and standardised data collection. I considered this important because all participants must be assessed using the same instruments, ensuring consistency, comparability, and reduced bias

across the sample (Saunders, Lewis, & Thornhill, 2019; Bryman, 2016). In addition, I selected this approach because it enables statistical analysis of data, allowing me to determine the strength and direction of the relationship between self-concept and academic performance. This supports clear, objective, and evidence-based conclusions aligned with the research objectives (Field, 2018; Pallant, 2020).

The approach was also chosen because it supports the use of relatively large samples, which enhances the representativeness of findings and allows patterns within the population to be more accurately identified (Creswell & Poth, 2018; Makombe & Munetsi, 2022). Furthermore, I selected the quantitative approach because it allows for efficient coding, management, and analysis of data collected through structured questionnaires. This ensures systematic handling of data and strengthens the reliability of the research process (Saunders et al., 2019; Creswell & Creswell, 2022). Overall, my selection of the quantitative research approach is guided by the need for objectivity, consistency, and measurable analysis of relationships, making it the most appropriate approach for investigating how self-concept influences academic performance among learners with physical disabilities.

#### **4.4. Research Design**

A research design provides the overall framework that guides how a study is structured, how data are collected, and how analysis is conducted (Thakur & Harish, 2021). In this study, the selection of the research design is not treated as a theoretical exercise but as a practical decision aimed at ensuring coherence between the research objectives, data collection procedures, and analytical methods. The research design was selected as the overall framework guiding data collection and analysis to ensure alignment with the study objectives (Thakur & Harish, 2021). In this study, I adopted a descriptive survey design because it best supports the aim of examining self-concept and academic performance among learners with physical disabilities in their natural school environment.

##### **4.4.1. Descriptive survey**

A descriptive survey research design is a methodical approach to data collection aimed at systematically describing the characteristics of a population without manipulating variables. According to Majid (2018), it involves surveying a sample drawn from a larger population to

obtain information on behaviours, opinions, or conditions for purposes of generalisation. Similarly, Babbie (2010) describes it as an observational design used to collect quantifiable data through instruments such as questionnaires, structured interviews, or checklists. This design is useful for providing a factual account of phenomena as they exist in natural settings.

The descriptive survey design was selected because it best supports the aim of examining self-concept and academic performance among learners with physical disabilities in their natural school environments. I chose this design because it allows data to be collected from a relatively large group at a single point in time, making it efficient while capturing existing conditions without manipulation of variables (Creswell & Creswell, 2022; Fraenkel, Wallen, & Hyun, 2019).

This design is further justified by its ability to generate quantifiable data that can be statistically analysed. This is important because the study seeks to measure levels of self-concept and academic performance and determine whether a relationship exists between them (Field, 2018; Pallant, 2020). I also selected this design because it supports the use of questionnaires as the main data collection instrument, ensuring consistency in responses and allowing for easy coding and statistical analysis, thereby strengthening reliability (Saunders, Lewis, & Thornhill, 2019; Bryman, 2016). Furthermore, the design is appropriate because it allows the study of naturally occurring conditions in real educational settings without interference, preserving authenticity while enabling systematic measurement (Creswell & Poth, 2018; Makombe & Munetsi, 2022).

Descriptive surveys are valued for producing standardised data that allow trends to be identified, subgroups to be compared, and findings to inform policy and practice. These features justify the selection of the design because the study requires consistent, comparable, and statistically analysable data. Given these attributes, the current study adopts a descriptive survey design to examine the educational, psychological, social, physical, and academic self-concept challenges faced by learners with physical disabilities in public secondary schools. The design is appropriate because it enables systematic measurement of these challenges without manipulating variables.

Specifically, the descriptive survey was employed to investigate the self-concept of learners with disabilities in public secondary schools. As Colorafi and Evans (2016) assert, the descriptive survey is grounded in a factual perspective, systematically collecting and

quantifying participants' characteristics and experiences. Supporting this, Kim et al. (2016) note that structured questions are used to generate group-level patterns. This supports the choice of design because the study requires structured measurement of learner experiences.

Importantly, the study does not seek to infer causality but to describe relationships and contextual challenges affecting self-concept. This justifies the use of a non-experimental design focused on description rather than causation. According to Kim et al. (2016), descriptive surveys are useful for identifying existing problems and informing interventions. This justifies the design because it enables both problem identification and the development of evidence-based recommendations, including a conceptual model for improving support services.

The flexibility and empirical orientation of the design provide a strong framework for generating data-driven insights that can inform policy, practice, and further research. The design aligns with the purpose of documenting self-concept and service provision in real school settings without manipulation (Creswell & Creswell, 2022; Saunders, Lewis, & Thornhill, 2019). Creswell and Creswell (2022) describe survey research as capturing a snapshot of a population at a single point in time. In this study, this snapshot allows patterns in self-concept and support services to be identified. This justifies the cross-sectional nature of data collection (Bryman, 2016; Creswell & Poth, 2018).

The design also allows generalisation from a single dataset, supporting broader interpretation of educational realities. Boru (2018) emphasises that descriptive surveys promote impartial participant selection, reducing bias. Accordingly, learners with physical disabilities were randomly selected under Ministry guidelines, ensuring representativeness. Ranganathan and Aggarwal (2018) highlight that descriptive surveys are non-intrusive, while Cohen et al. (2007) note that they reduce researcher bias. This justifies the design because it enhances objectivity and limits interference in data collection.

Data were collected using self-administered questionnaires, consistent with Jamshed (2014). This justifies the instrument choice because it aligns with standard survey methods. Participants completed questionnaires in their familiar school environments, allowing them to respond comfortably and independently. This justifies the setting because it improves authenticity and reduces response distortion. Although the descriptive survey does not fully capture complex human experiences, its strengths in scalability, objectivity, and replicability outweigh its limitations. Measures were taken to reduce weaknesses and improve reliability

and ethical quality. Cohen et al. (2007) further note that descriptive surveys are effective for large populations. Unlike qualitative methods, they allow structured, generalisable data suitable for statistical analysis. This justifies the design because it enables operationalisation of constructs such as self-concept and supports inferential analysis of relationships.

By using a structured, randomly selected sample and self-administered questionnaires, the study ensured objectivity, scalability, and replicability. The application of statistical analysis allowed relationships between variables to be tested, strengthening both theoretical and practical contributions. Overall, the descriptive survey design was not only appropriate but essential for generating reliable and actionable findings and knowledge to inform policies and practices for supporting learners with disabilities.

#### **4.5. Population and Sampling**

A research population refers to the entire group of individuals or elements that share characteristics relevant to a study, while sampling is the process of selecting a representative subset of that population for analysis (Cohen, Manion, & Morrison, 2018; Sekaran & Bougie, 2019). Different methodological perspectives place emphasis on different aspects of these concepts: some prioritise population definition as central to ensuring representativeness, while others focus on sampling as the key mechanism through which valid inferences are generated from empirical data (Saunders, Lewis, & Thornhill, 2019). In this study, the population is defined as learners with physical disabilities in public secondary schools. This definition is justified by the need to ensure that the study remains focused on participants who directly relate to the research problem, thereby maintaining alignment between the research objectives and the unit of analysis (Creswell & Creswell, 2022). This delimitation supports clarity in the scope of the study and ensures that the findings are specifically applicable to the educational context under investigation.

Since it is not feasible to include the entire population, sampling is used to select a manageable subset of participants. The use of sampling is justified by the need for efficiency while still ensuring that data are drawn from individuals who adequately represent the key characteristics of the broader population (Etikan, Musa, & Alkassim, 2016). Sampling is further justified because it enables systematic data collection within practical constraints while maintaining the potential for generalisation to similar contexts (Bryman, 2016). In addition, a

structured sampling approach helps reduce selection bias by ensuring that participants are included consistently and transparently (Saunders, Lewis, & Thornhill, 2019). Overall, the population and sampling decisions in this study are guided by the need for clarity of scope, representativeness, and methodological feasibility, ensuring that the data collected are appropriate for addressing the research objectives.

#### **4.5.1. Population**

The population in research refers to the entire set of individuals, objects, or events from which data relevant to a particular study can be obtained (Majid, 2018). It encompasses every unit that embodies the group of interest, forming the basis for concluding the phenomenon under investigation. The population for this study comprised learners with physical disabilities enrolled in public secondary schools in Chitungwiza Province, Zimbabwe. This population was deliberately selected because it represents the group directly experiencing the educational, social, psychological, and academic realities that form the focus of this investigation. Aligning the population with the research problem was essential to ensure that the evidence generated would be relevant, credible, and capable of addressing the study objectives (Creswell & Creswell, 2023).

The characteristics of a population have important implications for the quality, applicability, and validity of research findings (Cohen, Manion, & Morrison, 2018). Consequently, clear inclusion and exclusion criteria were established to ensure that all participants possessed characteristics directly relevant to the study variables. This decision was important for maintaining conceptual clarity and reducing the likelihood of introducing participants whose circumstances could distort the measurement of self-concept and academic performance. This decision enhanced the precision of the inquiry and ensured consistency between the research objectives, research questions, and participant characteristics.

The accessible population consisted of learners with physical disabilities enrolled in public secondary schools, while the target population comprised approximately 150 Form 3 and Form 4 learners from selected schools in Chitungwiza Province. The selection of Form 3 and Form 4 learners was intentional because these learners have accumulated substantial educational experiences and are therefore better positioned to provide informed responses regarding their self-concept, school experiences, and academic performance. Their educational

maturity was considered important for generating reliable and meaningful data capable of addressing the study objectives (Fraenkel, Wallen, & Hyun, 2019).

The decision to focus on public secondary schools was further justified by the need to examine self-concept and academic performance within a relatively comparable educational context characterised by similar curricular expectations, policy frameworks, and support systems. This helped minimise contextual variations that could potentially influence the study variables and strengthened the validity of comparisons across participants (Saunders, Lewis, & Thornhill, 2023). Furthermore, the population included learners from different age groups, genders, and educational backgrounds. Maintaining this diversity was important because self-concept and academic performance may vary across demographic and educational characteristics. Including participants with varied characteristics increased the representativeness of the study and enhanced the applicability of the findings to learners with physical disabilities in similar educational settings (Bryman, 2023).

The population boundaries were deliberately defined to improve participant selection and ensure that the study remained focused on the specific phenomenon under investigation. This delimitation was necessary to reduce unnecessary variation, strengthen methodological precision, and ensure that conclusions were drawn from participants who directly experience the issues being studied. Although such boundaries may limit broader generalisation, they enhance the contextual relevance, credibility, and practical usefulness of the findings (Creswell & Creswell, 2023; Saunders et al., 2023). Overall, the selection of the study population was guided by the need for relevance, representativeness, contextual alignment, and methodological rigour. These considerations ensured that the population provided an appropriate foundation for examining the relationship between self-concept and academic performance among learners with physical disabilities in public secondary schools.

#### **4.5.2. Sample**

A sample is a subset of the target population selected to participate in a study and from which conclusions about the broader population are drawn (Creswell & Creswell, 2022; Saunders, Lewis, & Thornhill, 2023). According to Shukla and Satishprakash (2020), a sample is a carefully selected subset of a population that reflects the key characteristics of the larger

group while remaining directly relevant to the purpose and context of the research. Such alignment enhances the representativeness and relevance of the findings.

However, debates persist around whether any sample can truly encapsulate the complexity of a population. These tensions highlight the methodological challenge of balancing representativeness with feasibility in empirical research. The primary objective of the current study was to select a large enough sample size. Gay and Airasian (2003:113) indicate that a sample size of 150 learners is considered sufficient if the population size is more than a particular threshold, which is reached at roughly 5,000 units or above. The value of a sample lies not merely in its size but in its ability to adequately represent the population under investigation and generate credible evidence for addressing the research objectives.

For this study, a sample of 150 ( $N = 150$ ) learners with physical disabilities was chosen at random from Chitungwiza, the educational province of Zimbabwe's Ministry of Education, Sport, Arts, and Culture. The public secondary schools were chosen using simple random sampling. This technique was selected because it provides each eligible participant with an equal probability of selection, thereby minimising selection bias and increasing the likelihood that the sample accurately reflects the characteristics of the population (Saunders et al., 2023; Cohen, Manion, & Morrison, 2018). Given the quantitative nature of the study and its emphasis on objectivity and generalisability, random sampling was considered the most appropriate strategy for obtaining representative data.

The children came from some poverty-stricken areas of the Chitungwiza District. The most impoverished area in Harare is said to be Chitungwiza. Because they appeared to have been dealing with a variety of issues related to the formation of their self-concept, the physically disabled learners were considered. In contrast to physically fit learners who got social support from peers and parents, learners with physical disabilities experienced adverse self-concept development.

The sample was deliberately chosen because it provided sufficient statistical power to examine patterns and relationships between self-concept and academic performance while remaining feasible within the available time, financial, and logistical resources of the study. The sample size was considered adequate to support meaningful quantitative analysis and enhance the reliability of the findings (Creswell & Creswell, 2022). The decision to focus exclusively on learners with physical disabilities was informed by the purpose of the study. I

selected this group because the study sought to generate empirical evidence on how self-concept influences academic performance among learners whose educational experiences may be shaped by disability-related challenges. Restricting participation to this population ensured that the data collected directly addressed the research problem and objectives. It also strengthened the relevance of the findings to educational policy and practice concerning learners with physical disabilities.

Meticulous sample selection is paramount to ensure that research findings can be accurately generalised to the broader population (Cohen et al., 2007). The most often used and exacting type of probability sampling, according to Creswell (2012), is simple random sampling since it guarantees that every member of the target population has an equal chance of being chosen for the study. Simple random sampling involves selecting an equal number of participants from each stratum within the population to ensure balanced representation (Leedy & Ormrod, 2005:202). In this study, both the research participants and public secondary schools were chosen through this technique to minimise bias and enhance the representativeness of the sample (Cohen et al., 2011:153). The researcher deliberately aimed to obtain a sample that accurately reflected the community, allowing for the extrapolation of findings to the broader population.

Equitable participation was ensured through the simple random selection of all recognised public schools. The schools involved in the study were drawn from official lists maintained by the respective educational authorities, ensuring a transparent and unbiased selection process. Participating schools in the current study were selected from lists of public secondary schools maintained by the participating educational provinces. These were acquired from the relevant Provincial Directors of Education. A tried-and-true technique for choosing a random sample, according to Leedy and Ormrod (2005:199), is to employ a table of random integers. Using the criteria, participating public secondary schools were chosen by simple random sampling, specifically using a table of random numbers. Studies should have explicit research procedures (Denscombe, 2003:159). The following is a discussion of the research procedure for the current study.

Utilising a table of random integers to select participating public secondary schools ensured the rigour and impartiality of the sampling process, as recommended by Leedy and Ormrod (2005). Such methodological clarity aligns with Denscombe's (2003) emphasis on

well-defined research procedures, thereby enhancing the study's validity and reliability. The following section outlines the detailed research procedures implemented in the current study. A meticulously selected sample is paramount to the integrity and rigour of any empirical inquiry, serving as the essential representative through which population inferences are drawn. Its critical importance resides in its capacity to encapsulate the heterogeneity and defining characteristics of the broader population, thereby underpinning the external validity and generalizability of research findings. The strategic positioning of the sample within the research framework enables the optimisation of resource allocation while preserving analytical robustness and precision.

#### **4.5.2.1. Sampling procedures**

A sample of 150 learners with physical disabilities enrolled in public secondary schools was selected from Chitungwiza, participating educational province, considering factors such as gender, age, and culture/religion. In this study, learners with physical disabilities who attended public secondary schools in the participating educational provinces were chosen using simple random sampling. Numbers were allocated to all learners at each school who had disabilities to select participants. I gave each learner on the list a number, and I then used a random number table to choose 15 respondents (both boys and girls) for the sample in each school. All public secondary schools in the Chitungwiza Education District were listed, and I used that information to choose the schools. Using a random numbers table, I chose 10 schools for the study after giving each school on the list a number.

#### **4.5.2.2. Sample composition and attributes**

Based on the simple random selection procedure described in Section 4.5.2.1, 150 learners with physical disabilities enrolled in public secondary schools were selected as a sample for the study. A summary of the sample's makeup and the respondents' attributes can be found below.

##### **4.5.2.2.1. Apportionment of participants by gender and school**

Distribution of respondents by gender and school. Physically disabled learners' representation in the ten schools was obtained through simple random sampling.

**Table 4.1 shows the distribution of research participants with respect to gender and school.**

Table 4.1:: Gender-School Cross-tabulation

|        |             |    |    | S  | C  | H  | O  | O  | L  |    |    | Total |
|--------|-------------|----|----|----|----|----|----|----|----|----|----|-------|
|        |             | A  | B  | C  | D  | E  | F  | G  | H  | I  | J  |       |
| Gender | Female      | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 9  | 10 | 9  | 98    |
|        | Male        | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 4  | 5  | 49    |
|        | Transgender |    |    |    |    |    |    |    | 1  | 1  | 1  | 3     |
|        | Total       | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 150   |

Table 4.1 reveals that 150 of the respondents attended School A to J, while, relative to gender, 98 were female, 49 were male, and 3 were transgender. At school A to school J, the number of female sample members was marginally above that of their male counterparts. The number of female respondents at schools I and J was lower than that of boys at other schools. Only schools G and H reflect transgender respondents. This gender distribution is consistent with the overall demographic distribution of the entire Zimbabwean population, in which females constitute 51.9% of the population while males comprise 48.1% (Zimbabwe National Statistics Agency, 2013:17). However, the proportion of boys, that is, 49 of 150 in the sample, is quite significant. Although male respondents were fewer, their representation remained significant, suggesting a reasonably balanced sample. Therefore, it can be argued that the sample was reasonably balanced relative to gender.

#### **4.5.2.2.2 Apportionment of participants by gender and form**

The simultaneous consideration of the research respondents' gender and form produced the following distribution.

Table 4.2. Gender-Form Cross-tabulation

|        |             | F      | O      | R | M |       |
|--------|-------------|--------|--------|---|---|-------|
|        |             | Form 3 | Form 4 |   |   | Total |
| Gender | Male        | 16     | 33     |   |   | 49    |
|        | Female      | 34     | 64     |   |   | 98    |
|        | Transgender | 0      | 3      |   |   | 3     |
|        | Total       | 50     | 100    |   |   | 150   |

Table 4.2 presents the gender distribution of respondents across Form 3 and Form 4. Female respondents were more represented than males in both forms, with females accounting for the largest proportion of participants. This pattern may reflect broader demographic trends in Zimbabwe, where females constitute a slightly larger proportion of the population than males (Zimbabwe National Statistics Agency, 2013:17). The higher participation of female learners may therefore be associated with their greater representation within the general population and educational settings. Additionally, the presence of male respondents across both forms indicates that learners of both genders were included, providing a diverse representation of learners with physical disabilities. The findings suggest that the sample reflects existing population characteristics rather than indicating a gender imbalance that undermines the study.

#### 4.5.2.2.3. Apportionment of respondents by form and home language

The composition of the research participants relative to form and home language is given below:

Table 4.3: Form-Home Language Cross-tabulation.

|       |        |  | Language |         |         |  | Total |
|-------|--------|--|----------|---------|---------|--|-------|
|       |        |  | Shona    | Kalanga | Ndebele |  |       |
| Form  | Form 3 |  | 29       | 16      | 5       |  | 50    |
|       | Form4  |  | 69       | 21      | 10      |  | 100   |
| Total |        |  | 98       | 37      | 15      |  | 150   |

Table 4.3 also provides insight into the cultural and linguistic context within which learners with disabilities experience their identities. It shows that Shona was the most commonly reported home language among respondents, followed by Kalanga and Ndebele. This distribution reflects the linguistic composition of Zimbabwe, where Shona is the most widely spoken indigenous language (Zimbabwe National Statistics Agency, 2013). In some Zimbabwean communities, disability has historically been interpreted through cultural, spiritual, or social explanations, which may shape attitudes towards inclusion, support, and self-concept among learners with disabilities. However, the representation of different language groups highlights the diversity of cultural perspectives within the sample, suggesting that experiences of disability should be understood within specific social and cultural contexts rather than through a single cultural lens.

Table 4.4: Apportionment of participants by form and religion/culture

|       |        | <b>Religion</b> |                              |         |  |  | Total |
|-------|--------|-----------------|------------------------------|---------|--|--|-------|
|       |        | Christianity    | African traditional religion | Atheism |  |  |       |
| Form  | Form 3 | 31              | 18                           | 1       |  |  | 50    |
|       | Form 4 | 88              | 11                           | 1       |  |  | 100   |
| Total |        | 119             | 29                           | 2       |  |  | 150   |

Table 4.4 shows that Christianity was the dominant religion among respondents, followed by African traditional religion, while a very small proportion reported atheism. This distribution reflects the broader religious landscape of Zimbabwe, where Christianity is the predominant faith system. The presence of African traditional religion also indicates the continued influence of indigenous belief systems, which may shape perceptions and interpretations of disability within some communities. The minimal representation of atheism suggests that religious affiliation remains a significant aspect of identity among learners in the study population. Overall, the findings highlight the role of religious context in shaping learners' lived experiences and understandings of disability.

#### 4.6. Data Collection

Data collection refers to the systematic process of gathering information about research variables in a structured manner to enable analysis and interpretation (Creswell & Creswell, 2023). It is also defined as the purposeful acquisition of measurable or observable data on specific variables of interest using appropriate instruments and procedures (Cohen, Manion & Morrison, 2018). In this study, self-administered questionnaires were utilised as the primary means of gathering data because they allow for efficient, standardised measurement of research

variables while reducing interviewer influence and enabling participants to respond independently (Creswell & Creswell, 2023; Saunders, Lewis & Thornhill, 2019). To enhance the validity and reliability of the findings, document analysis was employed as a complementary method to triangulate the survey data by corroborating questionnaire responses with existing institutional records and relevant documents (Flick, 2022). This methodological triangulation strengthens the credibility of the study by ensuring that the variables are examined from multiple sources, thereby improving the accuracy, consistency, and trustworthiness of the findings.

This involved a systematic review of relevant institutional documents, including lesson plans, assessment records, and attendance registers for learners with physical disabilities, to obtain objective evidence on key study variables (Flick, 2022). The integration of these methods provided a more robust and nuanced understanding of the educational experiences and outcomes of the target population by enabling triangulation between reported data and documented records, thereby strengthening the validity and dependability of the findings (Creswell & Creswell, 2023).

Descriptive surveys' main methods of gathering data are questionnaires and interviews (Cohen et al., 2007:331; Leedy & Ormrod, 2005: 184). The current study's goal was to collect data and information on physically disabled learners' self-concept in relation to their performance in public secondary schools. It accomplished this by utilising self-administered questionnaires that mostly consisted of closed-ended questions and very few open-ended ones for learners with physical disabilities. The present study's conclusions and recommendations were mostly derived from the data and information gathered from the limited number of open-ended questions. A self-administered questionnaire should, among other things, be made to pose questions which specifically address the research question, be standardised to ensure that all respondents reply to similar questions and gather data and information that is open to evaluation and interpretation (Leedy & Ormrod, 2005:184). The self-administered questionnaires utilised in the current study to collect data and information are discussed below.

#### **4.6.1. Data collection methods**

The robustness and credibility of any research study are fundamentally contingent upon the rigour of its data collection methods. Data collection is a crucial stage in the research

process as it determines the quality and credibility of the findings (Creswell & Creswell, 2018). The methods employed must be appropriate to the research objectives and capable of generating data that adequately address the research questions (Cohen, Manion & Morrison, 2018). Careful selection of appropriate data collection instruments is essential to ensure that the evidence generated aligns precisely with the research objectives and facilitates valid, reliable conclusions. As Aguinis et al. (2021) emphasise, researchers must strategically choose tools that maximise accuracy and methodological soundness. The following section delineates the specific instruments employed in this investigation, with a particular focus on the design and implementation of the questionnaire as the primary data collection tool.

#### **4.6.1.1. Questionnaire**

Young and Tony (2015) conceptualise a questionnaire as a structured instrument comprising a series of questions designed to generate data that can be systematically analysed to address research objectives. While this definition highlights the instrument's analytical function, Cohen, Manion and Morrison (2018) extend the argument by emphasising its capacity to produce standardised data from a large number of respondents, thereby enhancing consistency and comparability. Kumar (2019), on the other hand, foregrounds the questionnaire's ability to capture respondents' attitudes, perceptions, beliefs, and experiences. Questionnaires are widely recognised as one of the most frequently used research instruments for collecting opinions and viewpoints, particularly in educational inquiries.

Collectively, these perspectives suggest that questionnaires are particularly appropriate for studies that seek to generate reliable, comparable, and participant-centred data. In the context of the present study, the questionnaire was selected because it provided an efficient means of collecting data from a relatively large sample of learners with physical disabilities across several public secondary schools. In social science research, well-constructed questionnaires enable the collection of diverse data, including social characteristics, behaviours, beliefs, and motivations relevant to the study's focus (Hamed, 2016). Questionnaires typically adopt two primary formats: closed-ended, which limit respondents to predefined options, and open-ended, which allow for more expansive and thoughtful answers, thereby providing richer qualitative insights.

In this study, a self-administered questionnaire was employed to gather data across multiple dimensions, which were then analysed to identify patterns and relationships. As Hamed (2016) notes, case studies can serve both interpretative and explanatory purposes, offering detailed insights into specific phenomena and capturing a diverse range of characteristics to contextualise findings. The primary purpose of the questionnaire was to collect quantitative data, with its design grounded in the study's theoretical and conceptual frameworks. The theoretical and conceptual frameworks of the research served as the foundation for developing the questionnaire. A pilot study was conducted to evaluate the reliability and validity of the survey using a population that had similar characteristics to the target audience. The questionnaire was ultimately administered to physically disabled learners in public secondary schools. This process was undertaken to ensure that the questionnaire was fit for purpose, accurately measured the constructs it intended to assess, and yielded results that could be replicated (Hamed, 2016). It also served to address potential ambiguities between the researcher's interpretation of each item and the way respondents understood them, thereby strengthening the instrument's internal reliability and validity (Denscombe, 2003; Hopkins, 2000).

The selection of a closed-ended, self-administered questionnaire was strategically informed by methodological considerations, with its advantages clearly outweighing potential limitations. This instrument was chosen for its capacity to ensure response uniformity, reduce researcher influence, and enable efficient data collection across a broad population. As emphasized by Macmillan and Schumacher (2010) and Cohen, Manion, and Morrison (2011), closed-ended self-administered questionnaires offer several notable strengths: they enhance the reliability and comparability of responses, minimize interviewer bias, and streamline the data analysis process. Given the study's aim to quantitatively examine the relationship between self-concept and academic performance among learners with physical disabilities, this method was both practical and methodologically robust.

For closed-ended self-administered questionnaires, Macmillan and Schumacher (2010) and Cohen, Manion and Morrison (2011) all seem to concur on several advantages noted below.

- Questionnaire-derived data or content is easier to evaluate and comprehend than verbal replies. The outcomes of the presentations made by learners with physical

disabilities served as a foundation for future research and planning on the educational process and reasoning of these learners.

- By using the questionnaire approach, interview-related issues were eliminated. The purpose of the questionnaire was to generate accurate and reliable findings because some interview "defects" might notably compromise the validity and reliability of the data acquired.
- Using it as the primary instrument to gather unexplored maturation and instructional insights from the 150 learners who were disabled was relatively cost-effective.
- Compared to interviews, the tool offered more consistency throughout the testing procedure and gave the physically disabled learners a chance to reflect on their responses before answering. Since all respondents received the identical instructions, every learner with physical disabilities responded to identical questions.
- The researcher hypothesized that, rather than answering questions about themselves or their humiliating experiences in person with an interviewer who may be a stranger, respondents would readily and candidly provide genuine answers on a questionnaire.
- In their accommodating environments, respondents were given the freedom to finish surveys at their own pace and in a more casual setting.
- Some physically disabled learners were better able to express their opinions vocally than in writing, hence the use of a few open-ended questionnaires in conjunction with closed-ended questionnaires in this study.
- Only when a questionnaire is simple enough to understand with the provided guidelines and definitions can it be completed. The researcher made the language simpler for this aim.

In order to roughly represent research respondents' perspectives and experiences about the self-concept development of learners with disabilities in public secondary schools, the current study used self-administered, closed-ended questionnaire questions. The self-administered questionnaire is discussed below.

#### **4.6.1.1.1. Self-administered questionnaires**

Self-administered questionnaires are structured, printed instruments designed to elicit information directly from respondents concerning specific research inquiries (Hamed, 2016). Self-administered questionnaires were selected because they enable respondents to complete structured, printed instruments independently, thereby reducing interviewer bias and enhancing the consistency of responses (Hamed, 2016). This approach was particularly appropriate for the present study as it allowed learners with physical disabilities to provide information directly regarding their self-concept and academic performance without external influence, thereby improving the authenticity of the data collected. In addition, self-administration made it possible to reach a larger sample across different public secondary schools within a limited period, ensuring efficiency in data collection while maintaining standardisation of responses for quantitative analysis.

In the context of this study, such questionnaires were strategically selected for their capacity to efficiently generate quantitative data amenable to rigorous statistical analysis. Their standardised format facilitates consistency in responses and enhances the reliability of the data, aligning with the study's methodological framework and research objectives. The present study intrinsically applied closed-ended questionnaire items and limited open-ended items. Closed-ended questionnaire items give respondents a choice of standardised answers (Cohen et al., 2007:335).

The present investigation employed the Likert scale for self-administered, closed-ended questionnaire items to accurately approximate research respondents' perceptions and experiences regarding the self-concept and academic performance of learners with physical disabilities in public secondary schools. A Likert scale is a commonly used questionnaire rating format in which respondents indicate the extent of their agreement or disagreement with statements across ordered response categories, typically ranging from "strongly disagree" to "strongly agree," allowing attitudes and perceptions to be measured in degrees rather than simple yes/no responses (Joshi et al., 2015; Taherdoost, 2019).

The self-administered questionnaire items in the current study used a five-point Likert scale since certain respondents had to select "neutral" answers about research concerns. Like other rating systems, the Likert scale controls response intensity and extent and stays free of ambiguous questions (McLeod, 2023). The self-administered questionnaire items in the current

study employed a five-point Likert scale because it allows respondents to express varying degrees of agreement. Methodological literature supports the use of Likert scales in survey research for capturing attitudes and perceptions in graded form, thereby improving the sensitivity and interpretability of quantitative data (Joshi et al., 2015; Taherdoost, 2019). Consequently, the five-point Likert scale was considered appropriate for generating balanced and reliable responses aligned with the study's objectives. Since the Likert scale's descriptors can be changed to reflect the specifics of each question or statement under evaluation, it was chosen for the current study due to its versatility.

Additionally, learners were instructed to fill out section A of the questionnaire by entering one number in each block. Every question in the questionnaire was written in English. After studying the language for at least seven years during their elementary schooling, most learners in Zimbabwe are highly proficient in English by the time they enter secondary school. Given the predominantly quantitative orientation of the current study, the use of closed-ended questionnaire items afforded learners with physical disabilities a precise and consistent means to convey their perspectives, thereby enabling systematic data aggregation and rigorous comparative analysis across the sample.

Given the predominantly quantitative framework of the current study, closed-ended questionnaire items were strategically employed to provide learners with physical disabilities a standardised yet comprehensive medium to articulate their lived experiences across critical domains, psychological, social, physical, cultural, educational, and self-conceptual challenges. Closed-ended self-administered questionnaire items were expected to be easier and faster for participating physically disabled learners to complete than open-ended ones, and response coding was expected to be simple, reliable, and efficient. Ahmad (2012) states that closed questionnaire items are uniform for all respondents and that the resulting data and information can be effectively quantified and compared.

These interrelated dimensions are pivotal in understanding the complex interplay between personal identity and educational engagement, as they collectively shape learners' perceptions of self-worth, belonging, and academic efficacy. The systematic quantification of these constructs facilitated robust statistical analyses, enabling the identification of underlying patterns, correlations, and potential causal linkages between self-concept and academic outcomes. By operationalising these multifaceted psychosocial variables into measurable

indicators, the study advanced a complex comprehension of the barriers and enablers influencing the educational trajectories of learners with physical disabilities. Thus, the questionnaire functioned not only as a data collection instrument but as a lens through which the intricate dynamics of inclusion, stigma, and empowerment within the educational context could be empirically examined and addressed.

Self-administered questionnaires provide respondents with the assurance of anonymity, which often encourages greater candour, particularly when addressing sensitive or potentially contentious topics (Glazier, Boydston, & Feezell, 2021). In the present study, participants were not required to disclose their identities, a deliberate measure aimed at fostering an environment conducive to the collection of honest and reliable data. By eliminating the interviewer's presence, the use of self-administered questionnaires also mitigated potential biases linked to interviewer characteristics, thereby enhancing the objectivity of responses. This methodological choice capitalised on the increased anonymity afforded by the absence of direct interaction, ultimately strengthening the validity and credibility of the findings.

Notwithstanding the advantages of self-administered questionnaires, their application is often constrained by inherent limitations, foremost among them being low response rates, as respondents frequently fail to return completed instruments (Leedy & Ormrod, 2005). This challenge is exacerbated when participants lack intrinsic motivation or perceive little personal benefit in engaging with the survey. To address this critical issue, the present study employed a deliberate strategy of rapport-building with participants, coupled with transparent communication regarding the research objectives and rigorous assurances of confidentiality and anonymity. Such measures were instrumental in cultivating participants' trust and goodwill, thereby enhancing their willingness to contribute. This proactive engagement not only improved response rates but also reinforced the integrity and richness of the data collected, ultimately strengthening the study's empirical rigour.

Moreover, by self-administering the questionnaires and retrieving them immediately upon completion, the study ensures a high response rate while minimising the risk of misplaced or delayed data. This method facilitates immediate clarification of any ambiguities, thereby enhancing the reliability and validity of responses. Additionally, it reduces external influences, fostering greater authenticity and independence in the participants' answers. To ensure cooperation and produce responses that the researcher might utilise and interpret, the researcher

created self-constructed questionnaires that were brief, used straightforward language, retained the respondents' assignment simple, gave straightforward instructions, and had the self-constructed questionnaires appear competent and appealing.

The researcher is likely to obtain limited and potentially biased data from self-administered questionnaires when all questions are fully predetermined, as this restricts respondents' ability to introduce additional relevant perspectives that may be important to the phenomenon under study (Creswell & Creswell, 2018; Bryman, 2016). This limitation is widely acknowledged in contemporary survey research, where overly structured instruments may constrain depth of response and exclude unanticipated but meaningful information (Saunders et al., 2019). Consequently, while structured questionnaires enhance comparability and ease of analysis, they may also reduce flexibility in capturing complex experiences, particularly in studies involving perceptions such as self-concept and academic performance. According to Marcano Belisario et al. (2015), self-administered questionnaires may have close-ended questions which reduce both the breadth and the depth of answers by providing respondents with a predetermined collection of responses, such as agree or disagree, or the option to select from an assortment of numbers that stand for strengths of feeling or disposition.

Furthermore, as Marcano Belisario et al. (2015) highlight, an overreliance on close-ended questions inherently constrains the scope and nuance of participant responses, reducing complex lived experiences to predetermined categories such as agree/disagree scales or numerical indices of sentiment. This methodological limitation risks oversimplifying the multifaceted nature of the phenomena under study and potentially marginalizing divergent or unanticipated perspectives. To address these constraints, the researcher meticulously crafted the questionnaire to strike a judicious balance between specificity and openness, thereby enhancing its capacity to capture salient information without overwhelming respondents. Immediate collection of the completed questionnaires further allowed for prompt clarification of ambiguous responses, reducing measurement error and enhancing data fidelity. This integrative strategy sought to reconcile the efficiency and replicability of structured instruments with the depth and authenticity required for meaningful interpretation, thereby fortifying the overall methodological rigour of the study connecting statement.

#### **4.6.1.1.1. Section A: Secondary school learners' demographic data**

The first section of the questionnaire contained items on the demographic details of public secondary school learners living with physical disabilities. Section A Items were soliciting for biographical details of the individual (physically disabled learners) respondents. Such personal information entailed school, gender, religion/culture, and home language. Regarding schools, three alternatives in the discretion of pseudonyms were accentuated on the questionnaire. There were only two alternatives for grade level, that is, form, since the respondents were either in form 3 or form 4. Shona, Ndebele, and English were given as the three options for learners' home language.

#### **4.6.1.1.2 Section B: Categories of the questions on the self-administered questionnaires**

Two sets (Section A and Section B) of self-administered questionnaires were used in the current research to collect data and information on the self-concept of learners attending public secondary schools who have physical limitations. Four subsets (Sections 1, 2, 3, 4 and 5) of self-administered questionnaires in Section B were created for learners with disabilities. The categories of the questions on the self-administered questionnaires were deduced from the sub-research questions presented in section 1.4, which dictated the present study. The ensuing were the extensive divisions in the self-administered questionnaires:

Section 1: Items concentrating on the psychological self-concept of learners with physical disabilities.

Section 2: Items focusing on the social self-concept of learners with physical disabilities.

Section 3: Items focusing on the academic self-concept of learners with physical disabilities.

Section 4: Items focusing on the academic performance of learners with physical disabilities.

Section 5: Items focusing on the strategies or a model, if needed, to enhance the self-concept of learners with physical disabilities.

According to Sürücü and Maslakci (2020), researchers need to critically consider the validity and reliability of their research instruments to accrue as many meaningful results from their studies as possible. The following is a discussion on validity and reliability issues as they relate to the current study. Section B of the questionnaire contained subdivided items to be answered using a five-point Likert scale. To help the respondents as they answered the questionnaire, the Likert scale key was included as a footnote on every page of Section B. The self-administered

questionnaire's Section B included clear subsections, and the items that needed respondents' direct input were broken down into four groups.

#### **4.6.1. 2. Document analysis**

This method involves systematic examination and interpretation of existing written records to extract insights aligned with the study's research objectives. In educational research, document analysis is particularly valuable for triangulating data, offering an additional layer of verification and contextual understanding (Shaikh et al., 2022). Document analysis was employed as a critical component of this study's data collection strategy, particularly to assess the academic performance of learners with physical disabilities. Academic data were obtained primarily from learners' academic performance records, where the researcher obtained scholastic performance data in the form of grade point averages (GPAs). For this study, I selected English and Mathematics as the key subjects for analysis. English was chosen because it is not only a core subject in the curriculum but also the medium of instruction across all subjects, enabling learners to communicate effectively, comprehend instructions, and participate in both oral and written assessments. Mathematics was selected because it requires focus, problem-solving, and consistency, which can be easily disrupted in learners with physical disabilities who often experience low self-concept. Since the subject builds upon prior knowledge, any gaps created by missed lessons, reduced participation, or lack of confidence can have long-term effects on their performance. Together, English and Mathematics represent both communication and logical domains, making them ideal for assessing the academic effects of self-concept in learners with physical disabilities.

As a non-intrusive source of data, documents offer naturally occurring evidence that reflects institutional practices and learner outcomes over time, without the influence of researcher presence. Moreover, they can reveal both intentional data, explicitly recorded for specific purposes, and inadvertent data, which emerge through omissions, patterns, or underlying assumptions. This dual nature enriches the analysis and deepens the understanding of the educational realities facing learners with physical disabilities. In this study, document analysis not only strengthened data credibility but also provided critical context for interpreting learners' academic engagement, participation, and support structures within public secondary schools.

#### **4.6.2. Data collection procedures**

The researcher individually administered the self-administered questionnaires to learners with physical disabilities to ensure clarity of instructions and to minimise misinterpretation of items, thereby improving the accuracy and completeness of the data collected. Close supervision during completion was necessary to provide immediate clarification where respondents experienced difficulties, while still preserving the independence of their responses. The distribution of questionnaires was coordinated in collaboration with two special needs education teachers at each of the ten purposively selected secondary schools. This collaboration facilitated access to participants, improved logistical organisation, and ensured that data collection was conducted in a structured and ethically sensitive manner within a supportive school environment.

Before completion, the researcher personally provided comprehensive verbal instructions to the participants, which were also clearly outlined on the first page of the questionnaire, thereby ensuring that learners with physical disabilities fully understood the purpose and procedures of the survey to enhance the accuracy and reliability of their responses. Participants were explicitly encouraged to provide their candid and unfiltered thoughts and opinions on every issue addressed in the questionnaire. To foster genuine engagement and minimize response bias, the researcher took care to clearly articulate the purpose and significance of the study to all respondents prior to their participation.

Additionally, as respondents completed the questionnaire, the researcher emphasized that only one number should be entered in each response box. Clear instructions were subsequently provided on how to accurately respond to the items in Section A, which focused on gathering demographic information. Subsequently, code numbers ranging from 5 to 1 were employed to represent the respondents' levels of agreement or disagreement with each statement in Section B of the questionnaire. Participants received a detailed orientation on the conceptual underpinnings of the Likert scale coding schema and were explicitly directed to the reference key positioned at the base of each questionnaire, thereby ensuring clarity and uniformity in response interpretation.

Respondents were instructed to provide answers to all questions on the questionnaire. Throughout the completion process, the researcher actively encouraged participants to seek

clarification whenever needed, ensuring their comprehension of each item. After delivering clear instructions, the researcher assigned the learners the task of completing the questionnaires independently. During this time, both the researcher and the assisting special needs educators remained present within the learning environments to offer support and address any difficulties encountered by the learners. A handful of Form 3 respondents asked for definitions of terms like "motivated," "innovative," and "dispositions," which appeared in a few questionnaire items. To make sure the study respondents understood the items completely before answering, the researcher summarised the sentences that contained the terms. In several instances, the respondents received explanations in their native tongue to make sure the questions on the questionnaire were clearly understood by them. Following their completion of the questionnaire, the research assistants and the researcher assembled the completed questionnaires.

Since collecting objective data and information was the main goal of the study, the questionnaires were gathered as soon as they were completed to prevent research respondents from disclosing their responses. To understand the significance of any study data that has been collected, analysis is required to discern its meaning (Burns & Grove, 2003:84). The questionnaires were completed by the respondents in the morning at each of the 10 secondary schools that participated, and it took them between fifty and fifty-five minutes (50-55 minutes) to finish. Because they were distributed and collected promptly upon completion at each of the ten public secondary schools, the questionnaires had a 100% return rate. The part that follows goes into data analysis for the present study. Subsequently, the researcher expressed profound gratitude and heartfelt thanks to the 150 learners who participated in the study, as well as to the teachers who acted as research assistants, acknowledging their invaluable time, effort, and cooperation.

#### **4.7. Data Analysis**

Upon the culmination of data collection, the researcher transitions into the pivotal stage of data analysis, a process that inherently generates new questions warranting scholarly attention. The data analysis in the present study comprised coding, statistical analysis, and limited content analysis, with all procedures guided by the study's research questions to ensure methodological coherence. Descriptive statistics were used to summarise learners' responses

on self-concept and academic performance, thereby addressing the research questions that required an overview of patterns and distributions within the data. Chi-square analysis was then applied to research questions examining the relationship between learners' self-concept and their academic performance, as it was appropriate for testing associations between categorical variables derived from the questionnaire data.

Academic performance was coded into categorical levels based on learners' reported or grouped performance indicators, while self-concept items were aggregated into composite scores representing key dimensions such as academic, social, and psychological self-concept before being converted into categories for analysis. The use of SPSS facilitated accurate data coding, management, and execution of both descriptive and inferential statistical tests, ensuring consistency and reliability in the analysis process. In applying Chi-square, attention was given to its suitability for categorical data analysis and the requirement for expected cell frequencies to ensure valid interpretation of results. Overall, the analytical procedures were structured to align directly with the research questions and to produce findings that are both statistically and methodologically defensible (Creswell & Creswell, 2018; Saunders et al., 2019).

Paramount to this phase is the assurance of data integrity, accuracy, completeness, and contextual relevance, which form the foundation for rigorous and valid interpretation of research findings (Kumar, 2023; Otto et al., 2023). Before the application of descriptive and inferential statistical techniques, careful data organisation and preprocessing are essential to ensure data quality and analytical accuracy (Saunders et al., 2023). Furthermore, the selection of appropriate analytical methods is critical, as the use of unsuitable statistical techniques may produce misleading conclusions that fail to adequately address the research questions and objectives of the study.

Consequently, the researcher's responsibility extends beyond mere data collection to encompass a comprehensive, methodologically sound analysis that substantiates the validity and reliability of the study's findings, thereby advancing scholarly understanding within the field. Data analysis in the present study comprised coding, statistical analysis, and content analysis. Descriptive data analysis was used. For data analysis, Chi-square was also used, and the Statistical Program for the Social Sciences (SPSS), a prominent software for social scientists, was used to perform descriptive and inferential statistical tests.

#### **4.7.1 Coding**

Coding is a crucial step in the data analysis process, particularly when handling quantitative data collected through structured instruments such as questionnaires. It involves systematically assigning numerical or symbolic values to respondents' answers to facilitate efficient data entry, organisation, and statistical analysis. Effective coding ensures consistency, reduces ambiguity, and enables the transformation of raw data into analyzable formats. This step is foundational for maintaining the integrity and interpretability of the dataset. In the present study, coding was applied to categorise and quantify responses from learners with physical disabilities.

Coding refers to the systematic process of transforming raw empirical data into a structured format suitable for computer-based statistical analysis, ensuring that responses are organised into analyzable units (Creswell & Creswell, 2018; Gray, 2021). It involves categorising responses and assigning numerical values to represent specific variables or response patterns, thereby enabling efficient quantitative processing and interpretation (Saunders et al., 2019). Contemporary methodological scholarship emphasises that coding enhances consistency, reduces ambiguity in raw data, and improves the reliability of subsequent statistical analysis when applied uniformly across all cases (Flick, 2022). In this study, coding was therefore essential in preparing responses from learners with physical disabilities for analysis of self-concept and academic performance, ensuring that all data were systematically organised and aligned with the study variables prior to statistical processing.

Before data can be entered into a statistical software program, it must first undergo a structured coding process. This involves assigning a unique code, typically a numerical value-to each possible survey response. For example, if Question 1 of the questionnaire asks about the respondent's gender, the response "male" might be coded as 0 and "female" as 1. While pre-assigning these codes directly onto the self-administered questionnaire can streamline data entry, it also introduces a potential drawback: the presence of numerical values not inherently meaningful to the respondent may complicate the instrument's layout, possibly affecting respondent comprehension or engagement.

Every single respondent in the current study was referred to as an analysis unit. A distinct serial code was given to every unit of analysis. The score each respondent received for

each variable was indicated by the allocated unique serial code. Every item on the self-administered questionnaire had a column number designated for it. The column number of each self-administered questionnaire item was recorded after the serial number of each unit of analysis. Every response to a self-administered questionnaire was assigned a numerical code. Every self-administered questionnaire item's code was recorded next to its corresponding column number. According to McMillan and Schumacher (2006), quantitative data ought to undergo statistical analysis after coding. Statistical analysis for the present study is discussed below.

#### **4.7.2 Statistical analysis**

Arguably, the most popular software package for social science statistical analysis is the Statistical Package for the Social Sciences (SPSS). This is a quantitative research data analysis software. Because it encompasses a wide variety of statistical processes, it is very helpful for survey data analysis. Other software packages like SAS, Stata, or Minitab are available, but they are also pricey to buy, particularly if they are just going to be used once for a survey. One way to examine, interrogate, and investigate data mathematically is through statistical analysis. To achieve this, search for relationships across various data sets. The goal of the part that follows is to provide an audience without a presumption of mathematical experience with an explanation of some of the fundamental factors that can make statistical analysis complicated. There are several links to further reading at the conclusion of this section that can guide you throughout the statistical analysis process.

Usually, there are two kinds of statistics: inferential statistics from samples of populations (what might have occurred or will be discovered) and descriptive statistics, which are numerical summaries of samples (what was seen). Prior to starting an analysis, it is crucial to know what kind of statistics you are dealing with. The basic goal of statistical analysis is to provide relevant information that may guide decision-making by summarizing and analysing data. Inferential statistical analysis is used when attempting to comprehend a connection and make predictions or generalizations based on this knowledge, whereas descriptive statistics are used when trying to summarize certain facts into a shorter form. Statistical analysis may help us measure the degree of confidence we might have in our deductions or findings by using a

variety of statistical tests. Only in situations when the justifications for using statistical analysis are well understood should it be applied.

In the current study, the Statistical Package for the Social Sciences (SPSS) Student Version 11.0 was utilized to analyse data on the self-concept and academic performance of learners with physical disabilities in public secondary schools. This study examined the academic performance and self-perception of learners with physical disabilities attending public secondary schools in Zimbabwe using the Statistical Package for the Social Sciences (SPSS) Student Version 11.0. For several reasons, the SPSS software was utilized in this study. The SPSS package embraced a broad range of statistical procedures and comfortably handled enormous sets of data, numerous variables and missing data points and presented all research findings in an understandable, readable, and lucid table format. The SPSS package also tested for characteristics such as kurtosis that might have disregarded the assumptions on which parametric statistical procedures are based, and it also completed statistical tasks quickly.

Furthermore, the SPSS package permitted the researcher to sum up and present data in graphics, especially tables. Nevertheless, more recent methodological scholarship also cautions against an over-reliance on statistical software in the research process, emphasising that while programs such as SPSS enhance efficiency and accuracy, they do not replace the researcher's interpretive and analytical judgement (Creswell & Creswell, 2018; Saunders et al., 2019). In this regard, data analysis remains a fundamentally intellectual process in which the researcher is responsible for ensuring that results are meaningfully interpreted, appropriately aligned with the research questions, and theoretically grounded. In this study, the researcher had complete control over the data analysis and was aware of the when, what, where, how, and why of all computations. With the kind-hearted comprehension of the data, the researcher acquired dependable meaning from the statistics computed and utilized them to address and manage the research problem of the current study. The researcher utilized their in-depth understanding of the data to deduce the genuine significance from the calculated statistics and apply them to the current study's research challenge.

The researcher proposed various assertions in this study and used mathematical techniques to verify them. To help the readers with the study, I have included enough examples. Additionally, I used graphics to effectively explain the mathematical processes and theoretical analysis. A variety of economic ideas, methodologies, and analyses are presented in this

mathematical economic study in a way that is comprehensible, rational, trustworthy, and practical.

Since the data in this study were categorical, the Chi-square test was applied. To determine the importance of the association between the item responses of learners with disabilities, the Chi-square test was computed. The establishment of the significance implied that physically disabled learners' responses to aspects of the self-concept and academic performance of learners with physical disabilities in Zimbabwean secondary schools were different. Significance was established at 0.01 or 0.05 significance levels. Ratios were also computed for each questionnaire item to identify items that were negatively or positively rated. Ratios were computed by dividing the sum of positive responses by the sum of negative responses, for instance, the sum of "Very Great Extent" and "Great Extent" divided by the sum of "Little Extent" and "Very Little Extent."

#### **4.7.3 Variables**

A variable is a measurable characteristic, attribute, or construct that can vary across individuals, groups, or situations and is used to describe or explain differences within a study. In quantitative research, variables are commonly classified as either unidimensional, such as age or occupation, or multidimensional constructs, such as self-concept or motivation, which require careful operationalisation into measurable indicators to ensure validity and reliability of measurement (Cooper & Schindler, 2014; Saunders et al., 2019). Understanding the nature of variables is essential because it determines how research questions are formulated and how data are collected and analysed within a coherent research design. In this study, self-concept is the independent variable, representing the explanatory factor expected to influence learners' outcomes, while academic performance is the dependent variable, representing the outcome variable being measured and analysed. This distinction is critical for ensuring analytical clarity and appropriate statistical interpretation, as it guides the direction of analysis and the selection of suitable statistical techniques.

Comprehending the characteristics of variables and how they are measured is therefore fundamental to the research process, as it determines how abstract constructs are translated into observable and measurable indicators. Through proper operationalisation, self-concept was measured using structured questionnaire items, while academic performance was captured as

the outcome variable for analysis, ensuring consistency, validity, and methodological coherence throughout the study.

#### **4.8. Validity and Reliability of the Questionnaire**

Validity and reliability are essential concepts in ensuring the quality and credibility of any research instrument, particularly questionnaires. Before data collection, it is necessary to establish that the instrument measures what it is intended to measure (validity) and that it produces consistent and stable results over time or across similar conditions (reliability). In the context of this study on learners with physical disabilities, ensuring validity and reliability of the questionnaire was crucial for accurately capturing constructs such as self-concept and academic performance. This section therefore presents how the questionnaire was designed and tested to ensure that it yielded trustworthy, accurate, and consistent data capable of addressing the research objectives.

This study involved a test, re-test and revision of the questionnaire that evaluates and deliberates on the self-concept of learners with physical disabilities. The self-administered questionnaires for learners with physical disabilities were also validated by the researcher using the Criteria Jury opinion. The supervisor of the current study, together with seasoned professionals in the field of special needs services for learners with physical disabilities in public secondary schools, carefully examined the questionnaire items' relevance in relation to the objectives of the study (McLeod, 2023).

Reliability refers to the degree to which a research instrument produces consistent and stable results when used under similar conditions or across different occasions of measurement (McLeod, 2023; Creswell & Creswell, 2018). In the current study, the researcher adopted different measures to enhance the reliability of the research results. The researcher employed the test-retest reliability through distributing the self-administered questionnaires to 20 learners with physical disability (who did not participate again in this study) in the Chitungwiza educational province in Zimbabwe and readministering the questionnaires to 20 learners with physical disability after 3 weeks.

#### **4.8.1. Reliability in research**

Reliability in research refers to the extent to which a measurement instrument produces consistent, stable, and repeatable results under similar conditions over time (Bryman & Bell, 2015; Creswell & Creswell, 2018). In quantitative research, reliability is concerned with minimising measurement error so that observed results reflect true scores rather than random variation (Berchtold, 2016). Ensuring reliability is therefore essential in producing credible and trustworthy findings, particularly when measuring constructs such as self-concept and academic performance.

In the present study, I enhanced the reliability of the questionnaire through the test–retest method, which involved administering the same instrument to a similar group of respondents at two different points in time to check for consistency in the responses. This approach allowed me to determine whether the instrument produced stable results over time, thereby strengthening the dependability of the findings. In addition, I ensured reliability through the use of clear, standardised items and consistent administration procedures across all participants. The combination of test–retest reliability and standardised implementation increased the consistency of the instrument and ensured that the data collected from learners with physical disabilities was dependable for analysis.

##### **4.8.1.1. Test re-test**

A psychological test or assessment's stability is often evaluated through test–retest reliability, which examines the consistency of an instrument over time. This form of reliability is used to determine whether a test produces similar results when administered on two separate occasions under comparable conditions. It assumes that the construct being measured remains relatively stable between testing intervals, making it particularly suitable for characteristics where minimal change is expected over short periods. Reliability is typically higher when there is a short time between tests. This form of reliability is used to determine whether a test produces similar results when administered on two separate occasions under comparable conditions. In general, shorter intervals between tests tend to produce higher reliability coefficients, although an appropriate time gap is still necessary to minimise recall effects.

Reliability can also be assessed using other established approaches, including internal consistency, parallel-forms reliability, and inter-rater reliability, depending on the nature of the

instrument and the study design. In the present study, the test–retest method was used to establish the reliability of the self-administered questionnaire for learners with physical disabilities. The questionnaire was administered twice to a comparable group, and the scores obtained from the two administrations were correlated to determine the level of consistency. This process enabled the researcher to verify the stability of the instrument and ensure that the data collected were dependable for analysis. The results of the reliability testing are presented below.

Table 4.5: The results of the executed reliability tests for the physically disabled learners

| <b>Learners with physical disabilities</b> | <b>Initial score (X)</b> | <b>Retest score (Y)</b> |
|--------------------------------------------|--------------------------|-------------------------|
| 1                                          | 158                      | 156                     |
| 2                                          | 168                      | 173                     |
| 3                                          | 176                      | 170                     |
| 4                                          | 166                      | 169                     |
| 5                                          | 152                      | 157                     |
| 6                                          | 157                      | 159                     |
| 7                                          | 171                      | 172                     |
| 8                                          | 159                      | 165                     |
| 9                                          | 176                      | 177                     |
| 10                                         | 162                      | 165                     |
| 11                                         | 165                      | 169                     |
| 12                                         | 168                      | 174                     |
| 13                                         | 165                      | 160                     |
| 14                                         | 155                      | 158                     |
| 15                                         | 173                      | 170                     |
| 16                                         | 159                      | 162                     |
| 17                                         | 170                      | 173                     |
| 18                                         | 159                      | 163                     |
| 19                                         | 171                      | 173                     |
| 20                                         | 168                      | 174                     |

The results of the test-retest scores in Table 4.2 above show a correlation of 0.88, which indicates that the questionnaire administered in the current study is highly reliable (See Appendix for calculation details).

#### **4.8.2. Validity**

The degree to which the study findings truthfully address the problem, or the correctness of a measure, are referred to as the research's validity (Hamed, 2016). According to Creswell (2012), validity may be defined as the extent to which the questions on the data collection instrument and the scores obtained from these items represent all likely issues that could be addressed on the subject. It guarantees that the questionnaire has an adequate number of items that address the idea. According to Marcelle (2015), it also seems that the measure is evaluating the indentation construction that is being studied. As a result, establishing the validity of the instrument employed to really assess the aspects or theories it claims facilitates the research's findings (Hamed, 2016). In order to determine if a measure adequately covers a topic area, there is no factual test; instead, content validity is often determined by the opinion of subject matter experts.

Therefore, with the reviewers' help, the unclear may be modified, and the inadequate and dysfunctional questions may be eliminated with the guidance of the reviewers. The unavailability of validity and reliability renders any study invalid (Cohen et al., 2007:367). Different steps were taken to address the present study's internal and external validity and reliability. The utilization of proper research instrumentation, simple random sampling of the research participants, and efficient data processing all contributed to increased validity. There are several methods for assessing a measurement's reliability, including the test-retest approach. Internal consistency, parallel-forms reliability, and inter-rater reliability are other methods that can be applied. In this study, the consistency of the data was achieved when the steps in the research were verified by means of the retest. To improve the reliability, validity, and applicability of a self-administered questionnaire, test re-testing was conducted (Cohen et al., 2007:341) to ensure its validity.

Validity refers to the extent to which a research instrument accurately captures the concept it is intended to measure and, in doing so, enables the study findings to truthfully address the research problem (Hamed, 2016). According to Creswell (2012), validity

encompasses the degree to which the survey items and their resulting scores adequately reflect all dimensions of the construct under investigation. In this context, ensuring validity was essential for meaningfully interpreting the self-concept of learners with physical disabilities in public secondary schools. To establish content validity, the researcher sought expert reviews from specialists in special needs education. These professionals evaluated the questionnaire to ensure that each item was both relevant and aligned with the study's objectives. This peer-driven process enabled the refinement of vague or ambiguous items and the elimination of redundant questions, thereby enhancing the comprehensiveness and clarity of the instrument. As Marcelle (2015) emphasises, validity ensures that a tool effectively measures the theoretical dimension it purports to examine. However, no single statistical test can fully confirm content validity; it is instead derived from professional judgment, expert consensus, and theoretical alignment. This underscores the necessity of an iterative process that includes pilot testing, peer feedback, and continuous revision.

Although validity and reliability are distinct, they are fundamentally interdependent. Reliability refers to the consistency, stability, and replicability of measurement across time, contexts, or evaluators. An instrument may be reliable, producing similar results under consistent conditions, yet still lack validity if it fails to capture the actual construct of interest. Conversely, an instrument cannot be valid if it is unreliable, as inconsistency undermines the accuracy of interpretation. The current study addressed both of these pillars through a range of strategies. These included piloting the questionnaire with a population similar to the target group, applying expert judgment to assess and refine content, and employing re-testing to evaluate internal consistency. As recent scholars argue, the absence of either validity or reliability compromises the credibility and integrity of research findings, as both are fundamental indicators of research quality and trustworthiness (Creswell & Creswell, 2023; Saunders et al., 2023). Therefore, the combined focus on both properties contributed significantly to the overall trustworthiness, credibility, and methodological rigour of this investigation.

#### **4.9. Ethical Considerations**

Ethical considerations are fundamental to maintaining scientific credibility, fostering trust, and ensuring the positive impact of research (Antes & Maggi, 2022). Researchers are

obligated to report their findings with honesty and transparency, avoiding any intentional misrepresentation or selective disclosure that could undermine the integrity of the study or mislead stakeholders. At its core, ethical considerations are grounded in moral principles that guide responsible conduct throughout all stages of research. According to Cuschieri (2022), ethical considerations encompass the moral guidelines that govern research activities, derived from broader philosophical principles that prioritise respect for persons, beneficence, and justice. These considerations are essential to protect participants' rights and dignity while safeguarding the validity and societal value of the research outcomes.

In the present study, ethical considerations were rigorously addressed by obtaining formal permission from the Ministry of Education, Sport, Arts and Culture of Zimbabwe and the Provincial Education Offices of the participating regions, including Chitungwiza. Additionally, informed consent was sought from all participating learners with physical disabilities, ensuring their voluntary and fully informed participation (see Appendices for permission letters and consent forms). Maintaining confidentiality and anonymity was a critical component of the ethical considerations underpinning this research. The researcher implemented stringent measures to protect participant identities and sensitive data, thereby minimizing potential risks of harm or stigmatization. Participants were comprehensively informed about the study's objectives, their rights, including the right to withdraw at any time, and the confidentiality protocols, reinforcing an ethical framework that respects autonomy and promotes trust.

The ethical considerations guiding this study were also deeply influenced by Carl Rogers' humanistic theory, which emphasizes empathy, unconditional positive regard, and respect for individual dignity. This theoretical foundation shaped the researcher's interactions with learners with physical disabilities, fostering an environment that prioritized ethical responsiveness, empowerment, and inclusivity. Such an approach not only fulfils ethical obligations but also enriches the research process by building rapport and encouraging candid participation. In sum, the ethical considerations in this research were systematically integrated through institutional approvals, adherence to established ethical standards, and a participant-centred ethos rooted in humanistic values. This comprehensive approach ensured that the rights and welfare of vulnerable populations were protected and that the research findings produced are both credible and ethically sound.

#### **4.9.1 Permission**

Securing formal permission from relevant authorities is a fundamental ethical requirement in research involving human participants. This process ensures that the study complies with institutional and governmental regulations, safeguarding the rights and welfare of all stakeholders involved. In this study, permission was sought from multiple levels of educational governance before data collection. Before commencing the research, obtaining informed consent from participants is an ethical imperative (Marcelle, 2015). Accordingly, the researcher first secured formal authorisation from the University of South Africa, the Head Office of Zimbabwe's Ministry of Education, Sport, Arts, and Culture, and the Chitungwiza Provincial Education Offices to facilitate access to the study population and to seek the participants' consent.

Relevant documentation is provided in the Appendices, including the UNISA Research Ethics Clearance Certificate (Appendix A), letters requesting permission (Appendices D, E, F, and G), and copies of official permission letters from the Ministry of Education, Sport, Arts and Culture and Regional Education Offices (Appendices H, I, J, and K). Subsequently, before data collection, the researcher engaged directly with the participating learners with physical disabilities to obtain their voluntary informed consent. To ensure clarity and comprehension, a concise and clear research profile outlining the purpose, procedures, and ethical considerations of the study was provided to all parties involved, thereby facilitating informed decision-making and ethical compliance.

In summary, securing formal authorisation from institutional authorities was a fundamental step in ensuring the ethical integrity and legitimacy of the research process. This rigorous permission protocol not only upheld respect for organisational governance but also reinforced the protection of participants' rights and welfare. Consequently, it laid a solid foundation for transparent, accountable, and ethically sound data collection.

#### **4.9.2 Anonymity**

Anonymity is a critical ethical consideration in research, ensuring that participants' identities remain undisclosed and untraceable throughout all stages of the study. Upholding anonymity protects respondents from potential harm or social stigma, fostering a safe

environment for honest and uninhibited participation. This principle is particularly vital when working with vulnerable populations or sensitive topics, as it preserves confidentiality and reinforces trust between the researcher and participants. The ethical concept of anonymity dictates that research respondents' names must remain private, particularly while analysing and debating the study's conclusions (Kang & Hwang (2023). No real names were disclosed for the public secondary schools or research respondents. Instead of using names, the serial numbers assigned to research respondents in this study were used to identify them. By grouping data instead of displaying individual responses, anonymity was further ensured. The names of the respondents were used solely before and during the process of entering the learners' individual assessment examination scores and were then erased from the records. Their real names were subsequently removed from the records to uphold anonymity, which is generally maintained through strict confidentiality measures.

The researcher has an ethical duty to respect the right of research participants to remain anonymous throughout the study (Kang & Hwang, 2023). According to contemporary research ethics literature, anonymity is maintained when participants' identities cannot be linked to the information they provide, thereby preventing the tracing of specific responses to individual respondents and safeguarding participant privacy throughout the research process (Creswell & Creswell, 2023; American Psychological Association, 2020). How specific participating learners with physical disabilities answered the self-administered questionnaires was not disclosed to anybody or their peers in the research report of this study. In conclusion, maintaining participant anonymity throughout the research process was essential to uphold ethical standards and protect the privacy of learners with physical disabilities. By ensuring that personal identifiers were neither collected nor linked to responses, the study minimised risks of identification and potential negative consequences. This rigorous commitment to anonymity enhanced the integrity of the research and fostered candid, genuine participation, thereby strengthening the validity of the findings.

#### **4.9.3. Confidentiality**

Confidentiality is a cornerstone of ethical research practice, requiring researchers to protect participants' private information from unauthorised disclosure. The American Psychological Association (2017) emphasises that maintaining confidentiality fosters trust

between participants and researchers, which is essential for collecting honest and accurate data. Furthermore, contemporary research ethics scholars emphasise that researchers must implement robust data protection measures and carefully control access to sensitive information to uphold ethical standards throughout the research process (Creswell & Creswell, 2023; American Psychological Association, 2020). Confidentiality refers to the ethical responsibility of researchers to protect participants' identities and personal information from unauthorised disclosure (Israel & Hay, 2023). Maintaining confidentiality is a fundamental ethical principle in research, with anonymity serving as one important mechanism for achieving this objective. By safeguarding participants' information, researchers foster trust and protect individuals from potential harm, discrimination, or stigmatisation.

Confidentiality in research requires that information provided by participants be securely protected and not disclosed to unauthorised individuals without the participants' informed consent or explicit permission (Creswell & Creswell, 2023; Israel & Hay, 2023). Furthermore, ensuring the secure storage and management of such data is critical to safeguarding participants against potential exploitation, misuse, or breaches of privacy throughout and beyond the research process. Maintaining confidentiality not only respects participants' rights but also fosters trust and integrity within the research relationship. The researcher stored the completed questionnaires in a secure location after obtaining them directly from the respondents and then physically delivered them to the university for statistical analysis and data collection. The questionnaires were deleted once the data collection and statistical analysis were completed. According to the principle of non-maleficence, research respondents cannot suffer from bodily, emotional, or psychological damage (Beauchamp & Childress, 2019). The researcher tried to guarantee that the respondents finished the surveys without experiencing any kind of harm.

#### **4.9.4 Informed consent**

Informed consent is a foundational ethical principle in research, ensuring that participants voluntarily agree to take part in a study with a clear understanding of its purpose, procedures, potential risks, and benefits. It reflects respect for individuals' autonomy and right to make decisions about their participation. In educational and social research, especially involving vulnerable groups such as learners with physical disabilities, obtaining informed consent is not

only a legal obligation but a moral imperative to protect participants' rights and well-being. The principle of informed consent requires that a potential participant agrees to take part in a study only after receiving full information about the procedures, potential risks, and anticipated benefits (Arellano et al., 2023).

In the present study, the ethical principles of informed consent, confidentiality, anonymity, and non-maleficence were rigorously upheld. The researcher provided all relevant study materials to obtain informed consent, as evidenced by the letters addressed to public secondary school principals, parents, and legal guardians, along with learner assent forms. Respondents were allowed to make an informed decision about their participation after being thoroughly briefed on the study's objectives, rationale, and structure (Arellano et al., 2023). Furthermore, participants were informed that they could withdraw from the study at any time, should they choose to do so. In conclusion, the principle of informed consent was central to the ethical conduct of this study. Participants were fully briefed on the study's purpose, procedures, and their rights, including the option to withdraw at any time. This ensured voluntary participation and upheld the dignity and autonomy of all respondents.

#### **4.9.5 Protection from harm**

Protection from harm stands as a cornerstone of ethical research practice, mandating that investigators rigorously safeguard participants from any form of physical, psychological, or emotional distress throughout the study. This obligation becomes especially critical when engaging with vulnerable groups, such as learners with physical disabilities, who may face heightened risks. Ethical research design necessitates proactive risk assessment and the implementation of strategies that mitigate potential adverse effects, ensuring the welfare and dignity of participants remain uncompromised.

Researchers have an ethical responsibility to protect participants from unnecessary physical, psychological, emotional, social, or other forms of harm that may arise during the research process (Creswell & Creswell, 2023; Israel & Hay, 2023). This principle of non-maleficence requires researchers to minimise potential risks and ensure that participation does not adversely affect the well-being of respondents; researchers ought not to subject study respondents to unwarranted physical or psychological suffering. Learners with physical disabilities who took part in the current study did not experience any of the following negative

outcomes: negative labelling, inadequate sleep, depression, anxiety, shame, rage, violation of privacy, or harm to their sense of self-worth. The researcher did not ask the research respondents for data or information on personal or delicate matters. By upholding anonymity, confidentiality, and secrecy, psychological harm to research respondents has been prevented.

In this study, stringent measures were enacted to uphold the principle of protection from harm, ensuring that participants experienced no undue stress or discomfort during data collection. The researcher's continuous presence, along with the support of specialized educators, provided an added layer of oversight and reassurance. By prioritising participant safety and emotional well-being, the study not only adhered to ethical mandates but also fostered a trustworthy research environment conducive to authentic and reliable data collection.

#### **4.9.6 Honesty**

To maintain scientific credibility and trust while producing a positive impact, researchers must perform their assignments ethically (Antes & Maggi, 2022). According to Antes & Maggi (2022), researchers are required to convey their findings in a thorough and truthful manner, without purposefully misrepresenting their work or the nature of their conclusions. The researcher in this study did not, under any circumstances, manufacture data or information to promote any specific findings, regardless of how "preeminent" the results might appear. Any concepts or words used in the current study by any person, group, or institution were fully acknowledged by the researcher. It is ethically required of researchers to fully recognise any material that belongs to another individual when doing their research (American Psychological Association, 2002). As with any sincere researcher, the author of the current work attempted to publicly recognise her obligation to other individuals.

#### **4.10. Summary**

The research methodology was introduced in this chapter. Research design, sample, instrumentation, process, data analysis, validity and reliability, and ethical concerns are some of the topics discussed. To address the primary research question and related research questions of the subject under investigation, a thorough explanation of the qualitative research approach and design was provided in this chapter. A descriptive survey was employed for several considerations to investigate the self-concept of learners from public secondary schools

who have disabilities. The descriptive survey design was used in the research, and its applicability and relevance for the study were used to justify its adoption. The demographic, sample, and sampling techniques utilised in the study were also identified by the researcher, along with the justifications for their relevance to the investigation.

During this study, data consistency was attained after the research procedures were validated through test-retest. A researcher must use a scientific approach to produce high-quality research. When doing a literature review, determining research gaps, formulating a problem statement, and laying out study questions and objectives, researchers must adhere to the scientific process. The various research designs must be carefully chosen by the researcher; the choice of design is contingent upon the study's general objectives and particular research questions. A researcher must use reason and logic when making decisions, such as selecting data gathering methods and sample procedures. This is true for all types of research, including quantitative and qualitative as well as pure and applied. The researcher can only improve the correctness of her research by using the scientific method and her logical thinking. Generalisations are the goal of quantitative research. To draw compelling findings, the researcher must choose an acceptable study design, fully comprehend their variables, and use the best data analysis methods. Data will be presented, analysed, and discussed in Chapter 5.

## **CHAPTER 5**

### **DATA PRESENTATION, ANALYSIS AND DISCUSSION**

#### **5.1 Introduction**

The study methodology, including research design, sample, instruments, procedure, data analysis, validity and reliability, and ethical considerations, was covered in the preceding chapter. The purpose of the research is to investigate the self-concept and academic performance of learners with physical disabilities in Zimbabwean public secondary schools. Building on the methodology outlined in the preceding chapter, this section systematically presents and discusses the findings in line with the study's sub-research questions.

The data collected by the present inquiry is presented and analysed in this chapter within the framework of the four sub-headings that were formed from the section 1.4 sub-research questions that served as the study's guiding principles. The analysis is organised under four key themes: psychological, social, academic, and physical self-concept of learners with physical disabilities. In the subsequent section, the biographical variables of the research participants of the present study, selected physically disabled learners, are presented. The biographical variables of the research participants depict and disseminate the research context in which data were collected in the present study. An exposition of the research context enhances the comprehension of the presented, analysed and discussed data on the subject at hand.

## 5.2. Data Analysis and Interpretation

### 5.2. 1. Biographical characteristics of the respondents

#### 5.2.1.1. Descriptive statistics

Table 5.1: The distribution of respondents' gender by age, form, and family status.

|                           |          | Gender   |          |             | Total       |
|---------------------------|----------|----------|----------|-------------|-------------|
|                           |          | Male     | Female   | Transgender |             |
| Form                      | 3        | 18       | 32       | 0           | 50 (33.3%)  |
|                           | 4        | 33       | 64       | 3           | 100 (66.7%) |
| Age (years)               | 10 - 15  | 18       | 31       | 0           | 49 (32.7%)  |
|                           | 16 - 20  | 33       | 65       | 3           | 101 (67.3%) |
| Family Status             | Extended | 3        | 12       | 1           | 16 (10.7%)  |
|                           | Nuclear  | 44       | 69       | 1           | 114 (76%)   |
|                           | Other    | 4        | 15       | 1           | 20 (13.3%)  |
| Total per gender category |          | 51 (34%) | 96 (64%) | 3 (2%)      | 150         |

Table 5.1 indicates that the majority of learners with physical disabilities were in the 16–20-year age group, placing most respondents within the older adolescent category. This distribution is justifiable in the context of disability studies, as evidence shows that disability prevalence and functional limitations often become more pronounced with increasing age due to cumulative health, environmental, and social factors (Banks et al., 2018)..

### 5.2.2. Psychological self-concept of learners with physical disabilities

The first sub-research question posed in Section 1.4 explored the psychological self-concept of learners with physical disabilities in public schools in Zimbabwe. The findings of the present study on physically disabled learners are presented in the subsequent section.

Table 5.2: A Chi-Square test for the learners` responses to the Psychological self-concepts.

|           | Response   |            |          |            |            |            |       |                                                            |
|-----------|------------|------------|----------|------------|------------|------------|-------|------------------------------------------------------------|
| Statement | 1          | 2          | 3        | 4          | 5          | Total      | Ratio | Chi-Square                                                 |
| AQ1       | 98(5.9%)   | 37(2.2%)   | 2(0.1%)  | 6(0.4%)    | 7(0.4%)    | 150(9.1%)  | 0.1   | X-squared<br>= 879.19,<br>df = 40,<br>p-value < 0<br>.0001 |
| AQ10      | 77(4.7%)   | 43(2.6%)   | 6(0.4%)  | 10(0.6%)   | 14(0.8%)   | 150(9.1%)  | 0.2   |                                                            |
| AQ11      | 69(4.2%)   | 44(2.7%)   | 3(0.2%)  | 8(0.5%)    | 26(1.6%)   | 150(9.1%)  | 0.3   |                                                            |
| AQ2       | 2(0.1%)    | 33(2.0%)   | 9(0.5%)  | 65(3.9%)   | 41(2.5%)   | 150(9.1%)  | 3.0   |                                                            |
| AQ3       | 66(4.0%)   | 45(2.7%)   | 7(0.4%)  | 20(1.2%)   | 12(0.7%)   | 150(9.1%)  | 0.3   |                                                            |
| AQ4       | 4(0.2%)    | 8(0.5%)    | 9(0.5%)  | 82(5.0%)   | 47(2.8%)   | 150(9.1%)  | 10.8  |                                                            |
| AQ5       | 8(0.5%)    | 13(0.8%)   | 6(0.4%)  | 89(5.4%)   | 34(2.1%)   | 150(9.1%)  | 5.9   |                                                            |
| AQ6       | 16(1.0%)   | 7(0.4%)    | 9(0.5%)  | 62(3.8%)   | 56(3.4%)   | 150(9.1%)  | 5.1   |                                                            |
| AQ7       | 10(0.6%)   | 18(1.1%)   | 11(0.7%) | 74(4.5%)   | 37(2.2%)   | 150(9.1%)  | 4.0   |                                                            |
| AQ8       | 2(0.1%)    | 2(0.1%)    | 1(0.1%)  | 92(5.6%)   | 53(3.2%)   | 150(9.1%)  | 36.3  |                                                            |
| AQ9       | 86(5.2%)   | 36(2.2%)   | 8(0.5%)  | 10(0.6%)   | 10(0.6%)   | 150(9.1%)  | 0.2   |                                                            |
| Total     | 438(26.5%) | 286(17.3%) | 71(4.3%) | 518(31.4%) | 337(20.4%) | 1650(100%) |       |                                                            |

Table 5.2. above shows a p-value of less than 0.0001 for physically disabled learners. Such a difference is statistically significant by conventional criteria. A p-value < 0.0001 indicates a significant association between responses of participants and the biographical factors. The computed Chi-square test for physically disabled learners reveals significant differences in physically disabled learners' self-concept development and academic performance. The ratios in the table show that physically disabled learners negatively rated the extent of psychological self-concept for learners with physical disabilities.AQ1-AQ9 represents psychological self-concept questionnaires (Appendix G.

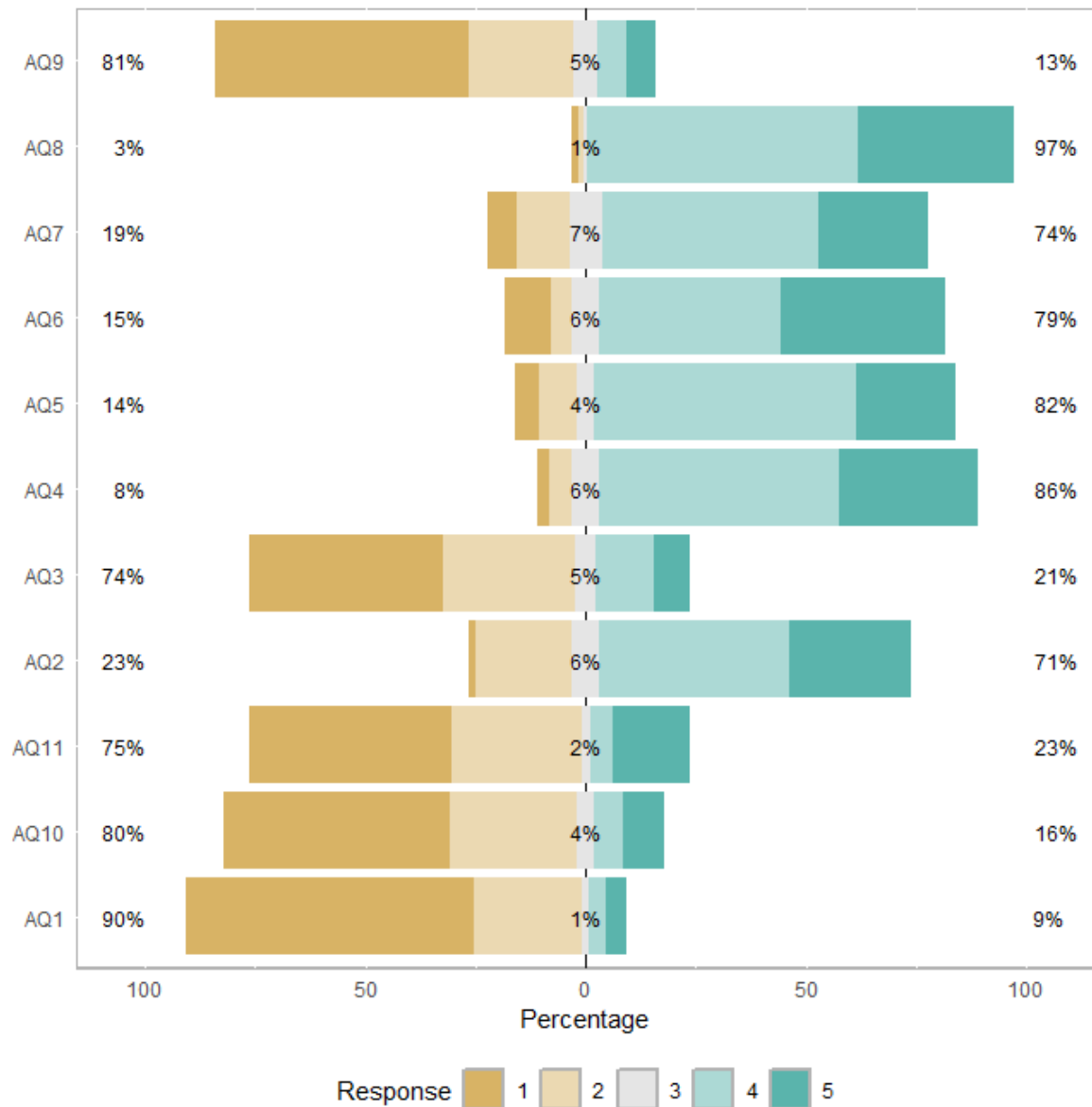


Figure 5.1: Responses to psychological self-concept statements

The data reveals and emphasises the urgent need for emotional and psychological support within schools to help students rebuild their self-concept and strengthen their mental health. Schools must prioritise psychological well-being to foster an environment where all students can thrive. Overall, the results reinforce the strong connection between psychological well-being and academic performance. The subsequent section presents the findings of the present study on social self-concept.

### 5.2.3. Social self-concept of learners with physical disabilities

The second sub-research question, presented in Section 1.4 of Chapter 1, examined the social self-concept of learners with disabilities in Zimbabwean public high schools. The following section presents the findings of the current study related to social self-concept.

Table 5.3: A Chi-Square test for the learners' responses to the social self-concepts.

|           | Response   |            |          |            |            | Total        | Ratio | Chi-square                                          |
|-----------|------------|------------|----------|------------|------------|--------------|-------|-----------------------------------------------------|
| Statement | 1          | 2          | 3        | 4          | 5          |              |       |                                                     |
| BQ1       | 7(0.3%)    | 40(1.8%)   | 6(0.3%)  | 54(2.4%)   | 43(1.9%)   | 150(6.7%)    | 2.1   | X-squared = 1019.2,<br>df = 56,<br>p-value < 0.0001 |
| BQ10      | 11(0.5%)   | 19(0.8%)   | 4(0.2%)  | 46(2.0%)   | 70(3.1%)   | 150 (6.7%)   | 3.9   |                                                     |
| BQ11      | 89(4.0%)   | 40(1.8%)   | 2(0.1%)  | 9(0.4%)    | 10(0.4%)   | 150 (6.7%)   | 0.1   |                                                     |
| BQ12      | 61(2.7%)   | 72(3.2%)   | 2(0.1%)  | 10(0.4%)   | 5(0.2%)    | 150 (6.7%)   | 0.1   |                                                     |
| BQ13      | 18(0.8%)   | 15(0.7%)   | 6(0.3%)  | 46(2.0%)   | 65(2.9%)   | 150 (6.7%)   | 3.4   |                                                     |
| BQ14      | 89(4.0%)   | 39(1.7%)   | 2(0.1%)  | 11(0.5%)   | 9(0.4%)    | 150 (6.7%)   | 0.2   |                                                     |
| BQ15      | 12(0.5%)   | 9(0.4%)    | 7(0.3%)  | 59(2.6%)   | 63(2.8%)   | 150 (6.7%)   | 5.8   |                                                     |
| BQ2       | 14(0.6%)   | 19(0.8%)   | 6(0.3%)  | 37(1.6%)   | 74(3.3%)   | 150 (6.7%)   | 3.4   |                                                     |
| BQ3       | 8(0.4%)    | 18(0.8%)   | 4(0.2%)  | 57(2.5%)   | 63(2.8%)   | 150 (6.7%)   | 4.6   |                                                     |
| BQ4       | 13(0.6%)   | 11(0.5%)   | 4(0.2%)  | 49(2.2%)   | 73(3.2%)   | 150 (6.7%)   | 5.1   |                                                     |
| BQ5       | 90(4.0%)   | 41(1.8%)   | 2(0.1%)  | 10(0.4%)   | 7(0.3%)    | 150 (6.7%)   | 0.1   |                                                     |
| BQ6       | 55(2.4%)   | 38(1.7%)   | 6(0.3%)  | 27(1.2%)   | 24(1.1%)   | 150 (6.7%)   | 0.5   |                                                     |
| BQ7       | 74(3.3%)   | 44(2.0%)   | 6(0.3%)  | 17(0.8%)   | 9(0.4%)    | 150 (6.7%)   | 0.2   |                                                     |
| BQ8       | 12(0.5%)   | 22(1.0%)   | 8(0.4%)  | 71(3.2%)   | 37(1.6%)   | 150(6.7%)    | 3.2   |                                                     |
| BQ9       | 67(3.0%)   | 48(2.1%)   | 9(0.4%)  | 15(0.7%)   | 11(0.5%)   | 150(6.7%)    | 0.2   |                                                     |
| Total     | 620(27.6%) | 475(21.1%) | 74(3.3%) | 518(23.0%) | 563(25.0%) | 2250(100.0%) |       |                                                     |

Table 5.3above shows a p-value of less than 0.0001 for physically disabled learners. By conventional criteria, the current difference is extremely statistically significant. The computed Chi-square test for physically disabled learners reveals significant differences in social self-concept development in relation to education. The ratios in the table show that physically disabled learners negatively rated the extent of social self-concept for learners with physical disabilities. BQ1-BQ15 represents social self-concept questionnaires (Appendix G)

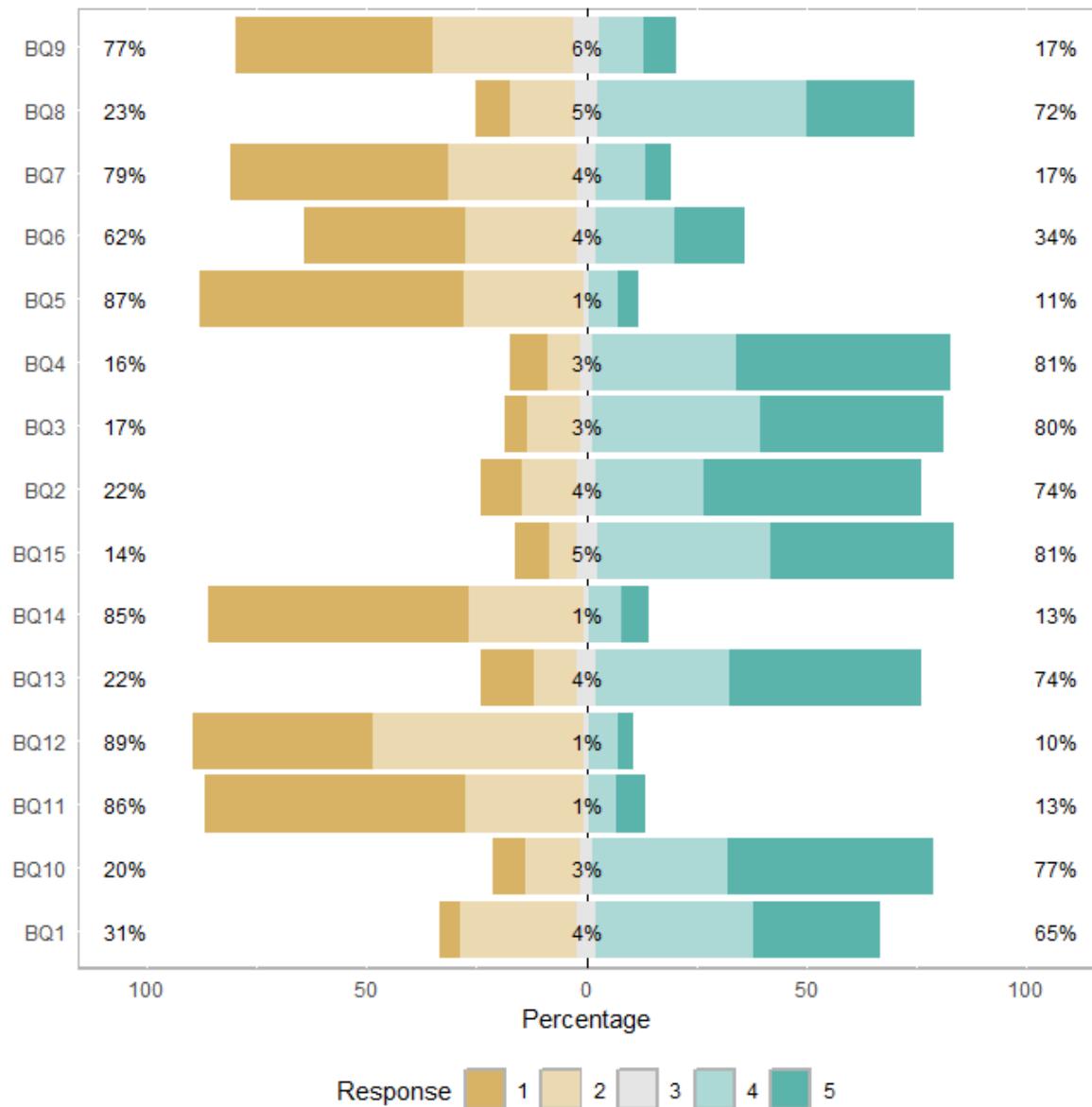


Figure 5.2: Responses to social self-concepts statements

A low social self-concept progressively erodes self-esteem, thereby impairing the individual's capacity to cope with depression and anxiety. This psychological vulnerability can give rise to suicidal ideation, diminished academic motivation, and chronic mental health challenges. Students grappling with trauma related to social self-concept may turn to self-reflection and self-awareness practices, as well as develop coping mechanisms that help

alleviate anxiety and stress. Nevertheless, many continue to suffer from intrusive thoughts or distressing flashbacks, which hinder their ability to concentrate in class, study efficiently, or maintain focus during timed academic tasks. In the following section, the findings of the study on academic self-concept are presented.

#### **5.2.4. Academic self-concept of learners with physical disabilities**

The third sub-research question outlined in Section 1.4 of Chapter 1 investigated the academic self-concept of learners with physical disabilities in Zimbabwean public secondary schools. The following section presents the findings of the current study related to the academic self-concept of these learners.

By conventional criteria, such a difference is extremely statistically significant. The computed Chi-square test for physically disabled learners reveals a significant effect in academic self-concept development in relation to education. The ratios in the table show that physically disabled learners negatively rated their academic self-concept, which in turn undermines their academic performance. Conversely, the ratios also reveal that these learners strongly recognise the impact of depression on their education. Furthermore, the data indicate that physically disabled learners rated their performance in Mathematics poorly. CQ1-CQ16 represents academic self-concept questionnaires (Appendix G)

Table 5.4: A Chi-Square test for the learners' responses to the academic self-concepts.

|           | Response   |            |           |            |            | Total        | Ratio | Chi-square                                          |
|-----------|------------|------------|-----------|------------|------------|--------------|-------|-----------------------------------------------------|
| Statement | 1          | 2          | 3         | 4          | 5          |              |       |                                                     |
| CQ1       | 9(0.4%)    | 19(0.8%)   | 7(0.3%)   | 49(2.0%)   | 66(2.8%)   | 150(6.3%)    | 4.1   | X-squared = 901.85,<br>df = 60,<br>p-value < 0.0001 |
| CQ10      | 21(0.9%)   | 24(1.0%)   | 5(0.2%)   | 54(2.3%)   | 46(1.9%)   | 150 (6.3%)   | 2.2   |                                                     |
| CQ11      | 10(0.4%)   | 22(0.9%)   | 13(0.5%)  | 54(2.3%)   | 51(2.1%)   | 150 (6.3%)   | 3.3   |                                                     |
| CQ12      | 13(0.5%)   | 11(0.5%)   | 12(0.5%)  | 85(3.5%)   | 29(1.2%)   | 150 (6.3%)   | 4.8   |                                                     |
| CQ13      | 7(0.3%)    | 21(0.9%)   | 10(0.4%)  | 51(2.1%)   | 61(2.5%)   | 150 (6.3%)   | 4.0   |                                                     |
| CQ14      | 13(0.5%)   | 12(0.5%)   | 12(0.5%)  | 78(3.3%)   | 35(1.5%)   | 150 (6.3%)   | 4.5   |                                                     |
| CQ15      | 8(0.3%)    | 8(0.3%)    | 4(0.2%)   | 39(1.6%)   | 91(3.8%)   | 150 (6.3%)   | 8.1   |                                                     |
| CQ16      | 26(1.1%)   | 17(0.7%)   | 3(0.1%)   | 64(2.7%)   | 40(1.7%)   | 150 (6.3%)   | 2.4   |                                                     |
| CQ2       | 10(0.4%)   | 13(0.5%)   | 14(0.6%)  | 80(3.3%)   | 33(1.4%)   | 150 (6.3%)   | 4.9   |                                                     |
| CQ3       | 6(0.3%)    | 12(0.5%)   | 10(0.4%)  | 64(2.7%)   | 58(2.4%)   | 150 (6.3%)   | 6.8   |                                                     |
| CQ4       | 75(3.1%)   | 51(2.1%)   | 0(0.0%)   | 9(0.4%)    | 15(0.6%)   | 150 (6.3%)   | 0.2   |                                                     |
| CQ5       | 91(3.8%)   | 28(1.2%)   | 10(0.4%)  | 13(0.5%)   | 8(0.3%)    | 150 (6.3%)   | 0.2   |                                                     |
| CQ6       | 9(0.4%)    | 11(0.5%)   | 4(0.2%)   | 43(1.8%)   | 83(3.5%)   | 150 (6.3%)   | 6.3   |                                                     |
| CQ7       | 2(0.1%)    | 10(0.4%)   | 10(0.4%)  | 57(2.4%)   | 71(3.0%)   | 150 (6.3%)   | 10.7  |                                                     |
| CQ8       | 7(0.3%)    | 18(0.8%)   | 0(0.0%)   | 79(3.3%)   | 46(1.9%)   | 150 (6.3%)   | 5.0   |                                                     |
| CQ9       | 15(0.6%)   | 12(0.5%)   | 5(0.2%)   | 56(2.3%)   | 62(2.6%)   | 150 (6.2%)   | 4.4   |                                                     |
| Total     | 322(13.4%) | 289(12.0%) | 119(5.0%) | 875(36.5%) | 795(33.1%) | 2400(100.0%) |       |                                                     |

The ratios in Table 5.4 above show that physically disabled learners negatively rated their performance in Mathematics. Statement CQ5 “I am bad in Mathematics; I fail almost all the mathematics topics that I learn”, had a ratio of 91 (3.8%), indicating that a measurable proportion of learners endorsed this negative self-assessment, which aligns with their overall poor performance in mathematics. Their pervasive negative academic self-concept, exemplified by the ratio of 91 (3.8%) endorsements of CQ5, erodes their intrinsic motivation and cognitive engagement in mathematics. When compounded by the profound effects of depression on concentration and self-efficacy, these learners become ensnared in a deleterious cycle of diminished mathematical performance.

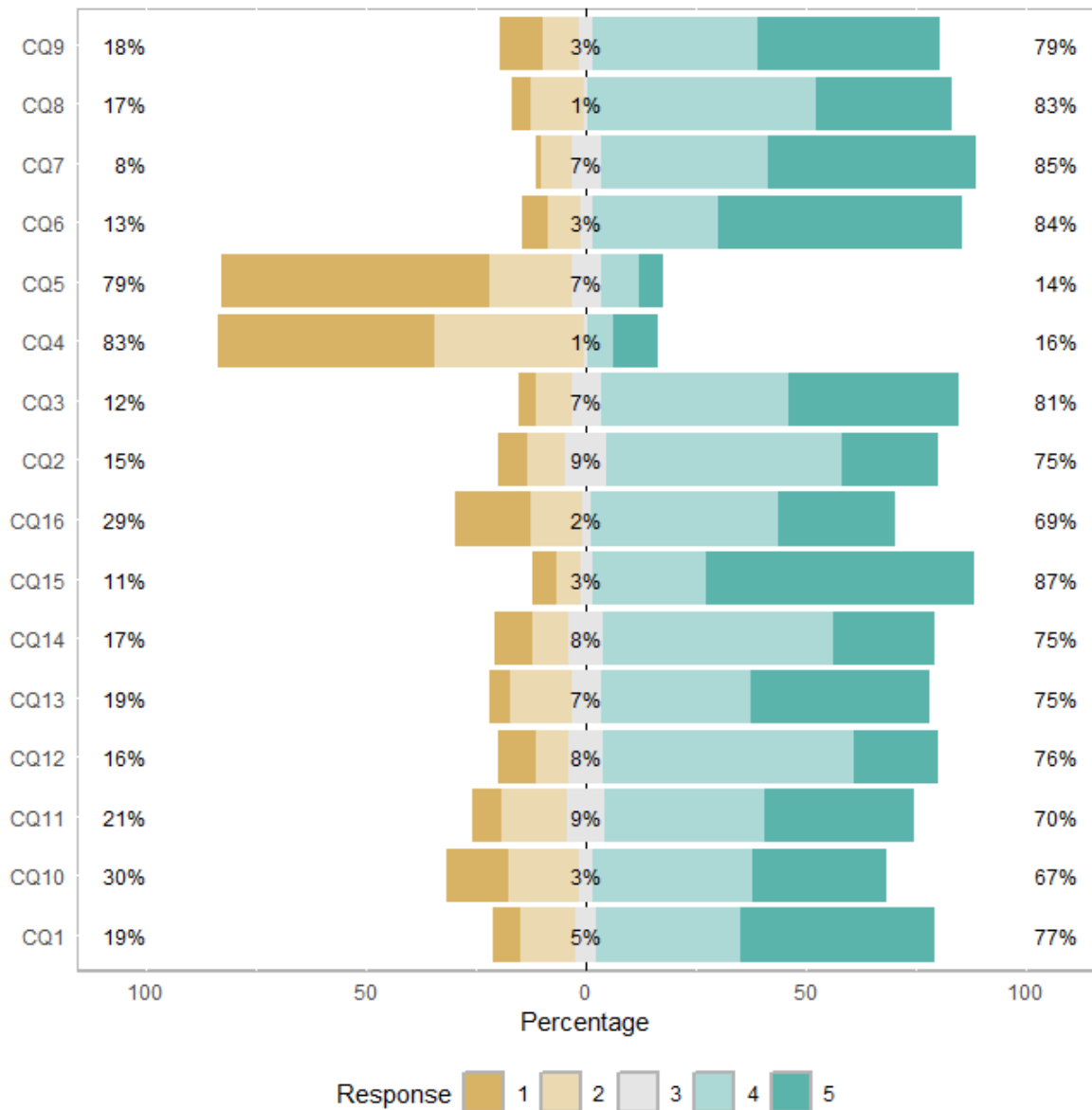


Figure 5.3. Responses to the academic self-concept statements

Figure 5.3 shows that, for statement CQ4, 83% of participants rated their academic self-concept negatively, 16% rated it positively, and 1% were neutral. The results indicate that the majority of learners with physical disabilities reported a negative academic self-concept, while a smaller proportion expressed positive perceptions of their academic abilities. Overall, the findings demonstrate that negative academic self-concept was prevalent among the participants.

### 5.2.5. The academic performance of learners with physical disabilities

The following section presents the findings of the present study on the academic performance of learners with physical disabilities.

Table 5.5: Academic Performance of Learners with Physical Disability

|         | Score      |           |          |           |            |                                                    |
|---------|------------|-----------|----------|-----------|------------|----------------------------------------------------|
| Subject | 0 to 25    | 26 to 50  | 51 to 75 | 76 to 100 | Total      | Chi-Square                                         |
| English | 99 (33.0)  | 46 (15.3) | 4(1.3)   | 1(0.3)    | 150(50.0)  | X-squared = 2.2215,<br>df = 3,<br>p-value = 0.5277 |
| Maths   | 110 (36.7) | 37(12.3)  | 2(0.7)   | 1(0.3)    | 150(50.0)  |                                                    |
| Total   | 209 (69.7) | 83(27.7)  | 6(2.0)   | 1(0.7)    | 300(100.0) |                                                    |

Table 5.5 above shows a p-value of less than 0.5277 for physically disabled learners. It indicates that learners with physical disabilities generally demonstrated low academic performance in both Mathematics and English. The majority of learners (69.7%) obtained scores of 25% or below, while 27.7% scored between 26% and 50%. Only a small proportion of learners (2.7%) achieved scores above 50% across the two subjects. This pattern suggests that most learners experienced difficulties achieving higher levels of academic performance in the assessed subjects. However, the chi-square test indicated that the observed differences between performance in Mathematics and English were not statistically significant,  $\chi^2(3) = 2.2215$ ,  $p = 0.5277$ . Therefore, the results suggest that subject differences alone did not significantly explain variations in academic performance among learners with physical disabilities. The findings should therefore be interpreted in relation to broader educational and psychosocial factors that may influence learning outcomes.

Table 5.6: Mathematics score in association with psychological self-concept

|     | Mathematics Score |           |          |           | Total       | Chi-Square                                        |
|-----|-------------------|-----------|----------|-----------|-------------|---------------------------------------------------|
| AQ1 | 0 to 25           | 26 to 50  | 51 to 75 | 76 to 100 |             | X-squared = 16.5,<br>df = 12,<br>p-value = 0.1683 |
| 1   | 81(54.0%)         | 16(10.7%) | 1(0.7%)  | 0(0.0%)   | 98(65.3%)   |                                                   |
| 2   | 21(14.0%)         | 14(9.3%)  | 1(0.7%)  | 1(0.7%)   | 37(24.7%)   |                                                   |
| 3   | 1(0.7%)           | 1(0.7%)   | 0(0.0%)  | 0(0.0%)   | 2(1.3%)     |                                                   |
| 4   | 4(2.7%)           | 2(1.3%)   | 0(0.0%)  | 0(0.0%)   | 6(4.0%)     |                                                   |
| 5   | 3(2.0%)           | 4(2.7%)   | 0(0.0%)  | 0(0.0%)   | 7(4.7%)     |                                                   |
|     | 110(73.3%)        | 37(24.7%) | 2(1.3%)  | 1(0.7%)   | 150(100.0%) |                                                   |

Table 5.6 above shows a p-value of less than 0.1683 for physically disabled learners. The analysis revealed no statistically significant association between psychological self-concept and Mathematics performance among learners, as indicated by the Chi-square test result ( $X^2 = 16.5$ ,  $df = 12$ ,  $p = 0.1683$ ). This suggests that, within the sample studied, psychological self-concept alone does not have a strong measurable impact on Mathematics achievement. While some learners with low psychological self-concept also had low Mathematics scores, the relationship was not strong enough to confirm a direct link. This finding supports the idea that academic performance is influenced by multiple interrelated factors beyond psychological self-concept alone, such as social support from peers and teachers, individual motivation, parental involvement, and home environment. These factors may act as buffers or contributors to academic outcomes, and their interaction should be considered in future interventions aimed at improving learner performance.

Table 5.7: English score in association with psychological self-concept.

|       | English Score |            |          |           | Chi-square                                       |
|-------|---------------|------------|----------|-----------|--------------------------------------------------|
| CQ    | 0 to 25       | 26 to 50   | 51 to 75 | 76 to 100 | X-squared = 56.73,<br>df = 12,<br>p-value<0.0001 |
| 1     | 235(9.8%)     | 68(2.8%)   | 11(0.5%) | 8(0.3%)   |                                                  |
| 2     | 163(6.8%)     | 115(4.8%)  | 11(0.5%) | 0(0.0%)   |                                                  |
| 3     | 68(2.8%)      | 47(2.0%)   | 4(0.2%)  | 0(0.0%)   |                                                  |
| 4     | 575(24.0%)    | 282(11.8%) | 15(0.6%) | 3(0.1%)   |                                                  |
| 5     | 543(22.6%)    | 224(9.3%)  | 23(1.0%) | 5(0.2%)   |                                                  |
| Total | 1584(66.0%)   | 736(30.7%) | 64(2.7%) | 16(0.7%)  |                                                  |

Table 5.7 presents the association between English scores and psychological self-concept among physically disabled learners. The Chi-square test results ( $X^2 = 56.73$ ,  $df = 12$ ,  $p\text{-value} < 0.0001$ ) indicate a statistically significant association between English performance

and psychological self-concept. Learners with lower psychological self-concept were more likely to obtain lower English scores. The majority of learners scored between 0–25 % (66.0%), while only 0.7% achieved scores between 76–100%. The findings demonstrate that psychological self-concept is significantly related to English academic performance among physically disabled learners.

Table 5.8: Mathematics score in association with gender

|        | Mathematics score |           |          |           | Total       | Chi-square                                         |
|--------|-------------------|-----------|----------|-----------|-------------|----------------------------------------------------|
| Gender | 0 to 25           | 26 to 50  | 51 to 75 | 76 to 100 |             |                                                    |
| 1      | 41(27.3%)         | 9(6.0%)   | 0(0.0%)  | 1(0.7%)   | 51(34.0%)   | X-squared = 5.1707,<br>df = 6,<br>p-value = 0.5221 |
| 2      | 67(44.7%)         | 27(18.0%) | 2(1.3%)  | 0(0.0%)   | 96(64.0%)   |                                                    |
| 3      | 2(1.3%)           | 1(0.7%)   | 0(0.0%)  | 0(0.0%)   | 3(2.0%)     |                                                    |
|        | 110(73.3%)        | 37(24.7%) | 2(1.3%)  | 1(0.7%)   | 150(100.0%) |                                                    |

Table 5.8 shows a statistically significant association ( $p < 0.0001$ ). Among physically disabled learners who scored between 0–25%, females constituted the majority, with 67 (44.7%) learners, compared to 41 (27.3%) males and 2 (1.3%) transgender learners, indicating that females were disproportionately represented among the lowest academic performers. This may be attributed to sociocultural factors, where girls often face greater cultural expectations, gender discrimination, and caregiving responsibilities than boys, increasing their psychosocial challenges and negatively affecting their academic performance.

### 5.2.6 Physical self-concept of the learners with physical disabilities

The sub-research question outlined in Section 1.4 of Chapter 1 examined the physical self-concept of learners with physical disabilities in Zimbabwean public schools. The following section presents the findings of the current study related to physical self-concept.

Table 5.9: A Chi-Square test for the learners' responses to the physical self-concept.

|         | Response   |           |          |            |            | Total        | Ratio | Chi-square                                          |
|---------|------------|-----------|----------|------------|------------|--------------|-------|-----------------------------------------------------|
| Statemt | 1          | 2         | 3        | 4          | 5          |              |       |                                                     |
| DQ1     | 19(1.3%)   | 12(0.8%)  | 11(0.7%) | 62(4.1%)   | 46(3.1%)   | 150(10.0%)   | 3.5   | X-squared = 324.27,<br>df = 36,<br>p-value < 0.0001 |
| DQ10    | 18(1.2%)   | 14(0.9%)  | 9(0.6%)  | 50(3.3%)   | 59(3.9%)   | 150 (10.0%)  | 3.4   |                                                     |
| DQ2     | 32(2.1%)   | 13(0.9%)  | 11(0.7%) | 56(3.7%)   | 38(2.5%)   | 150 (10.0%)  | 2.1   |                                                     |
| DQ3     | 8(0.5%)    | 16(1.1%)  | 4(0.3%)  | 76(5.1%)   | 46(3.1%)   | 150 (10.0%)  | 5.1   |                                                     |
| DQ4     | 19(1.3%)   | 4(0.3%)   | 11(0.7%) | 71(4.7%)   | 45(3.0%)   | 150 (10.0%)  | 5.0   |                                                     |
| DQ5     | 4(0.3%)    | 7(0.5%)   | 5(0.3%)  | 47(3.1%)   | 87(5.8%)   | 150 (10.0%)  | 12.2  |                                                     |
| DQ6     | 70(4.7%)   | 34(2.3%)  | 5(0.3%)  | 18(1.2%)   | 23(1.5%)   | 150 (10.0%)  | 0.4   |                                                     |
| DQ7     | 13(0.9%)   | 17(1.1%)  | 5(0.3%)  | 59(3.9%)   | 56(3.7%)   | 150 (10.0%)  | 3.8   |                                                     |
| DQ8     | 16(1.1%)   | 12(0.8%)  | 9(0.6%)  | 48(3.2%)   | 65(4.3%)   | 150 (10.0%)  | 4.0   |                                                     |
| DQ9     | 6(0.4%)    | 5(0.3%)   | 5(0.3%)  | 53(3.5%)   | 81(5.4%)   | 150 (10.0%)  | 12.2  |                                                     |
|         | 205(13.7%) | 134(8.9%) | 75(5.0%) | 540(36.0%) | 546(36.4%) | 1500(100.0%) |       |                                                     |

Table 5.9 reveals a Chi-Square value of  $X^2 = 324.27$ , with 36 degrees of freedom and a p-value of less than 0.0001, indicating a statistically significant relationship between physical self-concept and the academic performance of physically disabled learners in Zimbabwean public schools. The data show that these learners overwhelmingly rated their physical self-concept negatively. The ratios further show that learners positively rated the influence of physical appearance and lack of strength on learners with physical disabilities.

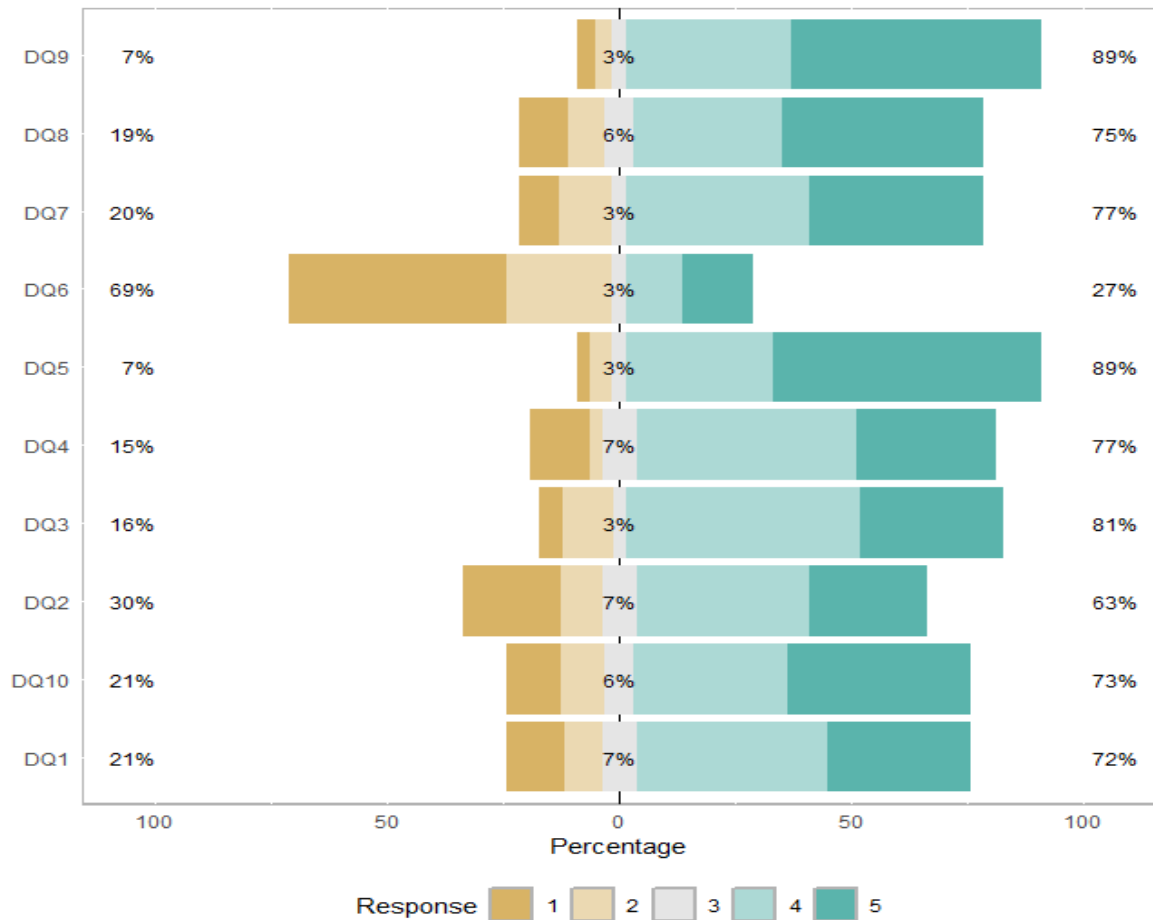


Figure 5.4: Responses to the academic self-concept statements

In Figure 5.4 above, the statement DQ6: A total of 69% of participants rated their physical self-concept negatively, 27% rated it positively, while the remaining 3% remained neutral or undecided. These results indicate a high prevalence of negative physical self-concept among learners with physical disabilities. A total of 69% of learners responded negatively on DQ 6, which reads: *“It is pretty tough to be me,”* indicating that they find it very difficult to accept who they are, largely due to visible physical differences, limited physical abilities that restrict participation, and experiences of body shaming and social stigma, all of which contribute to a poor physical self-concept. This highlights a significant struggle among physically disabled learners, reflecting profound challenges with self-acceptance and identity that can hinder their motivation, participation, and academic performance. DQ1-DQ10 represents psychological self-concept questionnaires (Appendix G)

### 5.3. Discussion of Results

This section discusses the findings, which are presented into four subheadings based on the sub-research questions outlined in Section 1.4 of Chapter 1, which guided the study. The sub-headings specifically address learners with physical disabilities' psychological self-concept, social self-concept, academic self-concept, and physical self-concept. Furthermore, the theoretical frameworks' relevance to the study is highlighted and discussed. The discussion entails presenting the study's findings in comparison to existing literature. The first sub-section examines the findings on the psychological self-concept of learners with physical disabilities.

#### 5.3.1. The psychological self-concept of learners with physical disabilities

This section discusses the psychological self-concept of learners with physical disabilities as derived from the findings of the current study, addressing sub-research question 1.5.1.1: *What is the psychological self-concept of learners with physical disabilities?* Reference is made to contemporary literature in educational psychology, disability studies, and inclusive education (Holenstein, Bruckmaier, & Grob, 2021; Schunk & DiBenedetto, 2021; Orth & Robins, 2021; Pekrun, 2018; Arens et al., 2021).

The findings indicate that learners with physical disabilities generally negatively rated their psychological self-concept, reflecting unfavourable perceptions of their competence, emotional wellbeing, and academic capabilities. Participants commonly described low self-esteem, diminished self-efficacy, insecurity, anxiety, stress, and reduced motivation. Learners also reported experiences such as irritability, sleep disturbances, restlessness, headaches, concentration difficulties, and memory lapses, suggesting that psychological distress was frequently expressed through both emotional and somatic experiences (Pekrun, 2018; Holenstein et al., 2021). Overall, the findings suggest that many learners experienced difficulties developing a positive psychological self-concept, particularly in relation to their perceived abilities and capacity to succeed academically.

The findings further indicate that negative psychological self-concept was closely associated with poorer academic experiences. Learners who reported low self-esteem, reduced self-efficacy, anxiety, and stress also described difficulties sustaining concentration, completing academic tasks, participating in classroom activities, and maintaining academic

engagement. Rather than demonstrating a direct causal relationship, these findings suggest that psychological self-concept was an important factor associated with learners' academic functioning. This interpretation is consistent with Control–Value Theory, which proposes that learners' achievement emotions are related to cognitive engagement, motivation, and academic functioning (Pekrun, 2018; Pekrun & Perry, 2019).

The findings suggest that learners' psychological self-concept was closely related to their psychosocial experiences within school and community environments. Participants who reported bullying, stigma, social exclusion, and limited support also described lower confidence in their academic abilities and more negative self-perceptions. These findings indicate that negative psychological self-concept was not solely related to individual characteristics but was also associated with learners' interactions with their social and educational environments. This pattern corresponds with literature indicating that repeated exposure to stigma and discrimination may be associated with the internalisation of negative societal attitudes toward disability and poorer psychological adjustment (Schunk & DiBenedetto, 2021; Orth & Robins, 2021; Douma et al., 2022).

The psychosocial experiences reported by learners appeared to be related to their emotional wellbeing. Experiences of exclusion, inadequate support, and negative social interactions were associated with increased stress and anxiety, as well as lower levels of self-esteem and self-efficacy. These emotional experiences appeared to influence learners' confidence in their academic abilities and their willingness to participate in learning activities. Recent literature similarly indicates that self-efficacy and self-concept are closely associated with academic motivation, persistence, and achievement among learners experiencing educational barriers (Schunk & DiBenedetto, 2021). Likewise, self-esteem has been identified as an important correlate of emotional wellbeing and academic adjustment (Orth & Robins, 2021). In the current study, learners who reported higher self-efficacy also described greater persistence with academic tasks, whereas those reporting lower self-efficacy more frequently described reduced effort, avoidance behaviours, and lower academic engagement. This interpretation is further supported by structural models of academic self-concept demonstrating that motivational and emotional processes are jointly associated with academic outcomes (Arens et al., 2021).

The findings further highlight the relationship between emotional experiences and academic functioning among learners with physical disabilities. Participants frequently described anxiety, stress, depressive symptoms, cognitive overload, and difficulties with concentration. Similar patterns have been reported in previous studies, which indicate increased psychological vulnerability among learners with disabilities, particularly in contexts characterised by exclusion and limited support (Maxey & Beckert, 2017; Giancane et al., 2016; Ogundele, 2018). In the present study, learners reporting greater emotional difficulties also described reduced classroom participation, lower academic engagement, and challenges maintaining consistent involvement in learning activities, suggesting that emotional wellbeing was closely associated with academic experiences.

Stress emerged as an important dimension linking psychosocial experiences, emotional wellbeing, and psychological self-concept. Learners reporting higher levels of stress also reported lower confidence, reduced concentration, and difficulties engaging consistently with academic tasks. Stress appeared to be associated with multiple contextual factors, including academic demands, stigma, exclusion, and limited access to support systems. Therefore, the findings suggest that stress should not be viewed solely as an individual experience but also considered within the broader educational and social circumstances affecting learners with physical disabilities. This interpretation is consistent with Venn (2010) and Polmann, Schneider, and Fischer (2022), who emphasise the influence of contextual factors on learners' psychological experiences.

Mental health experiences formed an important component of learners' psychological self-concept. Participants frequently described anxiety, depressed mood, emotional strain, and cognitive difficulties, although these experiences were sometimes expressed through physical symptoms rather than identified as psychological distress. The findings suggest that emotional difficulties among learners with physical disabilities may not always be recognised within school contexts, highlighting the importance of psychosocial support and early identification. Consistent with Bracke et al. (2019), stigma, bullying, and exclusion were associated with reduced academic engagement and increased social withdrawal, demonstrating the importance of supportive educational environments in shaping learners' psychological experiences.

Although the findings indicate relationships between negative psychological self-concept, psychosocial challenges, emotional distress, and academic difficulties, these

relationships should not be interpreted as deterministic. Variation among participants suggests that some learners demonstrated resilience and more positive adjustment when supportive educational conditions were present. Therefore, psychological self-concept among learners with physical disabilities appears to reflect an interaction between individual experiences and wider socio-educational contexts.

The findings indicate that learners with physical disabilities generally negatively rated their psychological self-concept, characterised by low self-esteem, reduced self-efficacy, and heightened emotional vulnerability. Negative psychological self-concept was closely associated with poorer academic experiences, including reduced participation, concentration difficulties, and lower academic engagement. The findings further suggest that psychological self-concept is socially and educationally shaped, with stigma, exclusion, and limited support appearing to influence learners' emotional experiences and academic functioning. Thus, psychological self-concept is best understood as a dynamic construct emerging from the interaction between learners' internal experiences and their broader educational environments.

The findings indicate that the psychological self-concept of learners with physical disabilities is characterised by generally low self-esteem, reduced self-efficacy, and heightened emotional vulnerability. These experiences were consistently associated with stigma, limited psychosocial support, and reduced academic engagement, highlighting the importance of educational environments in shaping learners' psychological wellbeing. Collectively, the findings suggest that psychological self-concept is best understood as a dynamic construct influenced by the interaction between individual experiences and broader socio-educational contexts rather than by personal characteristics alone.

### **5.3.2. The social self-concept of learners with physical disabilities**

This section explores social self-concept issues as revealed by the study's findings. It draws on existing literature regarding the social self-concept of learners with physical disabilities. The discussion specifically addresses the sub-research question 1.5.2.2 from chapter 1, which asks: What is the social self-concept of learners with physical disabilities? It emerged from the study that children in public schools in Chitungwiza educational district were exposed to adverse, negative social self-concept, particularly learners with physical disabilities.

Most physically disabled learners negatively rated the extent of the social self-concept for learners with physical disabilities in Zimbabwean public schools.

The findings indicate that learners with physical disabilities generally negatively rated their social self-concept. Participants described experiences of weak social belonging, limited peer relationships, reduced confidence in social interactions, and restricted participation within school and community contexts. Learners who experienced limited parental involvement, inadequate social support, peer exclusion, bullying, and reduced opportunities for meaningful interaction reported more negative perceptions of their social identity and poorer academic experiences. These learners frequently described reluctance to participate in group activities, reduced classroom involvement, and difficulties sustaining engagement in learning activities. The findings suggest that social self-concept among learners with physical disabilities is closely associated with the quality of their social relationships and educational environments rather than functioning solely as an individual psychological characteristic. Contemporary research on disability identity and inclusion similarly indicates that learners' perceptions of belonging and social value are strongly influenced by the extent to which they experience acceptance, participation, and recognition within their social environments (Pinquart & Behle, 2021; Raines et al., 2023).

The findings further suggest that social self-concept is shaped through relational experiences beginning within the family environment. Learners who reported limited parental involvement, reduced emotional support, or overprotective caregiving also described lower social confidence and fewer opportunities for independent social participation. Although parental protection may be motivated by concerns regarding safety and vulnerability, excessive restriction may reduce opportunities for developing autonomy, social competence, and confidence in interacting with others. Contemporary research on disability and family functioning indicates that supportive family relationships are associated with stronger psychosocial adjustment, whereas controlling or restrictive environments may limit participation and identity development (Haft et al., 2022). This interpretation remains consistent with self-determination perspectives, which emphasise that autonomy-supportive relationships contribute to competence, confidence, and adaptive social functioning. Within the current study, learners who experienced limited parental encouragement appeared more

hesitant to initiate social interactions and more vulnerable to negative peer experiences, suggesting that early relational experiences may influence later social participation.

Peer relationships emerged as a central factor associated with learners' social self-concept. The findings indicate that many learners experienced bullying, rejection, social distancing, and difficulties establishing friendships. These experiences were associated with reduced feelings of belonging, loneliness, and negative perceptions of social acceptance. Recent disability research demonstrates that peer exclusion and stigma remain significant barriers to participation and psychological wellbeing among learners with disabilities, particularly within educational contexts where inclusive practices are limited (Dada et al., 2023; Raines et al., 2023). Persistent exclusion may influence how learners interpret their social value and position within peer groups. Rubin, Bukowski, and Parker's (2006) social development framework remains relevant in explaining how repeated peer rejection may contribute to withdrawal behaviours, although contemporary research further highlights that such withdrawal should be understood within broader systems of exclusion rather than as an individual deficit. In the present study, some learners appeared to internalise repeated experiences of rejection, describing themselves as different, isolated, or less accepted, suggesting that exclusionary interactions were associated with weakened social self-concept.

School environments also appeared to play an important role in shaping learners' social experiences. The findings indicate that limited teacher support, inadequate peer integration strategies, and insufficient psychosocial services were associated with fewer opportunities for meaningful participation. Conversely, learners who experienced supportive teachers, inclusive classroom practices, and opportunities for collaboration demonstrated stronger confidence and greater willingness to engage socially. Recent inclusive education literature emphasises that school belonging is a critical component of learner participation and adjustment because it influences motivation, engagement, and perceptions of acceptance (Allen et al., 2021; Raines et al., 2023). Schools therefore function not merely as academic settings but as social environments in which learners negotiate identity, belonging, and social worth. When disability is approached through inclusive practices, learners may experience greater acceptance; however, when institutional practices reinforce difference or dependency, negative social perceptions may be maintained.

Cultural and social belief systems further influenced how disability was understood and experienced, thereby shaping learners' social self-concept. The findings indicate that some learners were exposed to beliefs that associated physical disability with punishment, curses, dependency, or spiritual explanations. Such interpretations appeared to reinforce stigma, concealment, social distancing, and restricted participation within both school and community settings. Rather than reflecting impairment itself, these beliefs appeared to shape how learners were perceived by others and how they subsequently perceived themselves. Contemporary disability scholarship argues that disability stigma is socially constructed through cultural meanings and everyday interactions that position learners with disabilities as different or less capable (Scior & Werner, 2019; Scior et al., 2020). Similarly, Lindsay et al. (2022) demonstrate that disability stigma operates through peer relationships, family attitudes, and institutional practices, influencing learners' sense of belonging, participation, and identity development. Kuper et al. (2020) further contend that negative cultural perceptions of disability continue to limit educational participation and social inclusion across many low- and middle-income contexts, while Banks et al. (2022) show that stigma interacts with broader structural inequalities to reinforce exclusion.

Contemporary disability scholarship conceptualises disability as a socially constructed experience in which cultural beliefs and societal attitudes shape learners' opportunities for participation and belonging. Empirical evidence indicates that disability-related stigma, reinforced through cultural norms and social interactions, limits social inclusion, undermines belonging, and contributes to the development of negative social identities among learners with disabilities (Scior et al., 2020; Kuper et al., 2020; Lindsay et al., 2022; Banks et al., 2022). Nevertheless, the findings also indicate that some cultural and religious communities provided acceptance, encouragement, and emotional support, suggesting that cultural belief systems may function as either barriers or protective resources depending on how disability is understood within particular social contexts. The findings therefore suggest that cultural and religious beliefs functioned primarily as mechanisms through which stigma was reproduced, contributing to persistent experiences of exclusion and the development of a negative social self-concept among learners with physical disabilities.

The findings suggest that economic disadvantage was associated with reduced access to assistive devices, transport, learning resources, extracurricular activities, and other

opportunities that facilitate social interaction and participation. Socio-economic conditions also formed an important structural context influencing learners' social self-concept. Rather than functioning merely as a background characteristic, socio-economic status appeared to shape learners' opportunities for social participation and inclusion across family, school, and community environments. Limited financial resources also appeared to reduce parental capacity to provide emotional and educational support and constrained learners' participation in school and community activities where friendships and social identities are often developed.

Contemporary disability research similarly demonstrates that poverty and disability interact to create cumulative disadvantages that restrict participation, belonging, and educational opportunities (Banks et al., 2022; Mitra, 2018). Economic disadvantage may therefore intensify existing barriers by limiting access to inclusive educational resources, supportive services, and opportunities for meaningful peer interaction. In this sense, socio-economic status should be understood as a structural condition that shapes the quality of learners' social environments and influences the relationships through which social self-concept develops. The findings therefore suggest that socio-economic disadvantage indirectly contributes to weaker social self-concept by restricting opportunities for participation, reinforcing exclusion, and reducing access to supportive ecological systems.

Taken together, the findings suggest a pathway through which social conditions were associated with learners' social self-concept and academic functioning. Limited parental involvement, inadequate social support, peer exclusion, bullying, weak teacher support, cultural stigma, and socio-economic disadvantage appeared to reduce learners' sense of belonging and social confidence. These experiences were associated with emotional difficulties, withdrawal from social interaction, and reduced willingness to participate. In turn, reduced participation was associated with poorer academic engagement, including limited classroom involvement, reduced collaboration, and lower persistence with learning tasks. The findings therefore suggest that negative social self-concept among learners with physical disabilities was closely associated with poorer educational experiences. This interpretation aligns with contemporary motivational research indicating that belonging, perceived competence, and social acceptance are important conditions supporting academic engagement and persistence (Schunk & DiBenedetto, 2020; Allen et al., 2021).

The findings also demonstrate the relationship between social self-concept and psychological wellbeing. Learners who experienced exclusion reported greater emotional difficulties, including loneliness, anxiety, and withdrawal. Recent research indicates that stigma and social exclusion among learners with disabilities are associated with increased psychological vulnerability and reduced participation (Haft et al., 2022). However, the findings also indicate that these relationships were not inevitable. Some learners demonstrated stronger social confidence where supportive family relationships, inclusive school environments, and positive peer interactions were present. This supports contemporary resilience perspectives, which emphasise that adaptive outcomes emerge through supportive systems rather than individual characteristics alone (Masten, 2021).

Overall, the findings indicate that learners with physical disabilities generally negatively rated their social self-concept, characterised by weak belonging, reduced social confidence, limited participation, and experiences of exclusion. Learners who experienced limited parental involvement, inadequate social support, peer rejection, bullying, restricted teacher support, cultural stigma, and socio-economic barriers reported more unfavourable social perceptions and poorer academic experiences. The findings suggest that social self-concept is shaped through the interaction of ecological and educational contexts, including family relationships, peer networks, school environments, cultural beliefs, and socio-economic conditions. Therefore, social self-concept among learners with physical disabilities is best understood as a relational and context-dependent construct that reflects learners' experiences of inclusion, belonging, and participation within their social worlds.

### **5.3.3 The academic self-concept of learners with physical disabilities**

The findings of this study revealed that learners with physical disabilities demonstrated a negatively rated academic self-concept, characterised by reduced confidence in their academic abilities, limited motivation, and lower expectations of academic success. Participants frequently perceived themselves as less academically capable than their peers, suggesting that academic self-concept extended beyond isolated classroom experiences to shape their broader academic identity. Consistent with Jones (2017), academic self-concept reflects learners' perceptions of their academic competence and achievement, while Marsh et al. (2018) emphasise that it represents an important component of intellectual confidence and

academic functioning. Within the context of learners with physical disabilities in public secondary schools in Chitungwiza District, Zimbabwe, the findings suggest that academic self-concept was associated with the interaction between individual perceptions and educational experiences rather than physical disability alone.

The findings indicate that academic self-concept among learners with physical disabilities is a multidimensional construct involving confidence, motivation, aspirations, and perceptions of academic capability. Learners who demonstrated reduced confidence in their abilities also appeared less likely to develop ambitious academic goals or perceive themselves as capable of improvement. Recent research indicates that positive academic self-beliefs are associated with motivation, self-regulation, persistence, and adaptive learning behaviours (Schunk & DiBenedetto, 2021). Similarly, Suriá Martínez (2023) found that stronger self-concept among learners with disabilities was associated with more positive academic orientations and greater confidence in educational participation. These findings support the view that academic self-concept is not limited to learners' perceptions of current ability but is also related to their expectations of future academic success.

The present study further demonstrates that academic self-concept among learners with physical disabilities is associated with the educational environments in which learners participate. Experiences such as limited access to learning resources, inadequate instructional accommodation, reduced opportunities to demonstrate competence, and low academic expectations may contribute to less favourable perceptions of academic capability. This interpretation is consistent with recent inclusive education research, which argues that learners with disabilities construct academic identities through experiences of accessibility, belonging, teacher expectations, and meaningful participation (Ainscow, 2021; Schwab et al., 2022). Sharma and Salend (2023) similarly emphasise that inclusive environments that communicate competence and belonging are important in supporting positive academic identities among learners with disabilities. Therefore, the negatively rated academic self-concept identified in this study appears to reflect the interaction between learners' internal beliefs and the educational contexts within which these beliefs develop.

The findings also indicated that negatively rated academic self-concept was associated with reduced educational participation. Learners with lower confidence in their academic abilities reported limited classroom participation, reduced persistence when encountering

academic challenges, and greater reluctance to engage with demanding academic activities. Some learners appeared hesitant to contribute during lessons because they anticipated failure or negative judgement, while others avoided challenging tasks that they perceived as beyond their capabilities. These findings support Obura, Kinai, and Ndanbuki (2019), who reported that negative academic self-concept is associated with reduced participation and lower persistence in learning activities. Similarly, Herrera et al. (2020) found that learners with weaker academic self-concepts often demonstrate reduced engagement, concentration, and motivation.

However, the relationship between academic self-concept and learner engagement should not be interpreted as one-directional. Contemporary evidence indicates that academic self-concept and academic experiences influence one another reciprocally, with learners' academic performance and experiences continuously shaping their self-perceptions while positive academic self-concept promotes greater engagement and subsequent achievement (Marsh, Pekrun, & Lüdtke, 2022). Thus, reduced participation may be associated with weaker academic self-concept, while negative self-beliefs may also contribute to reduced willingness to participate. Skaalvik and Skaalvik (2014) further highlight that task avoidance may be associated with multiple factors, including fear of failure, achievement goals, and classroom climate. Consistent with this perspective, the present study suggests that learners' participation patterns were associated not only with individual confidence but also with broader contextual factors, including teacher support, accessibility of learning environments, and perceived academic expectations. Consequently, improving participation among learners with physical disabilities requires attention to both learner confidence and the inclusiveness of educational practices.

The findings further revealed that academic self-concept was associated with educational outcomes among learners with physical disabilities. Learners with stronger academic self-beliefs demonstrated greater engagement with learning tasks, improved persistence, and stronger self-regulatory behaviours, whereas learners with weaker academic self-concept experienced difficulties related to motivation, creativity, problem-solving, adaptability, and critical thinking. These findings indicate that academic self-concept is associated with multiple dimensions of learning beyond academic achievement alone.

The positive relationship between academic self-concept and academic achievement identified in this study is consistent with Ajmal and Rafique (2018), who found a significant association between academic self-concept and achievement among learners. Similar relationships have been reported by Jaiswal and Choudhuri (2017), Olatunde (2010), and Sikhware (2004), who demonstrated that stronger self-concept is associated with improved academic outcomes. Trautwein et al. (2006) further showed that learners with stronger academic self-concepts generally report more positive academic perceptions and achieve better educational outcomes. In addition, Gachigi et al. (2019) demonstrated that specific dimensions of academic self-concept, including cognitive ability and motivation, contribute significantly to academic performance. In the present study, creativity and motivation emerged as important dimensions associated with academic achievement, suggesting that learners' perceptions of competence are related to their engagement with higher-order thinking, innovation, and persistence.

The findings also highlight the relationship between academic self-concept and learners' psychosocial experiences. Learners with negatively rated academic self-concepts reported reduced confidence in expressing ideas, accepting feedback, and demonstrating creativity and innovation. These experiences were associated with psychosocial barriers, including social exclusion, limited classroom support, and perceptions of low expectations. Cerda et al. (2021) found that poor academic achievement is associated with reduced psychological well-being and increased educational pressure. Furthermore, Chen et al. (2013), Harter (2012), and Marsh et al. (2018) highlight the relationship between academic self-concept, academic functioning, emotional well-being, and learner development. Therefore, the findings suggest that academic self-concept among learners with physical disabilities is associated with both educational and psychosocial dimensions of learner development.

Overall, this study contributes to existing knowledge by demonstrating that academic self-concept among learners with physical disabilities is a multidimensional construct associated with personal beliefs, educational participation, academic outcomes, and psychosocial experiences. While previous studies have examined academic self-concept largely among general learner populations, limited empirical evidence has examined how this construct operates among learners with physical disabilities in Zimbabwean public secondary schools. The findings from Chitungwiza District demonstrate that negatively rated academic

self-concept is associated not only with learners' perceptions of their academic competence but also with the educational conditions within which these perceptions develop. The study therefore extends disability-inclusive education research by showing that academic self-concept functions as a link between learners' internal beliefs and their educational experiences. Strengthening academic self-concept among learners with physical disabilities requires approaches that address both individual development and contextual factors through supportive teaching practices, accessible learning environments, positive teacher expectations, and meaningful opportunities for participation. This context-specific evidence contributes to broader efforts to promote equitable and inclusive educational experiences for learners with physical disabilities.

#### **5.3.4. The academic performance of learners with physical disabilities**

The findings of this study revealed a significant association between academic self-concept and the academic performance of learners with physical disabilities. Learners who demonstrated more positive perceptions of their academic abilities tended to experience more favourable academic outcomes, whereas those with negatively rated self-concepts demonstrated greater academic difficulties. These findings suggest that academic performance among learners with physical disabilities is associated not only with academic competence but also with learners' beliefs about their capabilities, motivation, and expectations of success. Therefore, academic underperformance among learners with physical disabilities should not be interpreted solely in relation to disability status or individual ability but should be understood within the broader psychological, social, and educational contexts in which learners construct their academic identities.

This interpretation is consistent with Hannover and Zander (2020), who identified a significant relationship between self-concept and academic achievement, and Ajmal and Rafique (2018), who demonstrated that learners' perceptions of their abilities are strongly associated with educational outcomes. Similarly, Sen Akcay and Senemoğlu (2021) found that self-concept contributes significantly to achievement in key subjects such as Mathematics and English at secondary school level, while Hannover and Zander (2020) reported that academic self-concept remains an important predictor of educational achievement across different learning contexts. The present study extends these findings by demonstrating that among

learners with physical disabilities in public secondary schools in Chitungwiza District, Zimbabwe, academic performance is associated with both learners' perceptions of competence and the structural and instructional conditions within which these perceptions develop.

The findings further indicate that the relationship between academic self-concept and academic performance is reciprocal rather than unidirectional. Learners with stronger academic self-beliefs appeared more likely to engage persistently with academic tasks, regulate their learning, and maintain motivation when experiencing academic challenges. Conversely, repeated experiences of academic difficulty appeared to be associated with weakened perceptions of competence, suggesting that achievement experiences and self-beliefs may influence each other over time. This interpretation is consistent with the Reciprocal Effects Model proposed by Marsh and Martin (2011), which explains that academic self-concept and achievement develop through continuous interaction.

Longitudinal evidence from Arens, Marsh, and Craven (2017) similarly demonstrates that academic achievement and self-concept are mutually reinforcing, with changes in one domain contributing to changes in the other. Seaton et al. (2019) further argue that academic self-concept functions both as a consequence of previous achievement experiences and as a factor associated with future academic engagement and performance. Although the present study was not longitudinal and therefore cannot establish causal direction, the findings are consistent with the broader theoretical position that academic experiences contribute to the development of learner self-perceptions.

Bong and Park (2020) caution that the strength of the relationship between academic self-concept and achievement differs across learner groups because contextual and structural conditions influence how academic experiences shape self-beliefs. In the present study, structural and instructional barriers within the school environment appeared to influence learners' opportunities to demonstrate competence, participate fully in learning activities, and receive recognition of their academic capabilities. Thus, academic performance among learners with physical disabilities reflects an interaction between individual beliefs and the educational conditions that enable or constrain academic participation. The chi-square test indicated that the observed differences between performance in Mathematics and English were not statistically significant,  $\chi^2(3) = 2.2215$ ,  $p = 0.5277$ . This suggests that subject differences alone did not significantly explain variations in academic performance among learners with physical

disabilities. The pattern of low performance observed across both subjects should therefore be interpreted in relation to broader educational and psychosocial factors rather than differences between subject areas alone.

The findings are consistent with Ajmal and Rafique (2018), who found that academic self-concept is associated with academic achievement among learners. Learners who perceive themselves as less academically capable may experience reduced motivation, lower persistence, and limited engagement with challenging learning activities. However, the present study does not demonstrate a direct causal relationship between academic self-concept and performance; rather, it indicates that academic outcomes are associated with the interaction between learners' perceptions of competence, educational experiences, and contextual conditions. In the context of learners with physical disabilities, academic outcomes may be influenced by structural, instructional, and psychosocial conditions within schools. These include opportunities for meaningful participation, recognition of learner capability, teacher expectations, peer relationships, and the extent to which learning environments accommodate diverse learner needs. Therefore, the low performance observed in Mathematics and English should not be understood as an inevitable consequence of disability but as an outcome shaped by the interaction between learner characteristics and educational contexts.

The findings further demonstrate that academic performance among learners with physical disabilities is associated with broader psychosocial experiences. Learners who reported weaker academic self-concepts also demonstrated reduced confidence, lower motivation, and difficulties sustaining effort during demanding academic activities. These findings suggest that academic outcomes among learners with physical disabilities are shaped through the interaction between personal beliefs and the educational environments in which learning occurs. This interpretation is supported by self-efficacy theory, which proposes that learners' beliefs about their capabilities develop through experiences of success, failure, feedback, and social interaction (Burns et al., 2019). When learners repeatedly encounter academic difficulties without adequate opportunities to demonstrate competence, they may develop reduced expectations of success. Similarly, Jaiswal and Choudhuri (2017) emphasise that contextual experiences play an important role in shaping learners' self-perceptions and academic outcomes.

The findings are further consistent with Hyvärinen et al. (2022), who highlight the importance of teacher encouragement, peer relationships, and opportunities for participation in strengthening learners' confidence and sense of worth. Darling-Hammond et al. (2020) similarly emphasise that motivation, parental involvement, realistic goal setting, and supportive learning conditions contribute to positive learner development. Within the context of learners with physical disabilities, these factors are particularly significant because academic experiences are influenced by whether schools create conditions that promote participation, belonging, and recognition of learner capability. Recent disability-inclusive education research further supports the importance of belonging and inclusive learning environments in shaping educational outcomes.

Recent disability-inclusive education research further supports the importance of belonging, participation, and recognition of learner capability in shaping educational outcomes. Sharma and Salend (2023) argue that inclusive learning environments contribute to positive academic identities among learners with disabilities by promoting competence, belonging, and meaningful participation rather than reinforcing deficit perspectives. Similarly, contemporary research on disability and inclusive schooling indicates that learners' academic engagement is influenced by whether educational environments provide appropriate support, acknowledge learner strengths, and create opportunities for active involvement in classroom activities. These perspectives support the present study's finding that academic performance among learners with physical disabilities develops through the interaction between personal beliefs and the structural and instructional conditions within schools. These perspectives support the present study's finding that academic performance among learners with physical disabilities develops through the interaction between personal beliefs and the structural and instructional conditions within schools.

The study also highlights the importance of developing realistic and resilient academic identities. Although positive academic self-concept is generally associated with stronger motivation and achievement, educational support should focus on developing realistic perceptions of competence rather than simply increasing confidence. Peperkorn and Wegner (2020) note that unrealistic self-perceptions may create challenges in social interaction and academic adjustment. Therefore, the development of positive academic identities among

learners with physical disabilities requires a balance between confidence, self-awareness, resilience, and realistic expectations.

Overall, this study contributes to existing knowledge by demonstrating that academic performance among learners with physical disabilities is associated with the interaction between academic self-concept, achievement experiences, and psychosocial environments. The findings show that learners' academic outcomes are connected not only to their academic abilities but also to how they perceive themselves as learners and how educational contexts influence their opportunities for achievement.

The study extends previous research by providing context-specific evidence from public secondary schools in Chitungwiza District, Zimbabwe. While previous studies have established relationships between self-concept and academic achievement, limited empirical evidence has examined how these relationships operate among learners with physical disabilities within Zimbabwean secondary school contexts. This study therefore contributes by demonstrating that academic performance among learners with physical disabilities develops through the interaction between learner perceptions, educational experiences, and opportunities for meaningful participation.

The findings suggest that promoting academic success among learners with physical disabilities requires attention to both learner-level and environmental factors. Supportive teacher feedback, inclusive instructional practices, positive peer relationships, accessible learning opportunities, and psychosocial support may contribute to stronger academic self-beliefs and improved educational experiences. Rather than viewing academic performance as a consequence of disability alone, this study highlights the importance of understanding how educational environments shape learners' academic identities and opportunities for success.

While previous research has established associations between academic self-concept and achievement, this study extends existing knowledge by demonstrating how these relationships operate among learners with physical disabilities within Zimbabwean public secondary schools. The findings show that academic performance is shaped through the interaction between learners' beliefs about their capabilities, their achievement experiences, and the structural and instructional conditions that influence participation and belonging. By highlighting this interaction, the study contributes to inclusive education research by demonstrating that improving educational outcomes for learners with physical disabilities

requires attention not only to academic achievement but also to the development of positive, realistic, and resilient learner identities.

### **5.3.5 Physical self-concept of learners with physical disabilities**

This section discusses the physical self-concept of learners with physical disabilities in Zimbabwean public schools, as revealed by the findings of the present study. In the discussion, reference is made to existing literature on physical self-concept. This section addresses the sub-research question posed in Section 1.4 of Chapter 1, which guided the current study. Specifically, it focuses on sub-research question 1.4.4, which states: What is the physical self-concept of learners with physical disabilities in Zimbabwean public schools?

It emerged from the study that learners with physical disabilities in public schools in Zimbabwe's Chitungwiza educational district were found to possess a negative physical self-concept. Most physically disabled learners negatively rated the extent of the physical self-concept for learners with physical disabilities in Zimbabwean public schools. The findings of the current study align with those of Cerda et al. (2021), who emphasise that limited access to physical activities and reduced engagement in exercise can negatively affect the development of a positive physical self-concept. This lack of involvement may lead to increased anxiety about physical appearance, low self-esteem, and general dissatisfaction with life, factors that can contribute to academic underachievement, particularly among learners with physical disabilities. In this study, it was further revealed that opportunities for physical activity among learners with disabilities in public schools are either severely limited or absent.

It was noted in Chitungwiza public secondary schools that learners with physical disabilities experienced consistently limited participation in Physical Education and extracurricular sporting activities due to a combination of institutional, environmental, and resource-related constraints. In most cases, these learners were either excused from physical activities or relegated to passive observation roles, largely because schools lacked adaptive sporting equipment and structured inclusive physical activity programmes. Mainstream sporting codes such as football, netball, and athletics were not modified to accommodate varying physical abilities, thereby excluding learners with disabilities from meaningful engagement.

It was further observed that infrastructural limitations, including uneven terrain, inaccessible playing fields, and absence of assistive mobility support, significantly restricted safe and active participation. In addition, school-level selection processes for sporting teams and inter-school competitions rarely considered learners with physical disabilities, reinforcing their marginalisation from organised physical development opportunities. These systemic constraints contributed to reduced exposure to physical competence-building experiences, which in turn reinforced a negative physical self-concept characterised by low confidence, perceived physical inadequacy, and limited social inclusion within school life.

It was apparent that learners with physical disabilities had limited participation in physical activities, largely due to institutional, environmental, and resource constraints within the school setting. It was established that the absence of inclusive sports programmes contributed significantly to the development of a low physical self-concept, as learners were denied opportunities to experience competence and success in physical domains. It was further highlighted that environmental barriers, including inaccessible sports facilities and a lack of adaptive equipment, restricted meaningful engagement in school sports. It was also acknowledged that psychosocial factors play a crucial role in shaping self-concept, particularly where repeated exclusion reinforces negative self-perceptions.

Evidence showed that reduced physical activity is closely associated with lower academic engagement, indicating that limitations in physical participation extend beyond the sports domain into broader school functioning. The study revealed that learners frequently experienced low confidence in their physical abilities, while the findings indicated that a negative physical self-concept adversely affected academic performance. It became apparent that exclusion from physical activities reinforced low self-esteem, and it was found that learners with disabilities consistently had limited opportunities for physical participation. Ultimately, it emerged that sustained physical inactivity contributed to poor self-concept development, reduced motivation, and weakened school engagement.

The published literature indicates a strong correlation between disability, emotional distress, and depression, all of which are closely linked to the development of a negative physical self-concept. Jaalkhorol et al. (2023) report a very high prevalence of depression among individuals with multiple sclerosis (MS), attributing this to psychological instability associated with the condition and treatment-related depressive symptoms. This demonstrates a

clear relationship between the management of physical disabilities and elevated levels of depression. Similarly, Morrow et al. (2015) found that intensive treatment and long-term management of physical disabilities are often associated with depressive disorders, reinforcing the psychological burden experienced by individuals with physical impairments.

Building on this evidence, it is evident that a negative physical self-concept is strongly reinforced among learners with physical disabilities as a consequence of sustained physical inactivity. Responses to the questionnaire items such as *“I like more engagement in physical activities and exercises”* and *“I am an expert in sporting activities”* indicated generally low levels of agreement among learners with physical disabilities, suggesting limited interest and perceived competence in physical activities. This pattern reflects restricted participation and low confidence in sporting contexts. It was observed in the current study that such inadequate or absent engagement in physical activity is associated with a range of adverse health outcomes, including obesity, reduced mobility, postural complications such as idiopathic scoliosis, and, in severe cases, premature mortality (Hillman et al., 2015). This suggests that physical inactivity not only undermines physical functioning but also consolidates negative perceptions of bodily competence and self-worth.

It was further revealed that a negative physical self-concept extends beyond physical health into psychological and behavioural functioning, where learners who are excluded from or disengaged in physical activities become more vulnerable to maladaptive coping responses, particularly when compounded by disability-related stressors. Supporting this, Lipowski et al. (2016) report that physically inactive learners with disabilities, especially those experiencing overweight conditions, are at increased risk of substance abuse, suicidal ideation, and other high-risk behaviours. These findings demonstrate a cumulative and reinforcing cycle in which physical inactivity, declining health status, and psychological distress interact to deepen a negative physical self-concept, which in turn further reduces motivation for physical engagement and exacerbates broader vulnerability among learners with physical disabilities.

The published literature indicates a strong correlation between disability, emotional distress, and depression, all of which are closely linked to the development of a negative physical self-concept. Jaalkhorol et al. (2023) report a very high prevalence of depression among individuals with multiple sclerosis (MS), attributing this to both psychological instabilities associated with the condition and treatment-related depressive symptoms. This

demonstrates a clear relationship between the management of physical disabilities and elevated levels of depression. Similarly, Morrow et al. (2015) found that intensive treatment and long-term management of physical disabilities are often associated with depressive disorders, further reinforcing the psychological burden experienced by individuals with physical impairments

Responses to the questionnaire item *“It is pretty tough to be me”* reflected a strong sense of difficulty among learners with physical disabilities, particularly those experiencing obesity, postural complications such as idiopathic scoliosis, and various somatic conditions. These learners’ responses suggest that living with limited physical ability and associated health complications contributes to feelings of strain, reduced self-worth, and heightened psychosocial burden. It emerged from the current study that inadequate or complete absence of physical activity leads to negative self-concept and poor academic performance, multiple health problems, including postural complications such as idiopathic scoliosis, various somatic conditions, obesity, mobility challenges, and in severe cases, premature mortality (Hillman et al., 2015). Furthermore, there is increasing empirical evidence linking physical inactivity to poor mental health outcomes. Notably, Lipowski et al. (2016) report that overweight learners with physical disabilities who do not participate in sports are at significantly higher risk of engaging in harmful behaviours such as suicide attempts, alcohol abuse, and drug use.

It emerged from the current study that inadequate or complete absence of physical activity contributes to a negative self-concept and poor academic performance among learners with physical disabilities. This is reflected in multiple health challenges, including postural complications such as idiopathic scoliosis, various somatic conditions, obesity, mobility challenges, and in severe cases, premature mortality (Hillman et al., 2015). These physical limitations not only affect overall health but also weaken learners’ self-perception and confidence, thereby influencing their engagement and achievement in academic tasks. Consequently, repeated absenteeism created gaps in learning that negatively affected academic performance, particularly in core subjects.

Over time, this cycle of illness-related absence, reduced participation, and low achievement reinforced feelings of academic inadequacy and further entrenched a negative self-concept among learners with physical disabilities. Furthermore, there is increasing empirical evidence linking physical inactivity to poor mental health outcomes, which further impacts learning outcomes. Notably, Lipowski et al. (2016) report that overweight learners

with physical disabilities who do not participate in sports are at significantly higher risk of engaging in harmful behaviours such as suicide attempts, alcohol abuse, and drug use. These psychological and behavioural challenges collectively reinforce a negative self-concept and contribute to reduced academic performance.

This study concurs with research by Smith and Johnson (2019), who demonstrated that learners with physical disabilities are more likely to exhibit both internalising and externalising behavioural difficulties compared to typically developing learners. These learners are especially vulnerable to experiencing elevated levels of stress, anxiety, and depression. Chronic psychological distress places physically disabled learners at greater risk of societal disruption, family dysfunction, and various physical and mental health disorders, including potential psychotic conditions (Brown et al., 2020). Such challenges can negatively affect their physical self-concept, which is often defined by factors such as academic achievement, mental well-being, and participation in extracurricular activities. The findings of the current study are consistent with Dela et al. (2022), who emphasise that a positive physical self-concept is a complex, overarching process shaped by taught concepts, mindsets, and beliefs about oneself. This growth in self-concept can be fostered through self-awareness, self-appreciation, self-actualisation, and optimistic, logical reasoning.

The current study further indicates that these learners often hold lowered perceptions of their physical attractiveness due to visible mobility limitations. This heightened self-awareness during adolescence contributes to insecurity and vulnerability, which undermine the development of a positive physical self-concept. As self-concept is closely linked to perceptions of body image and ability, these negative evaluations weaken overall self-esteem. Supporting this view, Stephen et al. (2011) argue that perceived physical attractiveness is often associated with health and vitality, meaning that learners who view themselves negatively may experience reduced confidence and self-worth. Consequently, physical disability during critical developmental stages negatively affects self-concept formation, with implications for mental well-being, social interaction, and academic engagement.

In this study, it emerged that physically disabled learners showed marked dissatisfaction with their body appearance, which negatively influenced their physical self-concept and reduced feelings of happiness and beauty. This dissatisfaction was reflected in responses such as *“I am reasonably attractive”* (low endorsement), *“I look awful these days,”*

and “*It is pretty tough to be me,*” indicating weakened positive self-perception and emotional well-being. Such perceptions are closely linked to visible conditions like obesity and limited mobility, which not only affect health but also shape how learners interpret their own beauty, attractiveness, and social acceptance. According to WHO (2016a), these conditions are associated with serious health risks such as diabetes and cardiovascular diseases, which may further reinforce negative body image and emotional distress.

It is consistent with Cash and Smolak (2011), who argue that body dissatisfaction significantly undermines self-esteem and emotional well-being, particularly during adolescence when self-image is highly sensitive to physical appearance. Similarly, Harter (2012) emphasises that perceived attractiveness and body image are central components of self-worth, directly influencing happiness, social confidence, and overall psychological adjustment. The findings suggest that reduced perceptions of beauty and happiness among learners with physical disabilities are interconnected with negative physical self-concept, where dissatisfaction with body image contributes to lowered self-esteem, reduced happiness, and weakened psychological well-being.

These health challenges negatively affected learners’ perceptions of their physical attractiveness and well-being (Stephen et al., 2011), resulting in lower self-esteem and reduced motivation for academic engagement. This aligns with Stephen and Tan (2014), who argue that physiological health cues strongly shape self-concept development. Therefore, improving physical health and body image is essential for enhancing both psychological well-being and academic success among learners with physical disabilities.

Evidence, however, reveals that children with physical disabilities (PD) are significantly less physically active than both their able-bodied peers (WHO, 2010) and peers with different types of disabilities (Guthold et al., 2020). They tend to participate in fewer structured leisure-time physical activities and spend prolonged periods engaged in sedentary behaviours. This sedentary lifestyle places children with physical disability at a heightened risk of reduced physical functioning, which may lead to additional health complications related to their primary disability.

It emerged from this study that a negative physical self-concept among learners with physical disabilities significantly undermines their ability to self-actualise and reach their full potential. Learners experiencing poor body image and low self-esteem often develop

internalised limitations that restrict participation in academic, social, and physical domains. This diminished self-worth contributes to psychological distress, social isolation, and reduced willingness to engage in opportunities that could support their development. As a result, their capacity to thrive intellectually, emotionally, and socially is severely compromised. The inability to accept and positively perceive one's physical identity delays personal development and obstructs the process of self-fulfilment. Therefore, this study underscores the urgent need to promote a positive self-concept as a central factor in enabling learners with physical disabilities to unlock their potential and achieve holistic success.

In the following section, a conclusion of data presentation, analysis and discussion is presented.

## **5.5. Summary**

The findings of this study indicate that learners with physical disabilities experience a complex interaction between self-concept, physical health, and academic performance, with each dimension reinforcing the other. Overall, the results show that a negative self-concept is strongly associated with reduced academic engagement, low motivation, poor concentration, and underachievement, particularly in core subjects such as Mathematics and English. This suggests that academic outcomes are not determined only by cognitive ability, but are also significantly shaped by psychosocial and contextual factors (Arens et al., 2017; Seaton et al., 2019).

A key finding is that limited participation in physical activity contributes to both negative physical self-concept and weakened psychological well-being. Learners who were excluded from or minimally engaged in sports and physical education reported lower confidence, reduced self-worth, and diminished motivation.

The study further established a strong reciprocal relationship between self-concept and academic performance. Poor performance reinforced negative self-beliefs, while low self-concept reduced persistence and effort in learning tasks, creating a cyclical pattern of underachievement. Current evidence supports this bidirectional relationship, showing that self-concept and achievement mutually reinforce each other over time (Pinxten & De Fraine, 2019; Seaton et al., 2019). In addition, the findings highlight the critical role of environmental and contextual factors in shaping learners' experiences. Limited access to inclusive sports facilities,

inadequate adaptive resources, and insufficient school support systems were found to restrict meaningful participation in both physical and academic domains, thereby limiting development opportunities and increasing exclusion (Jansen et al., 2021; Hyvärinen et al., 2022).

Importantly, the study underscores that psychosocial factors such as motivation, resilience, body image, and perceived competence play a central role in shaping learners' overall development. Negative perceptions of physical appearance and ability were closely linked to emotional distress and reduced self-esteem, which in turn negatively affected academic engagement (Cash & Smolak, 2011; Harter, 2012). The findings confirm that the academic performance of learners with physical disabilities cannot be understood in isolation from their self-concept and physical well-being. Rather, these elements interact dynamically in a reinforcing cycle where physical inactivity, negative self-concept, and poor academic performance perpetuate one another. The study therefore aligns with current inclusive education scholarship, emphasising the need for integrated interventions that simultaneously address psychological well-being, inclusive physical activity, and supportive learning environments to improve educational outcomes (Maher et al., 2016; Arens et al., 2017).

## **CHAPTER 6**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 Introduction**

The present study sought to investigate the self-concept and academic performance of learners with physical disabilities in Zimbabwean public schools with a view to enhancing positive self-concept development. Its primary aim was to examine how the development of a positive self-concept can foster resilience, enhance coping mechanisms, and promote independence, autonomy, problem-solving, and adaptability in these learners. Building on the research problem introduced in Chapter 1, this chapter provides a structured review of the key findings in relation to each sub-research question. It also synthesises the main conclusions drawn from the data and presents practical, evidence-based recommendations for educators, policymakers, and other stakeholders. Additionally, the chapter highlights the study's limitations and concludes with final remarks on the implications of the research for inclusive education and future inquiry. In the current chapter, the research problem presented in the previous chapter is reviewed, and a summary of the findings of the study on each sub-research question is presented. The chapter also presents the conclusions, recommendations and limitations of this study. The chapter further presents concluding remarks.

#### **6.2. Summary of the Research Findings**

##### **6.2.1 Key findings of the literature review**

###### **6.2.1.1 Psychological self-concept of learners with physical disabilities**

The literature suggests that negative psychological self-concept among learners with physical disabilities is associated with a range of adverse emotional and behavioural outcomes, including stress, anxiety, feelings of worthlessness, low self-esteem, and reduced psychological well-being (World Health Organization, 2021). However, what is analytically significant is not simply the presence of these psychological difficulties, but the manner in which disability-related barriers and internalised stigma interact to reinforce negative self-perceptions. This interaction may create a cycle in which diminished self-belief reduces learners' willingness to

engage academically and socially, thereby increasing vulnerability to further exclusion and disadvantage.

Studies have linked weakened psychological self-concept to outcomes such as educational withdrawal, exposure to violence, substance abuse, declining academic performance, emotional instability, and delinquent behaviour (World Health Organization, 2021). Rather than viewing these outcomes as direct consequences of disability, the literature suggests that they emerge through complex relationships between individual self-perceptions and broader social conditions. This perspective shifts attention from impairment itself to the social and educational contexts that shape how learners understand and evaluate themselves.

Research by Cieri and Esposito (2019) further indicates that psychological well-being is closely connected to both mental and physical health outcomes. The significance of this relationship lies in its implication that psychological self-concept may function as a protective resource, supporting resilience and adaptive coping in the face of adversity. At the same time, the evidence suggests that psychological self-concept does not operate independently. Social support, family relationships, school climate, and access to inclusive educational opportunities may strengthen or weaken its influence. This highlights the need to understand psychological self-concept as embedded within wider ecological systems rather than as an isolated personal attribute.

The literature on trauma provides additional insight into the development of a negative psychological self-concept. Burke (2017) identified withdrawal, self-doubt, depression, anxiety, heightened fear of failure, and symptoms associated with post-traumatic stress disorder as characteristics frequently linked to negative self-perceptions. Analytically, these findings suggest that psychological self-concept may mediate the relationship between adverse life experiences and later educational and psychosocial outcomes. Learners who internalise negative experiences may become more vulnerable to self-criticism and reduced confidence, potentially limiting their participation and achievement in educational settings.

Similarly, Shin and Park (2022) argue that persistent self-criticism and low self-efficacy are associated with feelings of hopelessness, anxiety, embarrassment, and fear. The importance of this finding lies in demonstrating how negative self-perceptions may become self-reinforcing over time. Reduced confidence can limit engagement with challenges, thereby restricting opportunities for success and further weakening self-belief. This process may be

particularly pronounced among learners with physical disabilities when societal attitudes and institutional barriers reinforce perceptions of inadequacy.

Taken together, the literature indicates that psychological self-concept is not merely an individual psychological characteristic but a mechanism through which social experiences, disability-related challenges, and educational opportunities influence well-being and achievement. The contribution of this perspective is that it extends beyond identifying associations between self-concept and outcomes, highlighting the processes through which psychological self-concept may shape learners' educational participation, resilience, and long-term development.

#### **6.2.1.2. Social self-concept of learners with physical disabilities**

The findings suggest that a negative social self-concept is associated with lower academic performance among learners with physical disabilities. What is analytically significant is not merely the presence of social difficulties, but how negative perceptions of social acceptance appear to shape learners' academic engagement, participation, and persistence. Consistent with Shim (2018), the findings indicate that learners' academic experiences are influenced by their sense of belonging and the quality of their social relationships within the school environment.

A key finding was that many learners exhibited negative social self-concepts characterised by feelings of exclusion, isolation, and limited social acceptance. While stigma and exclusion among learners with disabilities have been widely documented (Mostert, 2016), the present findings suggest that their significance lies in their academic consequences. Learners who perceive themselves as socially marginalised appear less likely to participate in collaborative learning, engage in classroom discussions, or access peer-based academic support, thereby reducing opportunities for meaningful academic engagement.

The findings further indicate that negative social self-concept undermines learners' sense of belonging within the school environment. In line with Jonsson et al. (2017), belonging is associated with sustained engagement, motivation, and persistence in learning tasks. Conversely, when learners experience exclusion or social disconnection, their willingness to remain actively involved in academic activities appears reduced. What is analytically important

here is that social belonging functions as an educational resource that directly shapes participation in learning processes.

The findings also highlight the role of social support in moderating the effects of negative social self-concept. Consistent with Boonk et al. (2018) and Mutiso, Musyimi, and Krolinski (2019), limited support from family, peers, and teachers appears to intensify feelings of isolation and disengagement, while supportive relationships help sustain confidence and participation. In the absence of such support, a negative social self-concept is more likely to translate into reduced academic involvement and weaker performance outcomes.

Taken together, the findings suggest that a negative social self-concept may adversely affect academic performance through its influence on participation, engagement, and persistence in learning activities. Within the scope of this study, the evidence indicates that academic disadvantage may emerge when negative social perceptions interact with stigma, exclusion, and inadequate social support, thereby limiting learners' opportunities for sustained academic engagement.

#### **6.2.1.3 Academic self-concept of learners with physical disabilities**

The findings suggest that negative academic self-concept is associated with lower academic performance among learners with physical disabilities. What is analytically significant is not simply the presence of a negative self-view, but the processes through which it appears to shape learners' engagement, persistence, and confidence in academic tasks. Within the scope of this study, negative academic self-concept seems to function as a limiting factor that reduces learners' willingness to participate fully in learning opportunities, consistent with the view that self-concept is closely tied to achievement-related behaviour (Harter, 2012; Wu et al., 2021).

A key finding is that learners with negative academic self-concepts tended to demonstrate reduced motivation, lower confidence in their academic abilities, and diminished willingness to engage with challenging tasks. Rather than being interpreted as individual incapacity, these patterns may reflect the influence of repeated academic experiences shaped by stigma, limited support, and accessibility barriers, as noted in disability education literature (Shields & Synnot, 2016; Kosciulek & Szymanski, 2015). In this sense, negative academic self-concept may both reflect and reinforce constrained educational participation.

The findings further indicate that negative academic self-concept is linked to avoidance behaviours in learning contexts. Learners who doubted their academic capabilities were more likely to withdraw effort when faced with difficulty, avoid participation in classroom activities, and limit engagement with academic tasks perceived as challenging. This aligns with evidence that low self-concept is associated with reduced persistence and weaker academic engagement (Yang et al., 2023). The significance of this finding lies in the suggestion that academic underperformance is not solely a function of ability, but may also be influenced by learners' expectations of failure and reduced academic confidence.

Additionally, the evidence suggests that negative academic self-concept interacts with structural and contextual conditions within the learning environment. In settings where learners experience exclusion, inadequate support, or negative stereotyping, negative self-perceptions may be intensified, consistent with arguments on social and institutional influences on self-concept development (Mostert, 2016; Jonsson et al., 2017). This interaction may contribute to a cycle in which low confidence reduces engagement, and reduced engagement further limits academic success. Taken together, the findings indicate that negative academic self-concept may adversely affect academic performance through its influence on motivation, engagement, and persistence. Within the scope of this study, the evidence suggests that academic disadvantage among learners with physical disabilities is better understood as a dynamic process involving both psychological self-perceptions and the broader educational context in which learning occurs.

#### **6.2.1.4. Physical self-concept of learners with physical disabilities**

Key findings from the literature suggest that learners with physical disabilities often experience a diminished physical self-concept, reflected in less favourable perceptions of their bodily abilities, appearance, and physical competence compared to their non-disabled peers. This pattern appears to be shaped less by individual limitation alone and more by the interaction between mobility constraints, restricted participation in physical activities, and disabling social and environmental conditions (Shields & Synnot, 2016). What is analytically significant is not simply the presence of a lowered physical self-concept, but how structural barriers and repeated social feedback may be internalised, thereby shaping learners' self-evaluations and subsequent engagement in school-related activities.

The literature further indicates that negative evaluations from peers and adults, combined with internalised perceptions of inadequacy, may weaken confidence and contribute to avoidance of physical activity and reduced social participation (Smith & Thomas, 2018). From an interpretive perspective, this avoidance should not be read solely as behavioural withdrawal, but as a response shaped by accumulated experiences of exclusion and limited participation opportunities. In this sense, physical self-concept operates as a psychosocial construct through which learners interpret both bodily capability and their position within socially structured environments. Physical self-concept, understood as individuals' perceptions of their bodily attributes such as stamina, athletic ability, and appearance, is widely recognised as a component of broader psychosocial well-being (Utesch et al., 2018; Badri et al., 2022). However, its significance extends beyond individual perception, as it is shaped by contextual variables such as gender, age, culture, and institutional inclusivity. The literature suggests that it may function as a protective factor for both physical and mental health, although its development remains contingent upon sustained opportunities for participation and positive reinforcement.

## **6.2.2. Key findings of the empirical research**

### **6.2.2.1 Psychological self-concept of learners with physical disabilities**

Literature reveals that physically disabled learners are generally characterised by adverse living conditions. According to the literature, learners with physical disabilities usually experience poor living conditions. The empirical investigation's findings corroborated these undesirable situations. Learners with physical disabilities in public schools face environmental hurdles such as a lack of ramps or lifts, inaccessible transportation, and steep or rocky terrain, which drains them and hinders their time management. Educators who are weary from tough travel arrangements lack the time and drive to fully prepare for their daily activities. These adverse conditions were confirmed by the findings of the empirical investigation. Living with physical disabilities presents physical and emotional difficulties such as prolonged discomfort and exhaustion, restricted mobility and dexterity, sensory disorders, prejudice and discrimination, and mental health issues daily due to a lack of adequate and proper adaptation and support, which causes anxiety in a variety of ways and hampers functional functioning and learning outcomes. Depressed learners with disabilities might encounter a lower quality of life

as a result of self-pity and guilt, internalised ableism, judgment and prejudice, and traumatic experiences. This reduces the optimal ability to engage in activities, maintain connections, and enjoy general well-being, resulting in social withdrawal and broken relationships.

According to empirical evidence, physical disability is typically accompanied by poor living conditions. The results of the empirical inquiry corroborated these detrimental conditions. According to the reviewed literature, a positive psychological self-concept includes a combination of self-worth, self-acceptance, self-esteem, positive relationships, and personal growth. The present investigation revealed that learners with physical disabilities were subjected to a negative and unfavourable psychological self-concept. Most physically disabled learners negatively rated the extent of the psychological self-concept among learners with physical disabilities in Zimbabwean public schools. In addition to having a negative psychological self-concept, learners with physical disabilities demonstrated predominantly low self-esteem, feelings of insecurity, lack of self-assurance, and lack of motivation. These learners exhibited sad, aggressive, or anxious symptoms, sensations of overload, and memory lapses. They were more likely to avoid academic work due to barriers such as inadequate adaptations, stigma and discrimination, harassment and social isolation, inappropriate disability support services, lack of family support, a diminished sense of self, and low self-esteem within society.

The findings of the current study concur with those of Wehrle and Fasbender (2018), who show that most disabled learners feel futile and inefficient in managing and controlling their lives. Due to a lack of a strong sense of psychological self-worth, self-assurance, and a positive self-concept, the majority of disabled learners are ineffective and unsuccessful in executing their lives. Learners with physical disabilities experience significant mental anguish. The formation of an appropriate psychological self-concept for the diverse behaviour of learners with disabilities is negatively affected by the presence of emotional distress. Most learners with physical disabilities suffer from such distress. The results of this study support those of Lal et al. (2022), who found that mental illnesses affect a large proportion of learners with physical disabilities. This is further supported by Giacomini and Jordan (2017), who state that, compared to their typically able-bodied peers, learners with physical disabilities are three times more likely to have suicidal thoughts and twice as likely to report feeling depressed or despondent daily. Indeed, this study has demonstrated a correlation between learners' physical

limitations and subclinical mental health issues, such as symptoms of anxiety and depression (Konstantopoulou, Iliou, Karaivazoglou et al., 2020). The development of a positive psychological self-concept was limited because students with physical impairments were often incompetent in planning, self-actualisation, and appraising programs that catered to the wide range of their needs and characteristics.

#### **6.2.2.2 Social self-concept of learners with physical disabilities**

Literature reveals that a cruel society can have serious and lasting effects on individuals with disabilities, affecting their social interactions, emotional well-being, and overall quality of life. Hostile environments have been shown to intensify stress and anxiety, contribute to low self-esteem and self-worth, and lead to depression, trauma, social isolation, stigma, and broader mental health challenges. The findings of the empirical investigation supported these claims. The study revealed that learners with physical disabilities in public schools within Zimbabwe's Chitungwiza educational district were subjected to adverse social self-concepts.

The current study identified negative self-talk, a lack of understanding from peers, heightened sensitivity to criticism, and negative peer responses to pain as key components of poor social interaction. Learners with physical disabilities exhibited a diminished social self-concept, characterised by feelings of isolation and a lack of belonging. It appeared that these students were socially excluded and had few, if any, meaningful peer relationships. These findings align with those of Yeager et al. (2016), who assert that socialisation fosters a sense of belonging in physically disabled learners. A lack of adequate social interaction can result in depression and alienation, increasing the risk of chronic psychological issues, such as persistent pain and anxiety disorders.

Empirical literature further highlights a general lack of social support for learners with physical disabilities in Zimbabwean public secondary schools. This diminished social self-concept negatively affected their academic performance. Due to insufficient support from both peers and parents, many disabled learners in Zimbabwean public schools experienced low self-worth, disengagement, self-doubt, anxiety, and reduced confidence. These learners often reported feeling overwhelmed and showed signs of distress, sadness, and memory lapses. Additionally, as they struggled with externalising behaviours, such as aggression, frustration, and antagonism, they became more vulnerable to bullying, victimisation, and discrimination.

This was often accompanied by shy, anxious, or withdrawn behaviour, along with social rejection, children who are timid, withdrawn, socially inhibited, or anxious are frequently targeted for bullying and cruelty (Mulvey et al. 2017) . Their peers often perceive these traits as signs of weakness or social incompetence, making them appear harmless and unlikely to retaliate, which further contributes to their marginalisation.

#### **6.2.2.3 Academic self-concept of learners with physical disabilities**

Literature reveals that the academic performance of learners with disabilities is adversely affected by a weakened academic self-concept. Learners with physical disabilities often lack motivation and academic aspirations. The current study found that students attending public secondary schools in the Chitungwiza educational district of Zimbabwe, particularly those with physical disabilities, demonstrated a poor and unfavourable academic self-concept. Indicators of negative academic motivation identified in the study included academic failure, irregular attendance, reduced participation in extracurricular activities, avoidance behaviours, and strained relationships with teachers.

The findings show that a strong or high academic self-concept (ASC) is positively correlated with higher academic achievement. A significant positive correlation ( $p < 0.05$ ) was established between ASC and learners' academic performance scores. This suggests that learners with low ASC are likely to lack essential problem-solving skills and valuable personality traits such as critical thinking, autonomy, motivation to learn, self-confidence, creativity, adaptability, and self-esteem. These qualities are vital for boosting learning drive and academic determination, which are key to improved academic success.

The results of this study are consistent with those of Jaiswal and Choudhuri (2017), whose research in secondary schools in Varanasi, India, revealed a positive relationship between ASC and learning outcomes. Their findings indicated that learners' beliefs about their intellectual ability, academic goals, and enthusiasm for learning were closely linked to academic success. Similarly, Ajmal and Rafique (2018) found a moderately favourable correlation between academic self-concept and academic achievement among distance learners. The present findings also align with the study by Gachigi et al. (2019) in Nairobi, Kenya, which concluded that ASC was strongly associated with improved academic performance in mathematics. Moreover, the study supports Jones' (2017) research, which

highlights that academic self-concept encompasses an individual's perception of their academic ability and achievement.

Finally, the current study revealed that learners with physical disabilities were more likely to exhibit deficiencies in creative and innovative thinking, largely due to their low academic self-concept.

#### **6.2.2.4 Physical self-concept of learners with physical disabilities**

The findings of the current study align with those of Cerda et al. (2021), who observed that a lack of physical activity and reduced participation in exercise can negatively impact the development of physical self-concept in children. This may result in appearance-related anxiety, low self-esteem, and life dissatisfaction, factors that contribute to underachievement among students with disabilities. The current study similarly revealed that learners with disabilities in Zimbabwean public schools rarely engaged in physical activities, if at all.

It was found that limited or no physical activity leads to numerous health complications, including bodily illnesses, postural issues (such as idiopathic scoliosis), obesity or being overweight, mobility difficulties, and even premature death (Li et al., 2017). Increasing empirical evidence suggests a significant relationship between mental health and physical inactivity. Notably, Lipowski et al. (2016) found that overweight students with physical disabilities who do not participate in sports are more likely to exhibit life-threatening behaviours, such as suicide attempts, substance abuse, and illegal drug use. These students are also more vulnerable to stress, anxiety, and depression.

In addition, physically challenged learners may experience heightened psychological distress due to factors such as family dysfunction, social instability, chronic medical or mental health conditions, or disordered thinking. Obesity has also been linked to several harmful health outcomes, including diabetes, cardiovascular diseases, and reduced mobility, all of which negatively affect the physical self-concept of learners with physical disabilities. Moreover, physical weakness or lack of physical strength was found to be predicted by behavioural problems, which may influence the relationship between a learner's physical characteristics and physical functioning (Cieri & Esposito, 2019).

Empirical evidence from Zimbabwe further emphasises that physically disabled learners often exhibit low engagement in physical activities and possess limited sport-specific

skills, which undermines their physical self-concept and health outcomes. Literature also establishes a strong association between disability and elevated rates of depression and anxiety. For instance, Jaalkhorol et al. (2023) reported a 100% prevalence of depression among individuals with multiple sclerosis, often linked to anxiety about their condition or side effects of treatment. These findings highlight the interconnectedness of physical self-concept, psychological well-being, and the urgent need for comprehensive support systems that address the complex identities and challenges faced by learners with disabilities (Jonsson et al., 2017).

### **6.3. Conclusions**

#### **6.3.1 Psychological self-concept of learners with physical disabilities**

The findings suggest that psychological self-concept among learners with physical disabilities is shaped within structurally constrained, low-resource educational environments where stigma, limited support, and exclusion influence self-evaluation (Shields & Synnot, 2016; Harter, 2012). What is theoretically significant is that self-concept appears to function less as a stable individual trait and more as a context-responsive construct.

This extends self-concept theory by indicating that in low-resource settings, self-perceptions are more strongly shaped by environmental instability and institutional inequities than traditional models may assume (Wu et al., 2021). From a disability studies perspective, the findings support an interactional view of disability, where psychological outcomes reflect the interplay between impairment and disabling social conditions rather than individual deficit alone (Mostert, 2016).

From a theoretical perspective, the findings indicate that psychological self-concept functions less as a stable trait and more as a context-responsive construct shaped by structural conditions. This extends self-concept theory by suggesting that in low-resource settings, self-perceptions are more strongly mediated by institutional inequities and environmental instability (Wu et al., 2021). From a disability studies perspective, the findings support an interactional view of disability, where psychological outcomes reflect the interplay between impairment and disabling social structures rather than individual deficit alone (Mostert, 2016).

Carl Rogers' theory suggests that psychological self-concept among learners with physical disabilities reflects incongruence between the real self and the ideal self, often shaped by conditions of worth within school and social environments that limit unconditional positive

regard. From Gordon Allport's perspective, psychological self-concept can be understood as part of the evolving *proprium*, where repeated social experiences of stigma and exclusion become integrated into the self-system, shaping identity development, motivation, and adjustment over time. In relation to Harter's model, the findings suggest a need to more explicitly incorporate structural and cultural constraints as shaping forces of self-concept development (Harter, 2012; Jonsson et al., 2017). Overall, psychological self-concept emerges as a relational construct embedded within educational inequality rather than purely individual cognition.

Overall, the findings suggest that psychological self-concept is a socially constructed and context-dependent phenomenon, requiring interpretation within broader structural, cultural, and relational conditions rather than as an isolated individual attribute.

### **6.3.2 Social self-concept of learners with physical disabilities**

The findings suggest that social self-concept among learners with physical disabilities is shaped within socially and institutionally mediated environments where inclusion, recognition, and support remain unevenly distributed. A key interpretive insight from the study is not the presence of low social self-concept alone, but how it is produced and sustained through the interaction of stigma, limited social support, and constrained participation in school and community life (Shim, 2018; Mostert, 2016).

Negative social self-concept is associated with patterns of social withdrawal, reduced participation, and feelings of exclusion. However, these outcomes are better understood as relational responses to experiences of marginalisation rather than individual social deficiency. Within this framing, social self-concept functions as a mechanism through which learners interpret their position within peer, family, and institutional networks.

The findings further indicate that the availability and quality of social support from peers, families, and educators play a central role in shaping social self-concept (Boonk et al., 2018; Mutiso et al., 2019). Limited support appears to intensify feelings of isolation and weakens engagement, while more supportive environments are associated with improved social confidence and participation. Cultural and contextual norms also emerge as shaping conditions, influencing whether disability is normalised or stigmatised within learners' immediate environments.

From a theoretical perspective, the findings reinforce an interactional understanding of disability, where social outcomes are produced through the relationship between individual experiences and broader structural conditions. This extends disability studies scholarship by highlighting how social exclusion is not only an interpersonal phenomenon but also an institutional and cultural process that shapes identity formation and educational participation.

Relating this to Carl Rogers' humanistic theory, the findings reinforce the idea that social identity is not formed in isolation but develops through continuous interaction with the social environment, particularly through experiences of acceptance or conditional regard. From a Rogers perspective, the interaction between institutional practices, peer relations, and cultural expectations reflects the presence of conditions of worth, where learners' sense of acceptance is contingent on conformity to socially accepted norms of ability and participation. This can lead to incongruence between the *real self* (lived experience of disability) and the *ideal self* (socially prescribed expectations), thereby shaping a negative social self-concept.

Overall, social self-concept emerges as a relational construct embedded within systems of support and exclusion. The evidence suggests that addressing negative social self-concept requires attention not only to individual learners but also to the social and institutional arrangements that structure opportunities for belonging and participation in educational contexts.

### **6.3.3 Academic self-concept of learners with physical disabilities**

The findings suggest a consistent association between academic self-concept and academic achievement among learners with physical disabilities. However, the conceptual significance lies not in confirming this relationship, but in how it is shaped by low-resource educational conditions, where feedback, access to support, and repeated learning experiences influence learners' motivational self-beliefs (Wu et al., 2021).

In low-resource contexts, the evidence suggests that self-concept theory requires contextual refinement, as academic self-perceptions appear more sensitive to structural constraints than many universal models assume. Rather than functioning as a stable internal trait, academic self-concept is more contingent on institutional conditions, instructional quality, and reinforcement patterns within schooling environments.

From a disability studies perspective, the findings shift interpretation away from individual deficit explanations towards an interactional understanding of academic underachievement. What emerges is that reduced performance is not only linked to impairment but to the ways in which educational structures shape confidence, participation, and motivation (Shields & Synnot, 2016).

In relation to Harter's model, the findings suggest a need for cultural and contextual extension. While the model captures multidimensionality in self-concept, it may understate the extent to which structural inequality and resource constraints intensify fluctuations in academic self-beliefs in disadvantaged settings.

Overall, academic self-concept functions as a context-dependent construct, suggesting that improving outcomes for learners with physical disabilities requires addressing both motivational development and the structural conditions that shape self-perception.

#### **6.3.4 Physical self-concept of learners with physical disabilities**

The findings suggest that cognitive functioning among learners with physical disabilities is not explained solely by IQ and executive functioning, but is also closely intertwined with physical self-concept. However, the conceptual implication is that self-concept operates as a socially and developmentally constructed system of meaning, rather than a fixed internal attribute.

From a Carl Rogers perspective, the findings indicate a potential disruption in the congruence between the *real self* and the *ideal self*, particularly where learners internalise socially imposed standards of bodily "normality." Incongruence appears to be intensified by stigma and exclusion, contributing to lowered self-regard, reduced motivation, and emotional vulnerability. In Rogers' terms, conditions of worth within schooling and social environments may undermine unconditional positive regard, thereby weakening self-acceptance and limiting psychological growth. In relation to Harter's model, the findings suggest that physical self-concept is strongly domain-specific and developmentally sensitive, but in low-resource and high-stigma contexts, domain evaluations are more heavily shaped by external feedback and social comparison. This extends the model by indicating that structural constraints and cultural norms may amplify negative self-evaluations across multiple self-domains, particularly during adolescence when peer evaluation is highly influential. From a Gordon Allport perspective, the

findings highlight the role of the self as a dynamic organisation of attitudes shaped through experience and social interaction. Negative physical self-concept can be interpreted as part of a broader system of “proprium” development, where repeated experiences of marginalisation and restricted participation become integrated into the self-structure. This suggests that personality development among learners with physical disabilities may be continuously reshaped by environmental conditions rather than following a linear or internally driven trajectory.

Within disability studies, these theoretical perspectives collectively reinforce an interactional understanding of disability, where cognitive, emotional, and behavioural outcomes emerge from the interplay between individual experience and socially constructed meaning systems. What becomes conceptually significant is not simply reduced functioning, but how self-structures are formed and reorganised through stigma, exclusion, and limited opportunities for positive self-validation.

Overall, the findings suggest that physical self-concept functions as a mediating psychological structure through which social meaning, identity formation (Rogers and Allport), and domain-specific self-evaluations (Harter) jointly influence cognitive engagement and learning outcomes.

#### **6.4 Contribution of the Study**

Analysing one’s own self-concept across cultural boundaries fosters respect, understanding, and appreciation for others, ultimately enhancing societal diversity. Gaining insight into one’s self-concept helps identify the causes of mental health conditions such as depression, anxiety, and low self-esteem, enabling the development of effective therapies and interventions. This study is the first of its kind within the selected public-school context in Zimbabwe and to the best of the researcher’s knowledge, given the limited empirical studies specifically focusing on learners with physical disabilities in relation to both academic performance and self-concept, to examine children’s academic performance and self-concept in public schools from the perspectives and experiences of learners with physical disabilities.

It contributes to the body of knowledge, attitudes, skills, and understandings regarding academic achievement, physical disabilities, and the role of self-concept in enhancing or

hindering these outcomes. Self-concept, a complex idea encompassing one's perception of their body, knowledge, abilities, attitudes, and identity, provides crucial support for physically disabled individuals. This knowledge base will assist stakeholders such as school counsellors, administrators, families, educators, government, and communities in strategising ways to promote positive self-concept development among learners with physical disabilities in public schools.

This study establishes a critical foundation for subsequent investigations into the enhancement of self-concept. It offers a profound contribution to societal advancement by fostering improved health outcomes, elevated educational attainment, and heightened capacities for empathy, compassion, and nuanced interpersonal communication. A sophisticated understanding of self-concept's pivotal influence on academic achievement empowers educators to architect learning environments and pedagogical strategies that cultivate positive self-concept, thereby optimising academic performance. Moreover, the nuanced exploration of self-concept elucidates the intricacies of individual experience, engendering greater societal tolerance and supportiveness. Insights derived from self-concept also refine decision-making frameworks, enabling learners with physical disabilities to make informed, values-driven choices aligned with their aspirations. Collectively, this body of research advances both individual development and collective well-being, contributing indispensably to the formation of a more empathetic, inclusive, and nurturing social fabric.

In the following section, the recommendations of the current study are presented.

## **6.5. Recommendations**

The researcher makes the following recommendations based on empirical findings and the literature review:

### **6.5.1. Recommendations for legislation and policy**

#### **6.5.1.1. Enforcement of inclusive education policy and resource allocation**

Education authorities should strengthen the enforcement of inclusive education policies to ensure adequate resourcing and accountability for the education of physically disabled learners. Findings reveal a persistent gap between inclusive education policy

intentions and actual implementation, negatively affecting all four domains of self-concept among physically disabled learners. Inadequate resources and weak enforcement hinder academic participation, social inclusion, psychological wellbeing, and physical accessibility. A limitation of the study is the absence of direct engagement with policy-makers. The gap identified is weak enforcement mechanisms and unequal resource distribution across schools. Strengthening policy implementation would promote equity and holistic self-concept development

#### **6.5.1.2. Strengthening teacher capacity for inclusive pedagogy**

The Ministry of Primary and Secondary Education should provide continuous professional development for teachers on inclusive education practices that specifically support physically disabled learners and enhance their self-concept. Findings show that teacher attitudes, instructional approaches, and classroom expectations significantly influence the academic self-concept and psychological self-concept of physically disabled learners. The limitation of the study is its reliance on learner perspectives without direct classroom observation of teacher practices. The gap identified is insufficient teacher preparedness to effectively support the learning and emotional needs of physically disabled learners. Strengthening teacher training would improve both academic engagement and emotional confidence.

#### **6.5.1.3. Strengthening inclusive learning environments**

School leadership and infrastructure development authorities should ensure that learning environments are fully accessible and inclusive for physically disabled learners, guided by universal design principles. Findings indicate that barriers in the physical self-concept domain—such as mobility limitations and inaccessible infrastructure—restrict participation and independence among physically disabled learners. These barriers also negatively affect their academic self-concept, as reduced participation leads to lower confidence in academic abilities. The limitation of the study is its focus on selected schools, which limits broader generalisation. The gap identified is the continued inadequacy of accessible infrastructure and adaptive learning resources for physically disabled learners.

## **6.5.2 Recommendations for practice**

### **6.5.2.1. Peer inclusion and anti-Stigma school programmes**

Schools should implement structured peer inclusion programmes and enforce anti-bullying policies that explicitly address discrimination against physically disabled learners. Findings reveal that physically disabled learners experience social exclusion, stigma, and teasing, which negatively affect their social self-concept and reduce their sense of belonging. These experiences also weaken their psychological self-concept by lowering self-esteem and increasing emotional distress. A limitation of the study is the absence of data from non-disabled peers, which limited deeper analysis of peer-group dynamics. The gap identified is the lack of formal peer inclusion systems that actively promote acceptance of physically disabled learners.

### **6.5.2.2. Strengthening family–school–community collaboration**

Parents, communities, and schools should collaborate more effectively to support the holistic development of physically disabled learners across the social, psychological, and academic domains of self-concept. Findings indicate that parental attitudes, home environments, and community perceptions significantly influence the self-esteem (psychological domain), social belonging (social domain), and academic motivation (academic domain) of physically disabled learners. A limitation of the study is the limited exploration of parental capacity and socio-economic constraints affecting support. The gap identified is weak coordination between home, school, and community systems in supporting physically disabled learners. Strengthening collaboration would ensure consistent reinforcement of positive self-concept

### **6.5.2.3. Institutionalised school-based psychosocial and inclusive support systems**

Schools should institutionalise structured counselling and psychosocial support services specifically designed for physically disabled learners. Findings indicate that the psychological self-concept (self-esteem, emotional wellbeing, and self-worth) of physically disabled learners is strongly influenced by emotional support systems within the school environment. Similarly, the social self-concept is shaped by peer acceptance and inclusion. A limitation of this study is that it did not evaluate the professional capacity and consistency of counselling services across schools. The gap identified is the absence of standardised

psychosocial support structures targeting the specific emotional and social needs of physically disabled learners. Institutionalising such services would strengthen emotional resilience and social integration.

### **6.5.3 Recommendations for further research**

#### **6.5.3.1 Longitudinal studies on Self-concept development**

Future studies should use longitudinal designs to examine how psychological and social support influence the long-term self-concept development of physically disabled learners. While the current study provided valuable insights into the psychological, social, academic, and physical self-concepts of learners with physical disabilities, its cross-sectional design limited the ability to assess changes in self-concept over time. Longitudinal research would enable researchers to track developmental patterns, identify factors that promote positive self-concept trajectories, and evaluate the sustained effects of interventions and support systems. Such studies would contribute to a deeper understanding of how self-concept evolves throughout the educational experiences of physically disabled learners and inform more effective policies and practices aimed at enhancing their overall well-being and academic success.

#### **6.5.3.2 Comparative studies across disability groups**

Future research should conduct comparative studies across different disability groups to determine whether self-concept development differs among learners with physical disabilities, intellectual disabilities, and sensory impairments. The current study focused exclusively on learners with physical disabilities, which limits the extent to which the findings can be generalised to other disability categories. Comparative research would provide a broader understanding of how different disability experiences influence the psychological, social, academic, and physical dimensions of self-concept. Such studies could identify both shared and disability-specific factors affecting self-concept development, thereby informing the design of more targeted interventions, inclusive educational practices, and support systems that address the unique needs of diverse groups of learners with disabilities.

### **6.5.3.3 Broader contextual and stakeholder-based research**

Future research should expand to rural, urban, and national contexts and incorporate the perspectives of multiple stakeholders, including parents, teachers, school administrators, and education officials. The current study was conducted in a single urban district and relied solely on the perspectives of learners with physical disabilities, which limits the generalisability and comprehensiveness of the findings. Broader contextual and stakeholder-based research would provide a more holistic understanding of the factors influencing the psychological, social, academic, and physical self-concept of learners with physical disabilities. Including diverse geographical settings and stakeholder perspectives would also facilitate the identification of contextual variations, support needs, and systemic barriers, thereby contributing to the development of more effective inclusive education policies and practices.

### **6.5.3.4 Mixed-methods approaches to self-concept research**

Future research should employ mixed-methods approaches to gain a more comprehensive understanding of self-concept among learners with physical disabilities. The current study utilised a quantitative approach, which was effective in identifying patterns and trends in the psychological, social, academic, and physical dimensions of self-concept. However, it provided limited insight into the personal meanings, experiences, and contextual factors underlying these patterns. Mixed-methods research would enable the integration of quantitative findings with qualitative accounts of learners' lived experiences, thereby providing a richer and more nuanced understanding of self-concept development. Such an approach would strengthen the validity of findings and generate deeper insights that could inform more responsive educational policies, interventions, and support programmes for learners with physical disabilities.

## **6.6 Limitations of the Study**

The findings of this study are contextually bounded to learners with physical disabilities in selected public secondary schools within the Chitungwiza District. As such, they should be interpreted as indicative rather than generalisable, given the socio-educational specificity of the setting. The study relied exclusively on self-administered questionnaires, which provided

structured access to learners' perceptions of their academic performance and self-concept across academic, social, physical, and psychological domains. However, self-report measures inherently capture perceived rather than directly observed realities, and therefore the findings reflect constructed accounts of experience that may not fully correspond with behavioural or externally validated indicators.

The exclusive use of questionnaires also constrained methodological depth, as it limited opportunities for triangulation with alternative data sources such as teacher reports, parental perspectives, or observational evidence. This methodological boundary reduces the extent to which claims can be cross-verified across contexts of experience (home, school, and peer environments), particularly in relation to the social and psychological dimensions of self-concept. Consequently, the interpretation of findings is best understood as a single-perspective reading of a multi-layered phenomenon, rather than a comprehensive representation of lived reality.

From a reflexive standpoint, the researcher's role was not neutral but interpretive, as decisions regarding construct selection, questionnaire design, analytical framing, and theoretical alignment inevitably shaped the production of findings. The study was guided by a conceptual framework of self-concept, which structured how academic, social, physical, and psychological dimensions were operationalised and interpreted. While this framework provided analytical coherence, it also directed attention toward particular patterns of meaning, potentially limiting the visibility of alternative or emergent interpretations outside the predefined conceptual boundaries.

In addition, power relations within the research context may have subtly influenced response formation. Although questionnaires were self-administered, data were collected within formal school environments characterised by adult authority structures. Within such contexts, learners may have moderated their responses in line with perceived institutional expectations, particularly on sensitive issues such as stigma, exclusion, or emotional wellbeing. This introduces a methodological constraint related not to data accuracy in a strict sense, but to the situated nature of disclosure in hierarchical educational settings.

Finally, the interpretive scope of the study is further shaped by its cross-sectional design, which captures self-concept as a static snapshot rather than a developmental process. This limits the extent to which the study can speak to change over time or causal directionality

between self-concept domains and academic performance. Nevertheless, the study contributes analytically by foregrounding the relational and environmental construction of self-concept among physically disabled learners, offering a context-specific account that can inform more multi-perspectival and longitudinal future inquiry.

### **6.7. Concluding Remarks**

This study highlights the significance of integrated psychological, social, academic, and physical support systems in shaping the self-concept of learners with physical disabilities. The findings suggest that limited participation in physical and social activities is associated, within this sample, with weakened physical self-perception, reduced self-esteem, and heightened emotional discomfort, which in turn appear to intersect with learners' reported academic engagement. In addition, perceived deficits in parental involvement, peer interaction, and broader social support are reflected in accounts of diminished social belonging and increased psychological strain, indicating the interconnected nature of the four self-concept domains within the school context.

Theoretically, the study reinforces a multidimensional understanding of self-concept as a socially and environmentally constructed phenomenon rather than a fixed individual attribute. It demonstrates that academic, social, physical, and psychological domains are mutually reinforcing and contextually shaped, particularly within school environments that either enable or constrain participation. This contributes to disability studies and special education literature by empirically grounding the argument that self-concept among learners with physical disabilities is produced through interactional conditions rather than determined solely by impairment status.

From an applied perspective, the findings may inform educators, school psychologists, and policymakers in refining support structures that are sensitive to the relational and environmental conditions influencing learner self-perception. However, these implications should be understood as context-bound interpretations derived from a single urban district sample rather than broadly generalisable prescriptions.

Methodologically, the cross-sectional design and exclusive reliance on self-administered questionnaires limit the study's capacity to trace developmental change or to verify reported experiences against external perspectives. As self-concept is inherently

dynamic, the findings represent a temporal snapshot of perceived experience rather than a longitudinal account of change. The urban-only sample further constrains contextual variation, suggesting that different socio-economic and institutional settings may yield alternative patterns of self-concept formation.

Reflexively, the researcher's interpretive role is acknowledged as central in shaping the analytical framing of the study. Decisions regarding construct operationalisation, theoretical alignment, and thematic emphasis inevitably influenced how data were interpreted within a self-concept framework. While this ensured conceptual coherence, it also structured the range of meanings that could be foregrounded, thereby delimiting alternative interpretive possibilities.

Overall, the study offers a context-specific analytical contribution by illustrating how interrelated support systems and environmental conditions are associated with variations in self-concept among learners with physical disabilities. It provides a basis for further inquiry that is methodologically plural, longitudinal, and comparative, in order to deepen understanding of how these dynamics unfold across time and context.

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## Appendix A: Ethics approval letter



## UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2023/04/12

Ref: **2023/04/12/13591800/33/AM**

Dear Mrs BS Madzivanyika

Name: Mrs BS Madzivanyika

Student No.: 13591800

**Decision:** Ethics Approval from  
2023/04/12 to 2028/04/12

**Researcher(s):** Name: Mrs BS Madzivanyika  
E-mail address: 13591800@my.life.unisa.ac.za  
Telephone: +263773229615

**Supervisor(s):** Name: Dr.T.D.Sikwari  
E-mail address: sikhwaritd@gmail.com  
Telephone: 0729352666
**Title of research:**
**The self-concept and academic performance of learners with physical disabilities in Chitungwiza, Zimbabwe.**
**Qualification:** PhD Psychology of Education

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2023/04/12 to 2028/04/12.

*The **medium risk** application was reviewed by the Ethics Review Committee on 2023/04/12 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 will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.
2. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.



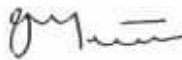
University of South Africa  
Preller Street, Muckleneuk Ridge, City of Tshwane  
PO Box 392 UNISA 0003 South Africa  
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150  
[www.unisa.ac.za](http://www.unisa.ac.za)

3. 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.
4. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
5. 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.
6. 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.
7. 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.
8. No field work activities may continue after the expiry date **2028/04/12**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

*Note:*

*The reference number **2023/04/12/13591800/33/AM** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,



**Prof AT Motlhabane**  
**CHAIRPERSON: CEDU RERC**  
motlhat@unisa.ac.za



**Prof Mpine Makoe**  
**ACTING EXECUTIVE DEAN**  
qakisme@unisa.ac.za

**Appendix B : Letter requesting regional permission to conduct research**

59 Nyenze crescent  
Zengeza 1  
Chitungwiza

10 October 2022

The Regional Director  
Ministry of Primary and Secondary Education , Sports and Culture  
P.O.BOX 121  
Harare Metropolitan Province  
Harare

Dear sir/madam

Re: AN APPLICATION TO CONDUCT AN EDUCATIONAL RESEARCH IN HARARE METROPOLITAN PROVINCE, CHITUNGWIZA DISTRICT, IN TEN SECONDARY SCHOOLS

TOPIC: THE SELF-CONCEPT AND ACADEMIC PERFORMANCE OF LEARNERS WITH PHYSICAL DISABILITIES IN CHITUNGWIZA, ZIMBABWE

I, Beauty Madzivanyika, am registered with the University of South Africa for PhD (Psychology in Education) for the current academic year, 2023. I wish to conduct a research study entitled: *The self-concept and academic performance of learners with physical disabilities in Chitungwiza, Zimbabwe*. The targeted research participants are secondary school learners. Each participant will complete a questionnaire containing items concerning self-concept and academic performance in about 45-50 minutes. The questionnaire will be administered during school hours and the respondents will complete the Likert scale questionnaire using numbers. There is a voluntary participation and participants can withdraw at any time without reprisal. Findings from the study will assist the school, Ministry of Primary Education and curb unforeseen dangers like depression, suicidal tendencies and help in understanding the extent to which learners' mental health can lead to low self-concept, motivation, and decline in academic performance. Parental/ guardian and learner's consent will be sought for accessing academic records and on the questionnaire use towards the learners.

The study will also assist Chitungwiza Education district with strategies that can be put in place to reduce discrimination of disabled adolescent learners. The study will help to minimise high dropout rates and optimise academic performance. There is an anticipated risk of stigmatisation, psychological distress, and discomfort to participants in this study. Provision will be made for debriefing and counselling where necessary. There will be no form of compensation or incentives for participating in the study. Questionnaires will be self-administered (physically/personally administered)

Thank you in advance for your contribution to this study.

Yours Faithfully



Mrs Madzivanyika (PhD Candidate –University of South Africa)  
+263773615 /beautymadzivanyika@gmail.com

**Appendix C : Letter requesting school permission to conduct research**

59 Nyenze crescent  
Zengeza 1  
Chitungwiza

10 October 2022

The Principal  
Chitungwiza

Dear sir/madam

TOPIC: THE SELF-CONCEPT AND ACADEMIC PERFORMANCE OF LEARNERS WITH PHYSICAL DISABILITIES IN CHITUNGWIZA, ZIMBABWE

I, Beauty Madzivanyika, am registered with the University of South Africa for PhD (Psychology in Education ) for the current academic year, 2022

I wish to conduct a research study entitled: *The self-concept and academic performance of learners with physical disabilities in Chitungwiza , Zimbabwe*. The targeted research participants are secondary school learners. Each participant will complete a questionnaire containing items concerning self-concept and academic performance in about 45-50 minutes. The information which participants will provide will be treated in confidentiality. I am requesting your permission to obtain the records of students with physical disabilities and then engage with them in the study. The participants will complete the Likert scale questionnaire using numbers. This is a voluntary participation and participants can withdraw at any time without reprisal. Findings from the study will assist the schools and the Ministry of Education alleviate unforeseen dangers like depression, suicidal tendencies and depression and help in understanding the extent to which learners' mental health can lead to low self-concept, motivation, and decline in academic performance. Parental/ guardian and learner's consent will be sought for accessing academic records.

The study will also assist Chitungwiza Education district with strategies that can be put in place to reduce discrimination of disabled adolescent learners. The study will help to minimise high dropout rates and optimise academic performance. There is anticipated risk of stigmatisation, psychological distress, and discomfort to participants in this study. Provision will be made for debriefing and counselling where necessary. There will be no form of compensation or incentives for participating in the study. Questionnaires will be self-administered (physically/personally administered)

Thank you in advance for your contribution to this study.

Yours Faithfully



Mrs Madzivanyika (PhD Candidate –University of South Africa)

+263773615 /beautymadzivanyika@gmail.com

## Appendix D: Permission to conduct research in selected secondary schools

All communications should be addressed to the  
Secretary for Primary and  
Secondary Education  
Telephone: +263 242 794 509  
Toll Free: 317

  
ZIMBABWE

Ministry of Primary and Secondary Education  
88 Kwame Nkrumah Avenue  
Queen Lozikeyi House  
P O Box 121  
Causeway, Harare

**Reference:** C/426/3  
Beauty Madzivanyika  
59 Nyenze Crescent  
Zengeza 1  
Chitungwiza

16 December 2024

**RE: PERMISSION TO CARRY OUT RESEARCH IN HARARE METROPOLITAN PROVINCE: CHITUNGWIZA DISTRICT: SEKE 1; ZENZEZA 1; SHARON COHEN; ST. MARY'S SEKE 5 ZENZEZA 3; SEKE 6; SEKE MHURIIMWE ZENZEZA 4 AND SEKE 3 HIGH SCHOOLS.**

Reference is made to your application to carry out research from the district mentioned above schools on the research title:

**"THE SELF CONCEPT AND ACADEMIC PERFORMANCE OF LEARNERS WITH PHYSICAL DISABILITIES IN CHITUNGWIZA ,ZIMBABWE."**

Permission is hereby granted. However, you must liaise with the Provincial Education Director of Harare Metropolitan Province, who is responsible for the schools which you want to involve in your research. You should ensure that your research work does not disrupt the normal operations of the schools. Where students are involved, parental consent is required. **Please note that the final permission is granted by the Research Council of Zimbabwe**

You must also provide a copy of your final report to the Secretary for Primary and Secondary Education.

  
Moses Mhike

**SECRETARY FOR PRIMARY AND SECONDARY EDUCATION**

  
20 DEC 2024  
P.O. BOX 121 CAUSEWAY  
ZIM. TEL: 04-792671/71798145

 #MoPSEZ  <https://www.facebook.com/MoPSEducationGovZimbabwe>  <https://www.instagram.com/mopse.co.zw/>  <https://www.linkedin.com/company/primary-and-secondary-education-zimbabwe/>

## **Appendix E: Letter to request participant`s consent**

Dear prospective participant

My name is *Beauty Madzivayika* and I am doing research under the supervision of *Dr T D Sikhwari*, an external supervisor in the Department of Psychology of Education, towards a doctoral degree at the University of South Africa. I am inviting you to participate in a study entitled: *The self-concept and academic performance of learners with physical disabilities in Chitungwiza, Zimbabwe*.

Purpose of the study

The purpose of the study is to collect information that could benefit the Ministry of Primary and Secondary Education, specifically Chitungwiza district, with knowledge about the self-concept and academic performance of learners with physical disabilities. Furthermore, teachers will be more knowledgeable about giving value to and in developing the self-concept of adolescent learners with physical disabilities.

### **Reason for invitation to participate in the study**

As the title of the study shows, you are invited to participate in the study because of your physical disability. The sample will comprise of 150 adolescent learners with physical disabilities randomly selected from the chosen schools. I obtained your contact details from the principal of your school.

### **The nature of participation in the study**

You will be given a self-administered questionnaire to be completed during an allocated time slot ensuring not to disturb classes. The questionnaire will consist of items about the self-concept and academic performance and it will take about 45-50 minutes to complete. Furthermore, I am requesting your permission to obtain your assessment records from the school so that I can view your scholastic performance in line with the objective of the research.

### **Withdrawal from participation in the study**

Participation in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, 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.

### **Negative consequences for participating in the study**

Please note that there may be some psychological harm or inconveniences related to the type of questions which will be asked in the questionnaire. I will inform you about any potential

risks that may be associated with your participation. Provision will be made for debriefing and counselling if there is a need.

### **Confidentiality and anonymity**

You will be requested to complete a questionnaire anonymously and no personal information will be required from you. All the research records and electronic information will be kept safely and only used for research purposes. You have the right to insist that your name will not be written anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research. Your answers will be given a code number or pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

### **Protection of 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 at the researcher's office or home for future research or academic purposes. Future use of the stored data will be subject to approval by the ERC, if possible. If necessary, hard copies will be shredded and/or electronic copies will be permanently deleted from the hard drive of the computer through the use of a relevant software programme.

### **Availability of the findings/results of the research**

The findings of the research will be sent to your school where they will be available on request. The findings will be accessible for a period of five years. Should you have concerns about the way in which the research has been conducted, you may contact Dr T D Sikhware (supervisor) on 0729352666 or email [sikhwaritd@gmail.com](mailto:sikhwaritd@gmail.com).

.....

Thank you for taking time to read this information sheet and for participating in this study.

Yours faithfully

Mrs Madzivanyika

Tel. +263773615

Email: [beautymadzivanyika@gmail.com](mailto:beautymadzivanyika@gmail.com)

### CONSENT TO PARTICIPATE IN THIS STUDY

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 in convenience 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 have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print).....

.....

.....

Participant Signature

Date

Researcher's signature

**Appendix F : Letter to request parent/guardian`s consent**

Dear prospective parent

My name is *Beauty Madzivayika* and I am doing research under the supervision of *Dr T D Sikhwari*, an external supervisor in the Department of Psychology of Education, towards a Doctoral degree at the University of South Africa. The title of the study is: *The self-concept and academic performance of learners with physical disabilities in Chitungwiza , Zimbabwe*. I am hereby humbly requesting you to allow your child to participate in the above-mentioned research.

**Purpose of the study**

The purpose of the study is to gather information about the self-concept and academic performance of adolescent learners with physical disabilities. The findings of the study will enable the Ministry of Primary and Secondary Education as well as teachers in secondary schools to develop strategies to enhance the self-concept and academic performance of learners with physical disabilities.

**Reason for invitation to participate in the study**

I am inviting your child because he/she has a physical disability. I obtained your contact details from the principal of the school where your child is attending. The sample will comprise of 150 adolescent learners with physical disabilities who will be selected from the chosen schools.

**The nature of participation in the study**

The data will be collected by means of questionnaires. Each learner will be given a questionnaire which should take 45-50 minutes to complete. I further request you to allow your child's academic records to be made available so that I can look at his/her scholastic performance in order to supplement information which will be collected through the questionnaire.

Withdrawal from participation in the study

Your child's participation in this study is voluntary and he/she can withdraw at any time if he/she wishes to do so. If you do decide that your child must take part, you will be given this information sheet to keep and be asked to sign a written consent form.

#### Negative consequences for participating in the study

Please note that there may be some psychological harm or inconveniences related to the type of questions which will be asked in the questionnaire. Provision will be made for debriefing and counselling if there is a need.

#### Confidentiality and anonymity

You have the right to insist that your child's 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. Your child's responses will be given a code number or pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

#### Protection of the security of data

Future use of the stored data will be subject to approval by the ERC, if possible. If necessary, hard copies will be shredded and/or electronic copies will be permanently deleted from the hard drive of the computer through the use of a relevant software programme.

#### Availability of the findings/results of the research

The findings of the research will be sent to the school where your child is attending. The findings will be accessible for a period of five years. Should you have concerns about the way in which the research has been conducted, you may contact Dr T D Sikhwari (supervisor) on 0729352666 or email [sikhwaritd@gmail.com](mailto:sikhwaritd@gmail.com).

Name of parent/guardian -----

Signature of parent/guardian -----

Mrs B S Madzivanyika

Tel. +263773615

Email: [beautymadzivanyika@gmail.com](mailto:beautymadzivanyika@gmail.com)

**Appendix G: Questionnaire for learners with physical disabilities**

*This questionnaire seeks to investigate the self-concept and academic performance of learners with physical disabilities in Chitungwiza, Zimbabwe. The questionnaire is part of the degree of Doctor of Education at the University of South Africa. There are no correct or incorrect answers. Read each statement carefully and decide whether you agree or disagree with it.*

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

**PART 1: DEMOGRAPHIC INFORMATION**

Kindly indicate your response by placing a tick in the appropriate box.

1. Age

|               |   |
|---------------|---|
| 10-15 years   | 1 |
| 16 -20 years  | 2 |
| Over 20 years | 3 |

2. Gender

|                     |   |
|---------------------|---|
| Male                | 1 |
| Female              | 2 |
| Transgender         | 3 |
| Others<br>(Specify) | 4 |

3. Nationality

|            |   |
|------------|---|
| Zimbabwean | 1 |
|------------|---|

|                  |   |
|------------------|---|
| Non-Zimbabwean   | 2 |
| Others (Specify) | 3 |

#### 4. Religion

|                   |   |
|-------------------|---|
| Christianity      | 1 |
| Muslim            | 2 |
| African Tradition | 3 |
| Atheist           | 4 |
| Others (Specify)  | 5 |

#### 5. Family status

|                  |   |
|------------------|---|
| Extended         | 1 |
| Nuclear          | 2 |
| Others (Specify) | 3 |

#### 6. Main language

|                  |   |
|------------------|---|
| Shona            | 1 |
| Ndebele          | 2 |
| Kalanga          | 3 |
| Tonga            | 4 |
| Others (Specify) | 5 |

#### 7. School

|                     |   |
|---------------------|---|
| Public              | 1 |
| Private/Independent | 2 |
| Special             | 3 |

8. Form .....

## PART 2: QUESTIONNAIRE

### SECTION A: The psychological self-concept aspects

To what extent do the following statements apply to your own situation? Responses: Very Great Extent, Great Extent, Somewhat Little Extent, Very Little Extent. Place a matching response number in a box.

| Statements                                                                   | Very<br>Great<br>extent | Great<br>Extent | Somewhat<br>Little<br>Extent | Little<br>Extent | Very<br>Little<br>Extent |                          |
|------------------------------------------------------------------------------|-------------------------|-----------------|------------------------------|------------------|--------------------------|--------------------------|
| 1. I am always calm.                                                         | 1                       | 2               | 3                            | 4                | 5                        | <input type="checkbox"/> |
| 2. I am emotionally stable.                                                  | 1                       | 2               | 3                            | 4                | 5                        | <input type="checkbox"/> |
| 3. I am always worried if people in my class will accept me.                 | 1                       | 2               | 3                            | 4                | 5                        | <input type="checkbox"/> |
| 4. I am confident in myself.                                                 | 1                       | 2               | 3                            | 4                | 5                        | <input type="checkbox"/> |
| 5. I am not embarrassed to let people know my opinions.                      | 1                       | 2               | 3                            | 4                | 5                        | <input type="checkbox"/> |
| 6. I am full of self-respect.                                                | 1                       | 2               | 3                            | 4                | 5                        | <input type="checkbox"/> |
| 7. I am proud of myself.                                                     | 1                       | 2               | 3                            | 4                | 5                        | <input type="checkbox"/> |
| 8. I am satisfied with the way I am.                                         | 1                       | 2               | 3                            | 4                | 5                        | <input type="checkbox"/> |
| 9. I occasionally suffer periods of depression, unhappiness, and low spirits | 1                       | 2               | 3                            | 4                | 5                        | <input type="checkbox"/> |

|                                                                            |   |   |   |   |   |
|----------------------------------------------------------------------------|---|---|---|---|---|
| 10.I am troubled by feelings of guilt or remorse over quite small matters. | 1 | 2 | 3 | 4 | 5 |
| 11.I feel restless as if I want something, but do not know what.           |   |   |   |   |   |

### SECTION B: The social self-concept aspects

- a) To what extent do the following statements apply to your own situation? Responses: Very Great Extent, Great Extent, Somewhat Little Extent, Very Little Extent. Place a matching response number in a box.

| Statements                                                                          | Very Great extent | Great Extend | Some what | Little Extend | Very Little Extend |
|-------------------------------------------------------------------------------------|-------------------|--------------|-----------|---------------|--------------------|
| 1. I interact freely with my friends.                                               | 1                 | 2            | 3         | 4             | 5                  |
| 2. I am popular at our school.                                                      | 1                 | 2            | 3         | 4             | 5                  |
| 3 I do not care what they think about me.                                           | 1                 | 2            | 3         | 4             | 5                  |
| 4. I am well-liked by most of my peers as a friend.                                 | 1                 | 2            | 3         | 4             | 5                  |
| 5. I am very concerned about what my friends think about me.                        | 1                 | 2            | 3         | 4             | 5                  |
| 6. I like myself even when others don't.                                            | 1                 | 2            | 3         | 4             | 5                  |
| 7. I am always in conflict with my peers.                                           | 1                 | 2            | 3         | 4             | 5                  |
| 8. I am always treated with great kindness, gentleness, and patience by my parents. | 1                 | 2            | 3         | 4             | 5                  |

|                                                                                                        |   |   |   |   |   |                          |
|--------------------------------------------------------------------------------------------------------|---|---|---|---|---|--------------------------|
| 9. In the midst of social groups, I am sometimes overcome by feelings of loneliness and worthlessness. | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 10. I participate in several community and social activities.                                          | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 11. Sometimes I feel that I am not socially as successful as I should be                               | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 12. In my social relations. I am sometimes troubled by a sense of inferiority.                         | 1 | 2 | 3 | 4 | 5 | <input type="checkbox"/> |
| 13. I like being in the middle of a great deal of excitement and bustle.                               | 1 | 2 | 3 | 4 | 5 |                          |
| 14. I have a feeling that my friends do not need me as much as I need them.                            | 1 | 2 | 3 | 4 | 5 |                          |
| 15. I enjoy getting into a conversation.                                                               | 1 | 2 | 3 | 4 | 5 |                          |

### SECTION C: The academic self-concept aspects

To what extent do the following statements apply to your own situation? Responses: Very Great Extent, Great Extent, Somewhat Little Extent, Very Little Extent. Place a matching response number in a box.

| Statement                                                                          | Very Great Extent | Great Extent | Somewhat | Little Extent | Very Little Extent |
|------------------------------------------------------------------------------------|-------------------|--------------|----------|---------------|--------------------|
| 1. I can comprehend what I read.                                                   | 1                 | 2            | 3        | 4             | 5                  |
| 2. I can speak fluently.                                                           | 1                 | 2            | 3        | 4             | 5                  |
| 3. I am a good reader.                                                             | 1                 | 2            | 3        | 4             | 5                  |
| 4. I hate studying Mathematics.                                                    | 1                 | 2            | 3        | 4             | 5                  |
| 5. I am bad in Mathematics; I fail almost all the mathematics topics that I learn. | 1                 | 2            | 3        | 4             | 5                  |
| 6. I feel that I am highly motivated to learn.                                     | 1                 | 2            | 3        | 4             | 5                  |

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|                                                                                              |   |   |   |   |   |
|----------------------------------------------------------------------------------------------|---|---|---|---|---|
| 7.I am sure of getting high scores in my school subjects.                                    | 1 | 2 | 3 | 4 | 5 |
| 8. I am more confident in my ability to succeed at school.                                   | 1 | 2 | 3 | 4 | 5 |
| 9 I am ready to freely express my viewpoints and tolerate criticism from peers               | 1 | 2 | 3 | 4 | 5 |
| 10. I have a genuine <b>interest in all school subjects</b>                                  | 1 | 2 | 3 | 4 | 5 |
| 11.I master all my school subjects                                                           | 1 | 2 | 3 | 4 | 5 |
| 12. I possess a lot of skills in different subjects.                                         | 1 | 2 | 3 | 4 | 5 |
| 13.I am able to take on challenges and heal more easily from negative feedback and failures. | 1 | 2 | 3 | 4 | 5 |
| 14. I am good at creative thinking dispositions.                                             | 1 | 2 | 3 | 4 | 5 |
| 15.I am able to solve problems and make the right decisions.                                 | 1 | 2 | 3 | 4 | 5 |
| 16.I am good at innovative thinking skills                                                   | 1 | 2 | 3 | 4 | 5 |

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## SECTION D: The physical self-concept aspects

To what extent do you agree or disagree with these statements? Responses: Very Great Extent, Great Extent, Somewhat Little Extent, Little Extent, Very Little Extent Place a matching response number in a box.

| Statements                                                        | Very Great extent | Great Extend | Somewhat | Little Extend | Very Little Extent |
|-------------------------------------------------------------------|-------------------|--------------|----------|---------------|--------------------|
| 1. I acquired sport- specific skills and I display them in sport. | 1                 | 2            | 3        | 4             | 5                  |
| 2. I am a fast runner.                                            | 1                 | 2            | 3        | 4             | 5                  |
| 3. I am an expert in sporting activities.                         | 1                 | 2            | 3        | 4             | 5                  |
| 4. I am reasonably attractive.                                    | 1                 | 2            | 3        | 4             | 5                  |
| 5. I look awful these days                                        | 1                 | 2            | 3        | 4             | 5                  |
| 6. It is pretty tough to be me                                    | 1                 | 2            | 3        | 4             | 5                  |
| 7. I feel that I am physically capable.                           | 1                 | 2            | 3        | 4             | 5                  |
| 8. I like more engagement in physical activities and exercises.   | 1                 | 2            | 3        | 4             | 5                  |
| 9. I am satisfied with my physical strength.                      | 1                 | 2            | 3        | 4             | 5                  |
| 10.I am proud of my physical appearance.                          | 1                 | 2            | 3        | 4             | 5                  |

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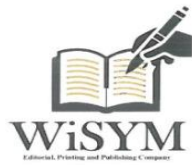
Mrs B S Madzivanyika

Tel. +263773615

Email: [beautymadzivanyika@gmail.com](mailto:beautymadzivanyika@gmail.com)

THANK YOU.

## Appendix H : Proof of language editing



### WiSYM Editorial, Printing and Publishing Company

141 Tartan Crescent  
Daylesford  
Gweru  
Zimbabwe

Mobile: +263 772 883 047  
+263 771 686 705  
E-mail: magwawiseman62@gmail.com  
vjenjekwa@gmail.com

#### LANGUAGE EDITING CERTIFICATE FOR BEAUTY MADZIVANYIKA

This is to certify that the thesis titled, **THE SELF-CONCEPT AND ACADEMIC PERFORMANCE OF LEARNERS WITH PHYSICAL DISABILITIES IN CHITUNGWIZA, ZIMBABWE**, was edited for grammar, punctuation, readability, coherence, and cohesion by a professional English Language editor, Dr V. Jenjekwa [(D. Lit et Phil (Linguistics) (UNISA); M. ED (English) (GZU); PGDE (English and Shona) (U.Z); BA (English and Linguistics) (UZ)].

**Vincent Jenjekwa (PhD)**

**Professor Wiseman Magwa (PhD)**  
*Executive Director - WiSYM*

DATE: 10/10/25

## Appendix I: Turnitin report

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