

**The value of a GIM-informed music- and art-based stress management
intervention: A qualitative case study in a HE work context**

By

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DECLARATION

I, Jacobus Fourie, student number 37627945, declare that “The value of a GIM-informed music- and art-based stress management intervention: a qualitative case study in a HE work context” is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references. In the development of this thesis, ChatGPT served as a consultative resource for brainstorming and refining written arguments. Its contributions were limited to providing linguistic, structural, and conceptual suggestions, ensuring clarity and coherence in the writing process. All final decisions regarding content, analysis, and interpretation were made by the researcher, maintaining full intellectual ownership of the work. I further declare that I submitted the thesis/dissertation to the appropriate originality detection system which is endorsed by Unisa and that it falls within the accepted requirements for originality. I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other HE institution.

17 August 2025

A handwritten signature in black ink, appearing to read 'J. Fourie', is positioned below the date. The signature is written in a cursive style with a large initial 'J'.

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LIST OF ABBREVIATIONS AND ACRONYMS

The following abbreviations and acronyms were used throughout the thesis:

GIM	Guided Imagery and Music
HE	Higher Education
HP	Hermeneutic Phenomenology / Phenomenological
IOP	Industrial-Organisational Psychology
IPA	Interpretive Phenomenological Analysis
SMI(s)	Stress Management Intervention(s)
SOC	Sense of Coherence
TMSC	Transactional Model of Stress and Coping
WLQ	Experience of Work and Life Circumstances Questionnaire

ABSTRACT

Stress in the Higher Education (HE) work environment is a pressing issue, demanding innovative approaches to support employee well-being. This study explores the value of a music- and art-based Stress Management Intervention (SMI), with adapted Guided Imagery and Music (GIM) as the central modality, in supporting coping processes and enhancing adaptive functioning among HE employees. Framing the inquiry, the research question posed was: “How do HE employees experience a music- and art-based SMI in relation to their stress management and coping capacity?” Situated within the disciplinary boundaries of industrial and organisational psychology, and grounded in employee well-being theory, the study draws on meta-theoretical foundations from neuroscience and psychodynamics. The experience of the intervention was evaluated using a multi-method, qualitative case study design informed by Hermeneutic Phenomenology (HP) and analysed through Interpretative Phenomenological Analysis (IPA).

Nine participants from diverse departments and positions engaged in six structured intervention sessions over a six-week period. Data were generated through pre- and post-intervention interviews, session observations, and a focus group, allowing for an in-depth exploration of perceived changes over time. Findings indicate that participation in the GIM-based SMI: (i) supported emotional regulation and adaptive coping; (ii) facilitated increased use of problem- and emotion-focused strategies; (iii) contributed to a more balanced and agentic self-identity; (iv) functioned as a psychodynamic tool for emotional growth and meaning-making; (v) fostered collective support through group cohesion and shared expression; and (vi) promoted embodied awareness and emotional harmony through neuro-somatic experiences.

This multifaceted exploration demonstrates the value of creative modalities like GIM in addressing workplace stress, and offers nuanced insights into their potential role in enhancing employee well-being in high-demand environments like HE.

Keywords: Workplace Stress, Stress Management Intervention, Coping Strategies, Guided Imagery and Music, Resilience, HE Employees, Employee Well-being, Music- and Art-based Interventions, Burnout, Job Demands-Resources

OPSOMMING

Stres in die Hoër Onderwys (HE)-werkomgewing is 'n dringende aangeleentheid wat innoverende benaderings verg om werknemers se welstand te ondersteun. Hierdie studie ondersoek die waarde van 'n musiek- en kunsgebaseerde Stresbestuur-intervensie (SMI), met aangepaste Geleide Beelde en Musiek (GIM) as die sentrale modaliteit, in die ondersteuning van hanteringsprosesse en die verbetering van aanpasbare funksionering onder werknemers in die Hoëronderwyssektor. Die volgende navorsingsvraag het as vertrekpunt vir die studie gedien: "Hoe ervaar Hoëronderwyssektor-werknemers 'n musiek- en kunsgebaseerde Stresbestuur-intervensie (SMI) ten opsigte van hul stresbestuur- en hanteringskapasiteit?" Binne die dissiplinêre grense van nywerheids- en organisasiesielkunde, en gesetel in werknemerwelstandsteorie, put hierdie studie uit meta-teoretiese grondbeginsels van neurowetenskap en psigodinamika. Die intervensie-ervaring is geëvalueer deur middel van 'n multi-metode- kwalitatiewe gevallestudie-ontwerp wat deur Hermeneutiese Fenomenologie (HP) geïnspireer is en deur Interpretatiewe Fenomenologiese Analise (IPA) ontleed is.

Nege deelnemers van uiteenlopende departemente en poste is by ses gestruktureerde intervensiesessies oor 'n tydperk van ses weke betrek. Data is gegenereer deur onderhoude voor en ná die intervensie, sessiewaarnemings, en 'n fokusgroep. Dit het 'n diepgaande ondersoek na veranderinge wat oor 'n tydperk opgemerk is, moontlik gemaak. Die bevindings toon dat deelname aan die GIM-gebaseerde SMI: (i) emosionele regulering en aanpasbare hantering ondersteun het; (ii) verhoogde gebruik van probleem- en emosiegefokusde strategieë bewerkstellig het, (iii) bygedra het tot 'n meer gebalanseerde en agentiese selfidentiteit; (iv) gefunksioneer het as 'n psigodinamiese hulpmiddel vir emosionele groei en betekenisvorming; (v) gesamentlike ondersteuning aangemoedig het deur groepkohesie en gedeelde uitdrukking; en (vi) verpersoonlikte bewustheid en emosionele harmonie bevorder het deur neuro-somatiese ervarings.

Hierdie veelvlakkige ondersoek demonstreer die waarde van kreatiewe modaliteite soos GIM om werkplek-stres te hanteer. Daarbenewens bied dit genuanseerde insig in hul potensiële rol in die verbetering van werknemerwelstand in veeleisende omgewings soos hoër onderwys.

Sleutelwoorde: Werkplekstres, Stresbestuur-intervensie, Hanteringstrategieë, Geleide Beelde en Musiek, Veerkragtigheid, HE-werknemers, Werknemerwelstand, Musiek-en kunsgebaseerde intervensies, Uitbranding, Werkseise-hulpbronne

SEHLOOHO

Kgatello ya kelello tikolohong ya mosebetsi ya Thuto e Phahameng (TP) ke bothata bo potlakileng, bo hloakang mekgwa e metjha ya ho tshehetsa boiketlo ba basebetsi. Phuputso ena e batlisisa ka bohlokwa ba ho Sebetsana le Maemo a ho Laola Kgatello ya Kelello ka mmimo le bonono, ka Tataiso ya ho iketsetsa Setshwantsho ka Kelellong le Mmino e le mokgwa o ka sehloohong bakeng sa ho tshehetsa mekgwa ya ho sebetsana le bothata bona le ho ntlafatsa mokgwa wa ho sebetsa ka hara basebetsi ba Thuto e Phahameng. Ha ho etswa dipatlisiso, potso e butsitsweng ya dipatlisiso e ne e re: “Basebetsi ba Thuto e Phahameng ba fumane ho Sebetsana le Maemo ka ho Laola Kgatello ya Kelello ka mmimo le bonolo ho le jwang mabapi le ho laola kgatello ya bona ya kelello le ho sebetsana le yona?” Phuputso ena ke karolo ya thuto ya kelello ya indasteri le ya mekgatlo mme e thehilwe dikgopolong tse mabapi le boiketlo ba basebetsi. E boetse e sebedisa dikgopolo tsa saense ya methapo ya kutlo le ya kelello ho tshehetsa mokgwa wa yona wa ho etsa dintho. Phihlelo ena ya ho ntlafatsa maemo e ile ya hlahlojwa ho sebediswa mekgwa e mengata, moralo wa thuto ya boleng bo thehilweng ho Hermeneutic Phenomenology (HP) mme ya hlahlojwa ka Interpretative Phenomenological Analysis (IPA).

Bankakarolo ba robong ba tswang mafapheng a sa tshwaneng le maemong a sa tshwaneng ba ile ba kenya letsoho dibokeng tse tsheletseng tse hlophisitsweng tsa ho ntlafatsa maemo tsa dibeke tse tsheletseng. Ho ile ha fumanwa dintlha ka dipuisano tse entsweng pele le ka morao mabapi le ho sebetsana le boemo bona, dibokeng tsa ho beha leihlo, le sehlopha se tsepamisitseng maikutlo, ho dumella ho hlahloba ka botebo diphetoho tse lemohuwang ha nako e ntse e tsamaya. Diphetoho di bontsha hore ho nka karolo mabapi le ho Sebetsana le Maemo a ho Laola Kgatello ya Kelello ka Mmino le Bonono, ka Tataiso ya ho iketsetsa Setshwantsho ka Kelellong le Mmino: (i) ho tsheheditse taolo ya maikutlo le ho sebetsana ka katleho le maemo; (ii) ho nolofalletsa tshebediso e eketsehileng ya maano a shebaneng le bothata le maikutlo; (iii) ho kentse letsoho ka ho lekalekaneng mabapi le boikemelo ba botho le ho ipona ka tsela e molemo; (iv) ho sebeditse e le sesebediswa sa psychodynamic bakeng sa ho hola maikutlong le ho utlwisisa dintho tse etsahalang; (v) ho

kgothaleditse tshehetso ka ho kopana ha sehlopha le ho ba le maikutlo a tshwanang; le (vi) ho kgothalletsa ho ba le temoho le kutlwano ya maikutlo ka diphihlelo tsa methapo ya kutlo.

Phuputso ena e nang le dikarolo tse ngata e bontsha bohlokwa ba mekgwa ya boqapi e kang Tataiso ya ho iketsetsa Setshwantsho ka Kelellong le Mmino (GIM) mabapi le ho sebetsana le kगतello ya kelello mosebetsing, mme e fana ka lesedi le hlakileng mabapi le karolo eo ba e bapalang ho ntlafatseng boiketlo ba basebetsi dibakeng tse amang kelello haholo jwalo ka Thutong e Phahameng.

Mantswe a sehlooho: Kगतello ya Kelello Mosebetsing, Ho Sebetsana le Maemo a ho Laola Kगतello ya Kelello, Mekgwa ya ho Sebetsana le Boemo, Tataiso ya ho iketsetsa Setshwantsho ka Kelellong le Mmino, Ho Mamella, Basebetsi ba Thuto e Phahameng, Boiketlo ba Basebetsi, Ho sebetsana le maemo ka Mmino le Bonono, Ho tepella, Ditlhoko tsa Mosebetsi le tsa ho Sebetsana le Maemo

CHAPTER 1: SCIENTIFIC ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Life is like a piano. The white keys represent happiness, and the black keys represent sadness. But as you go through life's journey, remember that with music and art, you have the power to play both the white and black keys, creating a harmonious melody that can help you cope with the stresses in the workplace.
Unknown.

Stress has become a pervasive aspect of daily life for many employees (Haque et al., 2021; Kinnunen-Amoroso & Liira, 2016; Panigrahi, 2017). While it is not limited to fast-paced societies, stress appears to be on the rise due to the constant need for adapting in today's fast-changing world (Sonowane, 2019; Yousefi, 2019). Factors such as technology, social habits, values, social structures, and individuals themselves are constantly evolving, necessitating coping and adjustment from individuals, organisations, and governments alike (Glazer et al., 2017; O'Dowd et al., 2018; Treven & Potocan, 2005). Not only is stress a pervasive feature within organisations, but it is also omnipresent in everyday life, and therefore it is important that people learn to cope with it effectively. Many studies have shown the negative effect that stress has on employee well-being (Fourie & Brand, 2020; Grover et al., 2017; Hricova et al., 2020). Organisations may ultimately experience extreme cases of absenteeism and low productivity when stress is not managed, pointing to stress management as imperative for managing employee wellness, especially in HE (Huang et al., 2018; Richardson & Rothstein, 2008; van Woerkom et al., 2016). Stress Management Interventions (SMIs) continually evolve and innovative techniques incorporating music and art have been shown to have potential in alleviating people's stress response and enhancing their coping behaviour (Beck et al., 2015a; Shum, 2020). Such techniques have, however, mainly been the operational area of general psychology and music and art therapy as applied in clinical settings. Limited research is available about them in the work context and in the domain of industrial and organisational psychology.

This thesis delves into the realm of SMIs, with a unique focus on the use of music and art as modalities to enhance coping responses. The research project expounded here, focuses on addressing stress from a specific intervention stance, applying music and art, informed by the principles of GIM, and exploring their value as modalities in stress

management. This study's central thesis, therefore, is to explore how creative expression through music and art—particularly within a GIM-based SMI—can be experienced by HE employees as supportive in managing workplace stress and promoting adaptive coping. GIM is a psychotherapeutic method developed by Helen Bonny. It involves listening to specially selected music in a deeply relaxed state. The music evokes imagery that helps individuals explore emotional, cognitive, and spiritual aspects of their inner experience. Bonny's original writings, compiled and edited by Lisa Summer, form the foundation of this method (Bonny, 2002). The Bonny Method of GIM is further elaborated in Bruscia and Grocke's edited volume (2002), which details its theory, development, and diverse clinical applications. GIM enables access to unconscious material. It supports psychological insight and promotes emotional integration through symbolic engagement with the music. The method has been applied in various contexts, including trauma recovery, grief work, psychotherapy, and personal growth. In this study, an adapted form of GIM is used as a SMI in the HE context.

To effectively navigate the terrain of the study, this chapter serves a critical purpose. It provides an orienting framework, setting the scene for the study while offering a comprehensive overview of the research objectives and significance, and the context within which it unfolded. In this chapter, I first present the background and rationale of the study, whereafter the problem statement is formulated and followed by the research question and aims. I then detail the research objective and contextualise the disciplinary boundaries and meta-theoretical frameworks of the study. This is followed by a brief explication of the research approach and strategy. The chapter concludes with a reflection on the significance of the study in the academic and work environment.

1.2 BACKGROUND and RATIONALE

To contextualise the study, in this section, I begin by delving into the prevailing issue of stress in HE, shedding light on the unique stressors faced by its diverse workforce. Exposing the issue of stress in HE serves as a contextual backdrop for exploring the value of music and art as stress alleviation modalities when used to enhance coping skills in SMIs. I conclude by explaining my evolving interest in this study.

1.2.1 Stress in the HE work context

Job stress negatively affects the psychological and physiological health of employees and causes them to deviate from normal effective functioning (Hricova et al., 2020; Richardson & Rothstein, 2008; Urbina-Garcia, 2020). Its negative impact on employees ranges from burnout, job dissatisfaction and cardiovascular disease, to withdrawal or reduction in job performance (Asfahani, 2023; Hricova et al., 2020; McEwen, 2016). Stress furthermore influences a person's decision-making capability and faulty choices could result from this (Landells & Albrecht, 2019; Mitchell et al., 2019; Thompson, 2010). Anxiety, depression and psychological disorders can also be some of the consequences of high stress levels (Battles, 2018; Saleh et al., 2018). Stress negatively impacts the organisation. It contributes to low morale, a decrease in performance, sick leave, high staff turnover, low motivation, accidents, low quality products and services, low job satisfaction, unsatisfactory conflicts and poor communication (Berebitsky & Ellis, 2018; Haque et al., 2021; Wolter et al., 2019). Employee stress is a key factor in absenteeism, accidents (organisational dysfunction), lost productivity and medical insurance claims (Otu et al., 2018; Srinivasan et al., 2020; Yousefi, 2019). Employees suffering from stress become ineffective, non-productive and absent from their job (Mitchell et al., 2019). Against this background, stress management is clearly imperative in the organisational and work context (Berebitsky & Ellis, 2018; Otu et al., 2018; Rao et al., 2017; Ravalier, 2019; Yousefi, 2019).

Workplace stress has become a significant issue within the context of HE, affecting specifically the employees. HE personnel, including faculty members, administrators and support staff, face unique challenges that contribute to elevated stress levels (Kinman & Johnson, 2019; Morrish, 2019). Faculty members in HE institutions are entrusted with multiple responsibilities including teaching, research, administrative duties, and professional development (Asfahani, 2023). They are expected to excel in each of these domains, which places immense pressure on them (du Plessis, 2019; Urbina-Garcia, 2020). The nature of academic work itself is demanding and challenging. Faculty members often find themselves juggling teaching responsibilities, preparing lectures, grading assignments, advising students, conducting research, and publishing their work (Okezue et al., 2020). This multitasking and the high standards set for each aspect of their work can create significant stress (Haque et al., 2021; Naz & Arshad, 2022).

Furthermore, the expectations placed on individuals in HE institutions are often high. Faculty members are expected to conduct ground-breaking research, publish in prestigious journals, secure research funding, and contribute to the advancement of knowledge in their respective fields (Asfahani, 2023; Bhana & Suknunan, 2021). These high-performance expectations can lead to a heightened sense of pressure and stress. Additionally, the competitive nature of the academic environment, with its emphasis on tenure, promotion, and recognition, adds to the stress experienced by faculty members (Freitas et al., 2020). Support staff and administrators in HE institutions also face their share of stressors. They are responsible for managing administrative tasks, coordinating various activities, handling student services, and ensuring the smooth functioning of the institution (Bhana & Suknunan, 2021; Naz & Arshad, 2022). These roles often involve dealing with competing demands, tight deadlines, and the need to navigate complex bureaucratic processes (Manimekalai et al., 2020; Shashi Kumar et al., 2022). The dynamic nature of the HE sector, with its evolving policies, changing regulations, and resource constraints, can further contribute to the stress experienced by these personnel (Gonzaga, 2019).

Moreover, the HE sector is not immune to the broader challenges and changes occurring in society. Issues such as budget cuts, institutional restructuring, and increasing competition for funding and resources add additional stressors to the work environment. These external pressures can impact job security, job satisfaction, and overall well-being of faculty members, administrators, and support staff (Freitas et al., 2020; Manimekalai et al., 2020).

Recognising and effectively addressing stress management in the HE work context is crucial for promoting the well-being and productivity of all personnel (Bhana & Suknunan, 2021; Shashi Kumar et al., 2022). It is important to create a supportive work environment that acknowledges and addresses the specific stressors faced by HE personnel. By doing so, institutions can contribute to the overall well-being of their employees, foster job satisfaction, enhance organisational performance, and create a positive academic culture (Kinnunen-Amoroso & Liira, 2016; Naz & Arshad, 2022).

1.2.2 Stress management through music and art

When it comes to stress management, various perspectives and approaches have emerged over time. These perspectives aim to understand and provide effective

strategies for individuals to cope with and alleviate stress in the workplace (Adomako, 2021; D'Emiljo & Du Preez, 2017). While traditional techniques like cognitive-behavioural interventions, relaxation exercises, and mindfulness practices have been widely studied and utilised, there is a growing recognition of alternative coping mechanisms, including the modalities of music and art (Bosman et al., 2021; Burman, 2019; Carr et al., 2012; Ophir & Jacoby, 2020).

From a psychological standpoint, music and art are seen as powerful tools for emotional expression and regulation (Grimaud & Eerola, 2021). Engaging with music and art can evoke a range of emotions, allowing individuals to explore and process their feelings in a non-verbal and creative manner (Ribeiro et al., 2019; Zhang et al., 2021). This perspective emphasises the importance of self-expression and creativity in managing stress and enhancing overall well-being (Gerge & Pedersen, 2017).

Music and art, as modalities used to enhance coping responses, have gained attention due to their potential therapeutic benefits and positive impact on emotional well-being (Dukić & Jakovljević, 2021; Hwang, 2023). Music and art modalities are creative outlets that offer individuals alternative means of expressing and regulating their emotions, which can contribute to stress reduction (Kaptein et al., 2018; Zeppegno et al., 2021). In this section I first discuss the value of music to psychological coping and well-being, after which I expand on the value of art to psychological coping and well-being.

1.2.2.1 The value of music to psychological coping and well-being

The profound connection between music and human experience has evolved over time, with Steven Mithen's assertion that music predates language, emphasising its ancient origins (Patel, 2015). The unique ability of music to evoke emotions has led to its exploration as a therapeutic tool across various domains (Huang & Li, 2022; Ribeiro et al., 2019). Darwin's recognition of the emotional depth contained in a musical note underscores its potential therapeutic role (Patel, 2015). The capacity of the voice to modulate pitch and timbre grants it a surprising healing power (Norton, 2016). Mothers intuitively use rhythmic sounds to comfort babies, demonstrating the innate soothing qualities of music (Ophir & Jacoby, 2020).

Music also contributes to neuroplasticity, the ability of the brain to reorganise neural pathways with new experiences (Carr & Hancock, 2017; Dieterich-Hartwell, 2017;

Thaut, 2015). Gottfried Schlaug's research confirms increased neuroplasticity in the brains of musicians, highlighting the transformative effects of musical exposure (Norton, 2016; Ramalingam et al., 2022). Universally present across cultures and generations, the capacity of music to create a safe, enjoyable context is emphasised (Carr et al., 2012; Dukić & Jakovljević, 2021). Active musical responses aid employees in grounding themselves, fostering a connection between the present moment and past traumatic experiences (Ahonen, 2018a; Saarikallio et al., 2019). Research validates that music therapy reduces traumatic associations (Ahonen, 2018b; Garrett, 2020) as music's ability to evoke memories and emotions facilitates their exploration and processing (Carr et al., 2012; Keeler & Cortina, 2020; Lee et al., 2016).

Receptive music therapy elicits a broad spectrum of human experiences, encompassing physical reactions, altered perceptions of time, inner imagery, mindfulness, and emotional responses (Grocke, 2014a; Hodges, 2016). Physically observable responses include facial gestures, chills, and rhythmic movements, while physiological changes encompass heart rate, blood pressure, and biochemical responses (Heiderscheit, 2017; Saleh et al., 2018). The amalgamation of physiological and physical responses gives rise to psychophysiological reactions (Ahonen, 2018b; Hodges, 2016). Positive emotions dominate these reactions, with feelings of joy, happiness, and calmness constituting the majority of the emotional responses (Grocke, 2014a; Harmon & Arpajian, 2020; Hicks-Moore & Robinson, 2008).

1.2.2.2 The value of art for psychological coping and well-being

The interplay of art and therapy offers a realm where expression bridges silence, fostering a rich array of possibilities. As articulated by art therapist Paola Luzzatto (2017), art therapy serves as a form of psychotherapy that neatly navigates the space between silence and dialogue. In this fusion of art and therapeutic practice, a diverse tapestry unfolds, unlocking profound potential for individuals (Luzzatto et al., 2017). Art therapy assumes the role of a catalyst for trust and security, fostering an environment where clients feel safe to embark on their expressive journeys (Bluethner, 2016; Gerge et al., 2019). This journey takes the form of an intricate three-way dance, intertwining the therapist, the client, and the artwork itself. For individuals who struggle with articulating their emotions and thoughts verbally, this dynamic offers an avenue

for communication and expression (Art Therapy Information, 2017; Ifrach & Miller, 2016; Martin et al., 2018).

A crucial facet of the impact of art therapy resides in its ability to influence physiological responses tied to stress. Cortisol, often regarded as a marker of stress fluctuations, emerges as a valuable indicator of stress levels (Engelbrecht et al., 2020; Keeler & Cortina, 2020; Sarcia, 2020). Delving deeper, cortisol offers a nuanced glimpse into stress measurement, an element that plays a pivotal role in understanding and addressing stress-related concerns (Prochazkova & Kret, 2017; Visnola et al., 2010). Research delving into the therapeutic union of art and well-being has illuminated the potential of art therapy to significantly diminish cortisol levels and alleviate state anxiety (Erginsoy Osmanoğlu & Yilmaz, 2019; Ugurlu et al., 2016; Visnola et al., 2010).

Art therapy manifests in various forms, each instrumental in helping individuals peel back layers to uncover their true selves, often veiled beneath masks of persona and pretence (*Art Therapy Information*, 2017; Rubin, 2008; Schiltz, 2014). Creating mandalas is one form of art therapy that has gained a lot of prominence in stress management and about which some research results have been published. Beyond the aesthetic, the act of creating mandalas engenders a meditative experience, ushering individuals into a state of introspection and tranquillity (Losinski et al., 2016; Temingh-Swart, 2020). This immersion in mandalas transports individuals into a meditative state, embracing tranquillity as stress is unburdened, harmony is sought, and equilibrium is discovered (Abbott, 2023; Jakobsson Støre & Jakobsson, 2022). Mandalas as artform have been shown to be effective in enhancing coping skills, because it helps with emotional expression. (Eaton & Tieber, 2017). Mandalas therefore hold a prominent place as tools for stress alleviation and introspection, particularly within the realm of GIM when applied as an SMI.

1.2.2.3 The value of music and art in stress management

From a physiological perspective, music and art have been shown to affect the brain and body in beneficial ways (Gerge et al., 2019; Luzzatto et al., 2022; Mckinney et al., 1997). Research indicates that listening to music or engaging in artistic activities can stimulate the release of endorphins and other "feel-good" chemicals in the brain, promoting relaxation, reducing stress hormone levels, and improving mood (Ahonen, 2018b; Erginsoy Osmanoğlu & Yilmaz, 2019). These physiological responses

contribute to stress reduction and promote a sense of well-being (Ramalingam et al., 2022; Thoma et al., 2013).

Taking a holistic approach to stress management, the integration of music and art modalities recognises the interconnectedness of physical, emotional, and mental well-being (Abrams et al., 2018; Wagner, 2016). This perspective emphasises the importance of addressing the whole person rather than focusing solely on specific stressors or symptoms (Kenny, 2015; Wagner, 2016). Incorporating music and art into stress management programmes acknowledges the multifaceted nature of stress and provides individuals with holistic tools for self-care, expression, and rejuvenation (Huet & Holttum, 2016; Jerling, 2019).

The exploration of music and art as modalities facilitating coping responses for stress management reflects a broader shift in understanding the complexity of stress and the need for diverse and individualised approaches to its management (Chai et al., 2017; Huang & Li, 2022; Kenny, 2015). By recognising the value of creative outlets like music and art, organisations can enhance their stress management initiatives and create more supportive and inclusive work environments that prioritise the well-being of their employees (Beck et al., 2015a; Martin et al., 2018).

1.2.3 Stress management interventions versus modalities

In the context of stress management and coping, understanding the difference between an intervention and a modality is crucial. An intervention is the overall strategy or action taken to address the stress-related concern, while a modality refers to the specific mode of the methods used within that intervention (Dunphy et al., 2019; Marr, 2001). Modality can therefore, also refer to the methods used per se.

For example, if the problem statement is focused on exploring the effectiveness of stress management strategies for faculty members in HE, the intervention could be the implementation of a programme or initiative aimed at reducing stress and promoting well-being (Yousefi & Abdullah, 2019). This intervention may involve multiple modalities (components), such as workshops, counselling services, or organisational policy changes (Levitin et al., 2018). Modalities also refer to the specific techniques or approaches used to deliver the intervention (Sharp, 2018). For instance, the modality could include mindfulness-based stress reduction techniques, art therapy sessions, or the integration of music into relaxation exercises (Marr, 2001). Each

modality offers a distinct approach to addressing stress and may have its own unique benefits and considerations (Dunphy et al., 2019). In this thesis, modality refers to the music- and art-based strategies and techniques that were used as the primary approach in the SMI that was conducted for the purposes of this research, namely a GIM-informed intervention.

1.2.4 My evolving interest in this study

My decision to conduct research in the HE environment stems from my observations and experiences of stress among personnel within this context. Having been part of the HE community, as a faculty member, I witnessed first-hand the significant levels of stress and the detrimental effects it has on the well-being of individuals. These experiences served as a catalyst for my desire to explore and contribute to stress management strategies within the HE setting.

I have observed and personally experienced the stress faced by my colleagues. Since my employment in HE began in 2016, I have for example had the opportunity to witness first-hand the disruptive impact student strikes had on both my colleagues and non-participating students. These strikes have manifested in class interruptions, vandalism of examination papers, and instances where students and lecturers were forced to vacate their classrooms. Additionally, there were situations in which we had to hastily exit the campus via a separate entrance for safety reasons.

In addition to these challenges, some of my colleagues have shared with me their struggle with maintaining a consistent output of high-quality research papers. The precarious nature of employment at this institution, characterised by non-permanent positions, further exacerbates the stress levels experienced by the personnel. The cumulative effects of these factors, amongst others, have created a highly stressful environment for the staff at our institution, which is similar to what has been noted elsewhere in HE. As noted before, within the HE environment, faculty members face numerous stressors, including heavy workloads, time pressures, high expectations, and competing demands. As a result, stress levels can escalate, leading to burnout, reduced job satisfaction, and compromised academic performance (Gonzaga, 2019; Naz & Arshad, 2022). Witnessing and experiencing these challenges, I recognised the urgent need for effective interventions that could alleviate stress and promote well-being amongst personnel in HE institutions (Shashi Kumar et al., 2022).

In my own journey, I began exploring different approaches to stress management and coping. It was during this exploration that I encountered the Bonny Method of Guided Imagery and Music, an approach that had a profound impact on reducing stress in my own life. The Bonny Method of Guided Imagery and Music involves using music and art as a therapeutic tool to guide individuals through a deep introspective process, accessing emotions and facilitating self-exploration (Beck et al., 2015a; Short & Heiderscheit, 2020; Temingh Swart, 2020). From this point forward, I will simply use the abbreviation GIM, referring to the adaptive form applied in this study's SMI. My personal immersion in this unique blend of attentively selected classical music, expert guidance, and the subsequent expression of emerging unconscious issues through drawings not only deepened my understanding of stress in my life, but also provided significant relief from it.

I recognised that integrating music and art modalities, such as in GIM, could offer a unique and effective approach to stress management in the workplace, for employees (Abrams et al., 2018; Bashir & Goswami, 2020; Beach, 2016). This realisation became the foundation for my research direction, as I believed that incorporating such modalities could bring about positive change and contribute to the well-being of individuals within the HE community (Bashir & Goswami, 2020; de Witte et al., 2022).

I commenced my journey towards becoming a GIM fellow, a trained professional in Guided Imagery and Music, in South Africa. This process spans a four-year duration and is expected to be concluded by the time this thesis is published. Throughout this training, I have had the opportunity to personally witness the significance of this modality in alleviating stress and its role in facilitating the healing of emotional challenges. I furthered my experience by conducting a substantial number of GIM sessions with students and clients under supervision. During this process, I observed the remarkable capacity of this modality to alleviate stress and facilitate emotional healing. This profound experience served as the inspiration for selecting an adaptive GIM as the modality for the SMI within my research.

In summary, my personal reflections on the stress experienced by personnel within the HE environment, combined with my own transformative experience with GIM, motivated me to undertake research in this specific area. I recognised the significance of addressing stress in the HE setting and believed that incorporating music and art

modalities could facilitate effective coping strategies (Naz & Arshad, 2022; Schaufeli & Taris, 2014; Shashi Kumar et al., 2022). Through my research, I aim to contribute to the well-being of employees in HE institutions and promote a healthier and more supportive environment for all (Glazer et al., 2017; Huet, 2015; O'Dowd et al., 2018).

1.3 PROBLEM STATEMENT

In the light of the context that I just discussed, researching the effect of music and art modalities on coping, and their value when integrated into an SMI, proves important. Firstly, the contextual problem addressed by this research is the prevalence of stress in the workplace, specifically within the context of HE, and the need for effective stress management strategies to support employees in coping within this particular context (Fang et al., 2020). Stress has become a pervasive issue affecting the faculty members in HE institutions, compromising their well-being and overall functioning (du Plessis, 2019; du Plessis & Martins, 2019; Okezue et al., 2020). The unique stressors present in the HE setting include: demanding workloads, high expectations for research and teaching excellence, and the constant need to balance multiple responsibilities (C.J. McCarthy et al., 2016; Yousefi & Abdullah, 2019), budget cuts, institutional changes and uncertainty (Griffioen, 2022; Naylor & Nyanjom, 2021), student strikes and disruption of regular academic activities (Bohler-Muller et al., 2017; Fomunyam, 2017; Gibson, 2020). These cumulative stressors can lead to negative outcomes including burnout, decreased productivity, and compromised mental health (Bhana & Suknunan, 2021; Soetan, 2018). Addressing the issue of employee stress in HE within the broader context of stress management is essential to promote a healthy and supportive work environment (Huet & Holttum, 2016; Sallon et al., 2017).

Secondly, of theoretical importance, traditional approaches to stress management often fail to capture the diverse needs and preferences of individuals (Randall et al., 2009). There is a pressing need to explore alternative coping resources, such as music and art, to enhance stress management and promote well-being in the workplace (Fang et al., 2020; Nezu et al., 2019). There is a need for innovative and tailored stress management strategies that address the unique stressors within HE and accommodate individual differences in coping preferences (Asfahani, 2023; du Plessis, 2019, 2020; Urbina-Garcia, 2020). Music and art have been applied in a clinical therapeutic context, and there is a lack of studies demonstrating their use in facilitating stress management in the workplace. This study explores the potential of music and

art as intervention methods to support constructive coping (Bosman et al., 2021; Dukić, 2018; Garrido et al., 2015; Gustavson et al., 2021). In doing so, it addresses a gap in knowledge by offering practical insights into how creative approaches may enhance well-being in high-demand workplace settings such as HE (Fang et al., 2020; Sonowane, 2019; Wu, 2016). The study contributes to understanding how such practices can be experienced as beneficial within employee support programmes.

I conducted an extensive literature search focusing on SMIs that integrate music and art as modalities, in the workplace. Furthermore, I explored music- and art-relevant SMIs within the HE context and searched for such SMIs that were conducted as part of a longitudinal program, rather than once-off, ad hoc sessions or interventions. However, despite combining (in various permutations) keywords such as (for example): “SMI, stress management, coping response, HE, music and art”, I encountered a scarcity of literature that specifically examines the combined effects of SMI through music and art over an extended duration within the organisational context. Furthermore, limited research was found using different combinations of the above keywords, denoting the neurological impact of music and art as modalities, as well as their effects within the HE work context. See *Table 1.1* for a summary of the searches conducted on Google Scholar, Sabinet African Journals, Emerald Business, Management and Economics eBook Series Collection, and EBSCO Host: Business Source Ultimate, with various permutations of relevant key words. These searches were done between 16 and 25 September 2023 and highlight the substantial gap in academic literature concerning stress management involving music and art. Specifically, there is a notable deficiency in studies that explore the integration of music and art within the educational domain.

Table 1.1*Literature search by Database*

Date	Database	Keywords	No. of hits	No. of relevant hits	Reasons not included
16-07-2023	Google Scholar	"SMI", "Coping response", "Higher Education" "personnel", "music" and "art" "neurological" "psychoanalysis"	0	0	NA
16-07-2023	Google Scholar	"Stress Management Intervention", "Coping response", "Higher Education" "personnel", "music" and "art" "neurological" "psychoanalysis"	0	0	NA
16-07-2023	Google Scholar	"Coping response", "Higher Education" "personnel", "music" and "art" "neurological" "psychoanalysis"	4	0	It's about students and children
16-07-2023	Google Scholar	"Coping response", "Higher Education", "music", "art" "neurological" "psychoanalysis"	9	0	It's about youth, children and students
16-07-2023	Google Scholar	"stress", "Coping", "higher Education", "staff", "music", "GIM", "art", "neurology" "psychoanalysis"	7	0	Literature list, Clinical environment, Cancer and dementia patients, students
16-07-2023	Google Scholar	"Stress", "Coping", "staff", "music", "art", "GIM", "neurology" "psychoanalysis"	33	1	Alzheimers, No Higher Education, conference outline, clinical environment, refugees, students, Psychiatric patients, medical, cancer, music only, children, religion, logo therapy, hypnosis, no art or music
16-07-2023	Sabinet African Journals	"Stress" and "coping" and "staff" and "music" and "art" and "GIM" and "neurology" and "psychoanalysis"	8	1	Biography, No music and art
16-07-2023	Sabinet African Journals	"Stress" and "coping" and "music" and "art" and "neuro" and "psychoanalysis"	1	0	Children
16-07-2023	UNISA	"stress management" and "intervention" and "work-place" and ("music" or "art") or ("music" and "art")	6	1	Only 1 with art – others nothing about music or art

Date	Database	Keywords	No. of hits	No. of relevant hits	Reasons not included
16-07-2023	UNISA	"music" and "art therapy" and "workplace"	21		Medical environment
25-07-2023	Emerald Business, Management and Economics Ebook Series Collection	"stress" and "Coping" and "staff" and "music" and "art" and "neuro*" and "psychoanalysis"	10	1 –Org Anxiety, not music or art	Not relevant: Special Needs Learners, Domain analysis, consumer research, triple helix, marketing, not music or art
25-07-2023	Emerald Insight: Journals, Books & Case Studies	"stress" and "Coping" and "staff" and "music" and "art" and "neuro*" and "psychoanalysis"	10	0	Not relevant: Special needs, consumer research, marketing
25-07-2023	Emerald Insight: Journals, Books & Case Studies	"stress" and "Coping" and "staff" and "music" and "art" and "higher education" and "neuro*"	38	1 anxiety, 1 burnout	Not relevant: School, Covid, students, storytelling, libraries, nurses, no music and art
25-07-2023	EBSCO Host: Business Source Ultimate	"stress" and "coping" and "music" and "art" and "higher education"	0	0	0
25-07-2023	EBSCO Host: Business Source Ultimate	"stress" and "coping" and "music" and "art"	0	0	0
25-07-2023	EBSCO Host: Business Source Ultimate	"Stress" and "Coping" and "Music and art therapy" and "higher education"	1	1	Included, but stress and coping is not in the article
25-07-2023	Ebsco Host: APA Psych Aricles	"stress" and "coping" and "music and art therapy" and "neuro*"	8	1	Not relevant: refugees, children, patients, musicians, stress and coping does not feature
25-07-2023	Ebsco Host: APA Psych Aricles	"stress" and "coping" and "psycho*" and "neuro*" and "music"	1	0	Not relevant: neuroticism

1.4 RESEARCH QUESTION

The research question for this study on stress management of employees in the HE work context, was framed as follows:

How do HE employees experience a music- and art-based SMI in relation to their stress management and coping capacity?

Sub-research questions were formulated as follows:

- i. How do psychological and neuroscience perspectives explain the effects of music and art on the stress response?

- ii. How do HE employees experience a GIM-informed, music- and art-based SMI in the workplace?
- iii. How do HE employees experience the value of a GIM-informed, music- and art-based SMI in relation to their stress management and coping capacity?

The research question seeks to investigate the potential of integrating music and art as stress intervention modalities for enhancing the stress management and coping capacity of HE employees. The research question foregrounds the need to understand the value of these creative modalities in promoting alternative means of coping with stress, when applied in an integrative way over a period of time. The research question therefore emphasises the need for understanding the value of comprehensive SMIs that integrate music and art. It seeks to explore how these modalities can be effectively integrated into existing stress management programs in HE, considering factors such as individual preferences, accessibility, and practical implementation within a specific HE environment. In this regard, the following research objectives were formulated in line with the stated research questions.

1.5 RESEARCH OBJECTIVE

The overall research objective of this study was to investigate the value of a GIM-informed music- and art-based SMI in facilitating the stress management and coping of HE employees in the workplace, through a deep exploration of their experience of participating in the SMI. The objective encompasses several key directives that guided the research process and outcomes through the following secondary research objectives:

- i. To conceptualise the psychological and neural processes that explain how music and art affect the stress response.
- ii. To explore HE employees' experience of a GIM-informed music and art-based SMI.
- iii. To explore HE employees' experience of the value of a GIM-informed music and art-based SMI intervention on their stress management and coping capacity.

The study recognises the importance of understanding the unique stressors and demands within HE while considering the diverse needs and preferences of faculty members. The research objectives, established a clear direction and purpose for the study and establishes the interdisciplinary grounding of the study, drawing from psychological, neurological and organisational perspectives (see Sections 1.6 and 1.7 below). The study intended to bridge these disciplinary boundaries to gain a comprehensive understanding of the potential benefits and challenges of integrating music and art into SMIs in HE and ultimately inform the development of evidence-based practices and interventions that can be applied in the workplace, specifically within the HE setting. Therefore, by examining the value of music and art as modalities affecting coping responses, this study contributes to developing evidence-based interventions that enhance well-being and resilience in the workplace. These findings should, however, be understood within the limitations of the research, as they cannot be generalised and remain restricted to the participants of this study.

1.6 DISCIPLINARY BOUNDARIES

This study was conducted in the primary discipline of IOP, using psychology and organisational science, with specific focus on stress management and coping and contributed to the sub-discipline of employee and organisational wellbeing.

1.6.1 Primary discipline: Industrial-Organisational Psychology

Industrial-Organisational Psychology (IOP) served as the primary disciplinary foundation for this research, as it encompasses the study of human behaviour within work settings (Fang et al., 2020; Powers, n.d.). IOP combines principles from psychology and organisational science to understand and improve the well-being, productivity, and effectiveness of individuals and organisations (Bester, 2019; Geldenhuys et al., 2015; Lefkowitz, 2019). This study therefore fits well within the field of Industrial and Organisational Psychology, as it aimed to explore how a music- and art-based SMI may be experienced in the workplace context.

In the context of this research, the disciplinary boundaries of IOP furthermore played a crucial role in shaping the understanding and investigation of stress management through music and art in the workplace (Jensen & Bonde, 2018; Sott et al., 2020). IOP offers a lens through which to examine the psychological processes, individual differences, and organisational factors that influence stress and coping mechanisms

within a work environment (Antony et al., 2017; Glazer et al., 2017; Lazarus & Folkman, 1987; Rabenu & Yaniv, 2017). Within the IOP field, the research explored how music and art can be integrated as modalities to influence coping responses with the aim of alleviating stress and by implication promote well-being amongst employees in HE (Beck, et al., 2015b). Established IOP theories and research, such as those related to stress, coping, job satisfaction, Job Demands-Resources (JDR), burnout, motivation, and organisational climate, provide knowledge about how coping mechanisms interact with individual and organisational factors to impact stress management outcomes (Loh et al., 2018; Yousefi, 2019).

Framing this study with the discipline of IOP, it becomes possible to investigate the psychological implications of music and art as modalities effecting coping responses in the workplace (Giaver et al., 2017; Sott et al., 2020). IOP theories help identify relevant constructs, such as job demands and resources, work-life balance, and employee engagement, which influence stress levels and coping strategies (Fourie & Brand, 2020; Janse Van Rensburg et al., 2018). This allowed for a comprehensive examination of the complex interplay between psychological well-being, organisational dynamics, and the integration of music and art in SMIs (Beck et al., 2015b; Robins et al., 2018).

1.6.2 Secondary discipline: Organisational and employee well-being

Incorporating the stress, burnout, and coping framework, this research also integrates the sub-discipline of employee well-being within IOP (Bester, 2019; Lopez-Martin & Topa, 2019). In organisational and employee well-being the focus is on promoting the overall well-being of individuals within the workplace, encompassing the physical, psychological, and social dimensions of well-being (Agarwal et al., 2020; Jackson, 2018; Sallon et al., 2017).

The field of organisational and employee well-being recognises the dynamic interplay between individual well-being and organisational factors (Burman, 2019; Riva & Chinyio, 2018) and thus provides a holistic understanding of stress and coping, linking it also to positive psychological constructs. It delves into positive outcomes such as engagement and satisfaction, in addition to stress alleviation (Beck et al., 2015a; Yavas et al., 2018). Complementing the primary focus on stress reduction with positive facets (Heiser, 2020; Hernandez-Ruiz, 2019) this discipline also leverages elements

of positive psychology (Heiser, 2020; Wong, 2019) to foster resilience and personal growth (Luthans & Youssef-Morgan, 2017).

Furthermore, this discipline underlines the importance of work-life balance and social support in nurturing a thriving workforce (Abe & Abe, 2018; Manimekalai et al., 2020). It emphasises a shift beyond mere stress relief to the cultivation of a positive work environment (Heiser, 2020; Redelinghuys & Rothmann, 2020). The application of organisational and employee well-being principles in the study emphasises how music and art modalities as interventions could potentially influence employee well-being in HE (Knight et al., 2017; Weinberg et al., 2010). This discipline highlights the significance of creating a supportive and healthy workplace, recognising the interconnectedness of individual well-being and the organisational context (Weinberg et al., 2010). In this study, the integration of music and art modalities into SMIs fits well in the discipline of organisational and employee wellness as it provides knowledge about stress management that can contribute to a culture of well-being within HE institutions (Bester, 2019; Gwinner, 2016; Mead et al., 2019).

By integrating this secondary discipline of organisational and employee well-being, the study considers the influence of organisational factors (Gómez-García et al., 2021), underscores the importance of a supportive work environment (Jyoti & Rani, 2019; Posner et al., 2017), and addresses employee well-being (Kaptein et al., 2018; Kotze, 2018; Lopez-Martin & Topa, 2019). This integration aims to provide practical insights and recommendations for enhancing well-being through the incorporation of music and art (Giaver et al., 2017; Jerling, 2019; Martin et al., 2018) within SMIs (Panigrahi, 2017) in the context of HE institutions (Beck et al., 2015a; Giordano et al., 2020).

1.7 META-THEORETICAL BOUNDARIES

1.7.1 Introduction

This study is theoretically bounded by the underlying psychological paradigms of neuroscience and psychodynamics, as well as conceptual theory related to stress, burnout, and coping. I am thus continuing to discuss the psychological paradigm, including neuroscience and psychodynamics. Thereafter I will discuss the psychological constructs of stress, burnout, coping and resilience.

1.7.2 Psychological paradigm: Neuroscience and psychodynamics

In addition to the primary and secondary disciplines, the research also draws upon two psychological meta-theoretical orientations or paradigms, which form the theoretical foundation of applying music and art modalities in stress management. Neuroscience and psychodynamics provide the meta-theoretical assumptions that aid a deeper understanding of the underlying psychological and neuro-biological processes involved in stress management and coping responses when using the modalities of music and art to alleviate stress (Bavley et al., 2017; King & Parada, 2020; Sarid & Huss, 2010). As this research was influenced by the discipline of neuroscience, the modalities chosen involved techniques that targeted neurological processes involved in the stress coping response, stimulated by using music and art (Levitin et al., 2018; Will, 2018). Moreover, the research was also rooted in the psychodynamic perspective, as the modalities chosen furthermore focused on exploring the unconscious factors influencing stress and coping (Letul  et al., 2018; Petriglieri & Petriglieri, 2022). In summary, from a psychodynamic and neuroscientific perspective, the exploration of stress management through music and art delves into the underlying psychological and neural processes that contribute to their effectiveness as modalities eliciting coping responses (Trimble & Hesdorffer, 2017; Vaudreuil et al., 2016; Zhou et al., 2022).

1.7.2.1. Neuroscientific perspective

Neuroscientific research has provided valuable insights into the neural mechanisms underlying the effects of music and art on stress management, emotions and coping strategies (Koelsch, 2018; Kwan & Clift, 2018; Lee et al., 2016). Neuroimaging studies have shown that listening to music activates brain regions involved in reward processing, emotional regulation, and memory (Ferreira et al., 2019; Gustavson et al., 2021). It explores how the brain responds to stressors and how different coping mechanisms, such as during engagement with music and art, can modulate neural activity and regulate emotions (Gerge et al., 2019; Koelsch, 2018; Will, 2017). For example, music can engage the limbic system, including the amygdala and hippocampus, which play a crucial role in emotion processing and memory formation (Tsisiris et al., 2018; Will, 2017). Similarly, engaging in artistic activities, such as painting or drawing, can stimulate brain regions associated with creativity, cognitive flexibility,

and emotional processing (Blom, 2014). The neuroscientific perspective also highlights the neural plasticity and the ability of music and art to modulate brain activity, leading to positive emotional experiences and stress reduction (Dukić & Jakovljević, 2021; Ripollés et al., 2016). Neural plasticity refers to the brain's capacity to adjust and transform throughout the lifespan (Dukić, 2018).

1.7.2.2. Psychodynamic perspective

The psychodynamic perspective, rooted in psychoanalytic theory, emphasises the role of the unconscious mind and the significance of emotional experiences in shaping human behaviour (Koelsch, 2018; Schiltz, 2014). Music and art offer individuals avenues for symbolic expression and unconscious communication. Engaging in creative activities can provide a safe and non-threatening space to explore and process emotions, including those related to stress (Kongkasuwan et al., 2015; Pienaar & Reynolds, 2015). Through music and art, individuals can tap into their innermost thoughts, feelings, and desires, facilitating self-reflection, catharsis, and insight (Bosman et al., 2021; Rankanen, 2014). The psychodynamic perspective recognises the therapeutic potential of music and art as modalities for self-expression and self-discovery, aiding in stress reduction and emotional well-being (Aalbers et al., 2020; Kaptein et al., 2018; Zeppegno et al., 2021). From a Jungian standpoint, music and art function as projective tools, allowing unconscious content to emerge symbolically. Jung famously wrote that “music represents the movement, development, and transformation of motifs of the collective unconscious” (1973, p.542). Such symbolic expression facilitates dialogue between conscious and unconscious aspects of the psyche, fostering insight, integration, and psychological healing.

Psychodynamics delves into the interplay between internal conflicts, defence mechanisms, and coping strategies (Vaillant, 2011). By incorporating psychodynamics through a lens of neuroscientific principles, the research aimed to explore the intrapsychic factors that influence the selection and effectiveness of coping responses, shedding light on the underlying motives and dynamics involved (Geldenhuys, 2022).

1.7.2.3. Integrating the neuroscientific and psychodynamic perspectives

The integration of neuroscience and psychodynamics enriches the research by providing a comprehensive understanding of stress management in the workplace (Scandurra et al., 2018). These meta-theories offer complementary perspectives on

the cognitive, emotional, and physiological dimensions of stress and coping. They contribute to a nuanced exploration of the mechanisms by which music and art can alleviate stress and enhance well-being, considering both the conscious and unconscious processes at play (Ahonen, 2018a; Lawes, 2021; Letulé et al., 2018; Vaillancourt, 2016).

By incorporating neuroscience and psychodynamics, the research gains a multidisciplinary lens that integrates biological, psychological, and social perspectives. This integrative approach enables a more holistic understanding of stress management and coping responses, encompassing both the physiological and psychological aspects of human functioning (Bavley et al., 2017; Koelsch, 2018).

The integration of these meta-theories also enhances the theoretical framework of the study. It allows for the exploration of complex interactions between individual factors (e.g., personality traits, cognitive processes), organisational factors (e.g., work environment, support systems), and the neurobiological and psychodynamic processes involved in stress management through music and art (Cheng & Cheung, 2005; Limm et al., 2011; Luthans & Youssef-Morgan, 2017; Matthews et al., 2017; Smollan & Pio, 2017; Will, 2017).

The interplay between conscious and unconscious processes and the modulation of brain activity contribute to the therapeutic benefits of music and art in stress management (Koelsch, 2018; Scovel & Gardstrom, 2012). Understanding these perspectives is crucial for developing evidence-based interventions that harness the power of music and art to promote well-being and resilience in the workplace (Giaver et al., 2017; Martin et al., 2018). By incorporating psychodynamic and neuroscientific principles into stress management programs, organisations can provide employees with innovative tools to navigate stress, enhance emotional regulation, and foster a positive and supportive work environment (Abrams et al., 2018; Ramalingam et al., 2022).

1.7.3. Psychological constructs: Stress, Burnout, Coping and Resilience

The theoretical framework of stress, burnout, and coping forms a crucial foundation for this research (Moss, 2019). It involves examining the concepts and theories related to stress, burnout, and the coping mechanisms employed by individuals in response

to work-related stressors (Gottschalk et al., 2020; J.M. McCarthy et al., 2016b; O'Dowd et al., 2018).

Stress is a psychological and physiological response to demands or pressures placed on individuals. It involves the perception of a threat or imbalance between the demands of a situation and one's ability to cope effectively (Ahmad et al., 2015; Riva & Chinyio, 2018; Yousefi, 2019). This research drew upon stress theory to understand the sources of stress within the HE context, such as high workload, time pressures, and organisational factors. This framework helped to identify the specific stressors that HE employees faced and how these stressors impacted their well-being and performance (Berebitsky & Ellis, 2018; du Plessis, 2019; Morrish, 2019).

Burnout, on the other hand, is a state of physical, emotional, and mental exhaustion that results from chronic work-related stress (Saito et al., 2018; Wills, 2020; Yavas et al., 2018). It is characterised by feelings of cynicism, depersonalisation, and a reduced sense of personal accomplishment. This research incorporated burnout theory to examine the prevalence and consequences of burnout amongst employees in HE (Lopez-Martin & Topa, 2019; Urbina-Garcia, 2020). This framework helped to identify the signs and symptoms of burnout and its potential impact on job satisfaction, engagement, and overall well-being (Thuynsma & De Beer, 2017; Van Steenbergen et al., 2018).

Coping refers to the cognitive and behavioural efforts individuals undertake to manage or reduce stress (du Plessis, 2019; Kaur et al., 2017). This research integrated music and art, through GIM, as modalities to enhance the coping strategies employed by HE employees to deal with work-related stressors (Garrido et al., 2015; Giordano et al., 2020; Ophir & Jacoby, 2020). This framework helped to understand the effectiveness of different coping mechanisms, including the use of music and art, in alleviating stress and promoting well-being (Gerge et al., 2019; Oren et al., 2019; Reybrouck et al., 2020). It also considered individual differences in coping styles and the influence of contextual factors on coping efficacy (Garrido et al., 2015; Qarima Isa et al., 2019).

Resilience, the ability to adapt and recover from adversity, is a critical factor in countering stress and burnout, enabling individuals to not only endure but thrive under occupational stressors (Matthews et al., 2017; O'Dowd et al., 2018) Defined as the capacity to maintain or regain performance and well-being despite challenges,

resilience encompasses personal qualities and a supportive environment, with social capital (such as emotional support, mutual trust, and instrumental aid) playing a vital role (Afifi et al., 2016; McEwen, 2016). Building personal resilience involves adopting strategies such as fostering a Sense of Coherence (SOC), optimism, self-efficacy, adaptability, and leveraging social support, which collectively empower employees to effectively manage workplace stress (Cooke et al., 2019).

By utilising the theoretical framework of stress, burnout, coping and resilience the research aimed to gain a comprehensive understanding of the experiences of HE employees when engaging in a music and art-based SMI (Al-Hawari et al., 2020; Lopez-Martin & Topa, 2019; Skaalvik & Skaalvik, 2018). This framework provided a structured approach to examining the role of music and art in influencing coping responses within the larger context of stress and burnout (Beck et al., 2015b; Meadows et al., 2015; Salzano et al., 2013). The conceptual theory related to stress, burnout and coping relates to the field of organisational and employee well-being, which constitutes a disciplinary boundary of this research. Relevant theory about stress, burnout, coping and resilience are elaborated on in Chapter 3 of this thesis.

1.8. RESEARCH DESIGN

This study employed a single case-study design from a hermeneutic phenomenological approach, grounded in an interpretive paradigm with a social constructionist epistemology and subtle realist ontology. In this chapter, I briefly outline the research design, beginning with a discussion of the interpretative and hermeneutic phenomenological perspective that informed my approach. I also detail the research strategy and procedure, highlighting the case study design as a structured framework for investigating the phenomenon in its specific context. The detail of the research design is thoroughly described in Chapter 2.

1.8.1 Research approach

This study was conducted from an interpretive, social constructionist, and Hermeneutic Phenomenology (HP) approach (Cap, 2019; Dungal, 2020; Nigar, 2020). This approach acknowledges the subjective nature of human experiences and seeks to understand the meaning individuals assign to their experiences within the social and cultural context (Gergen, 2011; Kekeya, 2019; Pulla & Carter, 2018).

By embracing an interpretive perspective, the research aimed to go beyond mere observation and description of phenomena. It sought to explore the subjective experiences of HE employees about a music and art-based SMI and its influence on their stress management and coping (Alase, 2017; Crowther & Thomson, 2020; Rashid et al., 2019). This approach recognises that individuals actively construct their reality through their unique perspectives, and their experiences cannot be reduced to objective measurements alone (Dressler, 2019; Galbin Damaschin, 2014; Kekeya, 2019). My interpretive paradigm is furthermore based in epistemological principles of social constructionism. Social constructionism guided the research by emphasising the role of social and cultural factors in shaping individual experiences (Liran & Miller, 2019; Neubauer et al., 2019). It recognises that individuals are influenced by their interactions with others, societal norms, and the shared meanings attached to certain behaviours or coping strategies (Mitchell et al., 2019; Rahman, 2023; Van der Walt, 2020).

HP is essentially an interpretivist methodology and aligns with social constructionist thinking. As an integral aspect of the research approach, HP focuses on understanding the lived experiences of individuals and the underlying meanings they attribute to those experiences (Fuster-Guillén, 2019; Gyollai, 2020; Nizza et al., 2021). It allows for an exploration of the individual and collective meanings attached to these coping strategies, the influence of social and cultural factors, and the potential implications for well-being and performance (Downs, 2019; Tsiris et al., 2018). Overall, the interpretive, social constructionist, and HP research approach aligns with my research objectives, facilitating a deep exploration of the subjective experiences, interpretations, and meanings that HE employees attach to stress management and coping responses within the context of a music- and art-based intervention in the workplace. (Abdelsamie et al., 2014; Rahman, 2023).

1.8.2 Research strategy and procedure

This study involved a case study of a SMI intervention in which nine participants engaged over a period of six weeks, incorporating six intervention sessions integrating music and art modalities in the form of GIM. Participants included only employees of a specific HE institution. Data were collected via the Experience of Work and Life Circumstances Questionnaire (WLQ), a summative observation report of the SMI sessions by the GIM therapist, artworks (Mandalas and clay work) completed during

the GIM sessions, as well as individual interviews and a focus group that was convened at the end of all the sessions. Data analysis was conducted following the analytic steps recommended in IPA and utilising the Atlas.ti 8. programme (ATLAS.ti 8 Scientific Software Development GmbH, 2023). By focusing on a specific institution, the study delved into the intricacies and complexities of stress management and coping responses of some of the personnel within this HE setting (du Plessis, 2019, 2020; Urbina-Garcia, 2020). The case study strategy allowed for a holistic exploration of the phenomenon under investigation, taking into account the unique organisational structures, cultural dynamics, and contextual factors that shaped the experiences of employees (Fourie & Brand, 2020; Pearson et al., 2015). It provided an opportunity to examine the interplay between individual-level factors, such as personal coping strategies and well-being, as well as broader organisational and systemic influences (Haque et al., 2021; Smollan & Pio, 2017).

Through the case study, the research gathered rich qualitative data that captured the nuances and depth of the experiences of participants (Tadajewski, 2016; Ylikoski & Zahle, 2019). This rigorous data gathering established the grounds for a comprehensive analysis of the value of integrating music and art modalities to alleviate stress within the HE context. It allowed for a detailed exploration of how these modalities interacted and impacted the stress management and coping capacity of the employees.

1.9 STUDY SIGNIFICANCE STATEMENT

The significance of the study lies in its potential to contribute to both theoretical knowledge and practical applications in the field of stress management and well-being in the workplace, specifically within the context of HE (du Plessis, 2019; Morrish, 2019; Sonowane, 2019). By exploring coping responses through the modalities of music and art, this research sought to generate insights that could inform potential strategies for supporting the stress management of faculty members (Garrido et al., 2015; Martin et al., 2018; Temingh Swart, 2020).

By conducting research in the HE environment and focusing on the impact of music and art modalities, I aimed to bridge the gap between theoretical knowledge and practical application (Ahonen, 2018a; Martin et al., 2016). I aim to contribute to the existing body of research by providing evidence-informed insights into how music- and

art-based Stress Management Interventions can be experienced by employees in HE institutions.

I further elucidate the significance of this study in Chapter 7.

1.10 CHAPTER LAYOUT

The layout of my chapters in this thesis, are as follows:

Chapter 1: Scientific Orientation

Chapter 2: Methodology

Chapter 3: Literature Review – Stress, SMI, Music & Art, Psychodynamics, Neuroscience

Chapter 4: Literature Review – JDR and Burnout

Chapter 5: Findings

Chapter 6: Discussion

Chapter 7: Conclusion & Significance of Study

1.11 CHAPTER CONCLUSION

In HE institutions, continuously neglecting stress can have adverse effects on the mental and physical well-being of employees, resulting in reduced productivity and increased absenteeism. To counteract this negative trend, this thesis delved into SMIs, with a specific emphasis on leveraging music and art as modalities to enhance coping mechanisms. Anchoring this study within the realms of IOP, as well as organisational and employee well-being, I position my research within the overarching paradigms of neuroscience and psychodynamics. Employing theoretical frameworks related to stress, burnout, and coping, I adopted an interpretive, social constructionist, and HP research approach, conducting an interpretive phenomenological analysis within a HE case study. By conducting research in the HE environment and focusing on the impact of music and art modalities on stress coping response, the goal was to bridge the gap between theoretical knowledge and practical application. In this highly pragmatic research, wherein nine stressed employees participated in a SMI that applied the GIM

method, integrating music and art modalities, my objective was to explore the value thereof on the stress management and coping capacity of these individuals.

CHAPTER 2: RESEARCH DESIGN

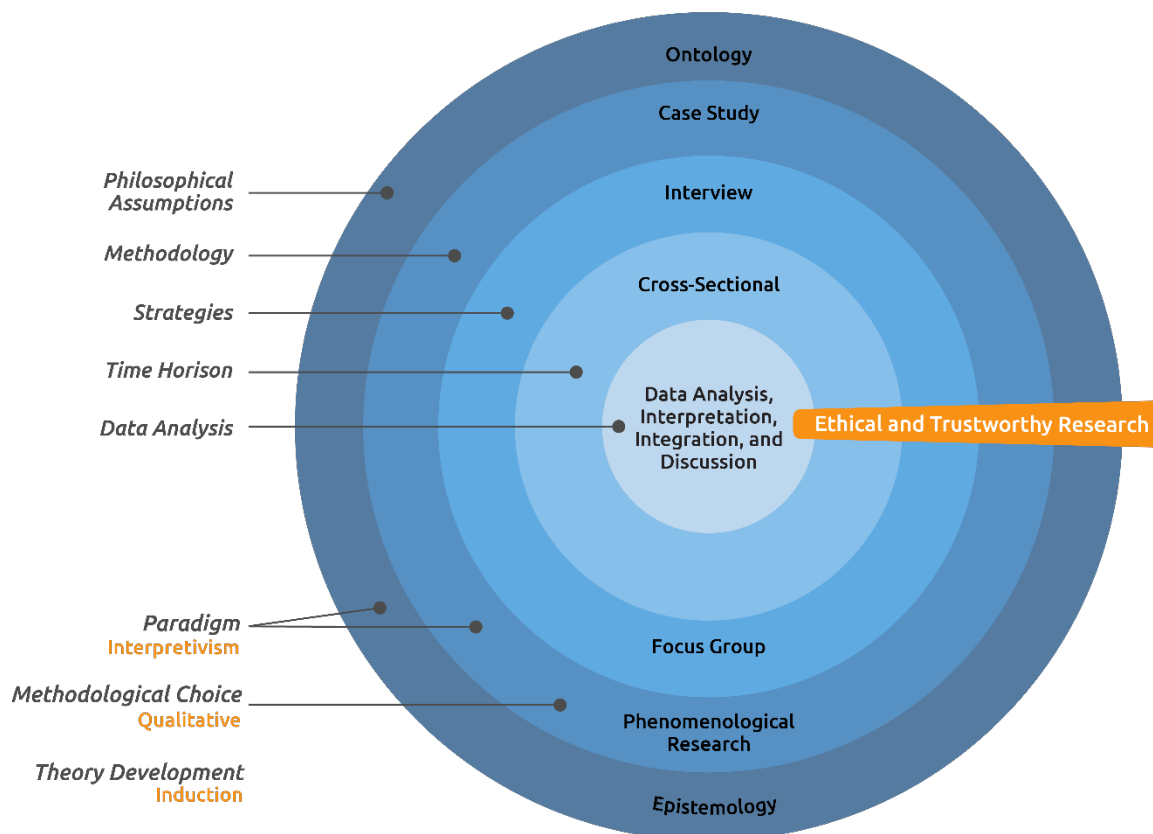
2.1 INTRODUCTION

Having presented a scientific orientation to the study in the previous chapter, in this chapter I present a detailed overview of the research design followed in executing the study. A research design is prepared by the researcher before embarking on a research project (Blaikie & Priest, 2019; Turner, 2020) and serves as a roadmap or structured plan for the entire research process (Hofstee, 2018). The research design outlines the necessary steps and procedures to be followed to address the research question effectively and integrates all the key components of the study (Asenahabi, 2019; Hofstee, 2018; Kumar, 2011). This structured roadmap or plan helps prevent frustration and confusion during the research process. It provides a clear framework for conducting the study and guides the researcher in collecting, analysing, and interpreting data (Abu-alhaija, 2019). The research design translates a research problem into practical data that can be analysed to provide relevant answers, thus linking conceptual research problems with relevant and attainable empirical research (Abu-alhaija, 2019; Abutabenjeh & Jaradat, 2018; Asenahabi, 2019; Creswell, 2013; Kassu, 2020). The research design defines the methodology, data collection techniques, and methods of data analysis. This structure ensures a systematic and rigorous investigation of the research problem (Kassu, 2020; Moon et al., 2019; Webb & Welsh, 2019). It also serves as a comprehensive strategy that outlines the study's paradigmatic orientation, along with the specific procedures and methods to be used during the research. (Abdelsamie et al., 2014; Moon et al., 2019; Webb & Welsh, 2019).

Drawing inspiration from various scholars, I developed a research design reflected in *Figure 2.1* below. The inspiration took insights from Barnard (2007), Saunders et al. (2012), and Blaikie (Blaikie & Priest, 2019) and serves as a visual representation of the key elements in the research design, providing a visual signpost for structuring the flow of this chapter.

Figure 2.1

Research Design



Note. This figure was adapted from Barnard (2007), Saunders (2012), Blaikie & Priest (2019)

I continue to discuss my research design according to the flow and structure reflected in *Figure 2.1*, because it represents my approach to and strategy of the research as a whole. This is the way I made sense of my research design within the current context of research paradigms, philosophy of science, methodologies and strategies. The chapter commences with an explanation of my philosophy of science and congruent paradigm. Thereafter, based on the chosen paradigmatic orientation, I outline several methodological choices that directed the way I approached this study. These include my research orientation, which is described in terms of qualitative inquiry, and an HP approach. I then integrate my paradigmatic orientation and methodological choices into describing the qualitative, single-case case study design. With reference to the

research methods that operationalised this study, I discuss the research context, sampling, participant observation, the research procedure, data collection (WLQ, interviews, the focus group, additional data resources), data recording and management, data analysis method, and ethical and trustworthy research. I continue to describe how I incorporated IPA as my primary method of analysis in this study.

2.2 PARADIGM AND PHILOSOPHICAL ASSUMPTIONS GUIDING THE STUDY

A paradigm can be seen as a collection of core beliefs that deal with fundamental principles (Kamal, 2019; Rahman, 2023). It's like a way of looking at the world that shapes how someone sees the world, their role in it, and the different ways they can relate to it (Fushimi, 2021; Madill, 2015; Rahman, 2023). Paradigms, like cosmologies and theologies, are based on faith and cannot be proven to be absolutely true (Guba & Lincoln, 1994). Paradigms can be understood as systems of beliefs and practices that have a profound impact on a researcher's choice of study questions and the methods they employ (Guba & Lincoln, 1994; Kumatongo & Muzata, 2021; Shannon-Baker, 2016).

Instead of viewing paradigms as limiting creativity (Anand et al., 2020; Christ, 2014), and being rigid and restrictive, paradigms can be seen as theoretical nets that guide the direction of a study (Iofrida et al., 2018; Kekeya, 2019). Paradigms provide a framework for the researcher to contextualise the research problem. They offer guidance on how to address the problem, based on the researcher's beliefs about knowledge and reality (Anand et al., 2020; Bonache & Festing, 2020; Kumatongo & Muzata, 2021). Paradigms can be likened to a set of glasses through which individuals perceive and make sense of the world around them, as well as their own position within it (Christ, 2014; Guba & Lincoln, 1994; Madill, 2015). A specific paradigm can be seen as the culmination of the most informed and sophisticated viewpoint that its proponents have been able to construct (Rahman, 2023; Ugwu et al., 2021). A paradigm is the result of careful efforts to address three fundamental philosophical questions, which are key to approaching knowledge creation (Guba & Lincoln, 1994; Ugwu et al., 2021). The three questions concern the ontological, epistemological and methodological dimensions that define the science of knowledge (Guba & Lincoln, 1994; Yong et al., 2021). In this way, paradigms, as built on these three philosophical

tenets of science, serve as guiding principles that ground the scientific value of the research (Shannon-Baker, 2016).

In this section, I present the interpretive paradigm that guided my study, along with the specific philosophical assumptions that constituted my interpretive orientation to scientific inquiry (Ugwu et al., 2021; Yong et al., 2021). My paradigm is built on my philosophical beliefs and influences my methodological choices (Abdul Rehman & Alharthi, 2016; Alharahsheh & Pius, 2020; Iofrida et al., 2018). As far as paradigms within organisational research are concerned, the following approaches are used in literature: positivist, post-positivist, interpretivist, pragmatist and critical theory (Bonache & Festing, 2020; Kekeya, 2019; Kelle & Reith, 2023; Yong et al., 2021). In this study, I followed an interpretivist paradigm (2.2.1) based on the philosophical notions of a subtle realism (ontology – 2.2.2.1) and social constructionism (epistemology – 2.2.2.2). Methodological choices are discussed in the section hereafter.

2.2.1 Interpretive paradigm

In my research, I position myself firmly within the interpretive paradigm. Interpretive reasoning is a method for understanding and deciphering data, commonly employed in qualitative research methods (Farooq, 2018; Funk, 2019). It involves a thorough analysis and interpretation of different forms of data, such as text, images, or other qualitative types. The goal is to gain deeper insights into the meaning and context of the data (Farooq, 2018) and provide comprehensive descriptions of social constructs. (Abdul Rehman & Alharthi, 2016; Wahyuni, 2012).

Individuals under study are viewed foremost as conscious, symbolic, self-directed human beings, not primarily as biological organisms. They are subjects to be understood first and not merely explained (Abdul Rehman & Alharthi, 2016; Babbie & Mouton, 2012). Max Weber distinguished between "verstehen" (understanding) as a fundamental aspect of the interpretive approach and "erklären" (explaining), which is commonly found in the natural sciences (Babbie & Mouton, 2012; Crotty, 1998; Kumatongo & Muzata, 2021). Interpretivism looks at the social lifeworld from culturally derived and historically situated interpretations (Alharahsheh & Pius, 2020; Pulla & Carter, 2018). This approach is frequently applied in fields such as sociology, anthropology, and psychology to understand human behaviour and social phenomena

(Pulla & Carter, 2018; Yong et al., 2021). In the context of organisational psychology, the interpretive focus centres on understanding the fundamental meanings attached to organisational life and uncovering multiple subjectivities. The objective is to immerse oneself in the everyday activities of the organisation to gain insight into and explain the experiences of employees (Bonache & Festing, 2020; Saunders et al., 2019).

Interpretivism, also known as interpretive sociology or interpretive anthropology, places a strong emphasis on the subjective understanding of individuals and the pivotal role of interpretation in social research (Al-Ababneh, 2020; Moon & Blackman, 2014). The interpretive perspective claims that reality is socially constructed through the meanings and interpretations that individuals attribute to their experiences (Alharahsheh & Pius, 2020; Bonache & Festing, 2020; Chowdhury, 2014). Interpretivists believe that understanding human behaviour requires a thorough exploration of the meanings people assign to their actions within the social contexts in which these meanings arise (Chowdhury, 2014; Saunders et al., 2019; Van der Walt, 2020). As such, constructivism and constructionism (also referred to as social constructionism) are both regarded as interpretive positions.

Constructivism (or constructivist) typically refers to the perspective that emphasises how individuals construct their understanding of the world through their experiences and interpretations. It focuses on the subjective nature of knowledge and how individuals create meaning (Kamal, 2019). Researchers in the field of constructivism are also dedicated to understanding the subjective experiences, explanations and perceptions of individuals (Abu-alhaija, 2019; Iofrida et al., 2018). However, in contrast to constructivism, constructionism extends this notion of subjectivity by also emphasising the role of social and cultural contexts, language, discourse and social interactions in shaping the understanding and creation of meaning by individuals (Forsyth, 2019; Galbin Damaschin, 2014; Nickerson, 2021). Constructionism suggests that knowledge and meaning are co-constructed through interactions with others within cultural contexts, through language and communication (Cunningham, 2014; Galbin Damaschin, 2014; Gergen, 2004).

In summary, constructivism and constructionism are both akin to the interpretivist paradigm. Both centre on individual interpretations and subjective meanings, with

constructionism extending the constructivist perspective by emphasising that all subjective individual meanings are shaped within a social and cultural context (Bøe, 2021; Iofrida et al., 2018). Consequently, individual understanding is co-constructed through interactions with others and within one's socio-cultural environment. The importance of subjective understanding and the inherently social nature of reality are key tenets shared by both perspectives. However, constructionism places a heightened emphasis on the pivotal role of language and social interactions in the process of meaning construction (Bøe, 2021; Cap, 2019; Iofrida et al., 2018; Rees et al., 2020).

In synthesising my position within the interpretive paradigm, I found that both constructivism and constructionism resonate with my perspective. These approaches collectively underscore the importance of subjective understanding in knowledge creation (Rabetino et al., 2021; Rahi, 2017). Constructivism, with its emphasis on how individuals construct their understanding of the world through experiences and interpretations, aligns with my belief in the personal nature of knowledge acquisition (Iofrida et al., 2018; Moon & Blackman, 2014). Concurrently, constructionism extends this view, highlighting the crucial role of social and cultural contexts in shaping these individual understandings. This dual alignment allows for a comprehensive approach that values both personal experiences and the influence of social interactions and cultural backgrounds in the construction of knowledge (Christ, 2014; Tadajewski, 2016).

As I now transition into discussing my philosophy of science, this integrated stance serves as a pivotal framework. It guides my exploration into the nature of scientific knowledge, recognising the interplay between individual cognition and the broader socio-cultural environment. This perspective will be crucial in exploring how scientific paradigms are individually constructed. It will also examine how they are socially co-constructed, highlighting the complex relationship between personal experiences and collective societal dynamics in shaping scientific understanding.

2.2.2 Philosophy of science

The philosophical beliefs of researchers reflect their assumptions of how they view the world, reality and existence and forms the basis of their research paradigm (Dangal, 2020; Mertens, 2012; Moon et al., 2019). A philosophy of science refers to the

overarching beliefs, assumptions and principles that constitute the building blocks of one's paradigm. These philosophical beliefs, assumptions, and principles further explain the paradigm. They ultimately guide how scientific inquiry is conducted, directing the development of knowledge (Al-Ababneh, 2020; Chege & Otieno, 2020). One's paradigm includes these philosophical questions about the nature of knowledge, the role of theory and observation, and the criteria for evaluating scientific claims (Abu-alhaja, 2019; Chege & Otieno, 2020). Philosophy in research helps create precise, clear, and rational arguments. It also accumulates knowledge that can assist in operationalising, delimiting, and re-contextualising further research, avoiding the need to reinvent the wheel each time (Muchanga, 2020). Philosophical assumptions will always be present, even if only in the background, to underpin the research methodology and strategies. In a certain sense, the researcher is making a philosophical commitment through the choices of research strategy (Matta, 2022; Saunders et al., 2012). Making assumptions at every stage in research, shapes how the researcher understands the research questions, the methods to be used and how the findings will be interpreted (Saunders et al., 2012).

Next, I elaborate on my ontological and epistemological assumptions as they relate to the interpretivist stance that I have taken in this study.

2.2.2.1 Ontology

Ontology is the philosophical explanation of understanding reality and comes from the Greek work '*ontos*', which means '*being*' and '*logos*,' which means '*study*' in Greek - thus a study of the nature of being or reality (Chege & Otieno, 2020; Muchanga, 2020). Ontological assumptions make statements about what kinds of social phenomena exist, the conditions under which they exist and the way in which they are related (Rahman, 2023). Ontology also refers to the nature of reality and what there is to know about the world (Abu-Alhaja, 2019; Ormston et al., 2013; Saunders et al., 2019). These assumptions indeed influence how researchers design and conduct their research (Moon et al., 2019; Muchanga, 2020). Ontological positions include: realism, subtle realism, critical realism, relativism, and idealism (Geldenhuys et al., 2015; van Manen, 2018).

There are three predominant ontological positions. Realism refers to an external reality, irrespective of people's beliefs (Shannon-Baker, 2016). This perspective differs from relativism, which denies the existence of an external objective reality altogether (Christ, 2014). Relativism suggests that reality is entirely dependent on subjective perceptions and that there is no objective truth or reality beyond individual or cultural interpretations (Crotty, 1998; Mead, 1936; Ormston et al., 2013). Idealism implies that reality is mind dependent and can only be known through social constructed meanings (Ormston et al., 2013; Van der Walt, 2020). Among the three dominant positions, variations in ontological perspectives have emerged to incorporate elements of more than one of these positions. One such position, critical or subtle realism, acknowledges the existence of an external objective reality or truth (Christ, 2014; Cunningham, 2014). However, it also acknowledges that our understanding of the external reality is influenced by subjective experiences and socially constructed meanings, and cannot be known with certainty (Cunningham, 2014; Habib, 2020). Critical realists believe in a world that is constructed through individual standpoints and perceptions. While there are a variety of perspectives on a single occurrence or object, Critical realism also recognises that there are realities that cannot not be known (Habib, 2020; Shannon-Baker, 2016). Critical realists find themselves in a dilemma by using theory in guiding the research process, while they admit that such theories are impartial or otherwise incomplete views of reality (Shannon-Baker, 2016).

My ontological preference is guided by subtle realism, which is congruent to the epistemological approach of social constructionism (Geldenhuys et al., 2015; Kumari, 2021), which I will discuss in the following section. Subtle realism is a philosophical stance in social research that navigates between the extremes of hard realism and relativism. This approach acknowledges the existence of an objective reality while also recognising that our understanding of this reality is inevitably influenced by human perception and social constructs (Duncan & Nicol, 2004). Subtle realism posits that while there is a real world that exists independently of our interpretations, our knowledge of this world is always mediated through our subjective experiences and social contexts (Cunningham, 2014; Rabetino et al., 2021). This perspective is particularly significant in qualitative research, where the focus is on understanding complex social phenomena and human experiences (Given, 2012).

In subtle realism, the researcher plays a crucial role in interpreting data. This approach emphasises reflexivity—the process of examining one's own beliefs, values, and biases and understanding how they influence the research (Cunningham, 2014; Mays & Pope, 2020). This approach does not claim an unattainable objectivity. Instead, it seeks a balanced understanding that recognises the existence of a real world while acknowledging the limitations and subjective nature of human knowledge (Hammersley, 2018). Subtle realism provides a nuanced framework for research. It aims to understand the complexities of human experiences and social phenomena while recognising that these experiences take place within a real, yet interpreted, world (Mays & Pope, 2020). This balance makes subtle realism an attractive approach for researchers. It bridges the gap between objective reality and subjective interpretation, fostering a meaningful and insightful understanding of the world (Hammersley, 2018).

2.2.2.2 Epistemology

Epistemology is derived from the Greek word “*episteme*”, which means “*truthful knowledge*” and refers to valid knowledge and a close approximation of truth (Babbie & Mouton, 2012). Knowledge is truthful when we have sufficient reason to believe that it is an accurate representation or explanation of a phenomenon, based on the best available evidence at a given point in time (Babbie & Mouton, 2012). In my exploration of epistemology, I delve into understanding the processes and approaches through which we perceive the world and construct our understanding of it. This inquiry seeks to unravel the methods by which we interpret our experiences, gather knowledge and form meaningful insights regarding our surroundings and existence. The foundation of social research is, amongst others, found in meaning and perspective in the research process (Abu-alhaija, 2019). This foundation is laid when we explain, through our epistemology, how we know what we know (Al-Ababneh, 2020; Crotty, 1998).

Knowledge is not an entity or substance but constructed through social processes. We could refer to such constructed knowledge as perspectivistic, since it represents different realities (Geldenhuys et al., 2015). According to Gergen (2011), these social processes develop rules to indicate what are hard facts, often trying in this way to obtain social control (Geldenhuys et al., 2015). The two major epistemological positions are objectivism and subjectivism (Al-Ababneh, 2020), with other epistemologies manifesting somewhere between these two opposing positions.

Objectivism refers to the idea that meaning and meaningful reality exist separate from the operation of any consciousness and that it is apart from social actors (Al-Ababneh, 2020; Crotty, 1998; Park et al., 2020). Objectivism relates to the characteristic of the procedures and methods employed in science for acquiring evidence (Babbie & Mouton, 2012; Moon & Blackman, 2014). An objective process is one that reduces error in the process of research (Biesta, 2014; Moon et al., 2019). Subjectivism embraces epistemological assumptions in opposition to objectivism and is more aligned to the interpretivist paradigm. From an interpretivist perspective, I embrace a subjectivist epistemology, as it aligns with social constructionism (Al-Ababneh, 2020; Farooq, 2018). Consequently, because my interpretive paradigm is social constructionist, I adopted a subjectivist epistemology (Farooq, 2018; Yilmaz, 2013).

Subjectivism entails that social phenomena are created from the perceptions and consequent actions that social actors have and display. This could also refer to the reality that is occurring behind what is happening (Ormston et al., 2013; Zahavi, 2021). People give their own subjective meanings to experiences, objects and people. This subjective concept involves placing greater emphasis on the perspective of participants regarding the situation under investigation (Koch et al., 2013; Yilmaz, 2013). For the purpose of this study, it was crucial that participants could react freely and therefore a combination of semi-structured and open-ended questions was used (see under strategies). The process of interaction amongst individuals forms part of the researcher's efforts, referring also to the context that people live and work in (Nigar, 2020; Saldaña, 2013). People place different emphases on the situation that they experience (Ophir & Jacoby, 2020). Subjective experiences are in line with their world view (Bogna et al., 2020). It is interconnected to each person's relationship to the situation (Ophir & Jacoby, 2020; Saunders et al., 2012).

Paradigmatically, social constructionism is really an epistemological stance about knowledge creation. Social constructionism as a paradigmatic stance entails "a theory of the knowledge of sociology and communication that examines the development of a jointly constructed understanding of the world" (Galbin, 2014, p. 82). Epistemologically, it focuses on the meanings allocated to facts rather than their literalness (Bøe, 2021). This subjective epistemological focus of social constructionism is on the processes through which people reach their understandings of themselves

and their worlds (Khan, 2021; Nickerson, 2021). It recognises the existence of multiple social realities constructed by different people (Wilson & Tagg, 2008), which are known in relation to one another (Farooq, 2018; Geldenhuys et al., 2015). Knowledge is continuously constructed in relationship (Geldenhuys et al., 2015) and is local and developed within a community of people (Khan, 2021). The rules for knowledge are set by the same people (Rees et al., 2020). The social basis of human nature starts as a social process and evolves within different relations and cultures (Geldenhuys et al., 2015; Rees et al., 2020). For example, the idea of Ubuntu supports the notion that a person becomes a person through their relationships with others (Geldenhuys et al., 2015). Social constructionism emphasises the making of meaning and the construction of knowledge through interactions between humans and their world (Al-Ababneh, 2020; Crotty, 1998). Knowledge of the world and the self originates in human relationships (Gergen, 2011). Meaningful reality is brought into being through historically and culturally situated social processes (Gergen, 2011).

People express their interpretations through language, which determines the nature of their experiences (Finlay, 2009; Kumari, 2021). Speech is grounded in cultural consensus as a social construction of reality (Galbin, 2014). Social constructivism emphasises the role of the individual in constructing social realities (Löhr, 2021). Knowledge resides in relationships rather than in the individual mind (Floridi, 2011; Gergen, 2011). All knowledge is considered local, fleeting and negotiated between people within a specific time frame and context (Farooq, 2018; Raskin, 2002). Subject and object become unified in the co-construction of meaning (Stenfors et al., 2020). Epistemologically, social constructionism underscores the importance of understanding the social processes through which individuals construct meaning. It emphasises the role of relationships, language, and cultural contexts in shaping knowledge and realities (Kelle & Reith, 2023).

In this section, it is essential to elucidate how this study was socially constructed. During the research, I explored each participant's personal experiences and perspectives on their intervention. I also considered how these were influenced by the collective and interactive experiences of the participants as a group. As such, I conducted individual interviews and a focus group (as explained in the case study design, section 2.4 below). In this way I co-constructed the findings of this study with

the participants. In summary, the research process was socially constructed because it was operationalised in a dynamic and collaborative way, noted in the following:

- i. *Utilisation of group experiences and data:* The social construction of my study is rooted in the incorporation of group experiences and data. The utilisation of group interactions and experiences allowed for a multi-faceted exploration of the research subject. It enabled me to capture the diverse perspectives, interpretations and collective sense-making within the group, adding depth and richness to our findings.
- ii. *Researcher's role in co-constructing meaning:* The active role of the researcher in the co-construction of meaning and knowledge with the participants is acknowledged. As a researcher, I brought my unique set of meaning-making lenses, which played a crucial role in shaping the interpretive process. The interactions with the participants were not passive observations; they were dynamic exchanges that shaped the direction and depth of the inquiry.
- iii. *Diverse Data Sources:* The socially constructed nature of our study is also evident in the diverse range of data sources employed. These sources included a WLQ, a summative observation report of the SMI sessions by the GIM therapist, artworks (Mandalas and clay work) completed during the GIM sessions, as well as individual interviews and a focus group that was convened at the end of all the sessions.
- iv. *Group interventions:* In this study, the term intervention refers to the broader SMI programme designed for stress management in HE, which included GIM-informed music-and-art-based sessions. When referring specifically to those sessions conducted in alignment with therapeutic processes as defined in GIM literature, the term therapy is used. This distinction maintains conceptual clarity while respecting the formal definitions within the field of music therapy.

My research embraced a unique approach to data collection, incorporating GIM sessions, facilitated in a group setting. GIM sessions facilitated structured

discussions within the group, where participants engaged in a profound exploration of their collective experiences and perspectives. This approach allowed me to tap into their inner narratives and emotions, unveiling deeper layers of meaning.

- v. *Observations as results of interactions:* The observations presented in this study are not detached from the research process, but rather the results of ongoing interactions with the participants and the comprehensive data collection methods employed. The dialogues during intervention sessions lead to collaborative sense-making within the group. In addition, further insights were derived from interviews, a focus group discussion, and the therapist's feedback. All of these were integral to the development of my interpretations.
- vi. *Interviews:* Post-intervention, individual interviews allowed for a more personal and in-depth exploration of each participant's perspective. These interviews provided a holistic understanding of their unique viewpoints, significantly enhancing the richness and depth of the research findings.
- vii. *Focus group:* In conducting the focus group following the six GIM sessions, I employed a semi-structured approach that significantly contributed to co-constructionism in our research. By combining specific guiding questions with the opportunity for open-ended responses, this method facilitated a rich, dialogic process where participants could share and expand upon their experiences. This interactive setup allowed for the co-construction of knowledge, as the insights and narratives shared by participants were not only expressions of their individual experiences but were also shaped by the collective dynamics and interactions within the group setting. This approach thus aligned with the principles of co-constructionism, emphasising the collaborative creation of meaning and understanding in research.

By incorporating these details, I not only highlight the socially constructed nature of this study but also emphasise the richness and depth of the data sources, showcasing the multiple dimensions of my research process. In the next section, I discuss my methodological choices, which focus on the theoretical and practical approaches

underlying the research problem. These choices shaped my strategies for data gathering and analysis.

2.3 METHODOLOGY

In this section, I explain HP as the methodological approach directing the pivotal methodological choices of this research (Alase, 2017). This includes aligning the methodological choices with the previously presented paradigmatic orientation and its philosophical assumptions. It also covers the specific research methodology and the qualitative research strategy employed in this study (J.L. Johnson et al., 2020; Rose & Johnson, 2020; Sundler et al., 2019). Methodological integrity, essential for ensuring confidence in research, is achieved when the design and procedures align with the research goals, respect the chosen inquiry approaches, and are tailored to the subject matter (Levitt et al., 2017; Rose & Johnson, 2020). The methodology, as a formalisation of the epistemological position into practice, shapes strategies for data gathering and analysis. This leads to the generation of knowledge that either fits into existing theories or offers new insights (Iofrida et al., 2018; Sundler et al., 2019).

Following the HP methodology, methodological choices included a qualitative inquiry and the application of IPA as analytic approach. These methodological choices led to the selection of a single-case study, enabling a deep exploration and understanding of the experiences and meanings attributed to a specific case. The aim was to uncover the rich and subjective perspectives of the individuals involved (Anand et al., 2020; Kenny, 2015). The Single-case Case Study design is discussed in the next section.

2.3.1 Hermeneutic Phenomenological approach

Different disciplines and fields of study often approach research from distinct theoretical perspectives, influenced by their unique paradigms and frameworks (Farooq, 2018; Ingham-Broomfield, 2015). A theoretical perspective in research refers to a particular lens or framework through which a researcher views and interprets a phenomenon or problem. It provides a set of assumptions, concepts and principles that guide the research process and shape the way data is collected, analysed and interpreted (Abu-alhaija, 2019; Leung, 2015). Researchers have the flexibility to choose one or multiple perspectives based on the nature of their study.

In this particular study, an HP perspective was adopted to approach the research phenomenon in its totality (Dangal, 2020; Geldenhuys et al., 2015). HP is a qualitative research methodology commonly used in the humanities and social sciences, particularly in fields such as philosophy, history, literature and cultural studies (Crowther & Thomson, 2020; Qutoshi, 2018). It aims to systematically explore and understand human experiences within their cultural and historical context (Dressler, 2019; Qutoshi, 2018; Suddick et al., 2020).

The choice of HP in this study was driven by its congruence with the interpretivist paradigm and social constructionist assumptions. As noted before, Social Constructionism emphasises how subjective meaning and understanding are socially created and negotiated within specific contexts (Geldenhuys et al., 2015; H. Jung, 2019; Nickerson, 2021). By adopting HP, the researcher aimed to reveal the subjective experiences and the genuine nature of things, considering individuals within their cultural, historical and socio-political context (Kumar, 2012). In the next section I will discuss the three important theoretical elements characteristic of HP that were applied, namely researcher self-reflection, inductive, abductive, and deductive reasoning and meaning making through the hermeneutic circle. For HP, 'self-reflection' and the 'hermeneutic circle' are ways to ensure credibility and authenticity in the inquiry.

2.3.1.1 Self-reflection

In line with my social constructionist epistemology, Gadamer's idea of hermeneutics states that our own beliefs and ideas come from our own language experiences, which help us understand things. He also says that when people communicate, they share a common understanding or universal consciousness, which makes it possible to understand each other. This shared understanding is called a "fusion of horizons." (Gadamer, 1975). Merleau-Ponty (1962) states clearly that the researcher and the co-researcher (participant) intermingle, touch and impact each other, co-creating meaning. The researcher's attention should fluctuate between focusing on personal assumptions and looking at the participant's experiences in a renewed way (Lengyel, 2018). Still, the focus of the researcher should be with the research participant and the phenomenon as it appears before them (Lengyel, 2018). As such, Gadamer (1975) emphasises the importance for researchers to be aware of their own biases. This awareness allows the text to present itself in its uniqueness, ensuring its own truth, rather than being shaped by the researcher's fore-meanings. My approach to data

analysis mirrored the concept put forth by Van Manen (2018), which suggests that a phenomenologist should focus their attention on the areas where meaning begins, emerges and seeps through the layers of prior experiences. This meaning then flows into us, influences us, saturates us, impacts us and stirs our emotions, thus shaping us in the process (Finlay, 2009; van Manen, 2018).

In my thesis, the practice of self-reflection was an integral part of the research process, primarily conducted through two distinct methods: journaling and critical discussions with my supervisor. Journaling served as a tool for ongoing introspection, allowing me to document and critically examine my thoughts, biases and evolving understanding throughout the research journey. This process not only helped in acknowledging my subjective influences but also in shaping a more nuanced approach to the analysis. Furthermore, engaging in critical discussions with my supervisor provided an external perspective, challenging my assumptions and ensuring a balanced interpretation of the data. Evidence of this self-reflective practice is woven throughout the thesis, particularly within the methodology section, where I discuss the research approach and my role as a researcher. Additionally, traces of this reflexivity are evident in the analysis and discussion sections, where my insights, shaped by ongoing self-reflection, play a crucial role in interpreting the findings and drawing conclusions.

2.3.1.2 Induction, deduction and abduction

The integration of inductive, deductive, and abductive reasoning forms a cornerstone of robust problem-solving and inference. Inductive reasoning facilitates the derivation of general conclusions from specific observations (Johansson, 2018), while deductive reasoning ensures logical coherence by testing hypotheses against established premises (Cramer-Petersen et al., 2019). Abductive reasoning complements these methods by providing the best possible explanations for phenomena, even in the face of ambiguity (Karlsen et al., 2021; Upmeier Zu Belzen et al., 2021). This approach cultivates innovative and adaptive insights (De Luca Picione, 2015; Erciyas, 2020).

This iterative process mirrors the hermeneutic circle, where understanding evolves through a dynamic interplay between the parts (data or observations) and the whole (theoretical frameworks or hypotheses). In qualitative research, abductive reasoning particularly aligns with this cycle, guiding researchers in uncovering hidden connections and meanings through iterative exploration and refinement (Hwang & Kim,

2023; Karlsen et al., 2021; Shani et al., 2020). By engaging in a back-and-forth process between data collection and hypothesis generation, researchers build theoretical frameworks that make sense of complex social and cultural contexts (Chege & Otieno, 2020; Rose & Johnson, 2020).

By harmonising these reasoning methods, researchers adopt a holistic analytical framework. Deductive reasoning validates findings (O'Dowd et al., 2018; Saunders et al., 2018), inductive reasoning uncovers novel patterns (Percy et al., 2015; Saunders et al., 2018), and abductive reasoning bridges gaps in understanding through dynamic, explanatory model generation (De Luca Picione, 2015; Shaffer, 2022). This triadic approach aligns with the hermeneutic circle's emphasis on continuous reiteration. It fosters a nuanced and comprehensive understanding of research questions, enriching both theoretical and practical contributions (Hwang et al., 2019; Shani et al., 2020).

The reasoning process combining inductive, deductive, and abductive approaches was applied strategically throughout this research to enhance its rigour and comprehensiveness, in the following ways.

i. Methodology and research question development

The study employed a Hermeneutic Phenomenological (HP) methodology to explore how HE employees experienced a music- and art-based Stress Management Intervention (SMI) in relation to their stress management and coping capacity. The central research question guiding the inquiry was: "How do HE employees experience a music- and art-based Stress Management Intervention in relation to their stress management and coping capacity?", was supported by sub-questions. These addressed the psychological and neuroscientific impacts of music and art, their role in coping with workplace stress, and participants' experiences with GIM sessions.

Abductive reasoning informed the development of these questions, providing plausible starting points based on established psychoanalytic and neuroscientific frameworks. This approach allowed the research to remain exploratory and flexible, while also engaging with existing knowledge to refine inquiry directions (Karlsen et al., 2021).

ii. Data collection and analysis

Data collection methods included a WLQ and a summative observation report of the SMI sessions by the GIM therapist. Additional methods included artworks (such as Mandalas and clay work) created during the GIM sessions, individual interviews, and a focus group convened at the end of all the sessions. These approaches ensured a comprehensive inductive understanding of participants' lived experiences within the context of the intervention. The analysis followed IPA, which emphasises the exploration of personal meaning and lived experience, aligning with the HP methodology.

Inductive reasoning was central to the IPA process, facilitating the emergence of themes and patterns directly from the data. Deductive reasoning then allowed these themes to be contextualised and validated against existing psychoanalytic and neuroscientific theories within employee wellbeing. Abductive reasoning played a critical role in interpreting unexpected findings and refining theoretical insights. This iterative back-and-forth between reasoning methods ensured a dynamic and nuanced understanding of the data (Shaffer, 2022).

iii. Frameworks and theoretical integration

Situated within a case study design, the research was grounded in psychoanalytic and neuroscientific frameworks relevant to stress management and coping in IOP. Deductive reasoning ensured alignment with these established frameworks, while abductive reasoning facilitated the integration of novel insights. This was particularly useful in understanding the mechanisms by which music- and art-based SMIs influenced stress responses and coping strategies.

This integration of reasoning approaches provided a robust interpretive process, enabling the study to offer practical and theoretical contributions to employee wellbeing. By combining inductive, deductive, and abductive reasoning, the research achieved some understanding of participants' experiences while remaining open to emergent and context-specific findings.

2.3.1.3 The hermeneutic circle

In this study, to apply HP, I employed IPA as the specific HP analytic method/strategy (Alase, 2017; Geldenhuys et al., 2015). The focus of IPA on exploring and interpreting

individual experiences through in-depth interviews aligns well with the hermeneutic circle concept. This circle represents an iterative understanding process, where the whole is understood through its parts and vice versa, a core aspect of HP. The analysis of qualitative data in IPA aims to uncover the underlying meanings and themes in the subjective experiences of participants (Dowling & Cooney, 2012; Pietkiewicz & Smith, 2014), mirroring the iterative nature of the hermeneutic circle.

By adopting an HP perspective and utilising IPA, this study sought to gain comprehensive insights into the experiences of specific employees who encountered stress in their workplace. This involved a dynamic dialogue between the researcher and participants, focused on understanding their subjective realities. The goal was to illuminate the intricate interplay between individual experiences and the broader social and cultural context (Afifi et al., 2016; Papparini et al., 2020; Ryan et al., 2017; Yousefi et al., 2016). In this study, the combination of GIM sessions, in-depth individual interviews and a focus group session contributed to a comprehensive understanding of the lived experiences of employees facing workplace stress. The GIM sessions provided a unique avenue for participants to express and process their experiences, which were further explored through interviews. The subsequent focus group discussion offered additional dimensions of collective insights. This triangulated approach enriched the findings, providing valuable insights for future research and the development of targeted interventions in this area (Chtibi et al., 2018; Gallup Panel, 2020).

2.3.2 A qualitative inquiry

An essential methodological choice pertains to the type of study. The type of study should be aligned to the research approach and refers to the overall strategy or plan for conducting research, such as quantitative, qualitative or mixed methods. It involves decisions about the research methodology, data collection methods and data analysis techniques to be used (Boddy, 2016; Petty et al., 2012). As stated previously, I chose a qualitative inquiry for this study.

There is no single definition of qualitative research, and it can mean different things to different people. Qualitative researchers study things or people in their natural settings and try to make sense of phenomena in terms of the meanings people bring to them. (Aspers & Corte, 2019). I find the definition of Yilmaz (2013, p.312) on qualitative

research very accurate: “I define it as an emergent, inductive, interpretive and naturalistic approach to the study of people, cases, phenomena, social situations and processes in their natural settings in order to reveal in descriptive terms the meanings that people attach to their experiences of the world”. Qualitative research focuses mainly on a richly descriptive account of a certain phenomenon and data is usually collected in a more naturalistic setting (J.L. Johnson et al., 2020).

A qualitative form of inquiry permits an inductive style where the researcher focuses on individual meaning, interpreting the complexity of the situation (Saunders et al., 2019). The researcher builds from particular information obtained from the participants to general informed themes (Saunders et al., 2019). Therefore the phenomenon that participants experienced, should be described and understood by means of capturing and verbalising their experiences in their own words (Kafle, 2013). Conclusions extrapolate, often dramatically, beyond the information given in the premises. In order to build accurate premises, I moved really close to the participants in order to gain trust, because all of us co-created the meaning of a phenomenon (Finlay, 2009; Kumar, 2012; Yilmaz, 2013). These extrapolations lead to paradigmatic verbal inductive arguments containing generalising a characteristic from a certain case to new cases (Oaksford & Chater, 2020).

Qualitative inquiry can include specific theoretical approaches and designs such as case study designs, ethnography, narrative inquiry, phenomenology, grounded theory, discourse analysis, feminist qualitative research or historical qualitative research (Lewis, 2015; Tomaszewski et al., 2020). The specific theoretical approach forms the lens through which the qualitative research is conducted. As part of my qualitative inquiry, I incorporated an HP approach as discussed above.

2.3.3 Interpretive Phenomenological Analysis

In my research, I employed IPA as the primary method for data analysis within the broader framework of HP (Hofstee, 2018; Thanh & Thanh, 2015). The primary purpose of IPA is to explain the lived experiences of individuals regarding specific phenomena (Alase, 2017). This focus on lived experience is crucial, as it enables researchers to uncover the meanings participants attribute to their experiences. It provides insights that are often overlooked in more quantitative approaches (Petitmengin et al., 2018).

The theoretical principles underpinning IPA are threefold: idiographic, hermeneutic, and phenomenological. The idiographic aspect emphasises the importance of individual cases, allowing researchers to delve deeply into the unique experiences of each participant (Rajasinghe, 2020). This contrasts with nomothetic approaches that seek generalisable findings across larger populations. The hermeneutic component emphasises the interpretative nature of understanding, where researchers engage in a "double hermeneutic" process. This involves interpreting participants' interpretations of their experiences (Larkin et al., 2011; Montague et al., 2020). Finally, the phenomenological aspect focuses on the essence of lived experiences, seeking to capture the subjective realities of participants in a way that honours their perspectives (Finlay, 2014; Gyollai, 2020).

IPA is a comprehensive approach for systematically exploring and understanding individuals' lived experiences and the subjective meanings they ascribe to events, thoughts, and emotions (Gyollai, 2020; Rajasinghe, 2020). It provides rigorous methods for interpreting data, enabling researchers to uncover shared experiences (constructionism) and individual variations (constructivism) (Nizza et al., 2021; Rees et al., 2020). Using tools like open-ended interviews and focus groups, IPA immerses researchers in participants' narratives to identify themes that reflect their inner worlds.

By embracing the philosophical foundations of phenomenology, IPA bridges the gap between the individual and the universal. It creates a convincing narrative that captures the essence of participants' experiences, enriching the field of qualitative inquiry (Finlay, 2014; van Manen, 2018).

Data sources such as interviews and focus groups are selected not only for their richness but also for their ability to capture participants' meaning-making processes, consistent with the IPA framework (Eatough & Smith, 2017). Moreover, IPA's iterative analytic steps—moving from descriptive to interpretative themes—align with the objectives of the case study. These steps ground the analysis in participants' narratives while allowing for thematic abstraction and reflexivity (Larkin et al., 2011; Smith, 2011). This approach ensures that the analytic process remains participant-centred and contextually sensitive, while the broader HP framework provides philosophical grounding in understanding lived experiences (Rajasinghe, 2020). By incorporating IPA's structured methodology, the case study gains meticulousness in

analysis, enabling a nuanced exploration of the participants' experiences within a specific context (Smith, 2011).

Next, I discuss the case study design in which the HP methodology and specifically the idiographic focus underlying IPA, serve as a key design principle.

2.4 CASE STUDY DESIGN

All my methodological choices were congruently incorporated into a single-case study mixed qualitative methods design, which provided an in-depth examination of a singular case (Peck & Mummery, 2019; Staller, 2012) offering valuable insights into its unique characteristics and intricacies (Hyett et al., 2014). The mixed qualitative methods element reflects the intentional integration of multiple qualitative data sources—semi-structured interviews, a focus group discussion, participant-generated artworks, and the therapist's observational report—within the single-case framework. This combination enabled a richer, more holistic understanding of the phenomenon than would have been possible through a single qualitative method alone, and allowed for triangulation of findings to enhance the credibility of the results (Creswell & Plano Clark, 2018; Flick, 2018). The case study design applied in any particular study should not only incorporate but also reflect both the research methodology—in this study, the HP approach—and the research strategy, which followed a qualitative orientation (Ylikoski & Zahle, 2019). This integration is crucial for ensuring the rigour and relevance of the research.

A case study is defined as an in-depth inquiry where the researcher extensively explores an event, a program activity, a process or one or more individuals within various real-life contexts (Saunders et al., 2012; Takahashi & Araujo, 2020). This design was particularly suited to my study because of the need to understand complex phenomena underlying an intervention activity, in detail. The case study involved conducting a comprehensive investigation into a single (case) or a small number of instances (cases) to gain a deeper understanding of a particular phenomenon (Takahashi & Araujo, 2020; Yin, 2012). Choosing the single-case study design was influenced by the nature of my research question, the context of my study and the type of data I aimed to collect. The specific strategy approach taken in a case study is further shaped by the nature of the activity, time constraints and the utilisation of

various data collection methods over a specified period (Creswell, 2009; Saunders et al., 2012).

In this section, I first detail the methodological nature of the case study design that I employed, explaining how it aligns with and supports the aims of my research. Second, I provide clarity on the case study design strategy, elaborating on how it effectively facilitates the investigation of “How do HE employees experience the value and effect of a music- and art-based SMI on their stress management and coping capacity?”. This approach not only aligns with the guidance of Ylikoski and Zahle (2019) but also serves to ensure a comprehensive and nuanced understanding of the research topic.

2.4.1 Characteristics of the case study

A case study design is constructed to bridge the gap between the initial research inquiries and the final research conclusions. The initial inquiries begin with identifying a research problem, which in this study focuses on the prevalence of stress in the workplace, specifically within the context of HE. It also addresses the need for effective stress management strategies to support employees in coping within this particular context (Schoch, 2020; Ylikoski & Zahle, 2019). The purpose statement of this study, which seeks to investigate the value of a music and art-based SMI to facilitate the stress management and coping capacity of HE employees in the workplace, aligns seamlessly with the case study design. This alignment is particularly evident in the exploratory nature of the study, as the complexity and multifaceted aspects of workplace stress in HE necessitate an in-depth examination within its real-life context (du Plessis, 2019; Okezue et al., 2020). The case study design is uniquely suited for this exploratory research, offering a comprehensive approach to understanding the nuances of stress and the effectiveness of various management strategies (Urbina-Garcia, 2020). This design enables detailed information gathering, observation of processes and a deep dive into the specific experiences and contexts that shape stress in HE settings. Furthermore, the descriptive aspect of the study is also well catered to by the case study approach. This approach is effective in capturing the detailed and nuanced descriptions of stress management and coping manifestation experiences within the unique cultural and structural framework of HE institutions (Dunmade et al., 2019).

Moreover, the flexibility in data collection methods that a case study design offers is crucial for a study that is both exploratory and descriptive (du Plessis, 2020). This flexibility allows for the utilisation of various data collection methods like interviews, observations and document analysis, providing a well-rounded and comprehensive understanding of the stress phenomenon in the unique context of HE. I used the data sources as described in 1.8.3. The use of a case study design is further supported by the literature, with works like Schoch (2020) and Takahashi and Araujo (2020) reinforcing its suitability for studies with similar goals. This approach not only aids in accurately describing and exploring the issue at hand but is also invaluable in developing and evaluating context-specific interventions for stress management in HE settings. Thus, the choice of a case study design is both appropriate and essential for achieving the exploratory and descriptive objectives of this study. It ensures a thorough and contextually relevant understanding of workplace stress within the HE sector (Buhrmann, 2016).

According to Yin (2014) the underlying methodological purpose of the research determines the specific type of case study. He distinguishes between exploratory, explanatory and descriptive case study types. In the context of this study, which is qualitative, exploratory and descriptive in nature, the selection of a descriptive case study type is most fitting (Paparini et al., 2020). This approach aligns with the aim to explore how a music- and art-based Stress Management Intervention may support the stress management and coping capacity of HE employees in the workplace. The descriptive case study enables a detailed and nuanced portrayal of the phenomenon in its natural setting. It provides an in-depth understanding of the unique stressors and coping mechanisms specific to this environment (du Plessis, 2020; Lin et al., 2017). This type of case study is particularly effective at capturing the rich, contextual data needed for a comprehensive understanding of complex issues like workplace stress. It allows the researcher to explore the specific factors that contribute to or mitigate stress in the educational workplace (Hyett et al., 2014). Consequently, by leveraging the descriptive case study design, this research can fulfil its qualitative, exploratory, and descriptive objectives. It offers valuable insights into the dynamics of stress and its management in HE.

2.4.2 Single-Case Study design with an idiographic concern

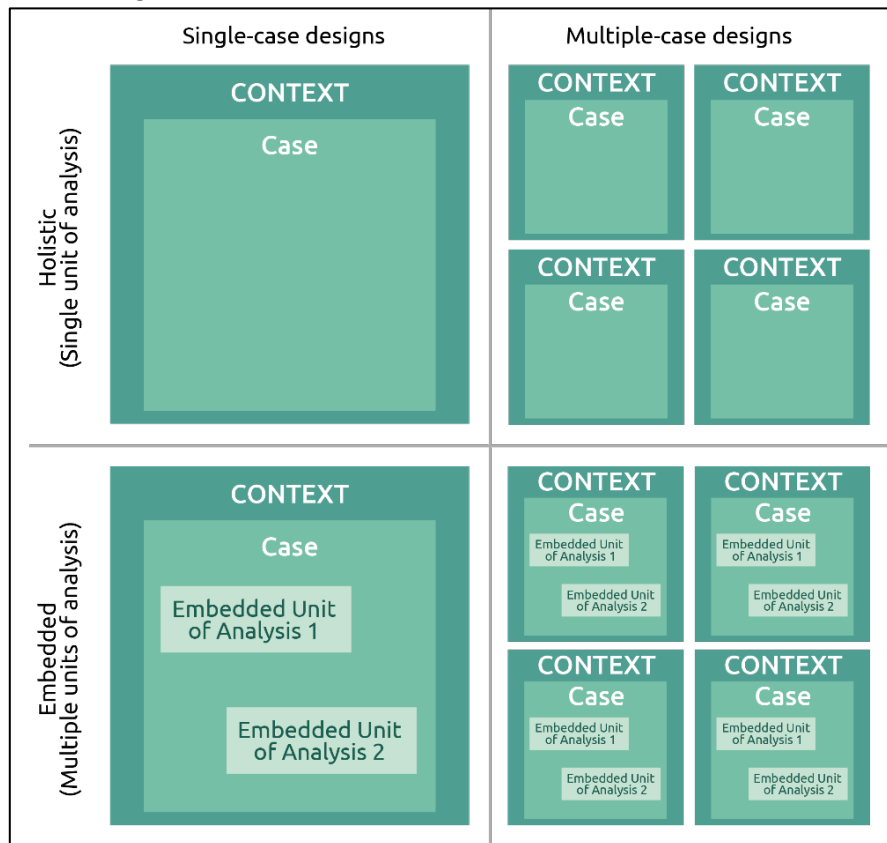
Designing a case study from a research strategy perspective, Ylikoski and Zahle's (2019, p. 3) definition of case study research offers a comprehensive strategy framework that contains a consideration of the following key aspects:

- Focus on a single case or a very limited number of cases.
- The case is a naturally occurring item or process conceptualised as representative of something.
- In-depth study of the case, involving extensive data collection.
- Utilisation of multiple methods for data collection and analysis, driven by research questions.
- The aim is to produce a comprehensive and in-depth account of the case, often presented in a narrative form.

Based on such considerations, Yin's typology of case study designs offers four options: holistic single-case design, holistic multiple-case design, embedded single-case design and embedded multiple-case design (Yin, 2012; Ylikoski & Zahle, 2019). Yin's typology is depicted in *Figure 2.2* below. Using the considerations outlined by Ylikoski and Zahle (2019), I designed a holistic single-case study (Tomaszewski et al., 2020; Yin, 2014), while retaining the idiographic focus on the individual as the unit of analysis. This approach aimed to explore individual experiences as both constructed and co-constructed in a group setting.

Figure 2.2

Basic Types of Design for Case Studies



Note: (Yin, 2012)

My study focused on a single case within a tertiary educational environment. The ‘case’ under investigation was the Stress Management Intervention (SMI) within the HE (HE) institution, while the individual employee served as the primary unit of analysis (Terre Blance et al., 2007; Yin, 2012; Ylikoski & Zahle, 2019).

The case as a naturally occurring item or process conceptualised as representative of something: Here, I was looking at my chosen case as a microcosm or a representative example of a broader issue or phenomenon. The case was not an outlier. Instead, it typified the larger set of similar cases, allowing me to draw broader insights from the in-depth analysis.

2.4.2.1 Defining and binding the case

A case can be an individual, a group, an event, an organisation or even a community. In this study the case was the SMI in the context of the HE institution and involved selecting a small number of subjects to participate in the study. The choice of the SMI

was deliberate, aimed at illuminating a particular phenomenon or issue (i.e. stress management and coping). The aim was to delve into this case, gaining a comprehensive understanding of it within its real-life context. The focus was on the unit of analysis, which consisted of nine stressed employees in HE who volunteered for the study and expressed interest in engaging in an SMI.

In order to ensure homogeneity in the process of sampling experiences, the study focused exclusively on a single institution. The overall research objective of this study was to investigate the value and effect of music and art as integrated stress-management intervention modalities. Conducted over several weeks, the study aimed to explore how these interventions were experienced in relation to the stress management capacity and coping responses of HE employees in the workplace.

In case study research, it is essential to define clear boundaries to ensure the study remains focused, manageable, and contextually relevant. Bounding a case helps to specify the scope of the study, outline its context, and ensure that the research questions are effectively addressed. Yin (2014) emphasises that bounding a case is critical for establishing the case's parameters and maintaining the integrity of the research design. Without clear boundaries, the study risks becoming too broad or losing its contextual specificity.

Aspects that bound my case study:

- Single institution: The research was conducted within a single tertiary educational institution.
- Specific intervention: A once-off SMI implemented through six GIM sessions facilitated by the same practitioner.
- Time frame: The intervention was carried out over a period of six weeks.
- Theoretical framework: The SMI was guided by the principles of the GIM approach.
- Participant selection: Nine participants volunteered to partake in the study after reporting high levels of stress and expressing a need for SMI.
- Sample size: The study focused exclusively on the nine participants who met the inclusion criteria.

This structured approach ensured a clear focus and facilitated a thorough exploration of the phenomena within a defined and manageable context.

The GIM sessions, designed as a therapeutic approach, were aimed at exploring the emotional and psychological responses of participants in a structured, yet expressive environment. Through these sessions, each individual's unique experience with stress and their coping mechanisms, were examined. The extended nature of the intervention provided an opportunity to observe changes and developments in the stress management strategies of the participants over time. This approach was instrumental in understanding not only the immediate impact of the GIM sessions but also their sustained effects on employees' ability to manage workplace stress.

One possible limitation of this research strategy is the potential for an insufficient number of participants to achieve a fully saturated case sample (Yin, 2014). However, in qualitative research the objective is not to quantify opinions or individuals but to delve into diverse perspectives and representations of a specific issue (Erciyas, 2020; O'Reilly & Parker, 2013). Therefore, conventional quantitative sampling procedures do not apply to qualitative research (O'Reilly & Parker, 2013). To address this, I engaged in collaborative interactions with participants to allow them to shape emerging themes and abstractions during the research process (Wolgemuth et al., 2015; Yin, 2018). Case study research can extend beyond exploratory functions and be utilised for comprehensive studies (Yin, 2014). In light of these considerations, the size of the sample in this study was determined not by conventional quantitative metrics, but by the needs and nature of the qualitative inquiry. Given the focus on in-depth, collaborative interactions, a smaller, more manageable number of participants was chosen. This approach aligns with the principle of 'saturation' in qualitative research, as described by Strauss and Corbin (1990). Saturation is reached when additional data no longer brings new insights to the research questions. The sample size consisted of nine stressed HE employees. This was deemed appropriate as it facilitated a thorough exploration of each participant's experiences and perceptions during the GIM sessions. The smaller sample size ensured that the depth and quality of the data collected were not compromised.

Furthermore, the intimate scale of the sample fostered a more nuanced understanding of the experiences of the participants, ensuring that the study could delve deeply into the complexities and subtleties of stress management through music and art. This aligns with Yin's (2014) assertion that case study research, particularly of a qualitative nature, can provide comprehensive insights even with a smaller sample size. It underscores the value of qualitative research in capturing the richness and diversity of human experiences, which is often lost in larger-scale quantitative studies.

In aligning with Yin's (2014) principles for designing a case study, a third key consideration was ensuring that the theoretical orientation is evident in the design. To this end, the study integrated IPA as a guiding framework for both the research questions and data collection methods. This approach was elaborated upon in sections 2.3.2 and 2.3.3 of the thesis. Notably, even though the case study involved nine participants and a series of GIM sessions over six weeks, the research maintained an idiographic focus.

In this study, the unit of analysis was not merely the collective experiences of the group but, more importantly, the individual experiences and responses of each participant to the SMI. This idiographic perspective allowed for a detailed exploration of each participant's unique psychological journey through the GIM sessions (Rajasinghe, 2020). It also enabled an in-depth understanding of how each individual processed and responded to the intervention. This provided rich and nuanced insights into the personal effectiveness of music and art as stress management tools within the workplace setting (Tsirir et al., 2018).

This focus on the unique and intricate experiences of each participant ensured that the study went beyond assessing the general effectiveness of the interventions. It also highlighted the diverse ways individuals engage with and benefit from these therapeutic approaches (Webb & Welsh, 2019).

2.4.2.2 Multiple data sources

The study involved an in-depth examination of the case, incorporating extensive data collection. This step involved gathering a wide range of data on my case. The aim was to thoroughly understand all aspects of the case, exploring its various dimensions and nuances. This comprehensive approach assisted in building a detailed and nuanced

picture of the case, contributing to the richness and depth of my study. Data were collected through multiple methods. These included the WLQ, and a summative observation report of the SMI sessions by the GIM therapist. Additional data sources were the artworks created during the GIM sessions, such as Mandalas and clay work, as well as individual interviews and a focus group convened at the conclusion of all sessions.

2.4.2.3 Producing a comprehensive, in-depth and narrative account of the case

The aim of this research was to provide a comprehensive and in-depth account of the case, often presented in a narrative form, mirroring the approach taken by Ylikoski and Zahle (2019). This narrative sought to capture the unique and context-dependent aspects of the case, focusing on the individualised experiences of the HE employees who participated in the GIM sessions.

This research acknowledged the traditional debate about the generalisation of case study findings. While case studies are often driven by the uniqueness of the case, there is still a desire to draw broader insights from them (Daniel, 2019). The tension lies in balancing the specificity of the case with the potential applicability of its findings to similar contexts or a broader class of cases (Takahashi & Araujo, 2020).

The report on this case study clearly states that while it offers a detailed examination of the specific case, it does not imply that this case is universally representative or typical of the broader population. However, it is essential to consider that the learning derived from case studies extends beyond mere generalisation (Daniel, 2019). This case study, with its idiographic focus and use of IPA, provides a specific understanding of stress management within a particular context. Additionally, it offers new perspectives and insights that could inform broader theories and practices in stress management interventions (Roberts et al., 2019).

2.5 RESEARCH METHODS

Qualitative research methods involve the systematic and rigorous approach used to gather and analyse data in order to explore, understand and interpret complex phenomena in-depth (Al-Ababneh, 2020; Kumar, 2011). A range of techniques is used to gather rich and detailed data. These include interviews, observations, focus groups,

and document analysis. Together, they capture the perspectives, experiences, and meanings of the participants (Liao & Hitchcock, 2018; Patel & Patel, 2019). The researcher plays a crucial role in the research process, actively engaging with participants and immersing themselves in the research context to gain an insider's understanding (Berger, 2015; Shava & Nkengbeza, 2019). Qualitative inquiry furthermore involves a variety of data analysis techniques, including thematic analysis, content analysis and narrative analysis. These methods focus on organising, interpreting, and making sense of the data collected in a systematic and rigorous manner (Larsen & Adu, 2022).

In this section, I present a detailed description of the research methods employed within the qualitative single-case case study design of this inquiry. First, I provide an in-depth description of the research context, setting the stage for the entire research attempt. Within this context, I clarify the specific environment, circumstances and conditions that served as the backdrop for the study, offering a clear understanding of the real-world context in which the case study unfolded.

Moving forward, I delve into the critical aspects of sampling and participants. Here, I explain the meticulous process by which the participants for this study were selected and recruited. I outline the criteria, strategies and rationale employed to ensure the inclusion of individuals most relevant to the research objective. This section provides clarity on the composition of the participants in this study. It highlights their characteristics, demographics, and any unique factors that influenced the participant selection process.

Finally, the focus narrows down to the research procedure itself. In this sub-section, I provide a comprehensive account of the step-by-step approach adopted to carry out the research. The research procedure section outlines the systematic process that guided the study, revealing the rigour and methodological precision employed to gather, interpret and draw insights from the data. This involves the design, tools, techniques and methodologies utilised during data collection and analysis.

This section on research methods provides a thorough account of how the case study research was conceptualised, executed, and analysed. It ensures transparency, reproducibility, and clarity throughout the research process.

2.5.1 Research Context

Within the broader context of HE in South Africa (as discussed in Chapter 1), the study was conducted at a South African tertiary institution, with employees working in an administrative and lecturing environment, who indicated that they were experiencing stress and signed up for an SMI. The university caters for approximately 60 000 students and has a personnel corps of 2700. At the time of the study, when the SMI sessions began, the university was experiencing student strikes. This situation was upsetting for both employees and students. It disrupted the healthy work environment for staff and negatively affected student functioning and normal academic life. The participants discussed the impact of the disruptions. Some felt that they were not supported at work, while others felt pressured by work deadlines. They also reported that the work environment hindered their productivity. Contact with the participants mostly occurred on-site at the university, however some interactions and data collection were also conducted off-site and online. The specifics of which are described in Section 2.5.3 below.

2.5.2 Sampling and Participants

As sampling method, a combination of convenience sampling and purposive sampling was used. The sample selection was made firstly on the basis of convenient sampling because HE employees who volunteered to participate in a SMI (GIM - music and art intervention), were selected (see Section 2.5.3 below). This approach is also called a convenience homogeneous sampling method, where volunteering participants shared the lived phenomenon of interest (Alase, 2017; Pietkiewicz & Smith, 2014; Tomaszewski et al., 2020). A purposive sample is a non-probability sample that is selected based on characteristics of a population and the objective of the study (Struwig, Stead, 2011; Terre Blance et al., 2007). A purposive sample is based on specific inclusion criteria to select participants that are information rich about the research phenomenon under study (Pietkiewicz & Smith, 2014). For this study, inclusion criteria specified that participants had to be employees in an HE institution, with a self-reported need for stress relief. The strength of this method lies in the fact that sample saturation can be reached with more ease (Guest et al., 2006). Participants were invited to the study via e-mail (see Section 2.5.3 below) specifying

that interested employees, experiencing stress and wanting to go through a de-stress experience, were to be considered (Manohar et al., 2019).

Sample saturation was achieved when sufficient information had emerged to allow for replication of the study. No new insights or data continued to surface during the final stages of analysis. I experienced this during my own data analysis and theme development, where repeated patterns and no new codes became evident. Fusch and Ness (2015) support this understanding by stating that saturation occurs when further coding is no longer possible because no new information, codes, or themes arise from additional interviews or data analysis. Sebele-Mpofu (2020) adds that theoretical saturation is reached when all concepts central to a theory are fully represented in the data.

2.5.3 Research Procedure

Firstly, I applied for and obtained ethics approval from the Research Ethics Committees of both UNISA (through which my PhD research was done) and the research institution. Having obtained institutional permission, a general e-mail was sent to all the employees of the institution, introducing the study and explaining its purpose and nature. In the e-mail, employees were invited to take part in a music- and art-based stress intervention (GIM) aimed at facilitating a process of de-stressing and stress management. Selection was open to any gender, race and position level. Initially 20 employees responded, and their participation was further individually discussed via personal e-mail, providing further information on informed consent, confidentiality and time commitments. Ultimately, nine employees volunteered and committed to take part in the SMI over a period of six consecutive weeks. A short introductory interview was held in person to confirm the study's objective and research process. It also aimed to confirm the participants' commitment to attending one SMI session per week for six consecutive weeks. After the initial interview, participants completed a stress assessment (the WLQ, see section 2.5.4.1) to provide a self-report indication of their stress experience. The results of the WLQ are discussed in Chapter 5.

Table 2.1*Biographical Information of Participants*

Participant Code	Age Category	Gender	Race	Work type	Stress Level	Total Sessions Attended	Focus Group Attendance
1	51-60	F	African	Lecturer	Normal	5	Yes
2	30-40	F	White	Support	Normal	6	Yes
3	41-50	M	White	Support	Very High	5	Yes
4	30-40	F	African	Lecturer	Very High	5	Yes
5	41-50	F	African	Support	High	6	Yes
6	51-60	F	White	Support	Very High	6	Yes
7	41-50	F	White	Support	High	5	No
8	41-50	F	White	Lecturer	High	6	No
9	30-40	F	White	Support	Very High	6	Yes

The study included nine participants, predominantly female (eight out of nine), with one male participant. The age distribution ranged from 30 to 60 years. In terms of racial composition, three participants identified as African and six as White. Most participants occupied support roles (six), while the remaining three were lecturers. Reported stress levels varied: three participants indicated normal stress, while the other six reported high or very high stress levels. Session attendance was consistent, with all participants attending either five or six sessions. Seven participants also took part in the focus group discussions. Overall, the sample reflects a diversity of age, race, and role, with a notable presence of White female support staff experiencing elevated stress.

The SMI process included six sessions of one hour and 15 minutes on a consecutive weekly basis, using a combined method of music and art, namely an adapted GIM. As noted in Chapter 3, the adapted GIM method is based on the Bonny Method of Guided Imagery and Music. However, in this thesis I use the term GIM to refer to an adapted Guided Imagery and Music, as it is the contemporary and commonly accepted terminology. In this study, the adapted GIM sessions were facilitated by a music therapist registered with the Health Professions Council of South Africa (HPCSA) for Arts Therapy. (Beck et al., 2015b). Five of the sessions took place at the University. However, due to a strike action occurring at the University, one session was alternatively hosted at my home. GIM is grounded in humanistic psychology and is a psychotherapeutic method that utilises elective classical music (Shum, 2020). This

method stimulates spontaneous inner imagery aiming at personal insight and transformation (Beck et al. 2015b; Dukić & Jakovljević, 2021; Shum, 2020). Each GIM session included a verbal discussion, a guided relaxation exercise, 30 minutes of listening to music and an integration of the experience. After listening to the music, the participants made a drawing within a mandala (circular outline) or a clay work of what they experienced in their altered state of consciousness. The imagery was discussed within the group setting in relation to the current work-life situation of the participants (Battles, 2018; Jerling, 2019).

In Table 2.2 I give an overview of the session number, date, use of entrainment, intention, themes emanating for the sessions and discussion, as well as the medium used:

Table 2.2 Session Structure Overview

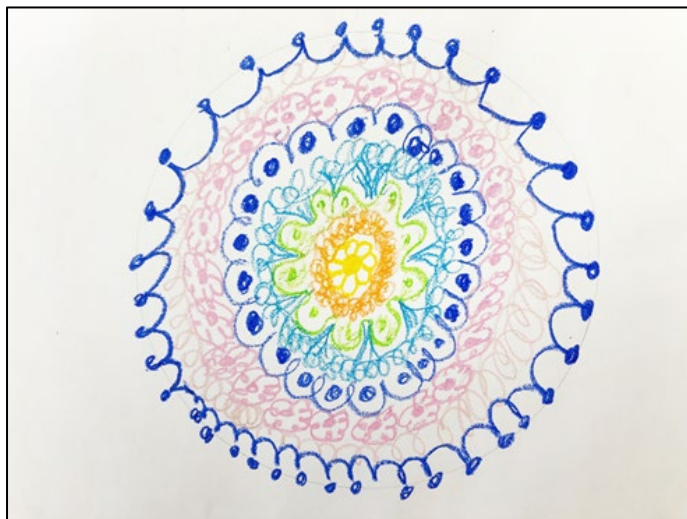
Session No.	Date (2019)	Rhythmic Entrainment with Djembe drums	Music Tracks	Intention / Imagery Focus	Themes Emanating from the session and discussion	Medium
1	30-Jan	Yes	Winter, P. (1983). Dolphin morning. On Sunsinger [Album]. Living Music. Winter, P. (1983). Reflections in a summer pond. On Sunsinger [Album]. Living Music. Lovland, R. (1997). Home [Recorded by Secret Garden]. On White stones [Album]. Philips.	First Group Drawing – opening to group process; connection to nature; gentle entry into imagery work	Theme 1: Driving forces behind SMI participation – starting point, openness to join group process. Theme 5: Group Dynamics – early bonding, shared imagery fosters relational safety. Theme 6: Neurosomatic experiences – sensory grounding through imagery of nature.	Pastels, A2
2	06-Feb	Yes	Shenandoah, J. (1997). Messenger. On Life blood [Album]. Silver Wave Records. Kater, P., & Nakai, R. C. (1992). Wandering. On Migrations [Album]. Silver Wave Records. Kater, P., & Nakai, R. C. (1992). Walking the path. On Migrations [Album]. Silver Wave Records.	Relaxed on Island – grass, birds, flying imagery; indigenous presence and cultural connection; journeying and return	Theme 4: Meaning making through self-transcendent mechanisms – cultural connection, symbolic journeying. Theme 5: Group Dynamics – shared collective presence, relational affirmation through cultural motifs. Theme 6: Neurosomatic experiences – bodily sensations of relaxation, flight, nature.	Pastels, A3
3	20-Feb	Yes	Shenandoah, J. (1997). Messenger. On Life blood [Album]. Silver Wave Records. Kater, P. (1990). Pagan saints. On Pagan saints [Album]. Silver Wave Records. Kater, P. (1990). Dirge. On Pagan saints [Album]. Silver Wave Records. Vollenweider, A. (1989). Dancing with the lion. On Dancing with the lion [Album]. Columbia.	Feel stress → release (post-strike) – confronting tension and unrest; grounding; movement toward lightness and restoration	Theme 2: Fortifying resilience through stress coping mechanisms – recognising stress, working toward release. Theme 6: Neurosomatic experiences – somatic grounding, embodied release. Theme 4: Meaning making through self-transcendent mechanisms – transformation of unrest into lightness.	Clay

4	20-Mar	Yes	Bach, J. S. (composer). (1940). Sheep may safely graze [Recorded by L. Stokowski, conductor]. On Bach transcriptions [Album]. RCA Victor. Bach, J. S. (composer). (1940). Air on a G string [Recorded by L. Stokowski, conductor]. On Bach transcriptions [Album]. RCA Victor. Massenet, J. (composer). (1946). Suite for orchestra (Le Cid, Ballet Suite) [Recorded by Arthur Fiedler & Boston "Pops" Orchestra]. Massenet: Le Cid – Ballet Suite [Album]. RCA Victor (Musical Masterpiece Album MDM-1058).	Peace, control, delight – stability, beauty, and structured harmony	Theme 2: Fortifying resilience through stress coping mechanisms – cultivating balance, stability, control. Theme 3: Empowering a compassionate and agentic sense of self – reclaiming control, self-directed harmony. Theme 6: Neurosomatic experiences – embodied delight, structured bodily calm	Pastels, A3
5	27-Mar	Yes	Morricone, E. (1986). Nella fantasia [Recorded by Celtic Woman]. On Celtic woman [Album]. Manhattan Records. (Original music "Gabriel's oboe" composed for The mission soundtrack). Lovland, R. (2002). The promise [Recorded by Secret Garden]. On Once in a red moon [Album]. Philips. Arkenstone, D., & Kostia. (1991). Cello song. On A childhood remembered [Album]. Narada.	Foundation and groundedness – deep emotional rooting, inner security, gentle reflection	Theme 3: Empowering a compassionate and agentic sense of self – inner security, compassionate rooting. Theme 4: Meaning making through self-transcendent mechanisms – reflection and existential grounding. Theme 6: Neurosomatic experiences – bodily groundedness, emotional rooting.	Pastels, A3
6	03-Apr	Yes	Shenandoah, J. (1997). When eyes meet. On Life blood [Album]. Silver Wave Records. Zimmer, H., & Gerrard, L. (2000). Now we are free. On Gladiator: Music from the motion picture [Soundtrack album]. Decca. Chopin, F. (composer). (1958). Concerto for piano no. 1 in E minor, Romance – Larghetto [Recorded by Artur Schnabel, Fritz Reiner, & Chicago Symphony Orchestra]. Chopin: Piano Concertos Nos. 1 & 2 [Album]. RCA Victor.	Closure and integration – farewell, emotional synthesis, uplift	Theme 4: Meaning making through self-transcendent mechanisms – integrating experience, uplifting synthesis. Theme 3: Empowering a compassionate and agentic sense of self – wholeness and farewell as identity growth. Theme 5: Group Dynamics – collective closure and shared farewell.	Pastels, A2

In *Figure 2.3* below, is an example of a mandala drawn by participant no. 4 in session 4 of the six GIM sessions.

Figure 2.3

A Mandala by Participant no. 4 (session 4)



Within four weeks after the GIM sessions, I conducted one-on-one interviews with each of the nine participants (30-45 minutes) followed by a comprehensive 90-minute focus group session with all the participants. These data collection methods were chosen to ensure the acquisition of rich and nuanced data that aligns with the essence of hermeneutic phenomenological inquiry (Gyollai, 2020; Love et al., 2020; van Manen, 2018). Through individual interviews, I aimed to explore the subjective experiences and perspectives of each participant (Raskin, 2002). This approach allowed for a deeper understanding of their lived experiences and the meanings they attached to their coping responses (Geldenhuys & Cilliers, 2012) following the music and art modalities used in the GIM intervention. (Carr et al., 2012; Shum, 2020).

Additionally, the focus group session provided a valuable platform for group dynamics and interactions, fostering the emergence of shared themes and collective insights that might not have surfaced through individual interviews alone (Ryan et al., 2014; Tadajewski, 2016). The combination of one-on-one interviews and the focus group session provided a comprehensive understanding of the coping responses triggered by the music and art modalities. It captured both individual experiences and shared meanings, enhancing the depth and breadth of the data collected for my research (Dangal, 2020). Furthermore, the GIM sessions served as my chosen intervention method, allowing for an exploration of the experiences and responses of participants within a controlled therapeutic setting (Hargrove et al., 2016; Pandey & Pestonjee, 2018).

2.5.4 Data Collection

To produce rich, detailed descriptions in first-person accounts (Pietkiewicz & Smith, 2014) in a single case study context, data collection was triangulated by collecting data through various methods and at various points in time during the research process. Data for this study were collected before the SMI using the WLQ. After the SMI, data were collected through semi-structured interviews, a semi-structured focus group, the GIM therapist's summary report of observations during the SMI, and the art objects created during the GIM sessions. Each of these are discussed in detail below.

2.5.4.1 *The Experience of Work and Life Circumstances Questionnaire (WLQ)*

The WLQ is a self-report measure of one's level and causes of stress (Van Zyl & Van der Walt, 1991). The WLQ is based on the model of Cox and Mckay to measure stress, since the model contains all the most important components of stress (Cox & Mackay, 1985). The assessment reflects these various stress components, as well as the interactions amongst them. The model consists of four phases (Van Zyl & Van der Walt, 1991). The first phase represents the demands made on the individual by the environment, while phase two represents the person's evaluation of these demands, as well as their own psychological ability to deal with them. Phase three deals with cognitive and behavioural responses to stress. When the individual realises that demands cannot be dealt with, these demands are interpreted as stress. During the fourth phase, the effect on the individual is measured. This effect may be experienced on a psychological or on a physical level (Van Zyl & Van der Walt, 1991). However, the problem with self-report questionnaires is that individuals may deny their symptoms or decide to answer the questions favourably or unfavourably. In order to overcome the social desirability reaction, the WLQ development included measuring different stress reactions – not only anxiety (Van Zyl & Van der Walt, 1991). Moreover, rapport was established with the participants during the initial introductory interview, to motivate them to respond honestly.

A five-point scale is used to measure both experience and expectations of work circumstances, to indicate how often certain aspects occur. The scale is as follows:

- 1 = Virtually never
- 2 = Sometimes
- 3 = Reasonably often
- 4 = Very often
- 5 = Virtually always

The scores are calculated, and the raw scores are used to measure the levels and causes of stress. The following raw scores, as indicated in *Table 2.1*, were utilised to assess stress levels:

Table 2.3

Scale and raw score levels of stress

Scale	Level of stress raw score
Very High	98 - 200
High	80 - 97
Normal	40 - 79

The questionnaire is based on the rationale that a person with a high score on the items in the questionnaire, experiences an elevated level of stress. For the full result description, see Chapter 5 (Research Findings).

The Work and Life Circumstances Questionnaire (WLQ) has demonstrated sound psychometric properties in both the structural validity study by Schaap and Kekana (2016) and the research of Kekana (2014). Reliability in the original standardisation was established using the Kuder–Richardson Formula 8 (KR-8) with coefficients between 0.83 and 0.92. In the current study, Cronbach’s alpha was applied—given the attitudinal nature of WLQ items—with results ranging from 0.75 to 0.95, indicating fair (C2, C3) to excellent (A) internal consistency. Kaiser–Meyer–Olkin (KMO) measures of sampling adequacy ranged from 0.749 to 0.906, exceeding the recommended threshold of 0.6, and Bartlett’s tests of sphericity were significant for all scales ($p < 0.001$), confirming suitability for factor analysis. Exploratory factor analysis (EFA) with parallel analysis showed that Scales C1, C3, C4, and C5 were unidimensional, whereas Scales A, B, C2, and C6 displayed some multidimensionality. Bi-factor analyses indicated that Scales A, B, and C6 achieved “essential unidimensionality” (general factors explaining 58–62% of variance), while C2 remained multidimensional and may require item revision. Confirmatory factor analysis (CFA) supported a higher-order latent model of overall work stress, with internal causes of stress (F1) loading strongly on the general construct, and external causes (Scale B) contributing indirectly via F1. Model fit improved to acceptable levels (e.g., CFI = 0.97, TLI = 0.95, RMSEA = 0.09) after correlating error terms between highly related subscales (C1 and C2). Overall, the WLQ demonstrates good reliability, adequate factorial validity, and a structural model consistent with its theoretical underpinnings, though refinement of

certain subscales—particularly C2—is recommended to enhance measurement precision (Kekana, 2014; Schaap, 2016).

2.5.4.2 *Semi-structured interviews*

For the *individual interview*, questions focused on the exploration of mental phenomena (memories, fantasies, thoughts, associations), sensory perceptions and individual interpretations (Pietkiewicz & Smith, 2014) about the research phenomenon. After some introductory and rapport-building questions, the following *open-ended questions* were prepared in an interview guide and used in each interview:

- “You recently participated in an SMI. Tell me the story of why you decided to participate in the SMI.”
- “How did the music-based activities during the SMI work for you? What did you feel/think differently after the SMI?”
- “How did the art-based activities during the SMI work for you? What did you feel/think differently after the SMI?”
- “Was there any improvement in your handling of stress after the SMI? Please elaborate.”
- “What do you feel and think differently as a result of participating in the SMI?”
- “How do you now react to the initial stressors that you told me about, that motivated you to participate in this SMI?”

This form of interview allowed for original and unexpected issues to surface, which were consequently investigated with further probing questions when necessary (Pietkiewicz & Smith, 2014). I felt comfortable when moments of silence arose, thereby encouraging reflection upon issues being discussed (Pietkiewicz & Smith, 2014). I was aware of non-verbal, behavioural and verbal communication. I was also being watchful for the effect of the intervention on the participants (Pietkiewicz & Smith, 2014). All communication was recorded on both a mobile phone and a tablet.

2.5.4.3 *The focus group*

During the focus group, the following probing question was used to initiate and elicit discussion: “*The purpose of this focus group is to discuss your experience of the SMI and how it impacted on the way that you think and feel, and the way in which you now*

manage things the same or differently. Who would like to start?" This question was also sent in advance to each participant, enabling them to come prepared to the focus group session. I followed Krueger and Casey (2015) and Morgan (1997) who allow a single opening question. The focus group interview was intentionally designed around a single, broad, open-ended probing question to stimulate collective reflection and discussion. As the group dialogue unfolded, I used contextual prompts to guide the conversation and ensure key themes were explored, consistent with the flexible nature of qualitative focus groups. This approach allowed for rich, participant-led interaction and was aligned with the exploratory aim of the focus group.

The effectiveness of the focus group data collection technique lies in its focus on participants who shared a homogeneous experience (Pietkiewicz & Smith, 2014), specifically, their encounter with the GIM-based SMI. Adding the focus group, provided a further point of data triangulation and enhanced the collection of rich and rigorous data.

2.5.4.4 Additional data sources

In addition to the WLQ, interviews and focus group, the dataset also included the summative observation report of the SMI sessions by the GIM therapist, and artworks (Mandalas and clay work) completed during the GIM sessions. The feedback report by the GIM therapist played a vital role in accentuating and complementing the triangulation process, enriching the dataset derived from the participants.

Together, these additional data sources improved the comprehensiveness and reliability of the findings. They provided a more detailed and nuanced understanding of the participants' experiences within the context of the GIM intervention. The artworks produced during the GIM sessions vividly portrayed the emotions and thoughts experienced by the participants while in an altered State of Consciousness. These artistic expressions served as a valuable and abundant source of personal data, providing profound insights into the individual journey of de-stressing of each participant.

2.5.5 Data Recording and Management

In order to record the data, the following methods were used: A password protected mobile phone was used as the primary recording device and a password protected data tablet served as a backup device (Saeed & Ali, 2019) for both the interviews and the focus group. From here on, the sound files were placed in a password protected “Dropbox” file for access to the transcriber. The transcriber signed a confidentiality agreement, after which she transcribed all the interviews and focus group sound files into electronic word documents. I used the Atlas.ti 8 programme to assist me in managing the data and coding for my final interpretation (Babbie & Mouton, 2012; Farooq, 2018).

Aligned with my research approach rooted in HP, I employed Atlas.ti 8 as a supportive tool to facilitate the utilisation of IPA in my study. Atlas.ti 8, a qualitative data analysis software programme, provides researchers with valuable tools and features that can be effectively utilised in the application of HP (Kalpokas & Radivojevic, 2022). HP focuses on exploring subjective experiences and the meanings attached to phenomena. Atlas.ti 8 provides tools that support the systematic analysis and interpretation of qualitative data, aligning with these approaches (Smit & Scherman, 2021). In HP, the focus is on interpreting and understanding the lived experiences of individuals (Lengyel, 2018). Atlas.ti 8 facilitates this process by providing a platform for organising, coding and analysing qualitative data (Paulus et al., 2019).

I imported various types of qualitative data, such as interview and focus group transcripts, observational notes of the GIM therapist and even multimedia content (mandala art works), into the software. As researcher using IPA, I strove to uncover the subjective meanings and interpretations of phenomena (Neubauer et al., 2019). Atlas.ti 8 enabled me as researcher to code and analyse my data at a granular level, capturing the nuances and subtleties of the experiences of participants. HP focuses on exploring subjective experiences and the meanings attached to phenomena. Atlas.ti 8 provides tools that support the systematic analysis and interpretation of qualitative data, aligning with these approaches (Soratto et al., 2020; Vila-Henninger, 2019). Additionally, Atlas.ti 8 allowed me to create networks that visually represent connections between themes, providing a visual representation of the interpretive process (See *Addenda 1a – 1f*). By facilitating the systematic analysis and

interpretation of qualitative data, Atlas.ti 8 enhanced the rigour, comprehensiveness and validity of this HP study.

2.5.6 Data analysis method

Data analysis refers to making sense out of text and image data. Analysis is a continual process of reflection on the data throughout the data collection, data management and data analysis stages. The data analysis process already starts during data collection and while data are being prepared for analysis. I delved deeper into the understanding of the data by consistently asking questions, taking notes and recording all interpretive notes of the interviews, as well as of the focus group session (Babbie & Mouton, 2012; Pulla & Carter, 2018; Terre Blance et al., 2007).

Overall I followed the analytic steps recommended in IPA namely: i) Familiarisation; ii) systematic coding, iii) searching themes, reviewing themes, iv) defining and naming themes, v) writing up, vi) checking and validating (Gyollai, 2020). Practically it meant that I first identified meaning units from the data and then condensed their meaning. Thereafter I identified subthemes, and from there I formulated themes.

2.5.6.1 Familiarisation stage

During the familiarisation stage, I read and re-read all the data while also listening to the audio recordings to gain a general sense of the information. Each reading brought new insights (Creswell, 2009). I observed and noted the general ideas and tone of each participant. I recalled the atmosphere of each interview and made notes about these observations, thoughts, and reflections, focusing on language, context, and content.

I immersed myself in the data to understand the participants' lived experiences holistically. As I revisited the transcripts and audio recordings, I actively engaged with the data by annotating key phrases, highlighting emotional expressions, and noting any patterns or contextual nuances. I also reflected on the dynamics of the interview setting, recalling moments of emphasis or hesitation, and used this reflection to deepen my understanding of each participant's narrative.

The outcome of this stage was a comprehensive set of initial impressions and annotations that provided a foundation for the subsequent stages of analysis. These reflections offered a refined understanding of the participants' experiences, enabling the identification of initial ideas and areas of focus for further analysis.

2.5.6.2 Systematic coding

During systematic coding, a detailed coding process was followed using Atlas.ti 8 (Creswell, 2009). I began by identifying meaningful units within the data and grouping them into meaningful units, sub-themes and themes (Saldaña, 2013; Smit & Scherman, 2021). In qualitative data analysis, a "meaningful unit" refers to a segment of data that holds significant relevance or meaning in relation to the research questions or objectives. These units typically consist of phrases, sentences, or paragraphs that encapsulate concepts, ideas, or themes relevant to the study (Graneheim & Lundman, 2004; Saldaña, 2013).

Using Atlas.ti 8, I employed codes, memos, and annotations to condense the meaning of each meaningful data unit. The software facilitated the creation of codes, memos, and annotations, which were instrumental in capturing and interpreting the rich layers of meaning within the data (Soratto et al., 2020). After re-reading the meaningful units and their condensed meanings, I further condensed the interpretative descriptions (memos, codes, and annotations) ascribed to these meaning units. This process resulted in more concise meaning descriptions in the form of codes. This systematic process enabled me to start identifying relationships and patterns in the data, forming a foundation for the development of themes in the next step.

2.5.6.3 Searching themes, reviewing themes

In this phase, I began reworking the initial codes by identifying relationships and grouping codes that shared similar meanings. These related codes were organised into sub-themes, each capturing specific aspects of the participants' experiences. Next, I examined the sub-themes for broader patterns and conceptual links, clustering them into overarching themes that represented the core findings of the analysis.

The visual interface of the Atlas.ti 8 software was instrumental in this process, enabling me to map and visualise the relationships between codes, sub-themes, and themes.

This iterative and interpretative process supported the hermeneutic analysis of the data, allowing me to synthesise the original meaning units into cohesive themes. Using this systematic approach, I transformed my notes, transcribed interviews, and focus group discussions into emergent themes. These themes captured the essence of the participants' lived experiences (Tomaszewski et al., 2020).

2.5.6.4 Defining and naming themes

Defining and naming themes: In reviewing the themes, further clusters of related themes were recognised. Grouping themes into clusters led to the emergence of the main themes (Pietkiewicz & Smith, 2014). The meaning of each theme was indicated by relying on memos, annotations, and codes related to the clustered sub-themes.

Using the Atlas.ti 8 program, the analysis was visually mapped into networks (see *Addendum 1*), providing a structured representation of the relationships between themes. This process culminated in a final interpretation that captured the essence of the data (Babbie & Mouton, 2012).

2.5.6.5 Writing-up

During the writing-up phase of my analysis, I systematically organised and presented my findings. I began by introducing the research aims and the theoretical framework of IPA providing context for the study. I then explained how the emergent themes were derived from the data. This process involved progressing from initial codes to sub-themes, and finally, to overarching themes. To maintain authenticity and ensure a grounded representation of the participants' experiences, I supported each theme with direct participant quotes or other pieces of raw data such as artwork. This approach allowed for a clear, coherent presentation of the analysis while staying true to the voices of the participants.

2.5.6.6 Checking and Validating:

Checking and validating: During the writing-up phase of my analysis, I systematically organised and presented my findings, beginning with an introduction to the research aims and the theoretical framework of IPA. I detailed how the emergent themes were derived from the data, with a clear progression from initial codes to sub-themes and

overarching themes. Each theme was supported by direct participant quotes to maintain authenticity and ensure the findings remained grounded in the participants' experiences.

I also reflected on the hermeneutic process, balancing the participants' voices with my own interpretations. The findings were linked to the research questions and broader literature, ensuring a meaningful connection between the data and existing research. The use of tools like Atlas.ti 8 allowed me to visualise relationships between codes and themes, facilitating a deeper understanding of the data.

Reflexivity was a key aspect of this stage, as I acknowledged my role in shaping the analysis and interpretation of the data. I sought to ensure the findings were both rich in detail and interpretatively meaningful. To enhance the credibility of the findings, I engaged in a process of checking and validation. This involved another researcher reviewing the data and suggesting recurring themes, followed by a validation session with my supervisor to further verify the analysis and ensure the accuracy and relevance of the findings. This iterative process strengthened the trustworthiness of the final interpretation.

The strength of this type of analysis is that it is structured and eventually leads to the classification of data into themes, which then makes it possible to create a network between the codes, sub-themes and themes. The limitations would be that it is complicated, time consuming and possibly open to bias (Creswell, 2009; Saldaña, 2013).

Auditability, as one of the principals of trustworthiness and rigour in qualitative research, requires the demonstration of transferability in the research process, which includes a systematic procedure for collecting, analysing and interpreting the data (Mays & Pope, 2020). In my study I just gave a detailed step-by-step description of this process and the way decision-making was done throughout the study (Daniel, 2019; Mays & Pope, 2020). The process of this research was fully documented and described, which contributed to the auditability and transference of this study.

2.6 ETHICAL and TRUSTWORTHY RESEARCH

Credibility is a critical consideration in qualitative inquiry, referring to the appropriateness and coherence of the tools, processes, and data in addressing the research question (Rose & Johnson, 2020). This concept should be evident throughout the research, connecting the research question, paradigm, and chosen methodology. Ensuring credibility involves designing an approach that aligns with the methodology, selecting a sampling strategy that fits the context, and employing data analysis techniques that generate findings grounded in the lived realities of the participants and the research context (Leung, 2015; Lub, 2015). I'll now discuss my research ethics and trustworthiness, which was maintained consistently throughout my thesis in order to ensure the quality and rigour of the study.

2.6.1 Research ethics

Research ethics hold a vital position in qualitative research, where it serves as the bedrock for safeguarding the well-being of participants and upholding the integrity and credibility of the research process (Daniel, 2019; Stahl & King, 2020). Given the nature of qualitative research, which often delves into complex and sensitive topics, explores personal experiences and seeks to understand the subjective realities of individuals, ethical considerations are of utmost importance (Bøe, 2021). I obtained ethical clearance from both UNISA (2018_CEMS/IOP_031) and the HE institution (REC/2018/06/005) where the research was conducted.

A fundamental ethical principle in qualitative research is informed consent. In adherence to this principle, firstly, participants volunteered their participation. Secondly, I obtained informed consent from participants, offering them comprehensive information about the purpose, procedures, potential risks and benefits of the study, and their rights as participants (Levitt et al., 2021). This ensured that participants fully understood the nature of the research, had the autonomy to participate or withdraw without facing repercussions and were aware of how their data would be used and protected (Goldberg & Allen, 2015). Confidentiality and anonymity represent additional critical ethical considerations in the South African context. I took rigorous measures to protect the identities and personal information of the participants throughout the research process (Reed et al., 2014). These included the use of pseudonyms and a coding system to anonymise participants, as well as secure data storage to prevent

unauthorised access. Upholding participant privacy and ensuring confidentiality were essential for fostering trust and encouraging participants to share their experiences openly (Levitt et al., 2021). The participants signed a participant information sheet (*Addendum 2*), which included a detailed section on confidentiality and anonymity. Additionally, all participants signed a separate confidentiality agreement and code of conduct form specific to focus group members (*Addendum 3*).

Furthermore, researchers bear a responsibility to minimise potential harm and ensure the well-being of participants (Chivanga et al., 2021; C.E. Johnson et al., 2020). This involves proactively mitigating any psychological or emotional distress that may arise during the research process. I established appropriate support mechanisms, such as debriefing sessions and the option for referral to counselling services, to address any adverse effects on participants, demonstrating a commitment to their welfare and ethical research practice (Daniel, 2019).

I strove to incorporate fidelity and utility in synergy as features of my study to strengthen its overall integrity. Fidelity, which refers to the close connection the researcher obtains with the phenomenon under study specifically, the lived experiences of the participants (Jerling, 2019; Roy et al., 2015), was achieved by undergoing the interventions alongside the participants. This involvement included participating in six stress management interventions conducted through GIM. Additionally, I conducted in-depth interviews with all participants and ensured prolonged engagement throughout the process.

Utility, which emphasises the effectiveness of the research design and methods, was ensured by employing triangulation. This approach involved multiple data sources, as described in 1.8.3. The synergistic relationship between fidelity and utility enabled the study to effectively achieve its goals and address the research problem (Levitt et al., 2017; Neubauer et al., 2019).

2.6.2 Trustworthiness criteria

Within the realm of qualitative research, trustworthiness criteria play a pivotal role in enhancing the quality and rigour of research outcomes (Crowther & Thomson, 2020). In a setting where diverse perspectives and contexts often intersect, ensuring the

trustworthiness of research findings is crucial for generating valuable insights (Gadamer, 1975).

In this section, I delve into the core principles of trustworthiness that underpin my research methodology. Trustworthiness in qualitative research is pivotal, serving as a benchmark for the credibility and reliability of the study (Anney, 2015; Kornbluh, 2015). Specifically, this thesis employed an HP approach and a case study design strategy, and the IPA analyst method each with their distinct quality criteria that ensure rigorous and authentic research outcomes (Iofrida et al., 2018; Malagon-Maldonado, 2014). Here, I conceptualise these criteria, illustrating not only their theoretical underpinnings but also how they have been meticulously applied and interwoven throughout the fabric of this study. This discussion will also include a reflective account of my research journey, emphasising the methods of reflection employed and their representation within the thesis. The subsequent evaluation of the trustworthiness of this study, presented in the final chapter, is rooted in these foundational criteria, affirming the integrity and depth of the research conducted.

This thesis employs HP as the methodology, case study as the research design, and IPA as the analysis method. Each of these approaches was selected for its unique capacity to enrich and deepen the understanding of the research subject.

2.6.2.1 Hermeneutic Phenomenology

In HP, credibility is essential to ensuring that the research findings accurately represent the perspectives of participants (Alsaigh & Coyne, 2021; Sloan & Bowe, 2014). In this study, credibility was strengthened through prolonged engagement. Over a six-week period, six sessions were conducted with most of the participants, providing ample time for deeper interaction and understanding of their lived experiences. This extended engagement facilitated a more refined interpretation of the data, enhancing the authenticity of the findings. To further ensure credibility, thick descriptions were used. By meticulously analysing the transcripts of the interviews and focus group sessions, direct quotes from participants were integrated into the findings. This not only added richness to the narrative, but also improved the transferability of the study, offering a detailed portrayal of participants' contexts and experiences.

To uphold dependability, thorough documentation was maintained throughout the research process. Audit trails were kept, which included summaries of the GIM

therapist's observation, providing an external perspective on the sessions. These audit trails served as a comprehensive record, supporting the reliability and replicability of the study (Carcary, 2020).

Reflexivity played a key role throughout the study (J.L. Johnson et al., 2020). A personal journal was maintained, where reflections, thoughts, and observations were regularly documented. This practice fostered self-awareness and critical reflection on the research process, allowing me to consistently check interpretations and conclusions against personal biases and preconceptions. This ensured the confirmability of the study, reinforcing the objectivity and integrity of the research.

2.6.2.2 Interpretive Phenomenological Analysis:

In this study, the idiographic focus of IPA was rigorously maintained through detailed analyses of individual interviews (Keep, 2013). Each participant's narrative was carefully examined by analysing the transcripts from their conversations. This approach ensured a deep engagement with each participant's unique experience of the intervention sessions. The Atlas.ti 8 software played a key role in this process. It enabled the categorisation of data based on emergent themes, allowing for a detailed understanding of individual perspectives. The phenomenological nature of the study was reflected in both the data collection and analysis methods (Ascenso et al., 2018). Each interview was recorded and transcribed verbatim, ensuring that direct quotations from participants were central to the analysis. This technique was essential in capturing the essence of participants' lived experiences, preserving their words and the meanings they conveyed.

The interpretive analysis in this study was a dynamic and iterative process (J.L. Johnson et al., 2020). Using Atlas.ti 8, themes were identified through repeated readings and interpretation of the data. This approach was not just about categorising information; it involved making sense of participants' experiences, delving into the depth of their narratives, and uncovering the inherent meanings (Tuffour, 2017). Throughout the IPA process, reflexivity was a key component, facilitated by keeping a research journal. The journal provided a space to reflect on interpretations, thoughts, and the evolving research journey. This practice was crucial in ensuring that the analysis remained grounded in the participants' perspectives, while maintaining awareness of the researcher's influence on the process.

To ensure methodological rigour, all categorised information and thematic analyses were systematically stored within the Atlas.ti 8 program. These records formed audit trails, providing a transparent, traceable account of the analytical process and the decisions made throughout the study.

2.6.2.3 Case Study:

This case study was conducted within a tertiary institution, focusing on personnel experiencing stress and engaging in a SMI. The unique context of the tertiary institution provided a rich, real-world backdrop for exploring stress in a specific, professional setting. This setting was critical for understanding the nuanced ways in which stress manifests and affects individuals within such environments. To ensure a comprehensive understanding of the case, multiple data sources were employed. Initially, the WLQ was used to assess the stress levels of participants. This quantitative measure was complemented by qualitative data, which included personal interviews, a focus group, observations by the GIM therapist, and analysis of the artworks produced during the intervention sessions. This triangulation of data sources enhanced the robustness of the findings, offering a multi-faceted view of the participants' experiences (Fusch & Ness, 2015).

Participants were selected through a combination of convenience sampling and purposive sampling, focusing on stressed personnel within the institution. The WLQ played a vital role in ensuring that participants were indeed experiencing stress. Data collection was achieved through recordings of the personal interviews and focus group sessions, which were later transcribed. The analysis process involved an initial read-through, followed by a more detailed examination using Atlas.ti 8. This software facilitated the identification of emergent themes and enabled a deeper exploration of the data, ensuring a thorough analysis of the collected information.

A central element of trustworthiness in this study was reflexivity - an ongoing engagement with my own biases, assumptions, and positionality as a researcher (Rees et al., 2020). By critically reflecting on these aspects and promoting inclusivity and equity throughout the research process, I aimed to enhance the study's transparency and credibility (Crowther & Thomson, 2020; Gadamer, 1975). To address reflexivity and potential biases, I maintained a research journal and engaged in ongoing discussions with my supervisor. This reflective practice ensured that my interpretations and analyses remained rooted in the data, while also accounting for my

influence as a researcher. Throughout the study, comprehensive documentation was maintained, including notes in my research journal, summary notes from the GIM therapist, and the analysed data stored in Atlas.ti 8. These records provided a transparent and traceable account of the research process, reinforcing the rigour and reliability of the methodology. Reflexivity allowed me to better understand how my perspectives, experiences, and identity could influence the research outcomes (J.L. Johnson et al., 2020). This self-awareness helped mitigate potential biases, ensuring fair representation of participants' voices and fostering a nuanced, comprehensive understanding of the phenomenon under investigation.

Transparency was also integral to the process, involving an honest acknowledgment of my roles, background, and motivations. I made efforts to openly address any potential conflicts of interest or preconceived notions that might have influenced the research process or the interpretation of findings (Abu-alhaija, 2019). By striving for transparency and continuous self-reflection, I sought to uphold the highest ethical standards, ensuring the reliability and authenticity of the research (Berger, 2015).

2.7 CHAPTER CONCLUSION

This chapter presented the research design and methodological framework used in the study, encompassing various aspects of research design and methodology. It began by discussing the paradigms and philosophical assumptions guiding the research (Abu-alhaija, 2019; Johnston, 2014). The chosen ontological position of subtle realism was highlighted, recognising the existence of a social reality that is influenced by subjective interpretations (Lynch et al., 2021). The constructionist paradigm was adopted, emphasising the importance of understanding how individuals construct meaning and interpret their experiences within social contexts (Rees et al., 2020).

The methodological choices made in the study were thoroughly examined. The specific approach of HP was chosen as the primary methodology, enabling a deep exploration of the subjective experiences and interpretations of participants (Gyllai, 2020). This methodology is consistent with the constructionist paradigm and the aim to understand how individuals construct meaning in their coping responses. Methodological choices further included the adoption of a qualitative research inquiry,

aligning with the exploratory nature of the research objectives (Yilmaz, 2013), and the utilisation of IPA as the primary method of analysis. IPA was used as the analysis method. It facilitated a systematic exploration of participants' subjective perspectives, coping strategies, and the meanings they attributed to their experiences. This approach aligned with the interpretive nature of the research, aiming to uncover the unique and contextually embedded meanings within the narratives of participants. Furthermore, the chapter delved into the case study design. The case study design allowed for an in-depth examination of a specific phenomenon, providing rich insights into the coping experiences of participants through music and art (Ylikoski & Zahle, 2019).

Overall, Chapter 2 provided a comprehensive overview of the methodological and design framework employed in the study. It contained discussions on the chosen ontological position of subtle realism, the constructionist paradigm and the methodological choice of HP inquiry and IPA as analytic method. This chapter served as a foundation for the subsequent chapters, ensuring the research is grounded in a robust methodological framework that aligns with the research aims and objectives.

CHAPTER 3: STRESS, JD-R, BURNOUT, RESILIENCE AND COPING

3.1 CHAPTER INTRODUCTION

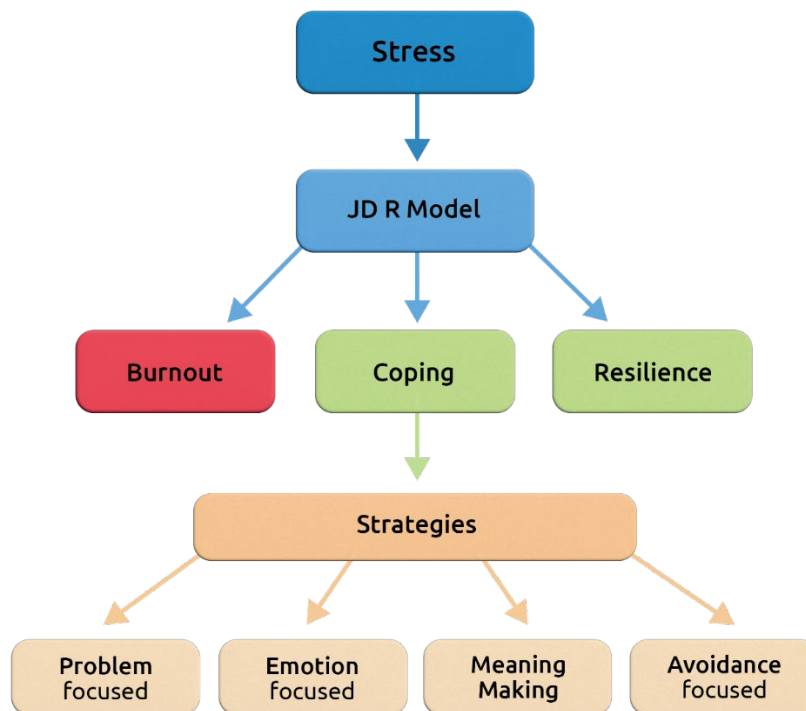
Employee wellbeing is a vital aspect of an individual's working life, influencing their bio-psycho-social health and, consequently, impacting organisational efficiency and long-term success (Molnár & Papp, 2023). As stress, chronic illness, and unhealthy lifestyle choices become more common in the workforce, alleviating and managing stress is important in promoting employee wellbeing (Yocum & Lawson, 2019) and enhancing organisational performance (Qureshi et al., 2024; Yadav et al., 2022).

To approach stress management efficiently, it is important to understand the relevant conceptual and theoretical underpinnings of stress in the workplace. Chapter 3 therefore focuses on the theory and concepts that form the foundation of working with and managing stress in the workplace. The chapter aims to provide a comprehensive theoretical framework to stress by firstly conceptualising stress and secondly by discussing the JD-R theory as a foundational theoretical model to understanding stress in the workplace. This is followed with a conceptualisation of burnout and resilience, two concepts related to the dynamic of stress in the workplace as explicated in the JD-R model. The chapter concludes with a discussion of coping theory, as coping is a natural and desired response to dealing with stress effectively. By examining these theoretical elements relevant to stress, one gains a deeper understanding of how stress impacts employees and the ways in which effective management strategies should be positioned and focused to alleviate its adverse effects.

Figure 3.1 below provides a visual representation of the layout and flow of the chapter.

Figure 3.1

Layout Chapter 3



Through this structured exploration, Chapter 3 provides a strong foundation for understanding stress management in the workplace, setting the stage for the subsequent discussion on stress management interventions in Chapter 4 and the innovative use of music and art to enhance coping responses.

3.2 STRESS

In this section, I delve into the multifaceted nature of stress, beginning with its definition and the various ways in which it has been conceptualised in literature. I focus on the Transactional Model of Stress, which provides a framework for understanding the dynamic relationship between individuals and their environments in the experience of stress. Additionally, I examine the distinction between eustress and distress, and the impact of stress on overall well-being. Then I discuss the psychodynamic and neuroscientific perspectives on stress, providing deeper insights into its underlying processes. This overview lays the groundwork for understanding the subsequent discussions on stress-related phenomena, namely the JD-R model, burnout, resilience and coping strategies.

3.2.1 Conceptualisation of Stress

Stress, a universal component of human life, is conceptualised in psychology as the response of an individual to an environment that demands actions beyond their readily available coping mechanisms (Brunner et al., 2019; Moss, 2019). It emerges in response to situations necessitating behavioural adjustments (du Plessis, 2019). Within the workplace context, stress often arises when individuals perceive that the demands placed upon them exceed the resources available to meet those demands (Brunner et al., 2019; Mcvicar, 2016). However, obtaining a standardised definition of stress proves challenging, similar to searching for a needle in a haystack, as the historical connotation of the term has evolved over time (De Bruin & Taylor, 2013; Florea & Florea, 2016). Initially, during the fourteenth century, "stress" referred to hardship, affliction or adversity. In 1920, Hans Selye, a physician, redefined stress as the body's non-specific response to any demand imposed upon it (Phetlhe, 2019; Selye, 1965).

The Transactional Model of Stress and Coping (TMSC) proposed by Lazarus and Folkman posits that stress is a dynamic interaction between the individual and their environment, emphasising the role of perceived threats or challenges and the subjective assessment of one's capacity to cope with them (Gieselmann et al., 2020; Obbarius et al., 2021). This model of Lazarus and Folkman (1984) underscores the importance of cognitive appraisals in determining stress levels, suggesting that how an individual evaluates a situation (as harmful, challenging, or benign), significantly influences their emotional and physiological responses (Obbarius et al., 2021).

3.2.2 Types of stress: From Eustress to Distress

Stress can influence individuals in two ways: constructively or destructively. Where it constructively enhances focus, alertness and energy, it is referred to as eustress or positive stress (Haque et al., 2021). Eustress, often defined as beneficial stress, plays a crucial role in enhancing one's well-being, motivation, performance and emotional health by framing stressors as positive challenges. This positive stress is linked to self-efficacy and the ability to achieve a state of flow, characterised by complete engagement and enjoyment in activities (Hargrove et al., 2015; Setar et al., 2015). In the workplace, strategies aimed at fostering eustress focus on promoting a positive

perception of stress, thereby potentially improving productivity, employee satisfaction and overall organisational health (Haque et al., 2021).

The other way stress can influence individuals is by being destructive, leading to harm in health, productivity and relationships. This is referred to as distress or negative stress (Chtibi et al., 2018; Moss, 2019). Individuals exhibit behavioural, cognitive, emotional and physical reactions to stress and it disturbs the body's equilibrium, leading to burnout (Downs, 2019; Gonzaga, 2019). The World Health Organization (WHO) has identified stress as the foremost global health concern (Jensen & Bonde, 2018). Stress can lead to persistent feelings of restlessness, extreme fatigue, burnout, a sense of powerlessness, anxiety and, over time, can weaken the immune system and potentially harm organs (Martin et al., 2018). Failing to effectively manage stress contributes to several major health issues with significant public health implications. These include heart disease, musculoskeletal disorders, depression, and anxiety disorders (Stiles-Shields et al., 2016; Zeppegno et al., 2021). Research has demonstrated that stress and other mental health challenges can increase the risk of mortality in individuals who would otherwise be considered healthy (Martin et al., 2018).

The interplay of physical, physiological and psychological responses can overwhelm one's coping resources, resulting in distress. Stress is an interactive and dynamic process that refers to a condition capable of disrupting normal physiological and psychological functioning (Haider et al., 2018; Weinberg et al., 2010).

3.2.3 Psychodynamic and neuroscientific perspectives on the stress concept

In the quest to understand and manage stress, the fields of psychodynamics and neuroscience offer distinct, yet complementary perspectives. These theoretical frameworks explore the origins and mechanisms of stress responses, offering insights into how internal conflicts and biological processes shape our ability to cope with stress (Austin, 2019; Boeker, 2000).

The psychodynamic perspective on stress emphasises the role of unconscious processes, early life experiences and defence mechanisms in understanding the responses of individuals to stressors (Battles, 2018). Freud highlighted defence mechanisms, such as humour, in stress management (Savitsky et al., 2020). Psychodynamic theories suggest that coping strategies can reflect unconscious

mechanisms and defences developed in early childhood (Ben-Ari & Hirshberg, 2009; Heiderscheidt, 2017). Horowitz's psychodynamic model explains the development, persistence and alleviation of Post-Traumatic Stress Disorder (PTSD) symptoms (Chu, 2023). This approach integrates theoretical concepts with empirical research, emphasising the interplay between conscious and unconscious forces in shaping responses to stressors (Brom & Kleber, 1989).

Psychodynamic theories stress the importance of self-understanding in stress management, linking higher insight levels to more adaptive behaviours and positive emotional experiences during challenges (Jennissen et al., 2018). This perspective extends to understanding stress disorders, such as PTSD, through a psychodynamic lens, emphasising early life experiences and unconscious processes (Kudler, 2007). Additionally, constructing coherent narratives is highlighted for coping with past traumas and managing their effects (Heir & Weisæth, 2006). Overall, the psychodynamic viewpoint combines unconscious processes, early life influences, defence mechanisms, and self-awareness to provide a comprehensive explanation of how individuals perceive, experience, and manage stress.

The neuroscientific perspective on stress explores the complex interaction between the brain, physiological responses and stress experiences (Salone et al., 2016). Studies have identified key brain regions like the amygdala and hippocampus in processing and regulating stress responses. The activation of the Hypothalamic-Pituitary-Adrenal (HPA) axis and the subsequent release of cortisol are key components of the body's response to stress (Reul et al., 2015). This perspective sheds light on how chronic stress can lead to changes in brain structure and function, affecting areas critical for emotional regulation and stress resilience (McEwen et al., 2015; McQuaid et al., 2016). Chronic stress affects the developing adolescent brain and can lead to lasting changes in neural development. These changes may contribute to psychological issues, such as anxiety and depression, during adolescence. (Eiland & Romeo, 2013; Haft et al., 2021).

Neurobiological research has uncovered the link between stress and disease risk through hormonal mechanisms. It highlights how psychological symptoms can manifest as physical health outcomes (McEwen, 2016). The concept of allostatic load, which refers to the disruption of the dynamic equilibrium in stress response systems,

has significant implications for overall health and well-being (Lamontagne et al., 2021; Luyten & Fonagy, 2020). Understanding the neurobiological foundations of stress and its effects on physiological and psychological functioning is crucial for developing targeted interventions to alleviate the negative impacts of stress on health and well-being.

Both psychodynamics and neuroscience offer valuable insights into the nature of stress and the stress response, highlighting the complex interplay between mind and body (Matthews et al., 2017; Salone et al., 2016). Moreover, integrating creative interventions like music and art into stress management strategies allows individuals to explore new ways of expressing themselves and coping with stress. This approach may lead to improved mental health and resilience (Garrett, 2020; Gerge et al., 2019).

In order to cope better with their stress, music and art can enhance the eustress of employees, being the positive drive that keeps them motivated despite setbacks. Understanding and leveraging eustress can lead to significant improvements in both personal and professional realms (Ahmad et al., 2015; Haque et al., 2021). Music and art promote eustress by engaging the brain's reward mechanisms and encouraging positive emotional states, which serve as coping responses to stress (Chua et al., 2018; Reybrouck et al., 2020).

Through psychoanalytic and neuroscientific lenses, these modalities (music and art) enable sublimation, where individuals redirect potential stressors into creative expressions (Lakkawar, 2020; Popa & Reynolds, 2022). This process not only stimulates areas of the brain associated with emotion regulation and stress reduction but also strengthens coping strategies, enhancing resilience and promoting a healthier psychological state (Anand et al., 2019; Savytska et al., 2022). In psychoanalysis, sublimation is a mature defence mechanism in which socially unacceptable impulses or idealisations are unconsciously transformed into socially acceptable actions or behaviours. This process may lead to the long-term conversion of the initial impulse. It's considered a positive mechanism because it allows individuals to channel potentially harmful energies into productive and beneficial activities, thus contributing to personal and societal development (Gerard, 2020; Popa & Reynolds, 2022). For example, a person with aggressive tendencies might channel that energy into a career

in sports, where these traits can be expressed constructively and beneficially (Freud, 1914).

Engaging with music and art to enhance eustress involves leveraging creative activities for stress management and emotional well-being. This approach emphasises the importance of positive experiences and resilience-building as fundamental to psychological health and happiness (Gerge et al., 2019; Kwok, 2019) and is elaborated on in Chapter 4.

Stress, whether negative or positive, plays a critical role in shaping the overall well-being and performance of employees. This naturally leads us to the JD-R model, which provides a framework for understanding how job demands can lead to stress and how job resources can help mitigate its effects. By examining the balance between demands and resources, employees and managers can gain insights into fostering a healthier and more productive work environment (Hoare & Vandenberghe, 2022).

3.3 JOB DEMANDS-RESOURCES (JD-R) THEORY: AN INTEGRATIVE FRAMEWORK and APPROACH to STRESS

The Job Demands-Resources (JD-R) theory is an integrative framework that suggests job demands, such as workload and emotional pressures, and job resources, such as support and autonomy, impact employee well-being and stress levels (Hoare & Vandenberghe, 2022). The JD-R approach highlights how high job demands can lead to increased stress and burnout, while adequate job resources can buffer these effects and promote engagement and resilience (Dan et al., 2020).

JD-R theory illustrates how an employee's job demands and resources can determine their ability to cope with stress in the work environment. A proper balance between demands and resources positively contributes to an employee's health and coping capacity (Hoare & Vandenberghe, 2022). Burnout and resilience are therefore stress-related concepts that are discussed in the following sections. By delving into the intricate dynamics of workplace wellbeing, I explore the JD-R model. In this section, the elements and processes that make up the stress dynamic, as outlined by the JD-R framework, are explained. The examination further unravels the model's core elements, that are job demands and job resources (Urien Angulo et al., 2018). A

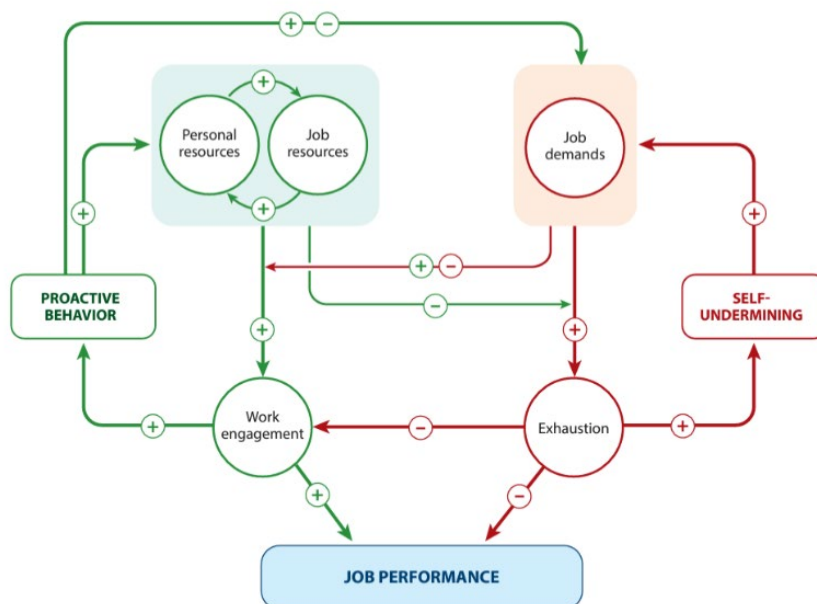
critical evaluation of the model's limitations and the latest advancements, lastly, sets the stage for discussing its cross-cultural applicability and practical interventions (Rattrie et al., 2020).

3.3.1 Conceptualisation of Job Demands-Resources (JD-R)

The JD-R theory, introduced by Bakker and Demerouti (2014) and illustrated in *Figure 3.2* below, acknowledges the dual nature of job characteristics. It suggests that employee well-being depends on the balance between job demands—both challenging and hindering—and job resources, which facilitate the accomplishment of work objectives and personal growth (Janse Van Rensburg et al., 2018; Urien Angulo et al., 2018). The JD-R model suggests that when job resources are sufficient, they can buffer the negative impact of job demands and promote resilience, leading to better performance, engagement and overall well-being (Falco et al., 2018). Thus, the JD-R theory acknowledges that the path to well-being and coping in the workplace is not through the elimination of stressors, but through the cultivation of resources that foster resilience and growth (Volter et al., 2019).

Figure 3.2

JD-R Model Bakker & Demerouti 2017



Note: (Bakker et al., 2023)

The JD-R theory underscores the importance of a supportive work environment that allows for the development of personal resources, which are instrumental in navigating

job demands and thriving at work (Mitchell et al., 2019). Two of the major processes in the JD–R theory are: health impairment and resilience building. The health impairment process suggests that high job demands can deplete the mental and physical resources of employees, leading to energy depletion, burnout, and health problems (Ceschi et al., 2017; Mayerl et al., 2016). Mental strain has been identified as a mediator between psychosocial job demands and health problems within this process (Bagdžiūnienė et al., 2022), and it is also associated with outcomes such as exhaustion and task performance (Schmitt et al., 2021). On the other hand, the motivational process in the JD–R theory indicates that job resources have a motivational potential that encourages employees to achieve their work goals, leading to work engagement (Mayerl et al., 2016). Job resources are considered external factors that can enhance resilience and are explored in detail within the JD–R theory (Jasman & Indriati, 2023). Personal resources, such as self-efficacy and optimism, are also recognised as core components of the model. Resilience, conceptualised as a personal resource, plays a crucial role in mitigating the impact of job demands on burnout, with resilience, self-efficacy, and self-regulation shown to mediate the relationship between job demands, exhaustion, and task performance (Schmitt et al., 2021). Building on this, Bakker and De Vries (2021) incorporate self-regulation strategies into the JD–R model, emphasising proactive behaviours such as job crafting, psychological detachment and recovery during non-work time, and the avoidance of self-undermining behaviours that create additional demands. They highlight the role of personal resources—including optimism, resilience, and self-efficacy—in sustaining motivation and buffering stress. This extension makes the JD–R framework more dynamic and actionable by outlining practical avenues for employees and organisations to prevent burnout and promote engagement. In summary, the JD–R theory integrates health impairment and resilience-building processes, underscoring how job demands, resources, and self-regulation interact to shape employee well-being, motivation, and performance in the workplace (Jasman & Indriati, 2023; Schmitt et al., 2021).

I will begin by discussing the concept of job demands and examining how variations in these demands can cause stress for employees in the workplace. Following this, I will explore job resources to understand how they can mitigate or balance job

demands, thereby helping employees cope with workplace stress. Additionally, I will briefly address the limitations of the JD-R model.

3.3.2 Key Components of JD-R: Demands and Resources

Herewith a discussion on the two major key components of the JD-R model, namely job demands and job resources.

3.3.2.1 Job Demands

The concept of job demands includes various physical, psychological, and social aspects of a job that require ongoing physical or mental effort. These demands can lead to physiological and psychological costs for employees. These demands, when excessive or improperly managed, can lead to detrimental effects on an employee's mental health and well-being, for example burnout (Castner, 2019; Wolter et al., 2019). The consequences of unmitigated job demands are diverse, affecting not only the individual but also the organisation as a whole (Thuynsma & De Beer, 2017).

Job demands in the workplace can stem from various sources, creating significant stress for employees (Falco et al., 2018). One major factor is rigid and overly bureaucratic company policies, which can make it difficult for employees to balance work with personal responsibilities or work autonomously (Lukić & Lazarević, 2018; Nkosi, 2019). These policies can either align with or contradict an employee's internal values, influencing their neurobiological stress response system (Cathomas et al., 2019).

Supervision quality also plays a crucial role; overly critical or unsupportive supervisors can increase stress, whereas supportive supervision can alleviate job demands (Otu et al., 2018). Remuneration perceived as unfair or insufficient can result in dissatisfaction and stress. Employees may feel their job demands are not adequately rewarded, which affects their sense of value and security (D'Emiljo & Du Preez, 2017; Janse Van Rensburg et al., 2018).

Interpersonal relationships at work can either buffer job stress or exacerbate it, particularly when conflict or poor group dynamics are present. These social interactions can trigger deep-seated psychodynamic conflicts, affecting neural networks related to emotional regulation and social cognition (Boeker, 2000; Falco et al., 2018; Wolter et al., 2019). Additionally, both physical and intangible working

conditions, such as uncomfortable environments, long hours, and inflexible schedules, can heighten job difficulty. These factors may also impact mental health by triggering stress-response systems. (Mphahlele et al., 2018; Thuynsma & De Beer, 2017).

Job insecurity and uncertainty, such as the fear of job loss, can lead to ongoing worry and distract employees from their tasks. This can provoke fundamental anxieties and activate the brain's threat detection systems (Asiwe et al., 2015; Vatharkar, 2019). Dealing with difficult customers can be particularly stressful in service-orientated roles, evoking complex emotional reactions and necessitating adaptive coping mechanisms (Wolter et al., 2019; Zito et al., 2016).

Balancing job responsibilities with personal life is another challenge. Excessive job demands can intrude on personal time, leading to conflicts with family responsibilities and inadequate rest, potentially resulting in burnout. Striking a balance impacts stress levels governing work and social life (Kapoor, 2022). Lastly, a lack of career development opportunities can make a job feel more demanding (Muleya et al., 2022). When employees feel stuck, day-to-day tasks can seem more burdensome, decreasing job satisfaction and increasing stress. Ambitions related to career progression impact motivation and engagement in goal-setting and achievement (Ahmad et al., 2015; Lukić & Lazarević, 2018).

Each of these mentioned factors contributes to the overall demands of a job, and the interplay between them can either multiply stress or be mitigated by job resources and personal resilience. I shall now continue to discuss job resources, with specific reference to the buffering effect it has against job demands, referring amongst others to autonomy, positive supervision, skill development, remuneration, participation in decision-making and work-life balance, mitigating the negative effects of job demands. Job resources contribute towards employee's coping ability against stress.

3.3.2.2 Job Resources

Job resources act as a buffer against the negative impact of job demands (Ribeiro et al., 2016). These resources include physical, psychological, social or organisational aspects that help achieve work goals, reduce the costs associated with job demands, and foster personal growth, learning and development (Falco et al., 2018; Knight et al., 2017). Intrinsic resources like autonomy, opportunities for skill utilisation and task variety can foster engagement and intrinsic motivation (Tims et al., 2015). Extrinsic

resources, such as social support from colleagues and supervisors, constructive feedback, and opportunities for professional development, strengthen an employee's connection to the workplace and sense of personal efficacy (Bellini et al., 2022; Demerouti & Bakker, 2023).

Supportive supervision, offering emotional support, recognition and constructive feedback, buffers job demands and aids personal development (Otu et al., 2018; Wolter et al., 2019). Opportunities for training and development make employees feel more competent and prepared for job demands (Mphahlele et al., 2018; Ribeiro et al., 2016). A positive work environment reduces strain and health issues. It also enhances emotional well-being by creating conditions that support psychodynamic needs for safety and belonging (Knight et al., 2017; Poulsen & Ipsen, 2017).

Good relationships with colleagues create a supportive network that reduces work-related stress, meeting psychodynamic needs for connection and support, thus enhancing resilience (Asiwe et al., 2015; Wolter et al., 2019). Fair remuneration and recognition validate efforts and contribute to job satisfaction (Potgieter et al., 2019; Srinivasan et al., 2020). Autonomy, which allows employees to control how they organise their work and make decisions, enhances job satisfaction and motivation (Janse Van Rensburg et al., 2018; Van Steenberghe et al., 2018). Involvement in decision-making (job-control) processes, along with sufficient decision autonomy, fosters a sense of ownership and alignment with organisational goals. This also satisfies a psychodynamic drive for control and influence. More autonomy includes an enhanced decision-making, serving as a valuable job resource (Sørli et al., 2022; Wu, 2016). Flexible working arrangements help balance work and personal life by addressing conflicts between the two. This supports stress regulation and enhances well-being. (Kröll et al., 2017; Schulz-Dadaczynski & Janetzke, 2020).

Integrating these job resources equips employees with robust coping mechanisms, enhancing engagement, reducing turnover and nurturing a positive organisational culture (Doosje et al., 2011; Kotze, 2018). Investing in such resources helps employees manage job demands while strengthening their overall well-being. It also contributes to the company's success, emphasising the critical link between employee support systems and organisational prosperity (D'Emiljo & Du Preez, 2017; Kotze, 2018). Adequate job resources are linked to higher job satisfaction, better

performance, reduced turnover intentions and lower absenteeism rates (Naidoo, 2018). These resources also promote employee resilience, enabling workers to cope, recover from setbacks and thrive in the face of challenges (Ceschi et al., 2017; Grover et al., 2017).

3.3.3 Limitations of the JD-R Model

The limitations of the JD-R model include issues related to its cross-occupational validity. While the model has been applied across various occupations, there is a need for more empirical evidence to support its validity in all types of jobs, particularly in non-Western contexts, as noted by Bakker and Demerouti (Bakker & Demerouti, 2014). Additionally, there are concerns regarding its predictive power. The ability of the JD-R model to predict outcomes may vary, and it might not fully capture the complex causality of well-being and performance outcomes in the workplace (Hoare & Vandenberghe, 2022; Schaufeli & Taris, 2014). Another limitation is its adaptability to change. As work environments evolve with technology and societal shifts, the JD-R model may require updates to remain relevant to new forms of work and the emerging job demands and resources (Chen & Hsieh, 2023).

However, having said that, the JD-R model helps us identify the factors that contribute to stress and how they can be balanced to prevent negative outcomes like burnout. Employees apply various coping mechanisms, such as problem-solving or avoidance, to deal with stress (Huang et al., 2018; Sonty, 2013). If employees' coping strategies fail to effectively manage stress from an imbalance between job demands and resources, the ongoing strain can lead to burnout (Kwon & Kim, 2020). By examining burnout in more detail in the next section, I demonstrate the importance of recognising and addressing it early to maintain a healthy employee and thus a healthy workplace.

3.4 BURNOUT

Burnout that occurs when employees are subjected to excessive stress without adequate job or personal resources to effectively manage these stressors. Burnout represents a complex psychological syndrome that manifests predominantly in the occupational sphere, critically impairing an individual's well-being and performance if they cannot successfully cope with stress (Els et al., 2015; Meng et al., 2023). It is characterised by a state of emotional exhaustion, depersonalisation and a diminished sense of personal accomplishment, all of which can profoundly impact an employee's

health and productivity (Kotze, 2018; Xu, 2019). Stress, stemming from excessive workloads, tight deadlines and high performance expectations, intensifies the symptoms of burnout (Asfahani, 2023).

To fully explore the complexity of burnout, this discussion proceeds in three key sections. First, the conceptualisation of burnout is examined, defining the phenomenon and its underlying components. Next, the dimensions of burnout is outlined, highlighting the various aspects through which it manifests. Finally, attention turns to the psychodynamic and neuroscientific approaches to burnout, offering insights into its underlying mechanisms and informing potential interventions and treatments (Delfanti et al., 2018; O'Dowd et al., 2018). My approach not only highlights the factors leading to burnout but also offers guidance on mitigating its detrimental effects within the work environment, with particular focus on managing workplace stress.

3.4.1 Conceptualisation of Burnout

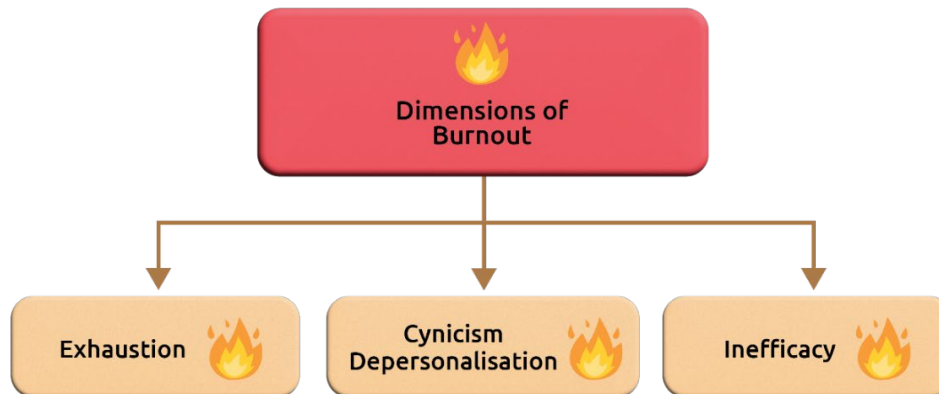
Burnout is described as a chronic feeling of being drained, having nothing left to give to one's job, irrespective of the length of time off or rest (Kotze, 2018; Petitta & Jiang, 2020; Robins et al., 2018). Some authors stated that burnout consists of three dimensions, namely physical fatigue, cognitive weariness and emotional exhaustion (Meng et al., 2023). Physical fatigue refers to an intense feeling of tiredness, lack of energy and a feeling of exhaustion which is associated with impaired physical and cognitive functioning (Zito et al., 2016). Contemporary definitions specify that burnout manifests through three distinct dimensions: exhaustion, cynicism and inefficacy.

3.4.2 Dimensions of Burnout

In *Figure 3.3*, I illustrate the dimensions of burnout, which are exhaustion, cynicism and inefficacy. Consequent to *Figure 3.3*, I discuss each of these dimensions.

Figure 3.3

Dimensions of Burnout



Note: Authors own work

3.4.2.1 Exhaustion in the workplace

Exhaustion in the workplace, commonly referred to as occupational or job burnout, is a widespread issue that arises from chronic stress and work-related pressures. It is characterised by emotional, physical, and mental fatigue, leading to a decrease in personal skills, negative attitudes towards work and a loss of interest in tasks or clients (Galletta et al., 2016). It is a state of chronic physical and mental fatigue caused by prolonged exposure to stressful working conditions (Puyod & Charoensukmongkol, 2021). Unlike typical tiredness, workplace exhaustion persists over time and can severely impact an individual's overall well-being and performance (J.M. McCarthy et al., 2016). The emotional aspect inherent to exhaustion in the workplace is a critical issue that can have harmful effects on the well-being of employees and organisational outcomes.

Several factors contribute to workplace exhaustion (Parray et al., 2023), ranging from excessive workloads (J.M. McCarthy et al., 2016), long hours, workplace bullying (Liang, 2021), workplace incivility (Mekawy et al., 2022; Parray et al., 2023), workplace ostracism (Wang et al., 2023), sexual harassment (van Veen et al., 2022) and conflict in the workplace, to workplace rumours (Puyod & Charoensukmongkol, 2021). High job demands, such as tight deadlines and constant multitasking, can result in overwhelming stress. Meanwhile, insufficient job resources, such as lack of support

from supervisors or colleagues (J.M. McCarthy et al., 2016) can worsen feelings of helplessness and fatigue. Additionally, a mismatch between an individual's values and the organisational culture can create a sense of alienation, further intensifying feelings of exhaustion (Vatharkar, 2019). Psychological contract breach is an indication that a business failed to meet their promises and may further enhance a feeling of exhaustion (Mekawy et al., 2022).

Workplace exhaustion manifests in various physical, emotional and behavioural symptoms. Workplace factors such as stress, fatigue and burnout can lead to symptoms like loss of confidence, fatigue, depressive thoughts and even suicidal ideation (Hlubocky et al., 2017). Interpersonal difficulties might surface due to emotional exhaustion, due to the fact that interpersonal relations are seen as one of the resources of the employee in the work environment (Akram et al., 2019). Physically, individuals may experience chronic fatigue, headaches and gastrointestinal issues (Beck et al., 2015a; Michalewski & Pietrakowski, 2018). Emotionally, they might suffer from anxiety, depression and irritability (Ceschi et al., 2017). Behaviourally, signs of burnout include decreased productivity, frequent absenteeism and withdrawal from work-related activities or social interactions with colleagues (Parry et al., 2023; Zito et al., 2016). These symptoms can collectively weaken an employee's ability to perform effectively and maintain healthy workplace relationships.

3.4.2.2 Cynicism (Depersonalisation)

Cynicism is characterised by a deep-seated distrust of others' motives, coupled with a lack of hope or faith in people. It is driven by desires, greed, ambition, materialism, and goals that a cynic views as unattainable, vain, or ultimately meaningless (Özdemir & Başar, 2024). Often developing as a coping mechanism to deal with stress and exhaustion, cynicism reflects an indifferent or distant attitude towards work, colleagues and even the recipients of one's services (Adamopoulos & Syrou, 2022; Hlubocky et al., 2017). Cynicism represents a withdrawal and is characterised by loss of idealism and a "dehumanised" perception of others (Hricová et al., 2020; O'Dowd et al., 2018; Viljoen & Claassen, 2017). Cynicism, particularly in the form of depersonalisation, can manifest in the workplace through various negative attitudes and behaviours. It leads to a loss of trust, frustration, demystification and a lack of belief in people and situations (Adamopoulos & Syrou, 2022). This negative outlook can result in reduced

professionalism, increased negativism and mental distancing from work-related responsibilities (Bauernhofer et al., 2018; Sterkens et al., 2022). Cynicism may also be associated with feelings of disillusionment, frustration and distrust towards individuals, groups, ideologies or institutions (Roche & Haar, 2013).

The causes of cynicism in the workplace can be multifaceted. For instance, exposure to trauma and continuous contact with distressing situations can increase cynical attitudes amongst healthcare professionals (Viljoen & Claassen, 2017). Workplace stressors, such as incivility, lack of organisational justice, and job insecurity, can trigger emotional reactions like cynicism, contributing to a negative work environment. (Mekawy et al., 2022; Petitta & Jiang, 2020).

Individual characteristics and personality traits, such as the Dark Triad traits, can influence cynical behaviours in the workplace. This highlights the role of personal tendencies in shaping attitudes towards the organisation. The Dark Triad refers to three closely related but distinct personality traits: narcissism, Machiavellianism (manipulation, deceit) and psychopathy (De Clercq et al., 2019). These traits are considered socially aversive and are associated with a variety of negative behaviours. It is essential to recognise that cynicism, along with emotional exhaustion and reduced professional efficacy, forms a crucial dimension of burnout, which is often a consequence of chronic workplace stress and overwhelming job demands (Başar, 2020; Özdemir & Başar, 2024).

In conclusion, cynicism in the workplace, particularly in the form of depersonalisation, can arise from various stressors, including exposure to trauma, incivility, lack of organisational justice, job insecurity and individual personality traits.

3.4.2.3 Inefficacy (Reduced Personal Accomplishment)

This third dimension, inefficacy, involves feelings of incompetence and a lack of achievement and productivity at work (Kumareswaran, 2023). Employees experiencing burnout often feel that their efforts are unproductive, leading to decreased motivation and job satisfaction (Kaihlainen et al., 2023; Kumareswaran, 2023). The pervasive sense of inefficacy can result from an imbalance between job demands and available resources, leaving workers feeling overwhelmed and unable to meet their goals effectively (Kaihlainen et al., 2023). Not having control over your job is generally related to the inefficacy or reduced personal accomplishment aspect

of burnout (Nkosi, 2019). Furthermore, when employees' work and efforts are not recognised, it devalues both the work and the worker, leading to feelings of inefficacy (Maslach & Leiter, 2016).

Research indicates that inefficacy due to burnout significantly impacts both individual and organisational performance. Employees who perceive themselves as ineffective are less likely to engage proactively in their tasks, leading to reduced productivity and a decline in the overall quality of work (Başar, 2020). Moreover, this sense of reduced personal accomplishment can create a feedback loop. Decreased performance further lowers an employee's self-efficacy, reinforcing the cycle of burnout (Lambert et al., 2018). Inefficacy is often linked to a loss of personal identity and a sense of disconnection from one's professional role. This intensifies the negative effects of burnout on workplace outcomes (Kumareswaran, 2023; Xu, 2019).

In summary, employees experiencing inefficacy often feel their work is no longer making a difference or that their skills are inadequate, leading to reduced productivity, compassion fatigue, depersonalisation and lack of fulfilment (Kotze, 2018; Moss, 2019). I will now explain the psychodynamic and neuroscientific perspectives on burnout.

3.4.3 Psychodynamic and Neuroscientific approach to burnout

The *psychodynamic* theory of burnout explores the existential and psychodynamic factors contributing to burnout symptoms (Fontes, 2020). It suggests that burnout can stem from a loss of significance or meaning in one's professional life, leading to emotional exhaustion, depersonalisation and reduced personal accomplishment (Devers, 2024; Spilt et al., 2011). Psychodynamic theories suggest that individuals may unconsciously choose occupations that reflect significant childhood experiences. This can shape their professional paths and contribute to burnout (Pines, 2002). The psychodynamic-existential perspective on burnout emphasises the need to address unconscious factors influencing career choices and the search for meaning in order to effectively treat burnout (Malach-Pines & Yafe-Yanai, 2001).

Moreover, the psychodynamic approach to burnout emphasises integrating cognitive-behavioural and psychodynamic interventions to comprehensively address burnout. By combining these modalities, individuals can focus on cognitive restructuring,

emotional regulation and finding existential meaning in their work to manage burnout symptoms effectively (Danieli et al., 2021; Hamelin et al., 2023). Overall, the psychodynamic theory of burnout offers a detailed understanding of how unconscious motivations, existential concerns, and psychodynamic processes interact to shape employees' experiences of burnout in professional settings.

The *neuroscientific* approach to burnout utilises advanced methods such as neuroimaging, including functional magnetic resonance imaging (fMRI) and electroencephalogram (EEG), to investigate the neural indicators of burnout symptoms (Bärtl et al., 2024). Research studies have used neuroimaging techniques to examine changes in brain function in individuals experiencing burnout. These studies provide insights into how neural processes are impacted by prolonged stress and emotional exhaustion (Sail & De Sousa, 2011). This approach provides a deeper understanding of the neural mechanisms involved in burnout, offering a neurobiological perspective on the cognitive, emotional and physiological aspects of this syndrome. Moreover, integrating neuroimaging data with computational modelling techniques presents a novel approach to studying burnout from a neuroscientific perspective. Researchers can better understand the brain processes linked to burnout by integrating neuroimaging findings. They combine these insights with approximation-based computational models to handle complex and uncertain data. This integrated approach provides a clearer picture of the neural dynamics underlying burnout (Chow et al., 2018). This integration not only enhances knowledge of the neural mechanisms associated with burnout but also provides a framework for predicting and simulating the progression of burnout based on neurobiological data. The neuroscientific approach to burnout links neuroimaging with computational modelling. This connection helps us better understand how brain activity relates to behaviour in individuals experiencing burnout. It may also guide the development of targeted interventions to reduce the effects of burnout (Mikołajewska et al., 2022).

In summary, burnout is a multifaceted condition characterised by emotional exhaustion, depersonalisation and reduced personal accomplishment. Conceptually, it arises from prolonged exposure to job demands that exceed an individual's capacity to cope, particularly when job resources are insufficient. The dimensions of burnout highlight its impact on emotional and professional life. From a psychodynamic

perspective, burnout can be understood as a response to internal conflicts and unmet psychological needs. The neuroscientific approach reveals how chronic stress affects brain function and contributes to the development of burnout. Integrating these perspectives provides a comprehensive understanding of burnout, emphasising the importance of addressing both the psychological and physiological aspects to foster resilience and well-being in the workplace.

3.5 RESILIENCE

In addressing the challenge of stress and burnout, it is crucial to explore the concept of resilience as a means to enhance well-being and performance in the working environment. This section conceptualises resilience, and examines key dimensions related to resilience, such as Sense of Coherence (SOC), optimism, social support, self-efficacy and adaptability. Practical approaches to developing personal resilience and thereby strengthening one's ability to cope with stress, will be provided. Additionally, the psychodynamic approach will be explored to understand internal conflicts and psychological needs related to resilience. The neurological approach will also be examined to highlight the brain's role in building resilience, which is crucial for stress management.

3.5.1 Conceptualisation of resilience

Resilience, the ability to adapt and bounce back from adversity, can serve as a powerful countermeasure to the challenges posed by stress and burnout (Matthews et al., 2017; O'Dowd et al., 2018). Shifting my focus to resilience, I examine how cultivating this adaptive capacity as a coping response can help individuals endure occupational stressors. More importantly, it enables them to emerge stronger and more capable in the face of these challenges (Al-Hawari et al., 2020; Wood & Bhatnagar, 2015).

Resilience in the workplace is the capacity of employees to maintain or regain high levels of performance and well-being despite experiencing stress or adversity. It is a dynamic process that includes personal qualities and a supportive environment, enabling individuals to thrive in the face of challenges (Afifi et al., 2016; McEwen, 2016). As far as the supportive environment is concerned, Fang et al. (2020) add social capital as an external contributor to personal resilience. This can be in the form of

emotional support, information, mutual trust and instrumental support as more dimensions of resilience.

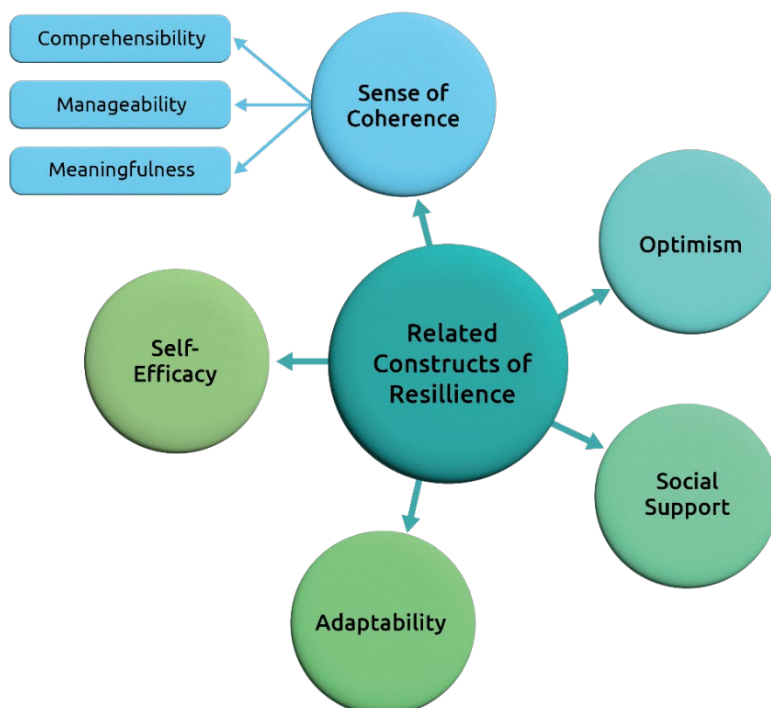
Understanding resilience in theory is the first step; the next is to explore how it can be practically developed on a personal level. Developing personal resilience involves adopting specific strategies and practices that enhance an individual's ability to manage stress and bounce back from challenges effectively. I will discuss SOC, optimism, social support, self-efficacy and adaptability as dimensions of resilience, of which most are seen as personal qualities that enable employees to cope with stressful workplace settings and events (Cooke et al., 2019).

3.5.2 Related Constructs of Resilience

In *Figure 3.4* below I give an overview of the related constructs of resilience. I then continue to discuss each of them.

Figure 3.4

Related Constructs of Resilience



Note: Author's own work

3.5.2.1 Sense of Coherence (SOC)

The concept of Sense of Coherence (SOC) emerges as a pivotal resilience construct within the field of health psychology, grounded in Antonovsky's Salutogenic model (Bauer & Jenny, 2022). SOC represents an individual's capacity to perceive life as comprehensible, manageable and meaningful (Abe & Abi, 2018; Vogt et al., 2016). Specifically, it involves the belief that stimuli from both internal and external environments are structured, predictable, and understandable (comprehensibility). It also includes the belief that resources are available to meet the demands posed by these stimuli (manageability). Finally, it encompasses the motivation to engage with life's challenges, as they are seen as worthy of investment and involvement (meaningfulness) (Mead et al., 2020). This triad of components acts as a dynamic and adaptive mechanism that enhances an individual's ability to effectively navigate and cope with stress, adversity and trauma, fostering psychological and physical well-being (Luthans & Youssef-Morgan, 2017). Individuals with a strong SOC tend to exhibit greater resilience, enabling them to maintain or quickly recover their equilibrium in the face of life's stresses (Abe & Abi, 2018; Bauer & Jenny, 2022). Research across different populations has consistently found that a high Sense of Coherence (SOC) is linked to better health outcomes, lower stress levels, and improved quality of life. This highlights SOC's role as a key factor in promoting resilience and overall health (Abualruz & Hayajneh, 2019).

SOC is a significant construct related to resilience, reflecting the ability of individuals to perceive and manage stressors effectively. Research by Festerling et al. (2022) emphasises that SOC includes coping with events based on manageability, comprehensibility and meaningfulness, which are essential components of resilience. This highlights the role of SOC in helping individuals cope with challenging situations and restore balance. Moreover, Isobe et al. (2018) highlight that SOC is crucial for preserving physical and mental health and coping with distressing experiences. Furthermore, SOC has been found to mediate the relationship between resilience and various outcomes. Mikutta et al. (2022) demonstrate that SOC mediates the interaction between resilience and PTSD symptoms, indicating its role in mitigating the severity of PTSD symptoms. Similarly, Mc Gee et al. (2018) suggest that the Sense of Coherence-Revised (SOC-R) concept plays a crucial role in the development of stress-related resilience.

3.5.2.2 Optimism

Optimism is another important resilience construct, playing a significant role in the ability of individuals to cope with adversity and maintain positive attitudes. Research by Hwang and Kim (2023) highlights that optimism is a fundamental aspect of resilience development, reflecting positive attitudes towards challenging circumstances (Gómez-Molinero et al., 2018). Studies have shown that resilience helps individuals cope with immediate challenges. In contrast, optimism plays a key role in maintaining positive perceptions and attitudes over the long term, particularly among older adults (Lee, 2023).

Optimism is identified as a major driving factor in the relationship between resilience and negative emotional responses. Chen et al. (2018) found that optimism, amongst the composite factors of resilience, significantly influences the negative bias in emotional reactions. Additionally, optimism has been linked to improved mental health outcomes, with studies indicating that a high level of optimism enhances the effectiveness of resilience, particularly in students (Mangestuti et al., 2020; Widuri, 2023).

Furthermore, optimism has been recognised as a mediator between resilience and psychological well-being. Shoaga et al. (2017) suggest that optimism plays a mediating role in enhancing the relationship between resilience and psychological distress, emphasising its importance in promoting overall well-being. Similarly, optimism has been recognised as a protective psychosocial factor, alongside resilience. It has the potential to reduce emotional distress in various contexts, such as infertility and cancer diagnosis (Gao et al., 2019; Santa-Cruz et al., 2019).

Moreover, optimism has been linked to greater psychological resilience and reduced burnout. Hope and social support play significant roles in enhancing resilience and helping to mitigate burnout (Klinoff et al., 2018). Studies have also highlighted the beneficial association between optimism and psychological resilience in managing pain and improving clinical outcomes in individuals with conditions like knee osteoarthritis (Thompson et al., 2019).

3.5.2.3. Social Support

Social support is a crucial construct underlying resilience, playing a significant role in the ability of individuals to adapt to adversity and enhance their overall well-being.

Research by Dias et al. (2015) emphasises that social support acts as a moderating factor of resilience, alleviating the physical and mental burden caused by stress and enhancing the coping abilities of individuals. Moreover, Li (2023) found that social support enables individuals to access additional social and psychological resources, fostering a sense of belonging and enhancing both family and individual resilience (Li et al., 2023). The strength of one's support networks also plays a critical role in resilience. Having robust relationships with colleagues, mentors and supervisors provides not only emotional support but also practical assistance, buffering against the impact of stress (Grover et al., 2017; Smollan & Singh, 2022).

Furthermore, social support has been consistently linked to resilience in various contexts. Lei et al. (2021) highlight that resilience is frequently associated with social support and life satisfaction, indicating the importance of social connections in promoting resilience. They found that good social support has protective effects that foster resilience, while resilience, in turn, enhances the capacity of individuals to manage stress effectively (Lei et al., 2021).

Zhao and Si (2021) suggest that social support plays a crucial role in enhancing resilience, particularly in the context of loneliness and frailty amongst older adults (Zhao & Si, 2021). Additionally, Gao et al. (2022) found that social support can positively predict individual resilience, indicating that strong social networks can contribute to building resilience.

3.5.2.4 Self-Efficacy

Self-efficacy is yet another fundamental resilience construct, playing a critical role in the ability of individuals to adapt to challenges, overcome obstacles and maintain a positive outlook. It refers to an individual's belief in their ability to harness motivation, cognitive resources, and the necessary actions. This enables them to successfully perform specific tasks within a given context (Kotze, 2018; Van Steenbergen et al., 2018). Research highlights that individuals with high resilience tend to report higher levels of self-efficacy (Schueler et al., 2021), enhancing their belief in their capabilities to navigate difficult situations effectively (Friedberg & Malefakis, 2018). Studies have consistently shown a strong link between self-efficacy and resilience. Individuals with high self-efficacy are better equipped to recover from adversity (Arbinaga, 2023).

In the workplace, self-efficacy plays a crucial role in mitigating burnout amongst employees. High levels of self-efficacy are associated with better health outcomes, well-being, job satisfaction and lower burnout rates (Alkhayyal & Bajaba, 2023). Employees with strong self-efficacy are more likely to exhibit proactive behaviour and persistence in the face of difficulties (Hakanen et al., 2008). Self-efficacy influences emotional exhaustion, work performance and safety behaviours, playing a crucial role in reducing the intention to quit and enhancing overall well-being (Akanni et al., 2021; Chang et al., 2023; Huard et al., 2021). Moreover, high levels of self-efficacy are associated with shorter return-to-work times after rehabilitation for health issues (Skagseth et al., 2021).

Self-efficacy also facilitates the relationship between resilience and various outcomes, such as coping with health challenges and workplace stressors. For instance, Zhang et al. (2020) found that self-efficacy mediates the relationship between symptom distress and resilience in lung cancer patients. This highlights the role of self-efficacy in boosting resilience when facing health challenges. Furthermore, individuals with high self-efficacy experience greater self-confidence, which leads to more positive emotions and improved subjective well-being. This further underscores the importance of self-efficacy in nurturing resilience (Wan et al., 2022).

In summary, self-efficacy is a key factor in coping with workplace stressors effectively, leading to greater job satisfaction and reduced intention to quit. It is closely linked to various aspects of workplace dynamics. Emotional self-efficacy is negatively related to emotional exhaustion, reduced work performance, and depersonalisation (Huard et al., 2021). Studies have highlighted that workplace self-efficacy impacts safety behaviours, engagement and turnover intentions amongst employees (Akanni et al., 2021; Chang et al., 2023). Therefore, fostering self-efficacy in individuals can significantly enhance their resilience, enabling them to maintain or quickly recover their equilibrium in the face of life's stresses and workplace challenges.

3.5.2.5 Adaptability

Finally, adaptability is an important construct relevant to resilience, reflecting the capacity of individuals to adjust and thrive in the face of changing circumstances and challenges. Research by Nelson (2011) highlights the importance of adaptation in building resilience, emphasising that responses to change can either strengthen or

undermine resilience. Moreover, Folke (2016) frames resilience as having two key components: social resilience, which encompasses adaptive capacity and learning, and biophysical resilience, which involves resistance and absorption within ecological systems. This highlights the multidimensional nature of resilience and the role of adaptability in coping with different stressors.

Furthermore, adaptability is closely linked to resilience in various contexts. Gao (2024) found that improving family intimacy and adaptability can help prevent non-suicidal self-injury behaviours among adolescents. This indicates the protective role of adaptability in promoting resilience. Additionally, Carballo and Lyndon (2022) suggest that adaptive behaviour mediates the relationship between resilience and job performance. This highlights how adaptability helps individuals navigate challenges effectively and excel in their roles.

Moreover, adaptability plays a significant role in mediating the effects of stress on health behaviours. Du et al. (2021) demonstrate that while stress can affect dietary behaviours, alcohol use, and sleep quality, resilience (including adaptability) can reduce these effects. This emphasises the importance of adaptability in fostering positive coping strategies. Additionally, Kukihara et al. (2020) found that perceived family adaptability positively influences resilience in haemodialysis patients. This indicates that adaptability within the family context can help individuals cope with health issues and enhance their resilience.

3.5.3 Psychodynamic and Neuroscientific approach to Resilience

Psychodynamics and *neuroscience* converge on the concept of resilience, each offering a unique lens through which to understand this complex phenomenon. From a psychodynamic perspective, resilience is seen as an individual's ability to navigate and adapt to psychological stressors and traumas. It emphasises the role of internal processes and early life experiences in shaping one's capacity to withstand adversity (de Kloet et al., 2019; Vaillant, 2011). The psychodynamic approach focuses on the unconscious mechanisms, defence mechanisms and the dynamic interplay between an individual's emotions and past experiences in fostering resilience (Friedberg & Malefakis, 2018; Garrett, 2020).

On the other hand, neuroscience approaches resilience from a biological standpoint, investigating the neural mechanisms and brain structures that enable an individual to

adapt to stress (Friedberg & Malefakis, 2018). Research in this field has identified specific brain regions, such as the prefrontal cortex and the amygdala, and neural pathways that are critical in regulating emotional responses to stress and facilitating adaptive behaviours, specifically if exposed to music intervention (Dukic, 2018; McEwen, 2016). Moreover, neuroscience has highlighted the importance of neuroplasticity — the brain's ability to reorganise itself by forming new neural connections. This suggests that resilience can be developed and strengthened through experiences that stimulate the brain's adaptability (McEwen, 2016). Together, psychodynamics and neuroscience offer a comprehensive understanding of resilience. They highlight its foundations in both unconscious mental processes and the tangible structures of the brain. This underscores resilience as a multifaceted construct influenced by psychological, emotional, and biological factors (Dukic, 2018; Friedberg & Malefakis, 2018).

In sum, personal resilience is an intricate blend of self-belief, optimism, adaptability, hope and strong social support, each playing a vital role in equipping individuals to effectively handle and thrive amidst life's challenges (Clur, 2023).

Having explored the critical role of resilience and its components, including self-efficacy, in enhancing well-being and mitigating stress, I now turn my attention to the concept of coping. While resilience provides a broader framework for understanding how individuals adapt and thrive amidst adversity, coping refers to the specific strategies and mechanisms people employ to manage stressors and navigate challenging situations. By examining various coping strategies, we can gain a deeper understanding of how individuals can effectively respond to stress, thereby complementing the insights gained from our discussion on resilience.

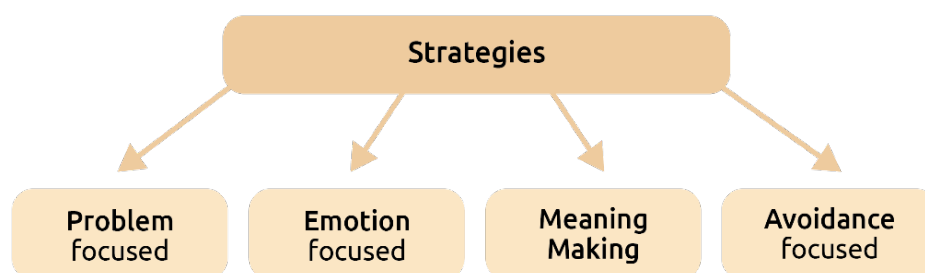
3.6 COPING

In this section, I delve into the concept of coping, which refers to the specific strategies and mechanisms individuals use to manage stressors and navigate challenging situations. I begin by conceptualising coping within the framework of the Transactional Model of Stress, which emphasises the dynamic process between individuals and their environments in responding to stress.

Following this, as illustrated in *Figure 3.5*, I explore various coping strategies, including problem-focused coping, which involves tackling the source of stress directly; emotion-focused coping, which aims to manage emotional responses to stress; meaning-making coping, which seeks to find purpose and significance in stressful experiences; and avoidance coping, which involves evading the stressor or related thoughts and feelings. This comprehensive overview provides valuable insights into the diverse ways in which individuals can effectively respond to and manage stress.

Figure 3.5

Coping Strategies



Note: Authors own work

3.6.1 Conceptualisation of Coping

From a process standpoint, coping can be defined as ongoing cognitive and behavioural efforts to manage specific demands perceived as exceeding one's resources. Lazarus (1993) suggests that most coping processes arise from a fluid struggle to respond appropriately to situational realities. Some coping strategies are more consistent across situations than others (de Boer et al., 2017). For instance, seeking social support depends heavily on the social context, while positive reappraisal is a more stable coping inclination. Additionally, the need for social support or distance varies depending on the situation (Lazarus, 1993).

Research by Lazarus has shown that planful problem-solving and positive reappraisal are associated with satisfactory outcomes, whereas confrontive coping and distancing often lead to unsatisfactory outcomes. Understanding these patterns can help tailor interventions to enhance coping effectiveness (Qarima Isa et al., 2019).

Coping is a dynamic process that evolves over time in response to changing situational contexts (Barnard et al., 2016). It is essential to measure coping thoughts and actions separately from their outcomes to determine whether they are adaptive or maladaptive (Mushwana et al., 2019). For example, denial can have different effects on health depending on the context: it might be productive after a cardiological operation (denying poor recovery) or counterproductive during an asthma attack (denying symptoms before the attack) (Lazarus, 1993). Understanding what a person is thinking and doing to cope with stress is crucial for assessing their coping patterns (Friedberg & Malefakis, 2018). Carver and Connor-Smith (2010) found that the relationship between how individuals cope and how well they adjust is influenced by several factors. These include the type of stressor, its duration, the context in which it occurs, and the degree of control over it. Bonanno (2013) further expands on this idea that adaptive and maladaptive coping are not clear-cut categories but that the characteristics of the context, as well as the fit between context and coping, must be assessed.

Lazarus (1993) indicates that in order to gain insights into a person's coping strategies, it is important to examine both consistencies and inconsistencies over time. This approach distinguishes between the trait concept (consistent coping patterns) and the state concept (contextual and fluctuating coping responses). The *Ways of Coping Questionnaire* from Lazarus and Folkman (Lundqvist & Ahlstr, 2006) offers a contextually-orientated method for studying coping. It measures eight factors: confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem-solving and positive reappraisal (Rexrode, 2005).

3.6.1.1 Theory of Coping

Coping can be defined as the cognitive and behavioural efforts made by individuals to manage, tolerate or reduce the internal and external demands of stressful situations (Reybrouck et al., 2020). It involves various strategies, such as problem-solving, seeking social support, engaging in relaxation techniques or adopting a positive outlook, aimed at adapting to difficult circumstances (du Plessis & Martins, 2019; Ornek & Esin, 2020).

Coping is understood as a continuous cognitive and behavioural effort by individuals to manage overwhelming stimuli, as described by Huang et al. (2018). Coping capacities are significantly influenced by an individual's personal characteristics (Matthews et al., 2017). Du Plessis and Martins (2019) describe coping as both a conscious and unconscious process, aimed at maintaining control in stressful situations. They propose that individuals may employ defence mechanisms unconsciously to cope with distressing stimuli, drawing from Freudian psychoanalytic theory (Gerge et al., 2019; Vaillant, 2011).

From a neuroscientific standpoint, coping mechanisms involve complex neural networks and neurotransmitter systems. Research has shown that regions of the brain such as the prefrontal cortex, amygdala and hippocampus play crucial roles in regulating emotional responses and decision-making processes associated with coping (de Kloet et al., 2019; McEwen, 2016).

Despite advances in neuroscience, Du Plessis and Martins (2019) highlight the difficulty in accurately measuring coping, pointing out the limitations in current questionnaires that fail to capture all relevant domains of this complex process (Lazarus, 1993). Coping theories emphasise the role of coping in adaptation to chronic stressors (Bonanno & Burton, 2013). Coping strategies may influence health outcomes by affecting psychological adjustment, physiological stress responses, health behaviours and treatment adherence. Research in this area explores the effectiveness of various coping interventions and the development of coping skills to enhance patient well-being and quality of life (Barnard et al., 2016).

3.6.1.2 Transactional Model of Coping

The TMSC, developed by Richard Lazarus and Susan Folkman in the 1980s, is a well-established framework that emphasises the dynamic nature of stress as a process involving the interaction between individuals and their environment (Ouko, 2024). This model posits that stress is not solely determined by external events but is also influenced by how individuals perceive and appraise these events (Siah et al., 2022). Before individuals decide on coping strategies, they first evaluate the level of stress brought on by a situation through cognitive appraisal. "Am I fine"?, is the question the threatened person seeks an answer to (Ouko, 2024; Siah et al., 2022). In the secondary appraisal, it is rather a matter of "What can I do?". This is where the person

looks at their resources and possible options to cope with the stressors (Lazarus & Folkman, 1987; Siah et al., 2022). The model suggests that coping involves cognitive and behavioural responses that individuals employ when they perceive stressors to be beyond their capabilities (Saleem & Malik, 2023). Furthermore, the TMSC highlights the importance of primary and secondary appraisals of a situation, coping efforts and the outcomes of these efforts (Miller et al., 2021).

The model also indicates that coping can act as a buffer against negative outcomes of stress, while poor coping strategies may exacerbate the effects of stress (Woods et al., 2023). Moreover, the TMSC provides a framework for understanding coping strategies employed in various contexts, such as caregiving (Ochoa-Dominguez et al., 2023), health care during the COVID-19 pandemic (Hundah et al., 2024) and online teaching during ostracism (Wang et al., 2023). It underscores the role of coping strategies in mediating the relationship between stressors and physiological responses to stress (Afonso et al., 2022).

In conclusion, the TMSC offers a comprehensive understanding of stress as a dynamic process influenced by individual appraisals and coping mechanisms. It highlights the importance of cognitive and behavioural responses in managing stress and provides a valuable framework for studying stress and coping strategies across different situations and populations.

3.6.2 Coping Strategies Framework

This framework categorises coping strategies into various types based on their cognitive or behavioural nature. Commonly used coping strategies include problem-focused coping (directly addressing the stressor), emotion-focused coping (managing emotional responses to the stressor) and meaning-focused coping (finding meaning or acceptance in the face of adversity) (du Plessis, 2020; Reybrouck et al., 2020; Skinner & Zimmer-Gembeck, 2012). Specific strategies within these categories may include seeking social support, cognitive reappraisal, leisure activities, religious practices, avoidance or acceptance (du Plessis, 2020). This framework helps researchers understand the diversity of coping responses and their implications for adjustment and well-being (Bregar et al., 2018).

Coping strategies are essential in the workplace, where they help individuals manage, reduce or alleviate stressors, thereby enhancing resilience, maintaining well-being and

improving job performance (Kwon & Kim, 2020; O'Dowd et al., 2018). From a psychodynamic perspective, problem-focused coping involves actively altering the person-environment relationship causing distress through conscious efforts or unconscious defense mechanisms (Vaillant, 2011). Emotion-focused coping manages the emotional response to stressors, often through unconscious processes like repression or denial (Fang et al., 2020). Additionally, avoidance and meaning-making strategies are significant in coping with workplace stress (Folkman, 2012; Madrigal & Blevins, 2022).

Integrating psychodynamic and neuroscientific perspectives provides a comprehensive understanding of coping resources, highlighting the interplay between internal psychological processes and neural mechanisms (Vaillant, 2011). Positive psychological traits and effective coping strategies are associated with adaptive changes in brain function, promoting resilience and well-being (Folkman, 2012; Haar, 2017). Conversely, maladaptive coping strategies can lead to dysregulation of the stress response system, increasing vulnerability to psychological distress and health problems (Mushwana et al., 2019; Nevill & Haverkamp, 2019). Understanding the role of SOC in coping helps explain why some individuals thrive under stress while others struggle. SOC shapes the choice and effectiveness of coping strategies, guiding individuals toward more adaptive responses and fostering resilience (Söderhamn & Holmgren, 2004).

3.6.2.1 Problem-focused coping

Problem-focused coping strategies are crucial in the workplace for effectively managing stressors and enhancing overall well-being. These strategies involve direct actions aimed at addressing the root cause of stress-inducing issues (Ardiana & Soetjningsih, 2024; Ryu, 2020). Research indicates that problem-focused coping can serve as a mediator in reducing workplace-related strain and turnover intentions (Muazzam et al., 2020). In professions like healthcare and emergency services, problem-focused coping has been recognised as a prevalent and effective approach to handling stressors (Bing-Agsaoay et al., 2022; Elliason, 2021). Studies have emphasised that problem-focused coping entails actively engaging in efforts to modify or seek alternatives to manage stressful situations (Gurvich et al., 2021; Madrigal & Blevins, 2022).

According to Antonovsky (1987), problems caused by stressors are twofold: the actual problem and the regulation of emotion. While problem-focused coping addresses the actual problem, it indirectly aids in regulating the emotional response. This dual impact highlights the effectiveness of problem-focused strategies in managing workplace stress. High job demands significantly contribute to emotional exhaustion. However, they can be mitigated through problem-focused coping, which reduces the ongoing cognitive and emotional effort needed to prevent health impairment (Lesener et al., 2019; Seidler et al., 2014).

Furthermore, problem-focused coping has been linked to positive outcomes, such as increased job satisfaction amongst medical and paramedical staff (Bing-Agsaoay et al., 2022). It has also been identified as particularly beneficial for individuals transitioning into new roles, providing the necessary motivation for success (Chiou, 2021). During a traumatic experience, e.g. the COVID-19 pandemic, problem-focused coping was recommended as a strategy to tackle the challenges posed by traumatic experiences and negative health perceptions (Li et al., 2021; Ryu, 2020). Additionally, interventions for conditions like Internet Gaming Disorder have highlighted the importance of promoting problem-focused coping strategies to boost resilience and reduce perceived stress (Yen et al., 2019).

Problem-focused coping strategies in the workplace include seeking information, generating solutions and taking concrete steps to eliminate or reduce stressors (Elliason, 2021; Liang et al., 2021). For example, employees might pursue additional training to better handle challenging tasks. They could also negotiate workload adjustments with supervisors or create time management plans to improve efficiency (Clur, 2023). These proactive steps enable individuals to confront stressors directly, improving their coping mechanisms and overall well-being (Afifi et al., 2016).

In summary, problem-focused coping plays a vital role in addressing workplace stress and improving coping mechanisms. By directly confronting stressors and taking proactive steps to resolve issues, individuals can effectively manage challenges in the workplace and enhance their overall well-being (Fourie, 2015).

3.6.2.2 Emotion-focused coping

Emotion-focused coping strategies are essential in managing stress and challenging situations, particularly in high-demand jobs where emotional exhaustion is prevalent

(Brantley et al., 2002). These strategies involve regulating and addressing the emotional aspects of a situation rather than focusing solely on problem-solving (Munroe et al., 2021). Research has shown that emotion-focused coping can mediate the relationship between job demands and psychological distress (Ben-Ezra & Hamama-Raz, 2021). Additionally, individuals who utilise emotion-focused coping strategies, such as positive reframing and acceptance, may experience posttraumatic growth and self-compassion (Munroe et al., 2021). *Positive Reframing* is a coping mechanism where individuals reinterpret a negative situation to see it in a more positive light (Terp, 2019). It involves shifting one's perspective to focus on any potential benefits, lessons learned or opportunities for personal growth that the situation might offer (Munroe et al., 2021). *Acceptance* as a coping strategy involves acknowledging and embracing the reality of a situation, including any emotions or thoughts it provokes, without trying to change it. Reappraisal is therefore a form of acceptance (Brooks et al., 2022). This approach helps reduce stress and anxiety by cultivating a mindset of dealing with things as they are, rather than how one wishes they were (Brinkborg et al., 2011).

Individuals may use various other emotion-focused strategies to cope, such as venting (Gurvich et al., 2021), humour (Bluethner, 2016) self-care, self-compassion and self-reflection (Hricová et al., 2020). However, maladaptive emotion-focused strategies, including venting while focusing on distress, denial and behavioural disengagement, can exacerbate stress (Bauer & Jenny, 2022; Noguchi et al., 2016).

Self-reflection is crucial for emotion-focused coping strategies. It involves examining one's attitudes, beliefs and actions to translate experiences into learning, leading to better future choices (Bregar et al., 2018; Nilsen et al., 2012). Reflection can be self-initiated or prompted by external events, such as workplace experiences (Lin et al., 2017). Continuous self-assessment through reflective practice is key to greater self-awareness, critical thinking and professional competence (Choudhury, 2017). Reflective and self-compassion skills help minimise occupational stress from professional conflicts and enhance feelings of control and appreciation (Shum, 2020; Wietmarschen et al., 2018).

Self-care involves proactive actions to maintain emotional, physical, mental and spiritual health, including healthy eating, regular exercise, meditation and improving

working conditions (Lloyd & Campion, 2017; Mirzazadeh-Qashqaei et al., 2023). It helps to identify relevant stressors and resources in professional and personal domains (Hricová et al., 2020). Increased self-care practices are associated with lower burnout and higher self-compassion (Hricová et al., 2020; Lloyd & Campion, 2017).

Self-compassion is the ability to take responsibility for failures and inadequacies without emotional distress or defensiveness, being mindful of individual struggles, opposing self-criticism and avoiding conflicts (Miyagawa et al., 2020). However, professionals may develop inappropriate self-care practices, such as self-medication, due to a culture of self-reliance and organisational pressures (Feingold & Tzur Bitan, 2022; Hawn et al., 2020).

3.6.2.3 Meaning-making coping

Meaning-making coping involves reconstructing schemes and representations to re-establish a sense of order and coherence. This process includes perspectives on the world, self, personal goals and significant events (Park, 2013). A few of the types of meaning-making coping processes can be identified as positive reappraisal, revised goals, spiritual beliefs (isolation), recognition of positive events in daily functioning, being in nature and inner connection with the self (Folkman, 2012; Frounfelker et al., 2020). Park et al. (2020) observed that meaning-making coping predicts both sense-making and perceived growth following traumatic events. They found that sense-making is particularly important for reducing distress.

Victor Frankl, a prominent psychiatrist and Holocaust survivor, is known for his profound insights into the human pursuit of meaning. Frankl's theory, as explained in his seminal work "Man's Search for Meaning", emphasises key concepts essential to the process of meaning making (Frankl, 1992). These include an acknowledgment of the spiritual dimension, the inherent responsibility individuals have towards seeking meaning and the intentional nature of finding purpose in life (Harisunker & du Plessis, 2021). Frankl suggests three pathways to find meaning, namely to engage with deeper purpose, connect meaningfully with others and embrace life with attitude (Frankl, 1966). Frankl's observations led to the development of logotherapy, a branch of existential psychology that posits meaning making as a fundamental human motivation, particularly crucial during times of immense stress and suffering (Frankl, 1992; White, 2020).

Frankl (1992) described this meaning making, amongst others, as *self-transcendence*, a fundamental aspect of human existence. This concept refers to the idea that being human involves directing oneself towards something or someone beyond oneself. It suggests that individuals find their true essence in pursuing a meaningful purpose or engaging with others. According to Frankl, the more a person forgets themselves in service to others, the more human they become, and the more they actualise their true potential (Frankl, 1992). This focus on meaning making aligns with Frankl's idea of self-transcendence, where individuals find fulfilment and actualise themselves by engaging with purposes beyond their own needs, including those within their work environment (Farrokhi, 2021; Osin et al., 2016).

In the work environment, meaning making helps employees address the person-environment mismatch while remaining in stressful situations (Barnard et al., 2016). Lorentz et al. (2016) suggest that employees construct meaning making to regulate personal experiences and well-being through value-based reflection. This integrative coping strategy uses internal and external resources, emphasising the importance of organisational support (Chen et al., 2022). Meaning-making coping enhances personal resources like self-efficacy and resilience, adding value during organisational change (Lorenz et al., 2016).

Frankl's theory of "Will to Meaning" serves as a foundational principle in contemporary health science research on the significance of meaning in life (Haugan & Dezutter, 2021). He proposes that while individuals may have enough to sustain their existence, they often lack a deeper sense of purpose. This notion underscores the underlying human quest for meaning beyond mere survival (Haugan & Dezutter, 2021). Moreover, Frankl's insights have significantly influenced clinical practice. They help healthcare professionals identify patients struggling to find meaning in the face of adversity and tragedy, especially in a modern world often devoid of transcendent values (Schimmoeller & Rothhaar, 2021).

Logotherapy, the therapeutic approach developed by Frankl, is rooted in three existential principles. Firstly, the concept of "freedom of will" asserts that individuals possess the autonomy to discover meaning in any circumstance. Secondly, the "will to meaning" highlights the primary capacity of humanity to ascribe value and significance to their existence. Lastly, the "meaning of life" underscores the

uniqueness of each individual's quest for meaning, emphasising the personal and subjective nature of this pursuit (Frankl, 1992; Schimmoeller & Rothhaar, 2021). This approach underscores the agency individuals have in shaping their own narratives and finding purpose in their lives (Bauer & Jenny, 2022).

Incorporating Frankl's insights into the work environment, employees can find meaning not only in their professional roles and achievements, but also in their relationships with colleagues and their response to challenges and adversities (Clur, 2023). This existential perspective encourages employees to see their work and its associated stresses as opportunities for personal growth and fulfilment (Harisunker & du Plessis, 2021). Organisational support in facilitating such an environment where employees can explore and find meaning in their work, can significantly enhance their resilience, job satisfaction and overall well-being (Haar, 2017).

Frankl's emphasis on the search for meaning as a primary motivator in human life resonates across various disciplines. From psychology to medicine, his ideas have influenced diverse fields. Scholars have observed that the pursuit of meaning exceeds other basic motivations. This underscores its critical role in shaping human behaviour and experiences (Wong, 2012).

By integrating Frankl's perspective, meaning-making coping strategies in the workplace are not just about managing stress and achieving coherence, but also about discovering a deeper purpose and significance in one's professional and personal life (Ben-Ezra & Hamama-Raz, 2021). This holistic approach underscores the transformative potential of meaning making, making it a vital component of effective SMIs.

3.6.2.4 Avoidance coping

Avoidance strategies focus on diverting attention away from the source of stress or psychological/somatic reactions to the stressor (Rabenu & Yaniv, 2017). These strategies include denial, escape, distraction, suppression, overworking, disengagement and internalisation (Hoffman, 2020; Hutchins et al., 2018; Iftikhar et al., 2022; Masood et al., 2021). Individuals who usually engage in avoidance behaviour have a predominantly coping style (Huang et al., 2018). Avoidance strategies can be effective in the initial stages of coping or when resources are

inadequate, providing a sense of control, but may compound stress or lead to burnout in the long run (Muriithi et al., 2020).

Avoidance coping is linked to increased substance abuse and poorer well-being (Nielsen & Knardahl, 2014). Psychological inflexibility or experiential avoidance is associated with mental illnesses like depression and self-harm behaviour (Chou et al., 2018; Dantzer et al., 2018). Avoidance coping leads to increased depression symptoms, posing a risk for clinical depression development (Bonanno & Burton, 2013; Seiffge-Krenke & Klessinger, 2000).

3.6.2.5 Coping strategies as related to Sense of Coherence

Understanding and implementing effective coping strategies is crucial for managing workplace stress and promoting mental well-being. By using problem-focused, emotion-focused and meaning-making coping strategies, individuals can strengthen their resilience. These mechanisms help reduce psychological distress and support a healthier work-life balance. SOC influences how people perceive and respond to stress, making it relevant to all four categories of coping strategies (Wood & Bhatnagar, 2015).

Problem-Focused Coping: SOC can enhance coping by fostering a sense of comprehensibility and manageability. People with a strong SOC perceive stressors as understandable and believe they have the resources to cope, which encourages proactive problem-solving (Mitonga-Monga, 2020). In *Emotion-Focused Coping*, SOC influences this form of coping through the meaningfulness component. Individuals with a strong SOC find purpose and meaning in challenging situations, helping them regulate their emotions more effectively (Angeles & Perkins, 2024). In *Meaning-Making Coping*, SOC directly relates to meaning making, as it involves finding purpose and coherence in life, even in stressful circumstances. Individuals with a high SOC are more likely to engage in meaning making as a coping strategy, turning potentially negative experiences into opportunities for growth and understanding (Hoffman et al., 2013). In *Avoidance Coping*, a strong SOC is generally associated with lower reliance on avoidance strategies, as individuals are more likely to face challenges directly. However, if avoidance is used as a temporary strategy to protect oneself until ready to confront the issue, SOC can still play a role in guiding this process (Bauer & Jenny, 2022).

3.6.3 Psychodynamic and Neuroscientific approach to Coping

Psychodynamic theory provides a unique perspective on coping mechanisms, emphasising the influence of unconscious internal mechanisms and defences that are developed during early childhood. Coping methods are not only conscious responses to stress but are also shaped by deep-seated psychological processes. Ben-Ari and Hirshberg (2009) explain that psychodynamic theories see coping methods as expressions of unconscious internal mechanisms and defences shaped in early childhood. In contrast, cognitive theories focus on the conscious aspects of coping methods. This distinction underscores the role of psychodynamic theory in understanding coping as a complex interplay between conscious and unconscious processes (Friedberg & Malefakis, 2018).

Furthermore, psychodynamic approaches to coping dynamics, as discussed by Barnard and Flotman (2020), recognise defensive coping as a natural and essential part of the overall coping dynamic. This perspective suggests that coping strategies are not only responses to immediate stressors, but also reflect deeper psychological mechanisms aimed at managing internal conflicts and external challenges. The value of the psychodynamic approach lies in its ability to delve into the underlying motivations and unconscious processes that shape the coping strategies of individuals (Kramer, 2010).

Additionally, psychodynamic theories of coping emphasise the role of insight, self-understanding and defence mechanisms in managing stress and adversity. Radnitz and Tiersky (2007) discuss how psychodynamic theories, alongside cognitive theories, contribute to understanding coping mechanisms. These theories emphasise the role of defence and coping mechanisms in shaping how individuals respond to stressors. Psychodynamic perspectives, in particular, provide insights into the unconscious aspects of coping.

Neuroscientific theory offers valuable insights into coping mechanisms by examining the neural processes and brain functions involved in how individuals respond to stress and adversity. Yarosh et al. (2021) discuss coping behaviour as a purposeful, neurophysiologically determined response that allows individuals to manage stress effectively based on their unique characteristics and the situational context. This perspective underscores the neurocognitive mechanisms underlying coping strategies

and highlights the importance of understanding how the brain processes stress and guides coping behaviours (Yarosh, 2021).

Moreover, Tops et al. (2017) emphasise the role of large-scale neural networks and the specialisation of motivation and emotion in stress-related behaviour. By exploring brain waves, motivation, functional laterality and executive function, this research sheds light on how neural activity influences coping strategies and emotional responses to stress. Understanding the neural underpinnings of motivation and emotion can provide valuable insights into the development of coping mechanisms and their impact on overall well-being (Murrrough & Russo, 2019).

Furthermore, Diamond (2013) discusses how neuroscientific research is influencing the evolution of therapeutic community practices for children and young people, particularly those who have experienced trauma. By incorporating neuroscientific findings into therapeutic approaches, practitioners can customise interventions. This helps better support individuals in coping with trauma and promoting healing. This highlights the practical implications of incorporating neuroscientific knowledge into therapeutic settings to enhance coping strategies and improve outcomes for individuals facing challenges.

3.7 CHAPTER CONCLUSION

In Chapter 3, I explored the multifaceted nature of stress, emphasising its conceptualisation and the application of the JD-R theory to understand the interplay between job demands and resources. I identified the limitations of the JD-R model and delved into the dimensions of burnout, highlighting the crucial role of resilience and the development of an SOC. The chapter also examined coping strategies, categorising them into problem-focused, emotion-focused, meaning-making and avoidance coping, and discussed their applications in the workplace.

This exploration is vital for practical applications in workplace settings, where stress management is crucial for both individual and organisational well-being. A detailed examination of coping strategies includes problem-focused approaches, which address stressors directly, and emotion-focused strategies, which help individuals manage their emotional responses. Together, these strategies offer a comprehensive toolkit for managing stress. Additionally, the discussion on meaning-making and

avoidance coping offers insights into how individuals can find purpose in their experiences or, conversely, how avoiding stressors can sometimes be a maladaptive response. This nuanced understanding underscores the importance of tailored interventions to support employee resilience and mental health in the workplace.

CHAPTER 4: STRESS MANAGEMENT INTERVENTIONS

4.1 INTRODUCTION

A plethora of SMIs, both within and outside of the workplace, have been explored in existing literature (Bass & Bradford, 2015; Brinkborg et al., 2011; Florea & Florea, 2016; Qarima Isa et al., 2019; Yousefi & Abdullah, 2019). These interventions originate from diverse psychological perspectives concerning coping mechanisms, adjustment and overall wellbeing. This thesis adopts an integrated approach, aligning with both psychodynamic and applied neuroscientific perspectives. This choice is informed by the compatibility of utilising music and art as modalities within these paradigms.

In the opening sections of Chapter 4, I explore the meta-theoretical frameworks underpinning the use of music and art as stress intervention modalities in this study, specifically Psychodynamics and Neuroscience. These frameworks highlight the effectiveness of music and art in alleviating stress and fostering coping mechanisms. Additionally, the discussion includes the role of hormones and neurotransmitters. The third section delves into music as a SMI modality, followed by a focus on art as an SMI modality in the fourth section. The integration of music and art through GIM is then thoroughly discussed. Finally, the chapter concludes with a discussion on group dynamics as a critical element in stress management interventions.

4.2 PSYCHODYNAMICS in MUSIC and ART

Psychodynamics, a theoretical framework originating from psychoanalytic psychology, plays a significant role in understanding the intricate interplay between the internal psychological processes of individuals and their artistic and musical expressions (Edwards, 2014a; Scandurra et al., 2018). In contrast, system psychodynamics expands this focus to include the social and organisational contexts within which the individual operates. It examines how unconscious processes within the individual and the groups interact within the broader systems they are part of, such as organisations and societies (Steyn & Cilliers, 2016). This approach integrates principles from psychoanalysis, group relations and systems theory to understand how collective dynamics, roles and structures impact individual and group behaviour. It is often applied in organisational consulting and development to address issues like leadership, group dynamics and organisational change (Geldenhuys, 2022).

When applied to art and music interventions, psychodynamics offers a rich perspective into the subconscious motivations, conflicts and emotions that underlie creative endeavours. This approach delves into the depths of the human psyche, revealing how artistic and musical creations become mediums for self-expression and a means to explore unconscious thoughts and feelings (Edwards, 2014a; Metzner, 2014).

Similarly, music interventions guided by psychodynamics acknowledge that musical compositions and performances serve as outlets for emotional release and exploration (Lawes, 2021). The tonalities, rhythms and themes present in music can evoke deep-seated feelings and thoughts, even ones that the individual might not be fully aware of (Beach, 2016; Szczesny, 2020). The melodies and harmonies become vehicles for accessing repressed emotions, enabling participants to engage with their psychological landscapes in a nonverbal manner (Abdumutalibovich, 2022; de Witte et al., 2022). Music therapists who integrate psychodynamic principles in their practice recognise the therapeutic potential of using music to access the unconscious, offering clients a safe space to process and make sense of their inner experiences (Gerge et al., 2019; Huang & Li, 2022).

Art interventions grounded in psychodynamics embrace the idea that artistic creations are not merely aesthetic expressions, but reflections of an individual's inner world. Artists often channel their inner conflicts, desires and fears into their work, giving form to complex emotions that might be challenging to articulate verbally (Gerge & Pedersen, 2017; Schiltz, 2014). Through mediums like painting, sculpture and mixed media, individuals can access their unconscious minds, unveiling suppressed memories and emotions that influence their behaviours and perceptions (Marco & Redolat, 2023). Therapists who employ psychodynamic principles in art interventions facilitate a process of exploration, interpretation and reflection, helping clients gain insight into the underlying emotional currents that shape their artistic expressions (Mandić-Gajić & Špirić, 2016; Zhang et al., 2021).

In both art and music interventions, psychodynamics also sheds light on the transference and countertransference dynamics that occur between the participant and the therapist (Bruscia, 2018; Ingram, 2020). Participants might project their feelings, attitudes and unresolved issues onto their creative works, allowing therapists to observe and interpret these dynamics to enhance the therapeutic process.

Additionally, a therapist's responses to a participant's creations can reveal insights into the therapist's own countertransference reactions, leading to a deeper understanding of the client-therapist relationship and the emotions evoked by the creative process (Bruscia, 2018; Scandurra et al., 2018).

In conclusion, integrating psychodynamics into art and music interventions provides a profound avenue for self-discovery, emotional expression and therapeutic transformation (Bruscia, 2018; McKinney & Honig, 2017). By recognising that art and music serve as channels for tapping into the unconscious and exploring the intricate workings of the mind, therapists can guide individuals towards greater self-awareness, healing and personal growth (Battles, 2018; Ingram, 2020). Through this approach, the realms of art and music become not only mediums of creative expression but also powerful tools for psychological exploration, building stress-related coping and assisting in emotional healing (Dukić & Jakovljević, 2021; Szczesny, 2020; Zhang et al., 2021)

4.3 NEUROSCIENCES in MUSIC and ART

Neuroscience is the broad scientific principle that explores the structure and function of the nervous system, encompassing a wide range of subfields such as neurobiology, cognitive neuroscience and neurophysiology. It focuses on understanding how the brain and the nervous system work at molecular, cellular and systems level, providing foundational knowledge about neural mechanisms and brain functions. Applied neuroscience broadly refers to the practical application of neuroscientific principles and discoveries to real world problems and industries, ranging from education and business to healthcare and technology. It consists of the use of techniques such as neuroimaging, neurofeedback and cognitive training to optimise human performance, enhance learning and improved mental health outcomes (Deffieux et al., 2021; Lee et al., 2016; Petchkovsky, 2017). Neuropsychotherapy, on the other hand, is a specialised branch of therapy that integrates knowledge from neuroscience into psychotherapeutic practices. It focuses on understanding and utilising the brain's mechanism to treat psychological disorders, emphasising the role of brain plasticity, emotional regulation and the neural underpinnings of behaviour. Neuro-

psychotherapists apply these insights to tailor interventions that can reshape neural pathways and promote mental wellbeing (Petchkovsky, 2017; Salone et al., 2016).

The intersection of neuroscience with music and art interventions brought an understanding of how our brains perceive, process and respond to artistic stimuli. The collaboration between neuroscience and artistic interventions has led to the emergence of neuroaesthetics, a field that seeks to decipher the neural underpinnings of aesthetic experiences (Cela-Conde & Ayala, 2018; King & Parada, 2020). Researchers have explored how aesthetic appreciation of both music and visual art can trigger the release of neurotransmitters like dopamine, eliciting pleasurable sensations. This understanding informs therapeutic practices, where carefully chosen artistic stimuli can stimulate positive emotional and coping responses and contribute to overall well-being (King & Parada, 2020).

By delving into the neural mechanisms underlying our engagement with music and visual art, these interventions are enriched with insights that amplify their therapeutic potential and expand our comprehension of human cognition and emotion (Putkinen et al., 2020). The growth of the main hearing areas in the human brain and the pathways connecting them, along with the larger cerebellum and parts of the front and premotor cortex that are connected via deep brain structures, signal a change towards appreciating sounds more. This change also led to the ability to synchronise with rhythms from outside sources (Trimble & Hesdorffer, 2017).

4.3.1 Regions of the brain affected by music and art

Different parts of our brains are activated when we listen to music. This music listening effect can alter or enhance our emotions. Music intervention combines both sciences and art in order to bring well-being to a troubled person and relieves physical and mental symptoms of a stressed person (Gray, 2013; Patel, 2015). Stress reduction in the working environment seems possible when employees listen to music that they like (Lesiuk, 2008). Neuroscience reveals that when individuals engage with music, various brain regions light up in orchestrated harmony (Levitin, 2013). Rhythmic patterns activate the motor cortex, prompting involuntary movements or foot tapping (Williams, 2018). Melodic progressions stimulate the auditory cortex, while emotional nuances of music trigger the limbic system, evoking feelings ranging from joy to nostalgia (Keeler & Cortina, 2020). This intricate symphony of brain activity during

musical engagement underscores how music can be a powerful tool in emotional regulation, stress reduction, coping and even pain management within therapeutic contexts (de Witte et al., 2022).

The following parts of our brains are involved in music and art (*Table 4.1*)

Table 4.1

Parts of the brain involved in music and art

Brain Area	Description
Music	Music
Auditory Cortex	Located in the temporal lobe where it processes sounds, e.g., pitch, rhythm, and melody (Putkinen et al., 2021).
Prefrontal Cortex	Used for planning, decision-making, social behaviour, and interpreting/understanding music (Grossberg, 2022).
Motor Cortex	Controls playing instruments, dancing, coordination, movement, and rhythm (Martín-Fernández et al., 2021).
Sensory Cortex	Activated by tactile feedback from playing instruments or feeling vibrations in music (Miller et al., 2019).
Hippocampus	Links music with memory and emotions (Hernandez-Ruiz, 2019).
Amygdala	Processes emotions, eliciting emotional responses to music (Keeler & Cortina, 2020).
Nucleus Accumbens	Part of the brain's reward and pleasure system, activated by experiencing pleasure from music (Koelsch, 2018).
Cerebellum	Assists with timing, coordination, and rhythm in music processing (Grossberg, 2022).
Art	Art
Visual Cortex	Situated in the occipital lobe; processes visual information like colour, shape, and movement in artworks (Fachner et al., 2019; Steiner, 2019).
Parietal Lobe	Helps with spatial orientation for discerning depth and distance (Pelowski et al., 2022).
Prefrontal Cortex	Involved in planning, decision-making, and interpreting the meaning of art (Alain et al., 2019).
Motor Cortex	Used for drawing, sculpting, and coordinating hand movements (Garrett, 2020).
Limbic System	Includes the amygdala and hippocampus; supports emotions and memories (Gerge et al., 2019; Williams, 2018).
Basal Ganglia	Responsible for coordination, movement, and appreciation of aesthetics (Pelowski et al., 2022; Romp, 2014).

Neural mapping during the experience of listening to music and engaging with art involves a symphony of brain regions and chemical interactions. When we hear music, our auditory cortex processes the basic elements such as pitch and tempo, while other regions such as the amygdala and nucleus accumbens participate in emotional

responses, releasing neurotransmitters like dopamine, which gives rise to feelings of pleasure (Bavley et al., 2017; Lee, et al., 2016). Simultaneously, the default mode network, which is associated with mind-wandering and creativity, may become active, especially when music or art triggers introspection or imaginative experiences.

Similarly, viewing art stimulates the visual cortex, and if the artwork is particularly moving or complex, the prefrontal cortex, which is involved in decision-making and contextual understanding, lights up to interpret and assign meaning (Cela-Conde & Ayala, 2018; Zaidel, 2013). The intricate dance of neurotransmitters like serotonin and endorphins during these experiences not only modulates our mood but also reinforces the cognitive and emotional associations we form with the artworks and melodies, essentially encoding them in the rich tapestry of our memories and emotions (Dukic, 2018; Pauwels et al., 2014).

Visual art invokes intricate neural processes. When individuals contemplate a painting or sculpture, the visual cortex is activated, allowing them to perceive colours, shapes and compositions (Ledoux, 2015; Lee et al., 2016). However, neuroscience has unveiled even deeper layers – the mirror neuron system, for instance, activates when we observe the artistic creations or expressions of others, fostering empathy and understanding (Blom, 2014). This neurological insight underscores the potential of art interventions to facilitate communication and emotional connection, especially in therapeutic settings where words might fall short (Oren et al., 2019).

The engagement with music and art extends beyond mere appreciation, activating extensive networks within the brain that reflect complex cognitive functions. When we discern rhythm and harmonies in music, or the nuances of colour and form in art, our brains engage in pattern recognition, a process involving the prefrontal cortex and temporal lobes (Chatterjee et al., 2021; Jeong & Park, 2016). This action is not just passive reception but an active construction, where mirror neurons might play a role in empathising with the emotions conveyed through art and music (Blom, 2014). Together, these neural processes highlight how deeply music and art are intertwined with our cognitive and emotional worlds, underscoring their significance in human experience and development.

4.3.2 Music and Art: The principle of neuroplasticity

Neuroplasticity, the brain's remarkable ability to reorganise and adapt in response to experiences, lies at the heart of understanding the transformative effects of music and art (Alain et al., 2019). This section explores how sensory experiences interact with the brain's plastic nature, driving dynamic changes that shape our cognitive and emotional landscapes. Grounded in evolutionary adaptation, neuroplasticity highlights the brain's capacity to localise functions, encode neural representations, and foster learning through dynamic change. The discussion unfolds across ten interconnected themes. It begins by examining how sensory experiences fuel neural adaptation and how evolutionary processes have harnessed neuroplasticity to optimise survival. Key concepts such as the localisation of brain functions, neural representation and coding, and the role of learning in driving dynamic change provide a foundation for understanding skill acquisition and cognitive growth.

Music emerges as a powerful agent of environmental enrichment, particularly through its influence on within-modality plasticity. This is further illustrated by its role in shaping brain development and fostering functional connectivity within complex brain networks. Music and art's long-lasting effects on the brain are considered, emphasising their potential to induce profound, enduring changes in neural structure and function (Chatterjee et al., 2021; McEwen, 2016).

Finally, the therapeutic implications of music and art are discussed, showcasing their capacity to leverage neuroplasticity for healing and growth. By integrating these themes, this section illuminates how music and art capitalise on neuroplasticity to enrich human experience and enhance well-being.

4.3.2.1 Neuroplasticity and Sensory Experiences

Neuroplasticity, the brain's ability to reorganise itself by forming new neural connections, is heavily influenced by sensory experiences like listening to music and viewing art. These activities can create and strengthen neural pathways, especially those related to emotional regulation, sensory processing and cognitive functions (Alain et al., 2019; Geldenhuys, 2022; Pauwels et al., 2014). Such engagement can aid in cognitive rehabilitation and mental health management, helping stroke survivors regain motor skills through musical therapy or alleviating anxiety through art (de Witte et al., 2022; Lin, 2019; Williams, 2018).

4.3.2.2. Evolutionary Adaptation and Brain Plasticity

Brain plasticity is an evolutionary adaptation enabling organisms to cope better with their environments. This concept can be examined on two scales: the evolutionary scale of humans as a species (phylogeny) and the individual development from birth to old age (ontogeny). These distinctions align with the "nature vs. nurture" and "culture vs. biology" debates, contrasting innate neural circuitry with learned mechanisms and cultural immersion. Music-induced plasticity supports a biocultural perspective, balancing genetic constraints with cultural factors, suggesting that cultural diversity stems from a shared biological foundation (Reybrouck et al., 2018).

4.3.2.3 Three Main Research Themes

Research in neuroplasticity focuses on three themes: (i) localisation of brain functions, (ii) neural representation and coding, and (iii) dynamic change or learning. The first theme identifies which brain structures handle specific processes. The second examines how neural networks encode cognitive processes at various levels. The third investigates how the brain adapts through experience and learning, exploring changes in neural networks and their correlation with behaviour (Reybrouck et al., 2018).

4.3.2.4 Dynamic Change and Skill Learning

Dynamic change or learning is crucial for skill acquisition, often studied in perceptual processing and motor output. However, areas like creativity, musical aesthetics and human interaction in relation to long-term music training, are under-researched. This shift from a static view of brain modules to a focus on lifelong re-organisational plasticity marks a paradigm change in neuro-musicology. Brain plasticity can be modified by environmental changes, observed during critical developmental periods and throughout life (Gottschalk et al., 2020; Singh-Taylor et al., 2015).

4.3.2.5 Music as an Environmental Enrichment

Learning to play a musical instrument illustrates neuroplasticity, starting early in life and involving multiple sensory modalities and motor systems. Environmental enrichment, including complex stimuli, drives brain plasticity. Music, as a "sounding environment", promotes plasticity from the foetal stage of infants through implicit learning. Sensory-motor learning highlights the interdependence of an organism and

its environment, enriching genetic adaptations with acquired dispositions for familiar situations (Bronson et al., 2018; Korsakova-Kreyn, 2018).

4.3.2.6 Focus on Within-Modality Plasticity

Most neuroplasticity studies focus on within-modality plasticity in sensory and motor domains, demonstrating the brain's adaptability to stimuli and actions after repeated exposure. Animal studies show that environmental changes significantly impact brain development, refining neural circuitry through synapse formation, pruning and plasticity. Enhanced synaptic connectivity underpins learning and memory, selectively changing pre-existing brain circuits and improving skills like auditory processing, which also enhance speech and emotional processing. Musicians, for instance, exhibit better temporal and frequency coding in the auditory brainstem, with more robust responses to speech and music stimuli (Pohl, 2018; Reybrouck et al., 2018).

4.3.2.7 Brain Plasticity and Development

The relationship between adaptation and development is asymmetrical; while development can occur without adaptation, adaptation requires development. Development can be natural through maturation or influenced by combining it with learning, especially in challenging environments, triggering brain plasticity. William James introduced this concept, further expanded by Ramón y Cajal and Donald Hebb, who emphasised the formation and reinforcement of brain pathways through experience. Plasticity affects not only synapses but also cortical maps, modified by sensory input and training, leading to structural changes in neural networks as new skills are acquired (Chatterjee et al., 2021; Reybrouck et al., 2018; Ripollés et al., 2016).

4.3.2.8 Functional Connectivity and Brain Networks

Music can trigger plastic changes in the brain, evidenced by numerous neuroimaging studies. Advances in functional neuroimaging measure interactions between distinct brain regions and examine their functional connectivity. Network science helps understand the brain as a complex network of interconnected regions, revealing its organisation and function. Functional connectivity, reflecting communication between separated regions, can be studied through synchronised fMRI or M/EEG (Magnetoencephalography and Electroencephalography, a combined technique used in neuroscience to study brain activity) during rest, revealing Resting-State Networks

(RSNs). These networks, detectable even at rest, indicate ongoing information processing and functional connectivity, with about 10-12 RSNs identified in the cerebral cortex (Blum et al., 2017; Ripollés et al., 2016).

4.3.2.9 Long-Lasting Influences of Music on the Brain

Recent research indicates that the influence of music on the brain extends beyond mood alteration, leading to long-lasting changes. Interactions with music, whether performing, listening or imagining, activate widespread brain areas influenced by factors like training, exposure, preference and cultural background. Musical training, in particular, causes structural changes in auditory and motor brain areas, enhancing functional connectivity during musical tasks, as shown by neuroimaging studies. Changes have also been observed in white-matter tracts, such as the corpus callosum, corticospinal tract and arcuate fasciculus. Longitudinal studies on musical training suggest it as a model for studying practice-related brain plasticity in humans (Chatterjee et al., 2021; McEwen, 2016).

4.3.2.10 Therapeutic Potential of Music and Art

The implications of neuroplasticity are profound: engaging with music and art can sculpt neural architecture, strengthening connections that build resilience against stress (King, 2016). This adaptive capacity makes the brain more adept at entering a relaxed state, reducing the physiological and psychological impacts of stress. The accessibility of music and art, near-universal human experiences, provides innate therapeutic and stress-relieving encounters that can lead to lasting brain changes (Chatterjee et al., 2021).

4.3.3 The role of hormones and neurotransmitters when engaging with music and art

The intricacy of these neural and chemical patterns underscores why art and music are so deeply interwoven with human culture and individual identity; they tap into the most fundamental aspects of brain chemistry that govern sensation, emotion and connection (Grossberg, 2022). The processes of listening to music and engaging with art involve a complex interplay of various hormones and neurotransmitters that affect our mood, emotion, cognition and overall brain health (Ahonen, 2018a). Here in *Table 4.2* are some key players in these processes, and their functions:

Table 4.2

Hormones and neurotransmitters and their role in enhancing mood, stress relief, and cognitive function through music and art

Hormone and Neuro-transmitter	Function	Reference
Dopamine	Dopamine, known as the "feel-good" neurotransmitter, plays a key role in the brain's reward system by regulating pleasure, motivation, and reward-seeking behaviour. Enjoyable experiences, such as listening to music or viewing art, activate this system, releasing dopamine and providing stress relief and satisfaction. This not only offers immediate pleasure but may also improve mood in the long term.	Ferreri et al., 2019; Pisarczyk, 2018; Sotiropoulos & Anagnostouli, 2021; Landay & Harms, 2019; Southwick et al., 2005
Serotonin	Serotonin, crucial for regulating mood and anxiety, fosters well-being and happiness. Engaging with calming or uplifting music or art can elevate serotonin levels, enhancing feelings of well-being. This soothing effect may improve stress and anxiety management over time by strengthening brain pathways associated with stress response.	Ahonen, 2018a; Baltazar et al., 2019; Sawami et al., 2018; Sotiropoulos & Anagnostouli, 2021
Cortisol	Cortisol, the stress hormone, is essential for the fight-or-flight response but can harm the body if chronically elevated. Relaxing music and art help reduce cortisol levels, alleviating stress. Music, in particular, can trigger alpha brain wave activity, promoting wakeful relaxation and further lowering cortisol.	Beck et al., 2015; Fox & McKinney, 2016; Park et al., 2023
Oxytocin	Oxytocin, the "love hormone," fosters social bonding and trust. Sharing music or art in social settings can trigger its release, enhancing connection and closeness with others.	Dukić, 2018; Gerge & Pedersen, 2017; Halbert et al., 2018
Endorphins	Endorphins, natural painkillers and mood enhancers, are released during enjoyable activities like listening to music, dancing, or viewing art, reducing pain and enhancing pleasure.	Ahonen, 2018a; Kwan & Clift, 2018; Reybrouck et al., 2020
Glutamate	Glutamate, the most abundant excitatory neurotransmitter, supports neural communication, memory, and learning. Music and art can stimulate its release, enhancing neuroplasticity and cognitive function.	Chatterjee et al., 2021; Grossberg, 2022; Sotiropoulos & Anagnostouli, 2021
Gamma-aminobutyric acid	GABA, the brain's main inhibitory neurotransmitter, helps control fear and anxiety. Soothing music and enjoyable art activities can boost GABA production, fostering relaxation and reducing stress.	Goldsby & Goldsby, 2020; Zaidel, 2013
Acetylcholine	This neurotransmitter plays a role in attention and arousal. It can be involved when concentrating on complex musical compositions or art pieces, facilitating focus and sustained attention.	Grossberg, 2022
Norepinephrine	Also known as noradrenaline, this neurotransmitter is similar to adrenaline and affects parts of the brain where attention and	Chen, 2018; Keeler & Cortina, 2020b

responding actions are controlled. It can heighten arousal and alertness and can be stimulated by more dynamic or emotionally charged music and art

4.3.4 Neuroscientific research on the effect of music and art on well-being

Mindfulness, a practice with roots in ancient meditation, has gained attention in neuroscience for its positive effects on brain function and structure (Phaetthayanan, 2019). Research using functional MRI (fMRI) and electroencephalography (EEG) has shown that mindfulness can enhance brain connectivity, particularly in regions like the Default Mode Network (DMN) and the Anterior Cingulate Cortex (ACC), leading to improved attention, emotional regulation, and reduced stress (Jackson, 2018; Kral et al., 2019). Mindfulness also induces neuroplasticity, aiding in the brain's ability to reorganise and form new neural connections, which is beneficial for mental health conditions like anxiety, depression, and PTSD (Williams, 2022; Zhu et al., 2017).

Biopsychological models prioritise medical interventions like anti-stress medications (Brunner et al., 2019; Gonzaga, 2019). Cognitive-behavioural psychology has led to interventions such as Cognitive Behavioural Therapy (CBT), while behavioural perspectives advocate for physical activities, nature experiences, and art (Brinkborg et al., 2011; Dieterich-Hartwell, 2017; van Wyk et al., 2022). The relational perspective emphasises the importance of romantic relationships, leisure activities, and deep conversations (DiazGranados et al., 2017; Meyer et al., 2015; Scheier et al., 2010). Additionally, Gestalt psychology introduces interventions involving smell and taste (Klatt et al., 2017; Levitin et al., 2018) and other approaches include food, writing, reading, humour, assertiveness, reducing stimulants, and animal-assisted interventions (Bluethner, 2016; Ramalingam et al., 2022; Harmon & Arpajian, 2020; Kaptein et al., 2018).

These diverse interventions highlight the importance of engaging various aspects of human experience, which is also reflected in the way hormones and neurotransmitters interact to shape the emotional and cognitive responses to music and art. The following hormones and neurotransmitters work together to create the rich emotional and cognitive experience associated with music and art. Their functions are not isolated to listening to music or viewing art; they are involved in a broad range of human activities and physiological processes. However, the arts can be a particularly

potent trigger for these chemicals, explaining why they have been a cornerstone of therapeutic practices for centuries (Ahonen, 2018b; Jackson et al., 2018).

The hormones and neurotransmitters involved in the appreciation of music and art play pivotal roles in stress reduction and overall well-being in both the work environment and life in general (Elliott, 2017):

4.3.4.1 Mood Enhancement

The release of dopamine and serotonin while listening to music or engaging with art can lead to mood enhancement. A better mood can translate to reduced perceived stress, greater job satisfaction and a more positive outlook on life (Ahonen, 2018a; Futterman Collier et al., 2016; Marco & Redolat, 2023).

4.3.4.2 Stress Response Reduction

The reduction in cortisol levels due to these activities can help mitigate the body's stress response. Lower cortisol levels are associated with reduced anxiety and an improved ability to cope with the day-to-day pressures of work and personal life (de Witte et al., 2022; Giordano et al., 2020).

4.3.4.3 Social Bonding

Oxytocin release can enhance social bonding, which is crucial in collaborative work environments. Feeling connected to colleagues can help reduce stress and improve teamwork, leading to a more supportive workplace atmosphere (Bluethner, 2016; Krueger, 2019).

4.3.4.4 Pain Relief and Pleasure

Endorphins can alleviate pain and induce feelings of euphoria. In the workplace, this can translate to less discomfort from the physical strains of work, while in everyday life, it can contribute to a greater sense of happiness and fulfilment (Nilsson, 2008; Ramalingam et al., 2022).

4.3.4.5 Improved Concentration and Cognitive Function

The stimulation of glutamate and acetylcholine can aid in learning and concentration. This might result in more efficient work, with the ability to focus better and solve problems more effectively, reducing the cognitive load and stress associated with challenging tasks (Aalbers et al., 2020; Kongkasuwan et al., 2015).

4.3.4.6 Relaxation

An increase in GABA can produce a calming effect on the brain. In a work setting, taking a short break to listen to music or view art can help employees relax, potentially improving productivity and reducing the likelihood of burnout (de la Torre-Luque et al., 2017; Goldsby & Goldsby, 2020).

4.3.4.7 Alertness and Energy

Norepinephrine can help increase alertness, which can be particularly useful in combating afternoon slumps in energy. A brief engagement with stimulating music or visual art can provide a non-caffeinated boost to alertness and performance (Baltazar et al., 2019; Sonowane, 2019).

4.3.4.8 Cognitive Reframing

Engaging with art and music can facilitate cognitive reframing, helping individuals to view their stressors in a new light. This shift in perspective can contribute to more adaptive coping strategies both in and out of the workplace (Heiser, 2020; Myers-Coffman et al., 2020).

4.3.4.9 Mindfulness and Presence

The contemplative nature of engaging with art and music can lead to a mindfulness-like state, which has been shown to improve stress resilience and emotional regulation. In other words, the practice of engaging deeply with art and music can train the brain to shift more easily into states of calm and focused attention, much like the benefits observed with consistent meditation practice (Abbott, 2023; Beerse et al., 2019; Hwang, 2021).

4.3.4.10 Emotional Release and Expression

Art and music can serve as outlets for emotional release and expression, offering a non-verbal way of processing complex emotions, thereby alleviating stress (Giaver et al., 2017; Sarid & Huss, 2010).

4.3.4.11 Identity and Personal Growth

Personal connections with music and art can contribute to one's sense of identity and facilitate personal growth, enhancing life satisfaction and stress resilience (Ramalingam et al., 2022; Temingh Swart, 2020).

Incorporating music and art into the work environment and daily life can provide employees and individuals with tools to manage stress, enhance their work experience and improve their overall quality of life. It's worth noting that the effectiveness of these tools can be subjective and vary greatly amongst individuals, so personal preference plays a significant role in how beneficial these interventions can be (de la Torre-Luque et al., 2017; Landay & Harms, 2019).

In conclusion, the integration of neuroscience into music and art interventions presents a captivating narrative of how human brains perceive, process and transform through artistic experiences (Alain et al., 2019; Gerge & Pedersen, 2017). From enhancing emotional well-being to rewiring neural connections, this synergy enriches therapeutic practices and our comprehension of the profound impact that music and art can have on our minds (Garrett, 2020). As I continue to unlock the neurological intricacies, I pave the way for innovative, evidence-based interventions that harness the power of creativity for healing and growth (Bosman et al., 2021; Fachner et al., 2019).

4.4 MUSIC as a SMI MODALITY

In this section I discuss music as an SMI modality, starting with the nature of music intervention, followed by different music intervention models. I conclude by highlighting music as an intervention modality from a psychodynamic and applied neuroscientific perspective.

4.4.1 Defining a music intervention

The World Federation of Music Therapy (WFMT) defines music intervention as:

... the professional use of music and its elements as an intervention in medical, educational, and everyday environments with individuals, groups, families, or communities who seek to optimize their quality of life and improve their physical, social, communicative, emotional, intellectual, and spiritual health and wellbeing. Research, practice education, and clinical training in music therapy are based on professional standards according to cultural, social, and political contexts (Edwards, 2016, p.3).

Music anthropology refers to music being used to express emotions, events or concepts. Different feelings (happiness, sadness), life events (birth, marriage, death)

and political values can be expressed through music (Oren et al., 2019; Thaut, 2015). In Babylonian culture (1850 B.C.) they viewed illness as a punishment from the gods. In order for the Babylonians to make peace with the gods, music was included in their healing ceremonies (Dukić & Jakovljević, 2021). Hebrew uses of music to heal physical and mental disturbances comes from the Bible (Old Testament, Book of Samuel) where King Saul was emotionally unwell. David played the harp whenever King Saul was shaken by an evil spirit and Saul was then refreshed and the evil spirit departed from him (Thaut, 2015).

The idea that music can be used as intervention, based on cross-cultural beliefs, thus stems from ancient times, grounded in the belief that music can have a “healing” effect on mind and body (Boas, 2020; Goldsby & Goldsby, 2020). Greek philosopher Pythagoras, who lived in the sixth century, is considered the founder of music intervention and geometry (Cartwright et al., 2021). He believed that music definitely contributes to health. Apart from a specific diet, Pythagoras prescribed music to restore and also uphold the balance of the body and soul (Heil, 2019; Nilsson, 2008). In the mid 1800’s Florence Nightingale used music intervention to treat wounded soldiers in the hospital. It should be highlighted that not all types of music have the same therapeutic effect in a stressed person. In Nightingale’s experiments she found that wind instrument pieces with continuous wind flow had a better anti-stress therapeutic effect than other types of instruments (Nilsson, 2008; Szczesny, 2020).

I continue to describe some of the music intervention models that have been used to date, for example the Nordoff-Robbins Creative Music Therapy (Scovel & Gardstrom, 2012; Tsisis et al., 2018), GIM, the Field of Play Model in Music Therapy (Birnbaum et al., 2023; Kenny, 2015), Community Music Therapy (Jensen & Bonde, 2018; Lawes, 2021), Resource-orientated Music Therapy, Culture-centred Music Therapy, Aesthetic Music Therapy, Developmental Musical Therapy, Anthroposophical Music Therapy, Psychodynamic Music Therapy and Neurologic Music Therapy.

4.4.2 Models of Music Therapy

In this section I summarise a variety of approaches and models of Music Intervention and then expand on the adapted GIM approach which is my preferred modality and the one I chose for this study (See *Table 4.3*). The Music Interventions that are

commonly used in different countries, as indicated by Edwards (2014a), are summarised in the table.

Table 4.3

Models of Music Therapy

Models of Music Therapy	Description	Primary Sources
Nordoff-Robbins Creative Music Therapy	The Nordoff-Robbins model focuses on music's role in therapy, emphasising its various aspects such as forces, processes, experiences, and structures. It uses collaborative music improvisation between clients and therapists to build a therapeutic connection. The approach highlights the impact of music on wellbeing and incorporates psychological, social, and cultural perspectives, viewing music as a direct expression of the self.	(Nordoff & Robbins, 1977; Scovel & Gardstrom, 2012)
Guided Imagery and Music	GIM is a psychodynamic and psychotherapeutic approach that incorporates relaxation, visualisation and the listening of music. GIM involves a skilled therapist assisting a client through a range of music-listening experiences, all while the client is in a state of relaxation and openness to experience (Lee & Kim, 2021; Shum, 2020). In GIM, ordered and carefully selected classical music selections are used to move the client's consciousness into altered states where emotional themes may come forward through various forms of imagery	(Bonny, 1978; Bonny & Savary, 1973; Jerling, 2019; Meadows et al., 2015)
Field of Play Model in Music Therapy	The practitioner is aware of the self and their wider cultural and social context. A journey is followed with the client to explore and achieve their own potentiality. The Field of Play is practiced as a space for loving and creating.	(Birnbaum et al., 2023; Kenny, 2015; Summer, 2009)
Community Music Therapy	The emphasis here is an inclusive and collaborative interaction between the practitioner and his/her client. The communal, rather than individual experiencing of music, is important.	(Jensen & Bonde, 2018; M. Lawes, 2021; Stige, 2002)
Resource-Orientated Music Therapy	This approach nurtures the resources, potentials, and strengths of the client. Equal collaboration is more important than intervention. Individuals must be seen in their own context, and music must be seen as a health resource.	(Brault, 2019; Mock, 2022; Rolvsjord, 2010)
Culture-Centred Music Therapy	The idea of participation is essential in this approach. The notion is to reflect on how a person's opportunities can be empowered by music participation within a specific culture.	(Miller, 2021; Stige, 2002)
Aesthetic Music Therapy	The music serves as a primary medium for understanding the therapeutic process, particularly through the powerful emotional responses it elicits. The focus is placed on the intentionality within the musical experience itself.	(Dunphy et al., 2019; Lee, 2003; Putkinen, Nazari-Farsani, et al., 2020)
Developmental Music Therapy	This model is focused on people with developmental disabilities.	(Alvin, 1966; Brault, 2019)
Anthroposophical Music Therapy	Anthroposophical music emphasises individualisation for each person, and harmony and balance in the music to restore balance within the individual. Spiritual development and cognition are emphasised. Tonalities, types of scales, timbre and character of certain instruments are key in this approach.	König, 1985; Lin 2019; Teckenberg-Jansson et al., 2019

Psychodynamic Music Therapy	Dynamic processes exist in the unconscious mind and influence intrapsychic and interpersonal processes. Here I chose the Bonny Method of Guided Imagery Music, (or GIM in short) as my modality of intervention. As it is a combination of music and art modalities as intervention.	Bonny & Savary, 1973; Lawes, 2021; Letule et al., 2018
Neurologic Music Therapy	Cognitive neuroscience, informed by various fields like cognitive science and psychology, examines how music is processed in the brain, emphasising that brain function differs from the mind. Music processing involves multiple cognitive processes, with musical elements being processed independently, not sequentially. This modular structure requires tailored musical tasks that account for participants' unique neuropsychological profiles and preserved musical abilities.	Peretz & Zatorre, 2005; Hernandez-Ruiz, 2019;

Note: I chose Psychodynamic Music intervention (GIM), which I'll discuss in more detail under 4.6 Integrating music and art: GIM.

Objective biomedical evidence from advanced neuroimaging technology confirms that musical activity supports neuroplasticity (O'Kelly et al., 2016). Neuroscientific methods have also linked the therapeutic potential of music to improvements in speech, memory, attention and motor activity. Additionally, music has been shown to impact areas such as stress reduction, immunity, social affiliation and reward (O'Kelly et al., 2016). Since there is no one-size-fits-all program, self-selected music often provides the most therapeutic benefit except in the case where GIM is used. Music therapists collaborate with the caregivers of clients to design personalised therapy plans, considering content, mode of engagement, duration and intensity (Chen et al., 2022; Clements-Cortes & Bartel, 2018). Music therapy can improve mood, reduce anxiety and enhance well-being across various clinical groups, including those with psychiatric disorders, depression, stroke, heart disease, anxiety, lack of resilience, quality of life issues and dementia (Chen et al., 2022; Zeppegno et al., 2021).

Neuroscientific music intervention leverages the power of music to influence brain function and improve mental health. This interdisciplinary approach combines principles from neuroscience, psychology and music therapy to address a variety of cognitive, emotional and physical conditions (Cope, 2021). Engaging with music can lead to changes in brain activity, including enhanced neural plasticity, improved memory and better mood regulation. These interventions are particularly beneficial for patients with neurological disorders such as Alzheimer's, Parkinson's disease and stroke, as well as those dealing with stress, anxiety and depression. By providing tailored musical experiences, neuroscientific music intervention aims to utilise the

brain's response to rhythmic, melodic and harmonic elements to promote overall well-being and enhance quality of life (Clements-Cortes & Bartel, 2018).

Notable figures in the field include Dr. Daniel Levitin, a neuroscientist and musician known for his research on the relationship between music, emotions and cognitive functions (Levitin, 2013; Levitin et al., 2018), Dr. Gottfried Schlaug, a neurologist and neuroscientist, who has demonstrated how musical training can induce structural and functional changes in the brain, benefiting conditions like stroke and aphasia. Dr. Robert Zatorre, a cognitive neuroscientist at the Montreal Neurological Institute, who has provided valuable insights into the neural mechanisms underlying music perception and production, highlighting the potential of music as a tool for neurorehabilitation (Dukic, 2018). These and other researchers continue to advance our understanding of the powerful connection between music and the brain, paving the way for innovative therapeutic applications (Ferreri et al., 2019; Peretz & Zatorre, 2012).

4.4.3 Music as an intervention modality from a psychodynamic and applied neuroscientific perspective

The psychodynamic approach to music intervention originates from the psychoanalytic theory which Freud introduced in the late 1800s (Edwards, 2014a, 2014b; Lawes, 2021). According to Freud's theory, human behaviour is the result of the interactions amongst three component parts of the mind: the id, ego and superego. These conflicts are mostly unconscious.

Personality develops through a series of stages, each characterised by a certain internal psychological conflict (Sutton, 2023; S. Zhang, 2020). Psychodynamic music intervention assumes that the existence of dynamic processes in the unconscious mind influences the interpersonal processes between the music therapist and the patient. With the assistance of music, a person can now become aware of his/her inner state and then communicate these through performing music or listening to music and expressing it in the form of art (Abrams et al., 2018; Hwang, 2021; Lee & Kim, 2021).

From a neuroscientific perspective, the brain responds to musical stimuli which influence emotional adjustment and response (Chatterjee et al., 2021; Korsakova-

Kreyn, 2018). Emotional centres in the brain respond favourably to music (Ripollés et al., 2016; Thaut et al., 2009). There is quite a variety of methods in music intervention: Lyric analyses, coral singing, playing instruments, music and movement, listening to music, guided meditation with live music and song discussion (Beck et al., 2015a; Hilliard, 2006). The Mozart Effect refers to a temporary enhancement of spatial-temporal reasoning abilities after listening to certain types of Mozart's music, particularly his Sonata for Two Pianos in D Major, K. 448. The term originated from a study by Rauscher et al. (1993), who found that college students who listened to this piece for 10 minutes performed significantly better on spatial reasoning tasks (specifically portions of the Stanford–Binet IQ test) compared to those who sat in silence or listened to relaxation instructions. The proposed mechanism was that Mozart's music may prime certain neural pathways involved in spatial-temporal reasoning by stimulating the brain's pattern recognition systems through its complex harmonic and structural qualities (Rauscher et al., 1993).

However, this effect has been misrepresented and overgeneralised in popular media to imply a broad, long-term increase in intelligence or cognitive function from listening to Mozart or classical music more generally. Scientifically, the original effect was short-lived (approximately 10–15 minutes), limited to specific cognitive tasks, and difficult to replicate consistently (Chabris, 1999; Steele et al., 1999). In practice, the Mozart Effect has found application in educational settings, prenatal stimulation programmes, and some therapeutic contexts, often outside the original scientific intent. Subsequent research has emphasised that arousal, mood enhancement, and personal music preference are more likely responsible for temporary cognitive boosts than Mozart's compositions per se (Chabris, 1999).

Music therapists also apply this effect in clinical settings. It diverts the patient's attention from unpleasant experiences. Some of the areas in which these interventions have been applied are cancer pain, cardiovascular disorders, stress disorders, epilepsy, depression and dementia (de la Torre-Luque et al., 2017; Lin, 2019; Patel, 2015; Pauwels et al., 2014; Pohl, 2018). Music intervention may also modulate a human's immune response as evidenced in research, by the incrementing activity of natural killer cells, lymphocytes and interferon- γ . Many diseases (including stress

disorders) are related to the immune system being misbalanced (Heiderscheit, 2017; Lipton, 2015; Orpen-Lyall, 2008; Pauwels et al., 2014).

Early evidence of music's clinical efficacy was synthesised by Nilsson (2008) in a systematic review of 42 randomised controlled trials (RCTs), which revealed that 50% of the studies reported a statistically significant reduction in anxiety, while 28% showed a reduction in pain intensity. This early body of work laid the foundation for music interventions in healthcare, particularly in perioperative and acute care contexts. Building on this, a more comprehensive meta-analysis by Hole et al. (2015) analysed 73 RCTs and found consistent, statistically significant benefits of music for postoperative pain (mean reduction of 0.77 on a 0–10 scale), anxiety (–0.68), and analgesic use. These findings confirm music's relevance as a low-cost, non-invasive intervention for enhancing patient comfort and emotional wellbeing during medical treatment.

Should one question the longevity of music as an intervention, given its strong link to emotional as well as cognitive responses? While emotions can be relatively short-lived (Giaver et al., 2017), research indicates that music-induced experiences can also engage neural, cognitive, and physiological processes that support longer-term change. Neuroimaging studies show that music activates widespread brain networks involved in emotion, attention, memory, and reward, fostering neuroplasticity that can sustain benefits beyond the immediate listening experience (Koelsch, 2014; Zatorre & Salimpoor, 2013). Giaver et al. (2017) identify several mechanisms through which these experiences may extend their influence over time. Many of these effects are amplified in group-based interventions, where emotional contagion — the automatic synchronisation with others' expressions, movements, vocalisations, and postures — plays a key role (Sakka & Juslin, 2018). Positive emotions foster a desire to sustain the experience, thereby supporting continued engagement (de la Torre-Luque et al., 2017; Giaver et al., 2017). This aligns with Fredrickson's broaden-and-build theory, which posits that positive emotional experiences build resilience (Knight et al., 2017; Luthans & Youssef-Morgan, 2017) and act as a buffer against high demands, enabling individuals to draw on these psychological resources in future challenges (Giaver et al., 2017; Petitta & Jiang, 2020).

Fu-kui and Toyoshima (Pauwels et al., 2014) found in their research that music reduces the secretion of cortisol (a steroid hormone, released during acute stress) and also leads to the improvement of mood disturbances (Pauwels et al., 2014; Teckenberg-Jansson et al., 2019). Consistent with research on the reduction in cortisol, other research reports on how music reduces anxiety and depression (Ahonen, 2018a; de Witte et al., 2022). Music has been used to assist survivors of trauma, for example, children who survived a tornado in the South-eastern United States (Beach, 2016). These children were assisted by expressing their feelings with music. Music intervention enabled them to process their emotions in a healthy and healing way and prepared them to return to school (Garrido et al., 2015). The “Black Saturday” fire survivors in Victoria, Australia in 2009, played music with others and shared songs to bond with each other and to regain confidence (Garrido et al., 2015).

A key consideration, however, remains that different personalities, cultures, ages and genders react differently to the same type of music (and art) intervention (Dukić & Jakovljević, 2021). Furthermore, it would be of great value to consider how personality types and coping styles can determine a client’s responses to music and art interventions (Gustavson et al., 2021; Kniffin et al., 2017). In a study by Garrido and Schubert (Garrido & Schubert, 2015), they found that adolescent boys who listened to music as a coping strategy, had higher levels of depression. In contrast, the girls who listened to music as a problem-orientated coping strategy, had lower depression levels (Garrido et al., 2015). Thus, the reason for using music intervention plays a very important role in its therapeutic outcome. Better results might be obtained if the aim of the intervention were to purify the spirit, strengthening the willpower and installing order and clarity in a person (Wagner, 2016). This was the aim of Jacques Dalcroze, Swiss composer and educator, whose *eurhythmics* refers to a process developing and refining innate musicality through rhythmic movement, ear training and improvisation. Dalcroze aims to strengthen the power of concentration in preparation for the body to execute orders from the brain (Wagner, 2016).

4.5 ART as SMI MODALITY

In this section I am discussing art as an SMI modality, starting with the nature of art as a stress release by using creativity to express emotion during art intervention. I will then continue to emphasise the value of art as a stress release, also in a group setting.

4.5.1 The nature of art as a stress release

Treatment through visual arts is sometimes referred to as “intervention through creativity” (Hoffmann, 2016). Different artistic means are used to express emotions during art intervention. Prevention and correction of some emotional disorders are indicated as results of art intervention (Jensen & Bonde, 2018; Luzzatto et al., 2022) and it is being used for different types of major mental illnesses, stress-related symptoms, serious symptoms of trauma, social problems, the effects of war and neurological impairments. The question remains how effective art intervention is in all of these cases, and even more specific, as a form of intervention to reduce stress (Hoffmann, 2016; Slayton et al., 2010).

An education through art, pedagogy and psychology takes place while using the art modality as intervention, therefore an art therapist should have knowledge of visual arts, psychotherapy and psychology (Hoffmann, 2016). Different types of therapeutic methods are regarded as art intervention: music, theatre, film, poetry, creative writing and visual arts like painting, sculpture, drawing, collage and sand creation (Hoffmann, 2016; Ifrach & Miller, 2016; Visnola et al., 2010). For the purposes of this research, I focused on visual arts (e.g., painting, drawing, colouring, handcraft and other forms of visual art). Art modality as intervention is sometimes presented in the form of group workshops. The artistic activity is not the main aim, but only a means to generate a positive change, namely to relieve stress (Hoffmann, 2016; Ifrach & Miller, 2016). Artistic abilities do not play any role in the process of creation, resulting in no exclusions due to lack of previous art experience (Hoffmann, 2016; Visnola et al., 2010).

4.5.2 The value of art as a stress release

Vera Zilzer (as quoted in Rubin, 2008, p. 4) said: “I can tell you things cognitively in my head, but when I began to see things on paper I began to experience the things that I had been avoiding and art was a way of ‘there it is, it’s just right in front of me’”. The presence of the therapist seems to make the art intervention experience very

valuable. The therapist creates an atmosphere of trust and safety from where the client can express their feelings through art (Ifrach & Miller, 2016; Kometiani, 2017; Rubin, 2008).

A simple act like colouring a pre-printed picture with own choice of colours, can reduce anxiety and produce proactive behaviours (Eaton & Tieber, 2017). However, it seems that restricted choice of colours (by copying colours from the original picture) reduces the amount of stress relief. Furthermore it is clear that the effect of the distressed feeling is limited to a relative short length of time (Eaton & Tieber, 2017). Art intervention is not automatically successful. It seems that different forms of art intervention have a different effect on stress relief. In research conducted by Pizzaro involving undergraduate students, it was discovered that the group assigned to writing experienced significant health improvements, in contrast to the group engaged in art-related activities, who did not show similar benefits (Slayton et al., 2010).

However, according to a study by Kometiani (2017) occupational stress can be reduced by developing a caring community or group work (including art as modality) where workers experience meaning because they feel supported and valued (Hertz, 2011; Hoffmann, 2016; Ifrach & Miller, 2016; Kometiani, 2017). Such a community development was facilitated through art intervention by Kometiani (2017) with staff from a paediatric hospital in Akron in the USA. The results indicated that group art intervention appears to be an effective way to combat workplace stress, compassion fatigue and burnout (Huss & Sarid, 2014; Ifrach & Miller, 2016; Kometiani, 2017).

The issue, however, is that the manipulation of artistic objects are much easier on paper, than in the mind/emotions (Huss & Sarid, 2014). In their case study, Huss and Sarid (2014) used drawing and imagery to lower the stress of employees. The destressing effect of both their interventions was measured using the Subjective Units of Discomfort Scale (SUDS). Units are measured on a scale of 1-10 (Sudie et al., 2014). In this scale 0 is the lowest discomfort and 10 the highest. Both drawing and imagery brought the SUDS of the employees down by four units (SD=0.5) (Huss & Sarid, 2014). Ifrach and Miller (2016) found in their research with females using group art work as modality of intervention, that stress was reduced by an average of 8 points on the Psychological Stress Measure-9 (PSM-9) (Ifrach & Miller, 2016). They furthermore came to the conclusion that there was a release of isolating symptoms

such as stress, anger and depression through the use of social action art (group art with a focus on society) (Ifrach & Miller, 2016).

It seems that collaborative art intervention indeed has a very positive outcome on reducing work-related stress, improving social connectivity and teambuilding (Hertz, 2011; Salzano et al., 2013). However, Rankanen (2016) differs from this opinion when indicating that art intervention is no more effective than other methods of psychotherapy. Salzano, Lindemann and Trosky (2013) did research on reducing stress by using collaborative art-making tasks on hospice caregivers. There was a significant decrease in burnout when stressed hospice caregivers were given a pre-test and post-test score on three different assessments: Maslach Burnout Inventory – General Survey (MBI-GS), MBI-GS Exhaustion subscale score and MBI-GS Cynicism subscale score. Their results confirmed the hypothesis that the art-making intervention would cause a statistically significant decrease in burnout scores (Salzano et al., 2013).

Unfortunately, very little literature is found outside the health (medical) discipline on art intervention used for purposes of stress reduction in employees (Huet, 2015). When studying *Table 1.1* (Chapter 1), there appears to be a lack of research in art-based intervention, specifically within the organisational environment (Luzzatto et al., 2022; Slayton et al., 2010). One of the issues in research within art intervention is that some researchers made use of more than one intervention simultaneously. They added other expressive arts such as writing, theatre, movement, video, dance and music (Slayton et al., 2010). The problem with these combined types of intervention is that it is difficult to separate the data (results) in order to get a clear view on the effects of the art intervention alone (Slayton et al., 2010).

4.6 INTEGRATING MUSIC and ART: GIM

I now proceed by discussing the integration of music and art as therapeutic modalities, focusing particularly on the GIM approach. GIM, my preferred method of intervention, combines these two modalities harmoniously to access the unconscious and address unresolved issues. This technique can be specifically applied to help de-stress employees in challenging work environments. I commence with a discussion on the origin and principles of GIM and then continue by explaining the GIM process.

Thereafter, I focus on the value of GIM in stress relief, followed by some contemporary applications of GIM.

4.6.1 Origin and principles of GIM

GIM is a psychodynamic and psychotherapeutic approach that incorporates relaxation, visualisation and the listening of music. It is a method that has been used to transform subjective emotional states. This process provides the stressed employee with an alternative emotional state, not linked with the original stress (Huss & Sarid, 2014). In GIM, emotional themes may come forward through various forms of imagery (Scovel & Gardstrom, 2012). Through the imagery experience, the specially trained therapist guides the client through support, reflecting, augmenting and encouraging (Scovel & Gardstrom, 2012). In the case of this research, the therapist only focused on destressing the participants by making use of an adapted form of GIM for groups.

The modern concept of guided imagery with music began to take shape in the 20th century, with notable contributions from figures like Helen Bonny, a music therapist and psychologist who is particularly renowned for her work in the field. In the 1960s, she developed a pioneering technique called Bonny Method of Guided Imagery and Music, which combined classical music and psychotherapy (Heiderscheit, 2017). Bonny's approach aimed to access the deep psyche through the emotional resonance of music and guided imagery (Fox & McKinney, 2016).

4.6.2 The GIM process

GIM involves a skilled therapist assisting a client through a range of music-listening experiences, all while the client is in a state of relaxation and openness to experience (Lee & Kim, 2021; Shum, 2020). In GIM, ordered and carefully selected classical music selections are used to move the client's consciousness into altered states where emotional themes may come forward through various forms of imagery (Jerling, 2019; Meadows et al., 2015; Scovel & Gardstrom, 2012).

The process begins with an initial conversation, involving the sharing of personal information, and the establishment of a goal or intention for the session, such as "Exploring my fears for public places". Following this, a music program, lasting between 20 and 40 minutes and consisting of carefully chosen classical music that aligns with the client's intention for the session, is played (Fox & McKinney, 2016;

Temingh Swart, 2020). Subsequently, the client reclines and the therapist provides verbal cues to encourage relaxation (Fox & McKinney, 2016). The technique of GIM encompasses a transpersonal dimension, facilitating an expansion and evolution of the self towards a state of wholeness. Throughout this process, clients are prompted to share the imagery, emotions and thoughts that surface in response to the musical experience (Temingh Swart, 2020). The therapist plays a crucial role in aiding the exploration and interpretation of these responses, fostering a deeper understanding and connection (Lee & Kim, 2021; Shum, 2020). GIM serves as a channel for the expression and release of emotions, as well as emotional memories, contributing to the therapeutic process (Heiderscheit, 2017).

After this the client engages in the artistic process of expressing their inner experiences within the confines of a mandala, a circular shape on paper (Hwang, 2021; Shum, 2020). This visual representation of their journey is then examined and discussed with the client in a therapeutic context. Engaging in this process fosters a profound understanding of oneself, enhancing the individual's ability to embrace the unknown and fostering a deeper connection with self-compassion (Temingh Swart, 2020). This method is instrumental in revealing the obscured facets of the self, specifically the shadow aspect, which remains elusive at the conscious level. The shadow represents the unacknowledged and suppressed dimensions of the psyche, standing in stark contrast to the facade that individuals typically adopt in societal interactions (Shum, 2020).

In describing the music selection, Shum (2020) notes that GIM often utilises carefully chosen ("elective") classical music to support the therapeutic process. While such descriptions are typically applied to individual BMGIM sessions, the present intervention adapted these principles for a group format. Although BMGIM was originally designed for individual, in-depth sessions, Helen Bonny occasionally implemented it in group contexts, particularly in workshops and training settings. In these adaptations, she retained the core structure of preparation, music listening, and post-music integration, with the music intentionally selected to match the session's thematic focus and functioning as the primary guiding medium (Bonny, 1989, 2002).

Subsequent authors formalised these group adaptations within the broader Music and Imagery spectrum (Bruscia & Grocke, 2002), identifying Group Music and Imagery

(GrpMI) as a recognised approach in which the central guiding role of music is preserved while accommodating the dynamics of a group setting (Grocke & Moe, 2015; Summer, 2002). The current study follows this established lineage: each session incorporated a pre-music intention-setting phase, brief relaxation, purposefully chosen music programmes aligned with the session's aim, and post-music integration through creative expression and group reflection. This format retained the intentional, guiding power of the music, consistent with BMGIM principles, while adapting the process to suit a workplace-based group intervention.

4.6.3 Research on the value of GIM in stress relief

GIM serves as a beneficial tool in navigating and mitigating complex emotional states such as rage, grief, loss, anxiety, anger and pain. It creates a channel for bringing unresolved issues to the forefront, effectively circumventing any resistances or blockages (Heiderscheit, 2017; Temingh Swart, 2020). In a specific investigation involving twenty Danish employees on extended sick leave due to stress, Beck et al. (2015b) discovered that GIM played a pivotal role in alleviating stress and expediting the return to employment. Their findings indicate that a substantial 83% of the individuals from their cohort resumed work by the time of the follow-up nine weeks later (Beck et al., 2015b). In conducting this study, Beck et al. (2015a) adopted a biopsychosocial approach, evaluating various facets of stress. These included emotional stress, alterations in hormonal levels, the circumstances surrounding sick leave, self-reported symptoms of stress, as well as the timing and conditions of returning to work (Beck et al., 2015a).

4.6.4 Contemporary applications

GIM has evolved beyond its early roots to find applications in various fields, including healthcare, psychotherapy, education and personal development. *Table 4.4* indicates the different fields of application of GIM.

Table 4.4*GIM Fields of Application*

GIM Application Field	Description	Reference
Stress Reduction and Relaxation	GIM is widely used to reduce stress and anxiety and promote relaxation. It is a popular tool in stress management programs and mindfulness practices	Ingram, 2020
Pain Management	In healthcare settings, GIM is used to complement pain management techniques. By redirecting focus away from pain and towards soothing imagery, it can help reduce the perception of pain	Beck, Hansen, et al., 2015
Emotional Healing	Psychotherapists use GIM to address issues such as trauma, grief and depression. It provides a safe space for individuals to explore and process their emotions	Lee & Kim, 2021
Performance Enhancement	Athletes, musicians and public speakers have turned to GIM to enhance their performance by visualising success and reducing performance anxiety	Jerling, 2019
Creative Inspiration	Artists and writers often use GIM to stimulate creativity and access their inner resources	Short & Heiderscheit, 2020
Spiritual and Transcendent Experiences	In a spiritual context, GIM is used to facilitate transcendent and mystical experiences, helping individuals connect with their inner selves or higher powers	Blom, 2014; Mon, 2020

In conclusion, GIM is a powerful and versatile therapeutic technique that has evolved over centuries, drawing from ancient traditions and modern psychological insights. By harnessing the combined influence of music and guided mental imagery, it offers a holistic approach to healing and personal development (Short, 2021). Its current

applications in healthcare, psychotherapy, education and personal growth continue to expand, making it a valuable tool for individuals seeking to improve their well-being, to de-stress and tap into their inner resources (Lawes, 2021; Shum, 2020). As GIM continues to evolve, its potential for promoting emotional and physical healing remains an interesting subject of exploration and research, with notable contributions from figures like Helen Bonny and her ground-breaking work in the field (Bruscia, 2018). This study specifically explores and highlights its value in the workplace as a modality to develop and implement SMIs.

4.7 GROUP DYNAMICS as FUNDAMENTAL to GIM

Group music therapy extends the zone of comfort and personal safety. It also encourages clients to be active meaning-makers and agents in their health journey, engaging with music as a medium for self-discovery and healing. Through collaborative music-making, the need for cooperation and team building is highlighted, as participants have to listen to each other, synchronise their efforts and work towards a harmonious outcome. In her chapter “Group Music and Imagery Therapy: An Emergent Music Therapy”, Summer (2002) presents group GIM not merely as a collection of individual sessions, but as a relational and aesthetic space where interpersonal dynamics shape therapeutic growth. She writes that the music becomes a shared mediator, facilitating a collective field in which participants co-create imagery and emotional meaning. Through this, group cohesion and emotional mirroring emerge naturally, supporting deeper exploration than in individual GIM alone. This collective experience serves as a space for exploring interpersonal dynamics and possibilities, offering insight into how individuals relate to one another. Additionally, songs provide a powerful vehicle for expressing a wide range of emotions and experiences, giving voice to thoughts and feelings that otherwise remain unspoken (Kirkland & King, 2021). Kirkland & King (2021) found that with rap sessions, a non-judgmental therapeutic alliance was formed. Songs give voice to a range of expressions: fears, triumphs, aspirations, disappointments, secrets, honesty, failures and success. These expressions take place through a socially approved channel of expression.

The psychodynamic aspects involved here include unconscious expression, transference and countertransference, offering a medium to work through complex feelings in a safe environment (Beebe & Wyatt, 2009; Letulé et al., 2018). Music often carries symbolism and metaphor, enhancing this process. Interpersonal dynamics refer to how individuals interact within the group, respond to music and engage with each other (Ingram, 2020; Vaillancourt, 2016). Music can facilitate emotional regulation and catharsis, helping clients process and manage intense feelings, which is essential for resolving internal conflict and fostering psychological healing. In a group setting, members often mirror and amplify each other's unconscious expressions, providing multiple perspectives and deeper insights (Bronson et al., 2018). Transference and countertransference occur between the group and the therapist, enriched by shared symbolism and metaphors discussed collectively. This discussion helps uncover unconscious processes and fosters a sense of connection amongst the group members (Savage et al., 2021).

GIM, a therapeutic approach that combines carefully curated music with pre-guided visualisation, becomes even more potent when explored through the lens of group dynamics (Bluethner, 2016; Marr, 2001a). In a group setting, the interplay of individual experiences, shared emotions and collective resonance can significantly enhance the efficacy of adapted GIM sessions, fostering a unique atmosphere of interconnectedness and mutual support (Blom, 2014; Cripps et al., 2016; Luthans & Youssef-Morgan, 2017; Oren et al., 2019).

In a typical group dynamic within a music and art therapy context like the adapted GIM method, especially when participants are not previously acquainted, the initial sessions often focus on establishing trust and safety amongst the group members (Bruscia, 2018; Mead, 1936; Rania et al., 2021; Vacchelli, 2021). During the first few meetings, participants might start with introductions and ice-breaking activities that incorporate music and art to foster a sense of connection. The therapist might guide the group through gentle, non-invasive music experiences that encourage shared emotions and reflections, without pressing for deep personal disclosures (Fotopoulou et al., 2022; Heiderscheit, 2017). Artistic activities could include collaborative creations or individual art-making that reflects on the shared musical journey, allowing members to express themselves while respecting their comfort levels (Salzano et al., 2013; Temingh Swart, 2020). As sessions progress, these shared activities help lay the

groundwork for a cohesive group atmosphere where participants feel more comfortable and willing to explore deeper emotional work together (Gupta & Tripathi, 2022).

By the time the group reaches its last session (the total can vary from 6-8 sessions), a natural progression often takes place from those initial stages of forming and norming, towards a more established and comfortable dynamic where participants are more engaged with one another (Heiderscheit, 2017; Temingh Swart, 2019). The music and art exercises become more profound, prompting participants to delve into more personal and meaningful imagery and artistic expression. The group may engage in a structured adapted GIM session that includes a longer and more intensive music-listening experience, followed by artmaking, allowing the imagery evoked by the music to manifest visually (Bruscia, 2018; Heiderscheit, 2017). Participants are likely to be more open to sharing their creations and the insights they gained with the group, facilitated by the therapist in a supportive post-session discussion (Vaida & Şerban, 2021). The art and music serve as both a bridge and a buffer, providing a non-verbal means of communication and connection, allowing for individual expression within the collective experience and forging deeper bonds of understanding and empathy amongst group members who were once strangers (Jones, 2019).

The GIM group adheres to a set of guidelines that involve facilitating sessions where individuals work together in a group setting to delve into their consciousness. During these sessions, each member engages in spontaneous imagery in response to one or more pieces of music, while in a non-ordinary state of consciousness (Temingh Swart, 2020). This process unfolds without the need for ongoing instructions or conversation with the leader, emphasising a client-centred approach (Bruscia, 2018; Temingh Swart, 2020). Each session is composed of four key phases: beginning with a preliminary conversation to establish the groundwork (which include a pre-guided suggestion), followed by a period of relaxation or induction to prepare for the experience, then moving into the music-imaging experience itself and concluding with a postlude discussion to reflect on and integrate the experiences they had during the session (Bruscia, 2018; Temingh Swart, 2020).

At the heart of group dynamics within GIM lies the concept of shared experience. As participants embark on their individual journeys guided by the music and imagery, a

collective energy forms, intertwining each person's inner exploration with the larger narrative of the group (Gerge & Pedersen, 2017). This shared engagement can intensify the emotional impact of the experience, as individuals may find solace and validation in knowing that they are not alone in their feelings and reactions (Choi & Lee, 2014).

Group dynamics also amplify the potential for catharsis and emotional release. The safe and empathetic environment cultivated within a GIM group encourages participants to delve into deep-seated emotions that the music and imagery might evoke (Beck et al., 2015b). As participants witness each other's emotional expression, a sense of vulnerability and authenticity is fostered, enabling a cathartic release of pent-up feelings. This collective emotional journey can foster a profound sense of relief and catharsis, validating each individual's emotional experience (Ventre & McKinney, 2015).

Furthermore, the interaction amongst participants during and after a GIM session can facilitate a process of mutual understanding and shared insights. Group discussions following the session allow participants to exchange their interpretations, reactions and reflections, potentially shedding new light on their own experiences (Blom, 2014; Dukic, 2018). This collaborative sense-making not only deepens each individual's connection with their inner selves, but also provides a rich opportunity for collective meaning making, as diverse perspectives contribute to a more comprehensive understanding of the session's impact (Halbert et al., 2018; Temingh Swart, 2020).

The phenomenon of entrainment, wherein individuals synchronise their physiological and emotional states in response to a common stimulus, is particularly pronounced within a GIM group. The rhythms, melodies and emotional cues of the music can lead participants to align their experiences, breathing patterns and even heart rates. This entrainment enhances the feeling of unity and shared connection, fostering an environment where participants resonate with each other on a profound level (Beck et al., 2015a; Levitin et al., 2018).

In conclusion, the influence of group dynamics within a GIM intervention is a potent and multifaceted phenomenon. Through shared experiences, emotional catharsis, collaborative sense-making and entrainment, participants within a group setting are able to tap into a unique depth of therapeutic exploration (Ifrach & Miller, 2016). The

collective energy and mutual support that emerge from the group dynamic enrich the GIM experience, creating a space where individual growth and healing are magnified through the power of shared resonance (Fotopoulou et al., 2022; Fox & McKinney, 2016; Rania et al., 2021).

4.8 CHAPTER CONCLUSION

In this chapter, I explored innovative approaches to SMIs that went beyond conventional methods. I began by examining a range of SMIs, from cognitive-behavioural techniques to mindfulness practices, setting the stage for a broader exploration (Gonzaga, 2019). Our journey then took us into the realm where psychodynamic principles intersected with music and art. Here, these expressive mediums served as vehicles for emotional release and self-discovery, offering profound insights into the human psyche (Letulé et al., 2018; Metzner, 2014). Venturing further, I delved into the intricate relationship between neuroscience and music and art, uncovering how these mediums influence neural circuitry and stress responses. I discovered that music and art are not only forms of entertainment, but potent modalities for stress management in their own right (Bando, 2021; Cope, 2021).

Building upon this understanding, I took a deep dive into GIM intervention, revealing a potent modality that interlinks the healing properties of music with the transformative power of imagination, offering a structured, yet personalised approach to stress management. The chapter further explored the psycho-dynamics inherent in art and music, illuminating how these modalities interact with the psyche to foster self-awareness and emotional release. Additionally, I touched upon the neuroscience behind art and music interventions, unravelling the brain's intricate response to these stimuli and the resultant neurological benefits (Letulé et al., 2018; Mårtenson Blom, 2022).

Finally, I investigated the role of group dynamics and their potential influences within therapeutic settings. The chapter examined how group interactions can shape individual experiences and outcomes, highlighting the importance of group cohesion and collective empathy in enhancing the therapeutic process. By integrating the restorative powers of art and music modalities within group settings, individuals are

provided with a refuge for recovery and rejuvenation, enabling them to confront and manage stress with renewed resilience and understanding.

CHAPTER 5: RESEARCH FINDINGS

5.1 INTRODUCTION

In this chapter, the findings from the data analysis are presented. The data was analysed in the context of the primary research objective and with the aim of answering the research question that directed this study. The aim of the study was to explore how HE employees experience a music- and art-based Stress Management Intervention (SMI) in relation to their stress management and coping capacity. Data were collected to answer the research question: “How do HE employees experience a music- and art-based Stress Management Intervention in relation to their stress management and coping capacity?”

The findings are reported on according to the research procedure that was followed.

Figure 5.1 gives an overview of the research procedure. In the research process there were nine participants who first had an initial interview (not for data collection purposes), and then completed the WLQ (Stress Inventory Test). Thereafter they attended six GIM sessions which formed the SMI intervention that was facilitated by a qualified GIM therapist. After the SMI intervention was concluded, data on the stress and de-stress experiences of the participants in the context of the SMI were gathered through the GIM therapist’s summative feedback report, the interviews with participants, a focus group, and artworks generated during the GIM sessions. Initial interviews, prior to the SMI, were held to meet the participants, to explain the procedures and to confirm their commitment. These interviews also assisted in confirming and clarifying their self-report about being stressed and wanting to partake in the SMI. Concluding interviews with all candidates were held after the SMI sessions, in order to obtain a phenomenological understanding of their experience of the SMI and how that related back to their initial needs for engagement in the SMI.

Figure 5.1

Summary of intervention process



In light of the chronology of the research procedure depicted in *Figure 5.1*, I first report on the results from the WLQ (Stress Inventory Test) completed by all participants before the SMI (i.e., the GIM sessions) commenced. These results contribute to contextualising the study and its main findings, which stem from the qualitative data. Therefore, second, I report on the six themes constructed during the qualitative data analysis. Data analysis was conducted utilising the Atlas.ti 8 software and following the analytic steps in IPA. The six themes will be expanded by an individual discussion of each, as they emerged from the analysis. Finally, the chapter concludes with an integrative summary of the findings.

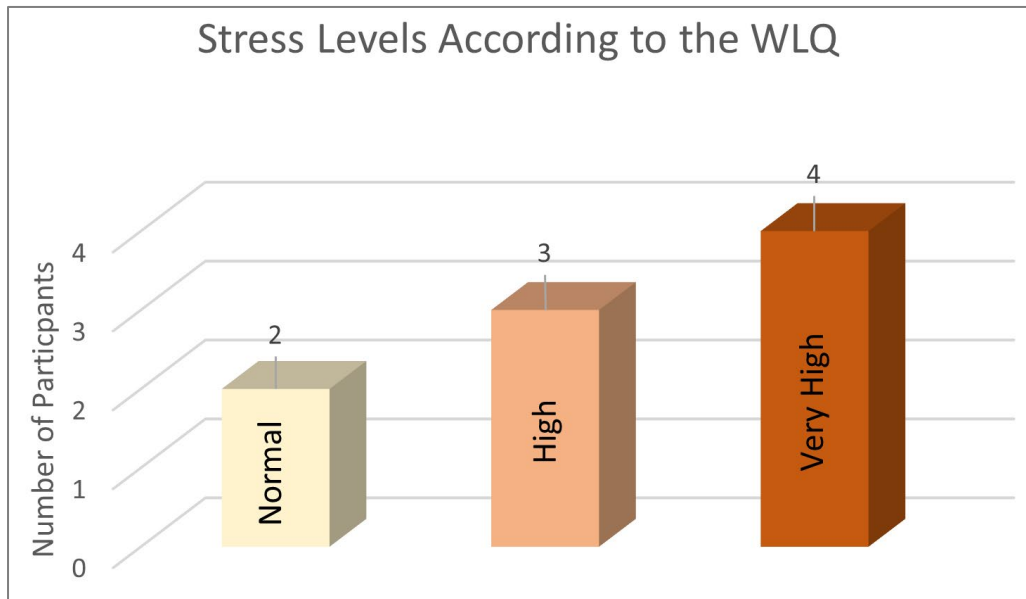
5.2 RESULTS: EXPERIENCE of WORK and LIFE CIRCUMSTANCES QUESTIONNAIRE (WLQ)

Before the intervention took place, the WLQ was used to explore the self-reported level of stress of each participant, as well as a range of stress areas affecting their stress experience (Van Zyl & Van der Walt, 1991). The WLQ was therefore not used to gather data on the stress management and coping of the participants in relation to the research question, but formed part of contextualising stress for the participants and orientating them towards becoming aware of their stress and stressors in preparation for the SMI. The WLQ firstly provides an indication of an individual's self-reported level of stress, where a high score indicates a high level of stress (see Chapter 2.5.4 Data Collection). The WLQ secondly measures circumstances inside the work situation that can be considered to manifest as potential stressors, such as the personnel policy, functioning of the organisation, physical working conditions, social and career matters, remuneration, job equipment and fringe benefits. From the perspective of the JD-R framework, these potential stressors relate to job demands in the work context that add to the health impairment process of the employee.

In *Figure 5.2* the individual level of stress of each participant is indicated based on their WLQ results. The results indicate that two participants reported a normal level of stress, while three reported a high level of stress, and four showed a very high level of stress.

Figure 5.2

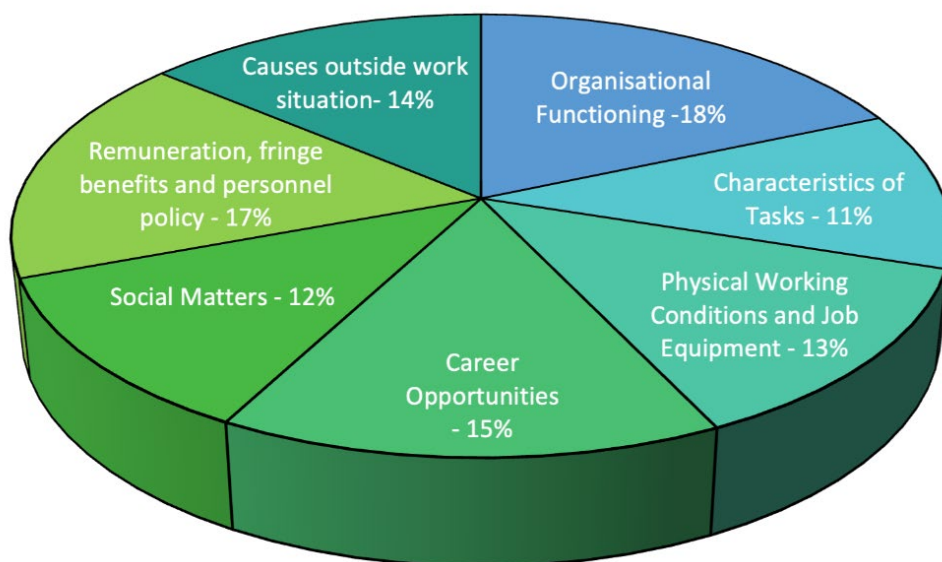
Nine Participants' Level of stress according to the WLQ



Based on the information obtained from the WLQ completed by all participants, each area in their range of stress is indicated in *Figure 5.3* as a percentage of the whole. The pie chart indicates the average for all the participants on each area of stress (not like the individual scores in the 'level of stress' above), as follows:

Figure 5.3

WLQ Results Stress Areas: WLQ results of the nine participants



Note: The % indicates the amount each area contributed to the group's stress.

From *Figure 5.3*, it is clear that the main cause of stress for participants was reported to be aspects related to *Organisational Functioning* (18%). These aspects pertain to trust in supervisors, effective organisational structure, a share in decision-making, a positive management climate, open communication channels and recognition of work well done. In their study, Fourie and Brand (2020) confirmed that an uncomfortable work environment and management style caused stress to employees. They also found that not being recognised as a decision-maker and the lack of respect for decisions made, caused stress in employees.

The second highest area, contributing about 17% to the stress levels of participants, was *Remuneration, Fringe Benefits and Personnel Policy* and refers to issues such as remuneration and fringe benefits being perceived as inadequate and the personnel policy as being unjust (Van Zyl & Van der Walt, 1991). Participant responses suggested that *Career opportunities* caused approximately 15% of their stress and it pertains to some of the following: further training, progress, use of talents and security of position.

Causes outside the work situation were indicated as 14% of the participants' origin of stress. These could include the following: social situations, family problems, phase of life, financial circumstances, status, health, background, facilities at home, family problems, religious life, transport facilities and political views (Van Zyl & Van der Walt, 1991). Furthermore, *Physical Working Conditions and Job Equipment* were indicated as the cause of 13% of the stress of participants, including a possible selection of the following: unavailability of job equipment (in working order) and the idea of working in inadequate physical working conditions. The lack of adequate and functioning resources can cause stress in a working environment (O'Dowd et al., 2018).

Participants indicated that 12% of their stress was caused within the area of *Social Matters*. In this regard the WLQ measures high status, positive relations with management and colleagues, and reasonable social demands.

Characteristics of tasks was identified as another factor responsible for 11% of stress experienced by participants and could comprise: getting work done in time, sufficient knowledge and information to do the job, applying new ideas, full responsibility for a piece of work, autonomous functioning within a position, no unnecessary pressure, no

contradictory instructions, having enough work, having a variety of tasks, and tasks causing conflict.

The WLQ results shed light on organisational functioning as the foremost stressor amongst participants, highlighting issues such as trust in supervisors, participation in decision-making, a positive management climate, open communication, and recognition for work well done. This is supported by the research of Kaur and Kaur (2017), who found that an uncomfortable work environment and problematic management styles significantly contribute to employee stress, especially when employees feel unrecognised or their decisions disrespected. Additionally, concerns over fair remuneration, benefits and personnel policies emerge as critical, alongside the desire for career advancement opportunities and the impact of external factors like family, financial circumstances and social situations on employee well-being, as outlined by Van Zyl and Van der Walt (1991).

Moving forward to the themes emerging from the data, these insights into workplace stressors guided my research towards a qualitative exploration of how these factors intertwined with the professional and personal lives of participants, contextualising the SMI in the context of their work and life stressors. The following section on the themes addresses the research question and examines the broader implications of these stressors on the coping responses of participants. The first theme particularly provides a nuanced understanding of how stress manifested in their lives, influenced by a mix of internal organisational practices and external personal pressures, thereby painting a comprehensive picture of the complex landscape of workplace stress in this HE context. The remaining themes describe the participants' experience of the SMI in relation to their stress experience.

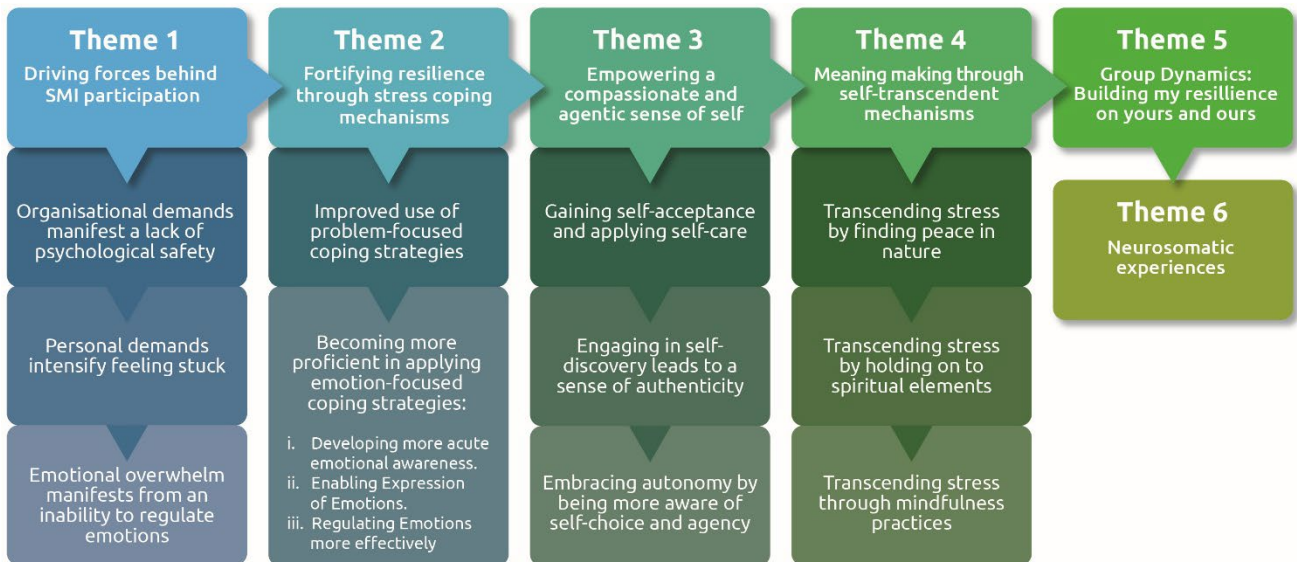
5.3 THEMES EMERGING FROM the DATA

This study made use of a music-and-art-based intervention method, namely the Bonny Method of GIM. A typical GIM session, incorporating therapeutic elements, was described in Chapter 4. Each session consisted of a relaxation exercise, a pre-guided suggestion, a GIM-informed music experience leading into imagery work (such as drawing or clay forming), followed by a group discussion and integration process. After the six therapy sessions, individual interviews with each participant and a focus group session were conducted to collect the primary data, these narratives were

complemented by the artworks created by participants during the SMI sessions. The GIM therapist's observational notes were then used as a benchmark against these data sources and integrated into the overall interpretation. After careful processing of the data using Atlas.ti 8, the following six themes emerged, as depicted in *Figure 5.4*:

Figure 5.4

Six Themes from the Data findings



Note: Adapted from the researcher's data

The following table (*Table 5.1*) provides an illustrative example of an outcome of the systematic coding process in using IPA as described in Chapter 2, Section 2.5.6. The table provides an illustrative excerpt of the analysis outcome for all themes and subthemes, demonstrating how coding systematically progressed from the rightmost to the leftmost column. The far-right column presents the extracted meaning unit (verbatim), followed by its condensed form, the associated subtheme, and, ultimately, the overarching theme positioned at the top. This approach exemplifies how I went about recording the data analysis process that I followed and how the interpretation of the data collected for this study, ensued to ensure a consistent and thorough analysis.

Table 5.1

From Meaning Units to Themes:

Theme 1: Driving forces behind SMI participation		
Sub-Theme	Condensation of Meaning	Meaning Unit from data
Organisational demands manifest a lack of psychological safety	Constant external pressures and instability prevent true relaxation and heighten stress.	"Yes, with students and the strikes, everything, so that then affects us and the things like management telling us to increase our workload, things like even student numbers... especially this year we have two programmes"
Personal demands intensify feeling stuck	Fear of letting others down reinforces feelings of entrapment and helplessness.	"I was especially scared of letting down or hurting my family, as my family unit is the place where I find my joy and my meaning".
Emotional overwhelm manifests from an inability to regulate emotions	Lack of healthy outlets leads to emotional overload and ineffective coping	"I don't have maybe a proper way of letting out what is actually what is going inside of me".
Theme 2: Fortifying resilience through stress coping mechanisms		
Sub-Theme	Condensation of Meaning	Meaning Unit from data
Improved use of problem-focused coping strategies	Able to compartmentalise challenges and apply structured coping to manage demands.	"It sort of helped me to compartmentalise and prioritise, so it's really helped me to see where stresses are coming from, to see, and how to deal with it..."
Becoming more proficient in applying emotion-focused coping strategies:	<ul style="list-style-type: none"> i. Developing more acute emotional awareness. ii. Enabling Expression of Emotions. iii. Regulating Emotions more effectively 	"... for me to create a drawing out of the feeling, that was beautiful... The happiness centre was not difficult because you sort of, I know where I want to be..."
Theme 3: Empowering a compassionate and agentic sense of self		
Sub-Theme	Condensation of Meaning	Meaning Unit from data
Gaining self-acceptance and applying self-care	Letting go of fears and embracing greater self-acceptance supports personal care.	"I've released most of my fears even it is not everything and like those things are no longer one of my biggest stresses because I've learned to like me and not put too more pressure in my life and to not stress about things that I cannot control"
Engaging in self-discovery leads to a sense of authenticity	Feeling centred and at peace enables deeper insight and self-understanding.	"In this session, I felt very centred and at peace. This picture visualised how that experience of centeredness allows me to radiate who I am and what my true nature is to the outside".
Embracing autonomy by being more aware of self-choice and agency	Acknowledging choice and boundaries fosters greater personal autonomy	"You choose what you let in, and I think this really just highlighted the fact that it's better to let music in and let art in and let all the destructive things out..."
Theme 4: Meaning making through self-transcendent mechanisms		
Sub-Theme	Condensation of Meaning	Meaning Unit from data

Transcending stress by finding peace in nature	Experiencing calm in natural rhythms and settings nurtures inner peace	"It's normally around the time the sun sets and then I really find the changing colours of the sky, the birds and bats flying about, and the gentle swing of the branches of the palm trees very relaxing and refreshing"
Transcending stress by holding on to spiritual elements	Drawing strength from spiritual symbols and faith offers grounding and reassurance during stress.	"At the bottom is a huge log of wood and some big stones. This symbolises my faith (Bible) which keeps everything together and stable."
Transcending stress through mindfulness practices	Being present in the moment fosters calm awareness and reduces the impact of stress.	"Yes definitely, especially you know, just being still and refocusing your mind or just you know, being able to sit and relax and not think about anything"

Theme 5: Group Dynamics: Building my resilience on yours and ours

Condensation of Meaning	Meaning Unit from data
Connection with peers fosters mutual support and strengthens resilience. Observing and exchanging strategies enhances personal coping skills. Sense of belonging in the group. Feeling accepted and understood reduces isolation and empowers growth.	"Your eyes are open to other perspectives that you didn't even think about. I mean if I looked at other people's art work and I was like, 'Wow, is that how you went with that?' and it's amazing cause it's equally valid for them as mine was for me but it just also helps contextualise and put things in perspective so I actually really enjoyed the group thing overall"

Theme 6: Neurosomatic experiences

Condensation of Meaning	Meaning Unit from data
Physical sensations mirror emotional shifts and contribute to self-awareness. Bodily experiences intertwine with imagery, reinforcing therapeutic effects. Relaxation and bodily release accompany emotional processing and stress reduction.	"I'm definitely thinking differently, acting differently but I've noticed that if I'm stressful or have got a lot of stress, I would just sit for five minutes and do the breathing exercises which helps a lot to get past that extra stress level that you're experiencing..."

The inclusion of verbatim excerpts from participants serves to ground the thematic findings in the data, enhancing the trustworthiness and credibility of the research findings. The code numbering system I used to distinguish participants, is as follows:

- Z** - Post-Intervention Interview
- F** - Focus Group
- M** - Mandala (Drawing Artwork)
- C** - Clay Artwork
- O** - Therapist Feedback Report
- P1-P9** Participant number

So, an example of the combination could e.g. be: *ZP1* – Post-Intervention Interview Participant 1. Having contextualised my data analysis approach and reporting, I now turn to discussing the main themes derived from the data analysis.

Theme 1

5.3.1 Theme 1 - Driving forces behind SMI participation

This theme revolves around explaining why participants engaged in the SMI and felt the need to address their stress management and coping. Guided by the elements in the JDR-framework, Theme 1 focuses on the job and personal demands that participants experienced as primary stressors affecting their stress levels and ability to manage their stress. The theme first provides insight into the aetiology of participant stress, which is an important benchmark factor in later determining how the SMI affected these stressor experiences of participants. It then illustrates how the job and personal demands facilitate a health impairment process, which is observed in their struggle to regulate their emotional responses to the stressors. Three sub-themes were constructed to conceptualise Theme 1, namely lack of psychological safety, personal demands intensifying feeling stuck, and inability to regulate emotions.

5.3.1.1 Organisational demands manifest a lack of psychological safety

According to the WLQ the primary reason for participant stress was organisational functioning, which relates to decision-making, sharing open communication, recognition and work well done. It was also evident from the interviews that participants experienced work overload which, combined with an unsupportive management style, manifested in them having a poor sense of psychological safety.

Participants reported experiencing significant stress due to the pressure of meeting multiple work deadlines and an increasing workload. *“What are you going to do with all these deadlines now they think they have to meet? That’s what’s stressing”* (ZP1). The same participant emphasised work overload in the context of poor management support, in that there were not enough resources to fulfil their daily tasks with the students:

Yes, with students and the strikes, everything, so that then affects us and the things like management telling us to increase our workload, things like even student numbers... especially this year we have two programmes; there’s more frustration in terms of how do we juggle this lab and it’s a 4 hour lab, we only have 4 labs and we have about 500 students to go through in a week to go

through that lab space. That's the frustration we have and then boundaries in terms of finance, you're looking for this, then it doesn't come. (ZP1)

To manage workload stress, participants highlighted the need for management support, such as providing staff with dedicated interventions, to help employees manage time and stress more effectively. However, they felt unsupported by management and noted that management was not concerned with staff stress, only with the challenges of students. According to Participant 3, staff felt neglected compared to the health and wellness programmes offered to students:

Definitely, definitely, with ... I guess, maybe like even students, I know that... I mean, like there are such programmes such as counselling for students but then I never thought that they were for, I guess, maybe like staff in a way. So, I think maybe, like we need more of these kind of programmes for staff. (ZP3)

Participants further indicated that they felt underappreciated and emotionally disconnected due to management's impersonal communication style, emphasising their experience of an unsupportive management. The lack of direct, empathetic engagement from management lead to frustration amongst staff, who perceived their efforts as unrecognised and their emotional needs unaddressed, as noted by Participant 1:

I wonder... and that's the main thing that's making me go, no-one has ever come to me except of a piece of paper that says: "We apologise, we know you're doing well". To come and say: "We understand". We are just posters there who will fall into the programme, we must fall into the programme. Really? There's no emotion attached, we're just a paper that is posted in a ... to say there's a new timetable; this is it. Who is going to talk to us? (ZP1)

Participant 1 expressed a sense of loss regarding the personal touch in workplace management. This shift from a more personal, human-centred approach to a more impersonal, detached style has left employees feeling ill-managed and disconnected within the institution:

So that's the main thing, that's like ... that personal touch has left the institution, it has left them totally and we didn't have that before. Before there was a personal ... you could feel you're being managed by somebody... now it's an animal you don't even know. (ZP1)

As a result of being overloaded with work, yet unsupported by management, participants reflected a psychological vulnerability, feeling unsafe to express themselves in the workplace. They described a significant fear and apprehension about expressing themselves openly and of being creative and open about their thoughts and ideas. This fear was not about disagreeing with others, but more about appearing foolish, making mistakes or offending others. For example, one participant wished for the organisational climate to be less inhibiting when it came to expressing the self:

I don't know if it's about feeling embarrassed or making a mistake or looking stupid in front of other people, but it shouldn't be so inhibitive. (FP5)

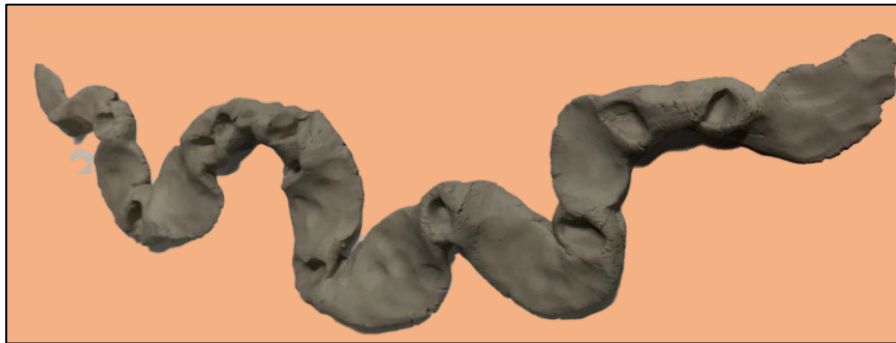
In an individual interview, Participant 1 highlighted a lack of communication platforms within the workplace for staff to express and understand each other's emotions. This created a sense of isolation and uncertainty, as employees were unsure if others were also experiencing stress and challenges, leading to a façade of normalcy despite underlying issues:

... but the staff don't have that platform. We have our unions, but we don't have the platform where -- you don't know how somebody else feels, you don't. Like with us in the department, we are quite small, so we know each other but outside there you don't know, you don't know whether ... maybe you are the only one feeling so; why is it so quiet? Why is everyone going on with their work as if everything is normal? Things are not normal, so are you the one who is ... because you can see that things are not normal, but everybody is going around their work, ok, let me go on with my work then. (FP1)

When doing clay artwork during one of the GIM sessions, the idea was for participants to first express their stressful situation whilst listening to a specific piece of music, then visualise a solution and form a second clay artwork, whilst listening to another selected piece of music, and then have a discussion on the value of both artworks for the participant. Below is the example of participant 1's first clay work.

Figure 5.5 (session 3)

Clay work no.1 of Participant 1 Session 3: Expressing an unpleasant life journey



The participant's clay work is a depiction of a road with numerous humps and ditches, serving as a metaphorical, artistic representation of organisational demands and conveying the sense of how these constant obstacles and difficulties shaped the emotional landscape of their work experience:

The first picture (CP1) (clay work) which was portrayed, had a lot of humps and was not smooth. That sort-of revealed how I feel, especially at work. There are a lot of blockages which come as humps and ditches, that makes working difficult. (ZP1)

The uneven, rough terrain of the clay road visually embodied the feelings of frustration at the barriers, challenges and hindrances that work-related demands created, offering a tangible form to metaphorically articulate the poor sense of psychological safety and well-being they manifested with. The constant struggle with these metaphorical obstacles left them feeling insecure and unsupported, undermining their ability to function effectively at work.

Psychological safety in the workplace is the assurance that one can express oneself fully without fear of negative consequences to self-image, status or career (C.E. Johnson et al., 2020; Kim et al., 2020). Management plays a crucial role in establishing and nurturing psychological safety by providing a supportive work environment through modelling openness, humility and a commitment to listening. The lack of psychological safety experienced by participants in this study was a key stressor, which was rooted in work overload and exacerbated by an unsupportive and detached management.

5.3.1.2 Personal demands intensify feeling stuck

In the exploration of workplace stress, it was found that personal demands on employees significantly exacerbated feelings of being stuck. This sub-theme delves into how the intricate interplay between personal responsibilities and professional challenges can lead to feeling trapped, impacting overall well-being and job performance. Participants expressed a deep emotional connection with their family, identifying it as the primary source of joy and meaning in their lives. However, this connection coincided with a fear of disappointing or hurting family members, underscoring the significant role family plays in their emotional well-being and sense of responsibility. As one participant noted:

I was especially scared of letting down or hurting my family, as my family unit is the place where I find my joy and my meaning. (ZP4)

Participant 3 reflected on family issues, viewing these problems as complex and lacking clear solutions. They expressed a sense of personal entanglement in these familial challenges, feeling as though they were at the centre of these difficulties. This sentiment is captured in the words:

Whereas the home problems are not really ... I think they don't have solutions. The way I believed, and I grew up in those kinds of problems, I happened to see myself as kind of the centre of these problems. (ZP3)

This perspective likely contributed to their stress, as they had internalised the family issues and saw themselves as a pivotal figure in these ongoing problems.

Participant 4 described pervasive stress and anxiety, both at work and home, leading to a feeling of being stuck. Recognising the inability to change external circumstances, they expressed a desire for personal change as a means to cope with and improve their situation. They viewed this desire for change as an opportunity for self-improvement and stress management, highlighting a proactive approach to their situation:

Well, honestly, I was not in a very good place. I was constantly feeling stressed, anxious, and it was just there in general. Was it work? Was it home? I can't... It was just there all the time and I felt that... I felt stuck, I felt like something needed to change and I knew I couldn't change my work-life or my routine at

home, so I felt like changing something for myself and I thought that this was a good opportunity. 'Cause let's face it, there are stressful things at work and I was hoping that this journey would help me to kind of get to a better place.
(ZP4)

5.3.1.3 Emotional overwhelm manifests from an inability to regulate emotions

The inability to regulate emotions, often leading to emotional overwhelm, is a critical factor affecting workplace dynamics. This section examines how emotional dysregulation can impair decision-making, reduce productivity and contribute to a toxic work environment, ultimately affecting both individual and organisational performance.

Due to organisational and personal demands, which were experienced as work and life overload, the employees struggled to self-regulate their emotions and had a need for self-care. Their emotional overwhelm is reflected in them feeling stuck, unimportant, inauthentic and unable to express their emotions and ideas. They sometimes lost their emotional control and experienced a need for help. Their emotional overwhelm was not only verbally expressed during the study but also depicted in the artworks they created during GIM sessions.

Participant 3 articulated their struggle with finding an effective way to express their internal experiences and challenges:

I don't have maybe a proper way of letting out what is actually... what is going on inside of me. (ZP3)

This difficulty in communication lead to a barrier in problem-solving, as they felt hesitant or afraid to share their issues with others:

Maybe that is the reason why I don't find solutions to my problems in that way, because somehow, I... feel afraid to say to the people. But then, in this kind of a problem, I... I know it is a problem, like everyone is having that kind of challenges. (P3)

The participant acknowledged that these challenges are common, yet this recognition didn't alleviate their personal difficulty in addressing them, thus causing an internal struggle. Similarly, during initial art sessions in the GIM, Participant 9 depicted their feeling of being overwhelmed by life as if they felt captured in a never-ending spiral of

stress (see Figure 5.6). They said: “To me everything feels and are an infinity. A never-ending cycle of life. Whether it’s your problems and stress at home or at work”. (MP9)

Figure 5.6 (session 2)

Infinity illustrated by participant 9



The participant was referring to a feeling of being overwhelmed by their problems and demands from work and at home. They felt as if they would never get out of their situation and this caused them stress, which created a need for intervention. It was a very desperate and hopeless plea for help.

Participant 6 was experiencing a challenging cycle of working long hours and trying to manage home responsibilities, resulting in less personal time and reduced productivity:

... working long hours now for a while and then when you’re not working, then you try and catch up everything else at home. So then you make even less time for yourself, which is not good because it creates a vicious circle, not actually as productive. (ZP6)

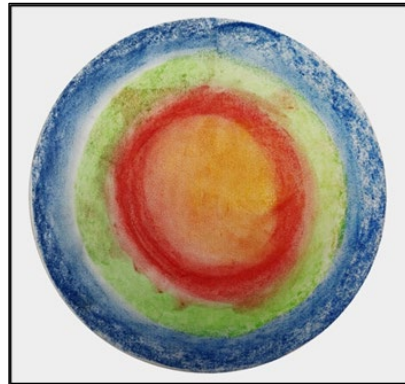
This situation highlighted the struggle to maintain a balance between work obligations and personal well-being, emphasising the importance of self-care and effective time management, which was not happening in this case. This caused the participant to look for help and thus participating in this SME programme.

The emotional overwhelm and a feeling of sadness was further illustrated by participant 5, who, during the 2nd GIM session, drew an island with an erupting volcano

at its centre, serving as a powerful metaphor to illustrate their experience of emotional overwhelm at the beginning of the SMIs (see Figure 5.7).

Figure 5.7 (session 2)

Erupting Volcano symbolising explosive emotions



The volcano, symbolising explosive emotions and uncontrollable circumstances, reflects the intensity of their internal state. The lava covering the island represents the pervasive and consuming nature of these overwhelming feelings, indicating a moment in life where negative and sad emotions seemed to overshadow everything else:

I felt sad and overwhelmed that day. There was a volcano exploding on my island and the lava was covering everything. The volcano is in the centre of the island. (MP5)

It therefore became essential for this participant to seek help in managing their stress levels. Participant 6 was overwhelmed by personal circumstances that felt like being caved in and no longer in control. This caused a high level of stress and the participant recognised a need to continue with this SMI (see Figure 5.8).

Figure 5.8 (session 2)

Wave crashing on black bird - resembling a psychological cave-in



Participant 6 reflected that:

In retrospect, I have wondered if my senses were forewarning me (if there is something like that) of the wave which will crash soon, and the little bird (myself) will be tumbled and overwhelmed. In this week I did feel like the wave crashed and tumbled me because I could not keep my very careful balance. Very stressful and effort intense to keep my balance. (MP6)

During one of the earlier GIM sessions, participant 3 also vividly illustrated in *Figure 5.9* a feeling of having an internal conflict and being emotionally overwhelmed (MP3).

Figure 5.9 (session 2)

Mandala from participant depicting depression and uncertainty



According to Participant 3 this mandala in *Figure 5.9* reflects a deep internal struggle and a search for identity across various life roles. It symbolises a battle between the desire for peace and the reality of unresolved issues. The participant's use of colours, like yellow for hope and green for life, juxtaposes with black for significance and purple for strength, indicating a complex emotional landscape. This artwork served as a medium for the participant to express an inability to articulate personal challenges, causing stress, depression and a longing for freedom and tranquillity amidst life's turmoil:

I am going through a phase in life where I cannot do anything, even though I know what is going on. Something is definitely not right with me, but I cannot verbalise it. This is a reflection of myself in three situations, namely, myself as a professional career enthusiast, myself as family 'man' and myself as an

'unknown' entity (identity crisis). Coming to think of myself in all of this, I know, I do not know what I want... I want freedom, I want peace and tranquillity, but these are sketchy. This image was created during one of the first sessions. ... I wanted to escape, to a more calmer space, but cannot. (MP3)

Theme 2

5.3.2 Theme 2 – Demonstrating the use of stress coping mechanisms

This theme describes the improved coping responses amongst HE employees who participated in this music- and art-based (GIM) SMI. The theme provide insight into how these creative modalities were perceived to enhance coping capacity and stress management. Theme 2 is described in two sub-themes: problem-focused coping, which involves addressing the source of stress directly, and emotion-focused coping, which aims to manage the emotional response to stress. These sub-themes illuminate how the intervention helped participants to not only tackle stressors more effectively but also regulate their emotional responses, which was a key reason for their engagement with the SMI (theme 1, section 5.3.1.3). The theme in this way underscores the perceived value and effect of the intervention for participants on their stress response.

5.3.2.1 *Improved use of problem-focused coping strategies*

In problem-focused coping, when changing the stress stimulus, you take direct action to alter the situation that is causing stress. This could involve creating a plan to tackle the problem at its root, thereby reducing or removing the source of stress entirely. There were several instances in the data providing evidence of how the participants started to engage in problem-focused coping during and as a result of their engagement with the GIM sessions. Problem-focused coping was evident in their presenting with i) a more realistic outlook on their circumstances, which gave them a better sense of control. They also applied ii) normalising thoughts and actively started to pursue work-life balance strategies.

- i. *Gaining a more realistic perspective and sense of control.* Participant 4 showed evidence of their problem-focused coping, demonstrating their enhanced ability to realistically evaluate stressors beyond their control and distinguish negative ones that should not affect them, when exclaiming:

... do I wanna expose myself to that negative energy, because now I'm rid of that underlying baseline of stress and do I really wanna go there again? And since this, I've started to just listen a little bit (to negative news) and discard it and if it sounds positive then I listen to the rest. If it doesn't, just put it off, just chuck it. (ZP4)

Another participant (6) concurred and expressed a newfound awareness and control over their exposure to negative stimuli, emphasising their ability to discern and limit engagement with stress-inducing factors post-intervention:

Definitely, yah. And outside negative comments, pushing them away easier. Listen to it, is it... sort of evaluate it and then put it to one side. (ZP6)

A participant (P4) from the focus group discussion described how therapeutic activities had aided in compartmentalising and prioritising different aspects of life, thereby enhancing their ability to identify stress sources and reflect more effectively. This appeared to improve their mental clarity and help them achieve a relaxed state. It also seemed to support a greater sense of control and the use of more effective problem-solving and coping strategies:

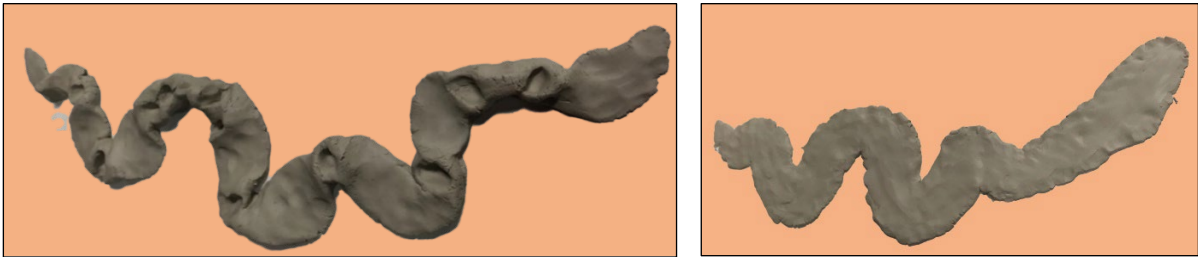
It sort of helped me to compartmentalise and prioritise, so it really helped me to see where stresses are coming from, to see, and how to deal with it, identify where those kinds of feelings come (from) and to reflect better. 'Cause you know, once you are sort of in that space where you are relaxed, it really does put you in a different mind space so you really can work through things better. (FP4)

Participant 1 confronted and reimagined their personal challenges by using clay to construct and then reconstruct a symbolic stress 'monster' (see Figure 5.10).

They found greater enjoyment and connection with clay compared to colouring as a medium for artistic expression. The participant highlighted the tactile process of moulding and reshaping clay as a therapeutic tool aiding in the visualisation and resolution of stressors, empowering them with a realistic perspective and a sense of control.

Figure 5.10 (session 3)

Monster (left) and Sense of Control (right)



Their verbatim below indicates facing the stress “monster” on the left and then finding a sense of control (a coping mechanism) to create the resolution on the right:

Yes, yes in terms of hands, instead of the drawing. The one of... I think of clay I can even do it and then I think I can use it to look at this monster and actually maybe even dismantle it to look what I would want it to look like when it's better... this monster. That really helped me, that I think was... I really liked that clay thing 'cause I could... we had the part where you saw the monster then the part where (you reshaped it), ... that helped because then you had to solve (the problem). (ZP1)

Participant 9 echoed this realistic sense of control over their stress with their clay work, as depicted in *Figure 5.11*. They indicated that they could express their feelings and thoughts very well through the use of clay: “... *I think the clay was definitely my thing. I liked the clay a lot*”. (ZP9)

The artwork on the left expresses the different issues (in the form of an incomplete pie) that caused stress in the person’s life, e.g., money and work (represented by the different slices of the pie). This clay work was reshaped (after a GIM intervention with music) to the artwork on the right.

Figure 5.11 (session 3)

Clay Expression: Participant 9 being in a boat floating over the stress river



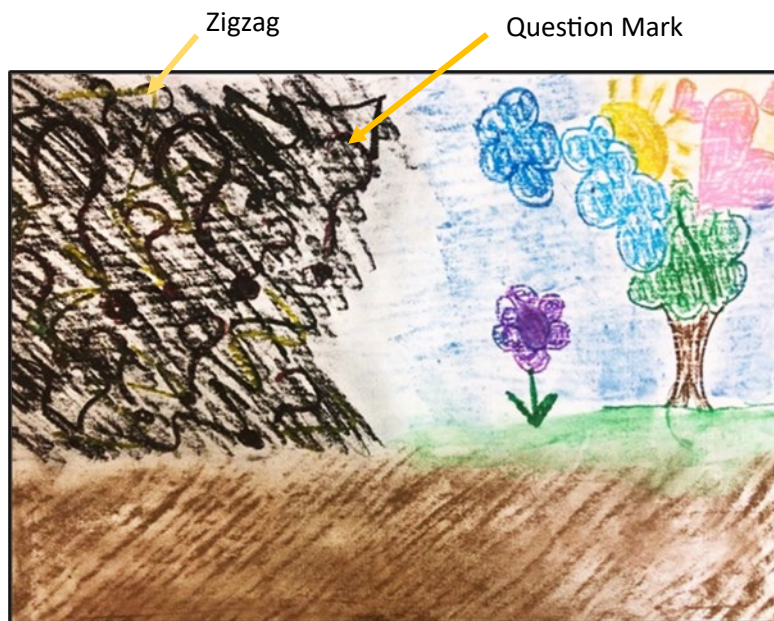
The participant depicted their journey of managing and conquering stress through the metaphor of being in a boat on a river (the clay image on the right), with the river itself embodying the stress they experienced. The sun's radiant presence above serves as a symbol of hope and unwavering positivity, shining light on their path despite the various challenges and stresses encountered in everyday life (Figure 5.11 – left). This is a remarkable example of how stress management through problem-focused coping was an intentionally controlled process for this participant:

I am sitting on a boat, drifting away and just relaxing. Forgetting about my daily problems and stress. The sun is shining above me. The river is my stress where I am floating over it and with the sun shining above me to show that the sun will always shine, no matter how stressed you are. Whether you have a bad day or not. (ZP9)

Stress in life is sometimes managed through problem-focused coping. In *Figure 5.12* below, Participant 5 (during Session 5) illustrates this process by balancing life's pressures as a coping mechanism.

Figure 5.12 (session 5)

Balancing Life's Pressures (Participant 5, session 5)



This part of the mandala portrays a vivid depiction of the participant's life struggles and joys. On the left (in the black area), their negative aspects (pressures and demands) are illustrated through specific elements like question marks and yellow zigzags, which represent the dangers and potential mistakes inherent in daily life. Conversely (on the right), the presence of beauty and positive experiences is acknowledged, reminding the participant of the good in life. This emphasises the participant's ability to integrate the dark and beautiful aspects of life. It also suggests a skill in problem-focused coping that appeared to develop during the sessions. Reflecting on the drawing, the participant's reference to a foundation of rock suggests a search for stability and strength amidst life's uncertainties:

The negative refers to the pressures that I feel in everyday life and the demands made on me. The question marks are the questions and needs of other people and the yellow zigzags refer to the dangers of the pressures and of making mistakes. The good is the fact that there is beauty in my life and good experiences, and I need to remember that. My foundation is rock, but I am not too sure what that rock is made of. (MP5)

ii. *Normalising the stress experience promotes coping.* As a result of their engagement in the GIM sessions, some participants came to the conclusion that they should accept stress as a universal experience, thus normalising their stress experience. This phenomenon is illuminated by participant reflections that stress should be accepted as a universal experience, fostering a sense of solidarity in adversity, as expressed in the notion of: “I am not the only one” (Ekiabor, 2016; Kiranmai & Kiran Kumar, 2019). This normalisation process, as participants suggested, is not merely a coping mechanism but a pivotal aspect of resilience, framing stress as a shared, rather than isolated, experience. Such dynamics underscore the paradoxical valuing of stress within groups, where managing stress without apparent strain becomes a badge of commitment and capability (Edwards & Ashkanasy, 2018).

Participants experiencing a communal aspect of coping (discussed under group dynamics) highlights how normalisation of stress and adversity can serve as a survival strategy, where shared experiences and mutual support become foundational to resilience (Nguyen-Gillham et al., 2008). In this regard, participant 5 shared the insight that stress is a universal condition, and that acceptance of this reality is crucial. The group therapy experience revealed that while the specifics may differ, the underlying emotions and feelings related to stress are often shared, creating a common ground for understanding and empathy:

I think the idea is that you must ‘maar’ except that there is going to be stressors, that nothing is perfect. And what I learned from the group is that everybody is stressed and sometimes we all stress about the same things. It’s the same; the context is not always the same but underneath it, there is often the same emotion and feelings. (ZP5)

Participant 3 reinforced the same normalising sentiment, highlighting a common struggle: the inability to slow down thoughts and the tendency to focus on problems. This happened even during relaxation or stress management. This recognition of the issue helped them normalise their

experience. It also appeared to support the use of more constructive coping strategies:

I mean... like... I know it is a problem, like everyone are having that kind of challenges and then with the colourful energy circulating around... and that sort of make you relax to say that I'm not the only one. I think... like... a method of... I guess... I don't know... just letting go of things that are beyond your control and actually... like... now trying to find the space where you can... I guess... maybe... like... just be yourself. (ZP3)

Participant 3 continued by reflecting on the therapeutic experience, noting how the awareness of shared challenges with others and the visualisation of “colourful energy” helped in relaxation. This points to a method of coping by acknowledging what is beyond one’s control and despite that, finding a space for self-expression and manageability as part of a sense of coherence:

I mean... I know it is a problem... everyone is having that kind of challenges and then with the colourful energy circulating around and that... make you relax to say that I'm not the only one. (ZP3)

This feeling of unity captured Participant 7’s observation of the diverse personalities and backgrounds within the group, despite all being university employees. The participant reflected on the bonding experience, emphasising how the realisation that everyone is dealing with personal challenges, whether at work, home or within themselves, helped to strengthen the group bond. The process of sharing feelings and experiences, combined with laughter, music and other activities, facilitated a deeper understanding and connection amongst the group members. It highlighted the universality of struggles, normalising of shared life stressors and the importance of moments of stillness and self-reflection in reconnecting with oneself, leaving them with a feeling of coping:

It was actually amazing because we were a lot of different personalities in the group and from different educational levels as well, even though we all work at the university. Our experiences or our jobs differ quite a lot, but I do think at the end we really felt the bond between us all

because we got to a point where we all realised, we're all struggling with something. (ZP7)

The group environment, even without verbal support from others, provided a sense of solidarity and understanding, as participants felt they were not alone in their struggles. This aspect of coping through an experience of normalising was reflected by the belief of a participant (P2) that a group setting offered a sense of support and reduced inhibition compared to a one-on-one session. The participant emphasised the non-judgmental nature of the group, where the focus was on mutual support, growth and peace. This highlighted the value of group therapy in creating a space where individuals felt supported and less judged, facilitating a more open and healing experience, because they could now cope better with their everyday stressors through a process of normalising:

Even with this group I felt more supported when I was ... even if they, the other participants, were not saying anything. But I felt that there is support because you feel like you are not the only person going through the same thing... because now we see we're supporting each other, we're there for each other and there's no judgement, it's all about growing and making peace better, that was how I experienced this, I think—maybe. (FP2)

This segment highlights the advantages of group dynamics in coping with stress from a normalising perspective. Group dynamics promotes the realisation that stress is a universal experience, varying in intensity and form amongst individuals. Through group interactions, participants gained perspective on their own stress levels, often finding them more manageable compared to those of others. Participants also learned from observing their peers, understanding that making mistakes is a common part of everyone's experience. This collective learning process, exemplified in activities like synchronised drumming, not only aided in stress management but also fostered a sense of unity and shared rhythm in coping strategies:

... like I said, you could see that it's not just you who deal with stress, and everybody has stress, they only have different stress. Where you

thought your stress is higher, then compared to others yours might be minimum compared to others, so yah, group interactions were for me better... (ZP9)

5.3.2.2 Becoming more proficient in applying emotion-focused coping strategies

The GIM sessions harnessed the emotive power of music and the expressive potential of art to facilitate deep emotional and neuro-somatic experiences, which enabled participants to access and process underlying stressors. By incorporating emotional awareness, expression, and regulation into a cohesive understanding, participants appeared to strengthen their ability to manage stress from an emotion-focused coping perspective.

These three components acted synergistically: i) emotional awareness provided the foundation for recognising and understanding complex feelings, serving as the first step in navigating stress more effectively. This awareness then facilitated ii) the expression of emotion, allowing individuals to articulate their experiences through music and art modalities and other forms of creative output, which in turn provided a cathartic release and deepened personal insights. Finally, iii) the regulation of emotions was cultivated through practiced techniques such as deep breathing, engaging with music, and tactile activities like drawing and clay modelling, enabling participants to modulate their emotional responses in a healthy manner. Together, these elements contributed to a comprehensive strategy for stress management, where participants learned not only to identify and express their emotions but also to control them, leading to more adaptive coping mechanisms and improved mental well-being.

i. Developing more acute emotional awareness.

Participant 1 reflected on the meaningful experience of creating a drawing that represented their feeling of happiness. This artistic process allowed them to not only visualise but also understand and appreciate their own 'happiness centre', indicating a clarity in their emotional aspirations and desires:

... for me to create a drawing out of the feeling, that was beautiful... The happiness centre was not difficult because you sort of, I know where I want to be ... (ZP1)

Through the GIM sessions participants were brought closer to their emotions through music and recognised the potential of music as a tool for relaxation and mood enhancement. There were also experiences of discomfort in response to the music, which from a psycho-dynamic perspective, signified discomforting emotions that a person did not want to face, like P8 mentioned: *“The art is fine but the kind of noisy ... side to it is difficult for me with the singing and the drums.”* (ZP8) She held back and was not ready to confront her emotions.

It appears that on a psychodynamic level, some unresolved unconscious issues came forward during this session which participant 6 had to start dealing with. Participating in this first and then subsequent sessions allowed her to begin the process of emotional coping by positive reframing of the emotional aspects of her situation:

Because at that time things were quite calm, but there was the relaxing music that I really enjoyed because I was taken to another place every time and that worked well for me. It triggered something that I must do that because it helps me a lot to relax, to just forget about what’s around me and just go to that place, even though there might not be music around. I was trying it last night and it seems if there’s music it does actually help you to get there and to stay there. (ZP6)

In the act of playing the drums, participant 4’s reservation and lack of full engagement may have signalled underlying psychodynamic issues, suggesting an internal conflict or a deep-seated fear of expressing themselves fully. This hesitance could reflect a protective mechanism, perhaps stemming from past experiences or a vulnerability not yet confronted. From a psychological perspective, such behaviour might indicate a need for further exploration into their emotional and mental state, as creative expression, especially in music, is often a mirror to one's inner world: *“...the drumming bit was the bit where I actually held back a bit, so it was opposite of what I had expected”* (ZP4). Contrary to their expectations, they found themselves holding back during this part of the session, highlighting the complexity of individual responses to different therapeutic activities.

ii. *Enabling Expression of Emotions.*

Participant 1 found it challenging to visually represent the complex nature of their stress. This difficulty pointed to a need for developing skills in expressing emotions through creative means, such as drawing, to better understand and conceptualise stress:

...but for me to create a drawing out of the feeling... it's just too many to visualise... that was difficult for me. I think I need... to train myself to do that. What is this devil of stress, what does it look like in terms of imagining? (ZP1)

Although it was difficult for some of the participants to express their feelings through art, participant 2 succeeded to express themselves through drawing after being exposed to a selected music programme in GIM. The participant appreciated learning about the symbolic meanings of colours in the context of stress coping strategies following GIM sessions:

...when we started, I didn't know the meaning of colours. I knew that this is green, but green might symbolise something else. But then when we went to express ourselves it was just... like you can say something about red ... you can express yourself with red, you can express yourself with black and you can over-express yourself with different colours. (ZP2)

Initially unaware of the significance beyond basic colour identification, they found that expressing emotions through colours (such as red or black) offered a more profound experience compared to traditional diary writing. Creating a visual representation, like a picture labelled "peace" (*Figure 5.13*) provided a tangible reflection of their emotional state and a mental retreat. For them, this newfound method of expression, using colours to convey feelings, was both surprising and beneficial, making them eager to explore further and incorporate this approach into their life as an emotional coping strategy.

Figure 5.13 (session 2)

Nature relaxes me



Note: Participant 2 indicating a place and moment of peace

Participant 3 indicated that they could translate their feelings through the music into art. This participant spoke about the enlightening experience of listening to music and using it as a tool to visualise and identify emotions or themes, which they had not previously considered. This process of auditory stimulation led to visual representation of their emotions in their artwork and signified a newfound emotional understanding:

... by listening to the music and also trying to... sort of... like... visualise, ... maybe like identify things that the music is... giving it ... and I never actually given that a thought before, but then I think... maybe... from that... that's what I've actually taken, which also helps into translating my activities in the art works. (ZP3)

The participant (ZP3) noted how this synergy between music and art had enriched their ability to translate feelings and experiences into creative expressions and, in turn, improved their coping response with stress in the work environment.

Participant 5 (ZP5) indicated that the music opened suppressed heartache and described feeling sad and overwhelmed. They expressed these emotions through the metaphor of a volcano erupting on their island, which symbolises intense emotions engulfing their inner landscape (Figure 5.14).

Figure 5.14 (session 5)

Island with erupting volcano: Emotional Turmoil



The imagery in *Figure 5.14* of their experience, reflects their response to stress as a result of engaging with the music, capturing and communicating complex emotional states. Therefore, we see an improved emotional expression, as they stated: *“I felt sad and overwhelmed that day. There was a volcano exploding on my island and the lava was covering everything. The volcano is in the centre of the island”* (ZP5). This, in turn, contributed to an improved coping response for the participant.

During the focus group, participants reflected on the supportive nature of the art activities, emphasising the value of non-verbal expression and the comfort of a non-judgmental environment. The second participant noted the supportive aspect of expressing emotions through artwork, even without words: *“...like looking at yesterday’s exercise, it was a supportive exercise even if we were not expressing the words”* (FP2). Participant 6 highlighted how the lack of judgment in the artistic process enabled freer self-expression, contributing significantly to their stress-coping strategy: *“... that played a big part as well, to be able to express yourself and know there is no right or wrong”* (FP6). Their ability to express emotions through these creative outlets appeared to support their emotional resilience and coping mechanisms.

Participant 7 described the drumming sessions as not only enjoyable but also therapeutically effective. They emphasised the release provided by drumming, particularly its ability to allow for emotional expression and stress relief without the need for verbal explanation:

It was very nice, actually it was amazing. Every time before I went, something happened in the office. So every time, we started with a drumming session and that really did it, because you can let go and you didn't have to tell anybody why. (ZP7)

This suggests that drumming served as a powerful medium for them to channel and release stress, especially related to workplace incidents, in a non-verbal, yet emotionally expressive manner.

Participants from the focus group discussion expressed a sense of anticipation and enjoyment regarding the drumming sessions. Most participants noted the drumming as a key factor in their relaxation and coming out of their shell, indicating personal growth and increased comfort in emotional self-expression: *It was something we looked forward to, to come and play the drum... (FP1)*

As the sessions progressed, I climbed out of my shell, especially when we started with the drums. I enjoyed that immensely, so I think that's when I really started relaxing. (FP9)

The emphasis on the enjoyment and relaxation experienced during and after the sessions, despite initial stress about keeping rhythm, highlights the potential of drumming as a therapeutic tool to facilitate emotional expression and stress relief. Such experiences may contribute to participants feeling more able to manage challenges, suggesting a possible link to enhanced coping and personal development in the workplace: *"We laughed, it was really relaxing for me afterwards, it was relaxing... it was enjoyable." (FP5)*

The group experience made emotional expression a more natural and normal human activity. Collective discomfort and shared vulnerability in the group contributed to a sense of bonding within the group:

...and I guess even if we walk out crying because of a story we've heard from someone else, I mean we are all human beings, it just goes to show that your story touches something in me and we all go through similar experiences. (FP5)

The laughter and light-hearted acknowledgment of these moments pointed to a growing comfort with expressing emotions as part of the group:

...all of us were uncomfortable at a certain stage, doing stuff that you normally would not...and we all did it and I think in that we had like a bond, you know, oh ok, this was not that bad [laughing] so I think it was really very nice. (ZP7)

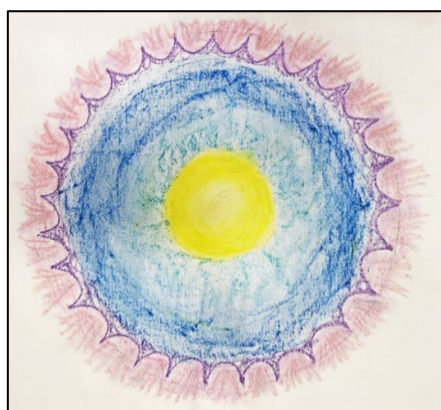
This underscored the therapeutic value of shared emotional experiences and vulnerabilities in creating a stronger, more empathetic bond within the group, as well as enhancing skills of participants to accept and exercise their own emotional expression, which was so hard to do before engaging with the GIM.

iii. Regulating Emotions more effectively

One participant (4) in session 4 said that when they are not mentally and emotionally centred, they lose control (*Figure 5.15*).

Figure 5.15 (session 5)

Participant lost control when not centred



Participant 4 articulated that an absence of centeredness and presence resulted in a loss of control and an inability to engage in proactive emotional coping. Instead, they found themselves merely reacting to situations, which they perceived as a deviation from their authentic self. As they expressed:

When I am not centred, when I am not present and focused, I feel like I lose control and that I simply react. I then don't manage to be true to myself. (MP4)

This response underscores the participant's struggle with maintaining self-control and emotional coping mechanisms when lacking focus and grounding, which negatively impacts both their personal and professional conduct.

However, Participant 4 increased their skill to calm down their emotional responses, even while certain situations still evoked initial upset:

But yes, initially they still upset me and I still... you know..., but then I am able to calm it down a little bit, so I think even outside of the workplace, it's effective. (FP4)

This reflected the effectiveness of emotional regulation as an emotion-focused coping technique not only in the workplace, but also in other areas of their life.

To further enhance this experience of regulating emotions as part of a coping process, participant 4 described a lasting change in how they processed emotions and reacted to stressful situations, indicating a significant and enduring impact of the intervention on their emotional regulation:

Even after I left the venue, I felt like things stayed with me for a while, then I process them ... the effect carries on for a while and I think now, you know... for example, if I got an upsetting email, before this intervention I would be very upset and I would be angry, you know... Now I'm like sort of amused, not in a bad way or disrespectful way, but it's just, it doesn't have that effect anymore. (FP4)

The mandala below of participant 6 (Figure 5.16) demonstrates that they accumulated more resilience and regulation of emotions as opposed to their last mandala:

Figure 5.16 (session 5)

Participant 6 illustrating more resilience



They (P6) felt emotionally lighter after the fifth therapy session, describing the experience as effortlessly transitioning into a sunlit, more positive emotional state (on the right of the above picture). This contrasts with previous unsuccessful efforts to achieve emotional well-being (on the left), highlighting the effectiveness of the GIM sessions in facilitating an internal shift towards a more efficient emotional regulation.

I felt lighter when I left the session, almost as if I had actually put myself in the sunlight area just by wondering how to get there. There was no effort involved. I have often wanted to be in a better place emotionally but that did not help me to be there. Somehow this process did seem to transfer me. (MP6)

Participant 6 also reflected on the calming effect of relaxing music used during the sessions. They described how the music facilitated a sense of being transported to another place, indicating a profound experience of mental escape and tranquillity. This highlights the effectiveness of music as a powerful tool for exercising emotional regulation, providing a serene and restorative experience that is particularly beneficial in moments of calm:

Because at that time things were quite calm, but there was the relaxing music that I really enjoyed because I was taken to another place every time and that worked well for me. (ZP6)

Participant 6 noted an increase in their ability to regulate emotion and thus cope with stress, highlighting a shift from feeling disorientated and unable to locate themselves in a group picture — a metaphor for feeling out of control — to placing themselves on stable ground in the last session, symbolising newfound stability and calmness. This transition was marked by a lack of specific thoughts or feelings during the drawing process, indicating a state of relaxation and ease. The lasting impression of feeling light and the enjoyment of the session, coupled with the continued appreciation for the beauty of the picture they created, underscores the positive impact of the intervention on their coping capabilities:

The last group picture, where I could not place myself anywhere on the page because I felt I was spinning somewhere off the page. At the time

this picture was drawn, I put myself on the rocks where it is stable... I was feeling relaxed and at ease. After leaving the session I felt very light, I enjoyed the session and still see the picture, which was beautiful. (MP6)

Experiencing stress release and calmness as a result of GIM session activities, enabled participants to practice emotional regulation. Calming their emotions inside the sessions had the potential to extend applying this ability outside of the sessions too. Participant 6 illustrated their experience of inner equilibrium, but also a sense of impending change in their mandala below (Figure 5.17):

Figure 5.17 (session 5)

Reflection on Participant's Own Journey



Participant 6's mandala captured a moment of calm juxtaposed with a sense of impending change. The prominent red hibiscus and stable brown rocks symbolised a present state of stability and peace regulating emotions. In contrast, the dynamic blue and green wave, with a hovering black bird cautiously balancing above, suggests a careful anticipation of potential upheaval. This imagery, combined with the empty space between the flower and the waves, reflects the participant's feelings of being in a transient, undefined state. The retrospective view of feeling overwhelmed, like being caught in a crashing wave, indicates a self-reflection on the precariousness of maintaining balance amidst life's challenges:

The big red hibiscus flower was prominent but the blue and green wave, topped with white, continually rolled into view... There was a little black bird hovering just above the crest of the wave, very, very carefully

judging the distance and balancing to stay just above the potentially devastating wave, indicating my very careful balance. Very stressful and effort-intense to keep my balance. The bird was not afraid or anxious. There was a vacuum between the flower and the waves. I could not see anything in that space – a space of nothingness. (MP6)

The following aspects reflected participant 2's perception of emotional safety and expression in the group versus individual sessions. The participant expressed a belief that in a group setting, there's a need to self-regulate emotions to avoid upsetting others. In contrast, the individual perceived a one-on-one session with a professional as a safer space for emotional expression, assuming the professional's capacity to handle emotional responses without being personally affected. This illustrates how the setting (group vs. individual) influenced the comfort level of participants in expressing emotions, shaped by the perceived ability of others to manage emotional reactions and increase coping to experience stress relief:

I think so, because I would feel so... because I think, maybe in a group... you feel because you must thought of something... like... you might hurt the other person or make them emotional. But maybe if it is one on one (referring to an individual session, instead of a group session) the person is professional enough to hold that tears or something. That is how I was feeling. (ZP2)

Theme 3

5.3.3 Theme 3 - Developing a compassionate and agentic sense of self

Analysis of the data revealed that participants went through various self-processing experiences, which for them resulted in developing a more compassionate and agentic sense of self. Their GIM experiences left them feeling more self-empowered as they gained self-acceptance and care and enjoyed the self-discovery process to the point of feeling more authentic. This third theme therefore consists of three sub-themes namely self-acceptance, self-discovery and embracing autonomy.

5.3.3.1 Gaining self-acceptance and applying self-care

For participant 2 this intervention process led to a significant reduction in stress, a journey towards self-acceptance and an understanding of the importance of not overburdening oneself with concerns outside one's control. They described successfully applying self-acceptance techniques learned in therapy to confront and alleviate their fears and stressors:

I tried to use those techniques so that I can deal with those stressing problems and to be honest, I faced most of my fears. I've released most of my fears, even it is not everything and like those things are no longer one of my biggest stresses because I've learned to like me and not put too much pressure in my life and to not stress about things that I cannot control. (ZP2)

Participant 9 found it difficult to articulate their internal turmoil verbally, as noted in theme 1, thus during GIM sessions the art modality provided a valuable medium for expressing unspoken self-deprecating thoughts and feelings. The use of colour and free drawings in artwork became a tool for self-care, providing a nurturing and non-judgmental way of exploring and nurturing emotions. As one participant expressed, "*I am the bird, flying away from my problems and stress*" (ZP9), symbolising a sense of liberation and empowerment, where flying away was not about escaping, but about rising above and conquering challenges with grace and strength (see *Figure 5.18 below*).

Figure 5.18

Flying away from stress (session 5)



The GIM programme provided participants with the opportunity to release the self of unrealistic self-expectations, as noted in Participant 5's reflection, emphasising the importance of accepting life's realities and advocating for a more relaxed approach. Such an approach includes allowing oneself to focus on what is achievable and letting go of what isn't: *"So accept it, relax, slow down, do what you can do..."* (ZP5). When discussing the process of letting go of unrealistic self-expectations, participants proposed a philosophy of doing one's best within personal limits and through self-acceptance empowering the self in the process.

When exploring imagery in GIM, I found that it goes beyond the normal spectrum and can include a variety of experiences, for example emotions, feelings, memories and any visual, auditory, body-based, olfactory, gustatory or kinaesthetic senses (Shum, 2020).

Figure 5.19 below shows participant 5's drawing, from the first session, where they were still experiencing a lot of emotional turmoil and stress. In comparison to the participant's later drawings in session 4 (*Figure 5.20*) it is evident how the participant became more self-accepting and caring towards the self:

Figure 5.19 (session 5)

Island with erupting volcano: Emotional Turmoil



Figure 5.20 (session 5)

Participant reminding themselves of self-compassion



Participant 5 initially experienced emotional turmoil and stress, as depicted in *Figure 5.19* where a lava explosion symbolises their inner conflict. However, by Session 4, their drawing reflected a significant shift towards self-acceptance and self-care. *"The*

heart is a reminder that I need to love myself a little more and be more compassionate towards myself” (ZP5). In this session, they expressed a newfound understanding that they should not be so harsh on themselves but rather adopt a more compassionate and caring approach to self (see figure 5.20) as part of their stress management.

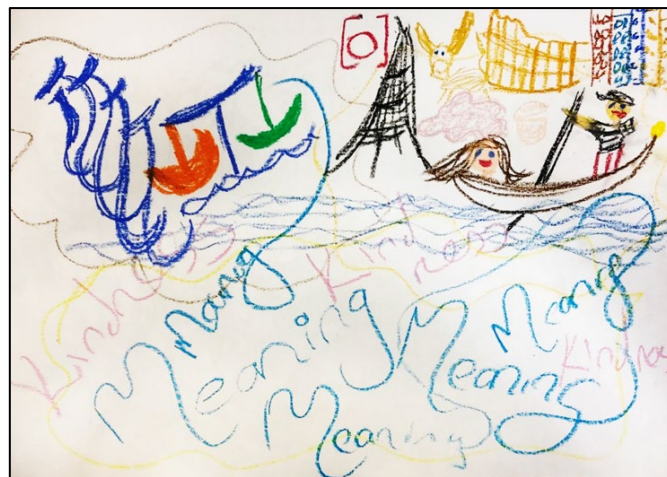
In session 5, participant 8 was able to re-discover and express what gives meaning to their life (Figure 5.21). The participant's (P8) artwork, created in a relaxed and enjoyable setting, represents a celebration of self-care as they engaged in personal passions such as traveling, pets and photography, particularly recalling recent travels with their daughter:

I enjoyed the session and remembered I chose to focus on that which gives me meaning (traveling, my pets and photography – top right corner). I had recently travelled with my daughter to Paris, Amsterdam, Rome, and Venice... (ZP8)

Here, they demonstrated self-care by remembering to do things that are meaningful and good for them:

Figure 5.21 (session 5)

Rediscovered own meaning in life



This session further prompted a reflection on the nature of conflict, highlighting the participant's core value of kindness and how acts perceived as cruel and unkind are particularly stressful to them. The artwork served as a visual diary, capturing meaningful experiences and reinforcing the participant's identity, while also acknowledging the emotional impact of external conflicts.

5.3.3.2 *Engaging in self-discovery leads to a sense of authenticity*

Engaging over time in the GIM sessions introduced participants to a self-discovery process, which they enjoyed. Their engagement with art and music facilitated their engagement with the self and this self-discovery process inevitably, for them, led to feeling more authentic. They (P4) expressed a profound sense of centeredness and peace experienced during the session, which was effectively captured and expressed through their artwork:

In this session, I felt very centred and at peace. This picture visualised how that experience of centeredness allows me to radiate who I am and what my true nature is to the outside. (ZP4)

This artistic representation served as a medium for them to visualise and convey their true nature and essence, illustrating the therapeutic power of art in facilitating self-discovery and a sense of authenticity.

Likewise, participant 1 found solace and happiness in visualisation as a form of expression, which they discovered as their preferred method over writing or acting. Visualisation served as a tool for self-discovery and managing stress, not only in the present but also in anticipating future challenges:

I can't maybe write it or act it out, but I can visualise it and it makes me happy. It has helped me, especially in future life where I think if... I will meet stress, then I'm more relaxed, actually, I must just say that... this transition is a lot in my mind. (ZP1)

As part of the self-discovery process, the participant acknowledged a significant mental shift towards focusing on the self and how they are now transitioning towards their authentic self. The self-transitioning experience provided them with a sense of control over their life and enabled relaxation and a more composed approach to life's stressors.

There was a sense of surprise and positivity from participant 4 regarding the depth of expression and self-awareness achievable through drawing, particularly when combined with music:

I did not think that you could express so much through drawing. I didn't think you could learn so much and have these kinds of self-awareness realisations through drawing a picture to some music. (ZP4)

They highlighted the unexpected capacity of drawing as a medium to facilitate profound personal insights and emotional revelations, underscoring the therapeutic value of art in stress management and self-discovery that leads to a sense of authenticity.

5.3.3.3 Embracing autonomy by being more aware of self-choice and agency

Participant narratives often reflected the empowering realisation that they have the choice to let positive influences like music and art into their life, while keeping destructive elements at bay. This awareness countered the common belief of being a passive participant in life, emphasising the individual's agency in shaping their own experiences and well-being. Participant 7 started taking responsibility for their level of coping with stress by implementing actions, because they felt empowered in making conscious decisions about their emotional wellness:

You choose what you let in, and I think this really just highlighted the fact that it's better to let music in and let art in and let all the destructive things out, you know, and you choose. So, and I think unfortunately in the world we live, we tend to... everybody makes us believe that you can't choose. You are just a participant in everything around you that happens, but this really taught me that I can actually choose, you know. (FP7)

Through the therapist's facilitation, individuals embarked on a transformative journey, enhancing their resilience and autonomy. Her positive influence was pivotal in the success of the SMI, combining music and art. Her welcoming presence and effective guidance provided a safe space that encouraged self-acceptance, discovery and empowerment. The structured, yet empathetic sessions enabled participants to not only creatively express themselves but also exercise their agency in coping with stress:

...overall, it was ... the sessions were great. I felt the therapist was great... it was very nice and how it was handled, you know, leading us from the one point to another point and then bringing everything together every time, you know... I think the therapist played a big role as well, she has got very – her aura is very

soft and gentle and very welcoming, and I think that also made the group quite nice. (FP5)

The following statement illustrates a specific incident where Participant 1, influenced by the therapist's guidance, effectively used an assertive and controlled response ('haa!') during a potentially volatile situation with rioting students. This response, diverging from the participant's usual approach, demonstrates newfound confidence and emotional control, enabling the participant's autonomy to manage the crisis effectively:

Students went on riot; they picked up our building and they came in. Students were writing a test. The Therapist said you must just say 'haa!' I didn't say 'haa!', I said louder than 'haa!' [laughing] and actually students are—what they are — they think they scare us but that gave me... under normal circumstances you would then say, 'no, students, pack up your bags, go-go', but I went, 'haa!' and the staff were shocked, they were scared on my behalf, you know. I got scared after, because I realised how I had been controlling... He actually saw that he didn't scare me. (FP1)

Participant 2's statement suggests that the intervention sessions supported their self-confidence. The sessions offered practical strategies to address stress-related challenges. After the session, they felt they had possible solutions and approaches to deal with problems. This appeared to foster a sense of autonomy and agency. It also suggested a perceived improvement in their ability to cope with stress: "... you feel like now you know what to do, because now you have tried to look at that problem and see how I can resolve it. So... when you leave (the intervention session), you feel like you have solutions to your problems and how to deal with this. (ZP2)

Participant 1's first clay work (5.3.2.1), as featured in *Figure 5.10* demonstrates the participant's depiction of a road with numerous humps and ditches, serving as a metaphor for their work and life challenges. In contrast to this, participant 1 later depicted a much smoother road with their second clay artwork. These artworks reflect the participant's transition to a state where obstacles were still present but were perceived as more manageable through self-choice. The gentler terrain (in the clay-work on the right) symbolises a sense of adaptation, empowerment, autonomy,

resilience, choice and agency, and perhaps a more optimistic outlook on navigating life's journey. Participant 1's gained sense of control is clearly evident in their description: *"The second clay portrait is that of a journey again, but it's much smoother. It still has hills and potholes, but they are not steep"* (CP1).

Through understanding diverse perspectives in group sessions, a participant highlighted their appreciation for the growth, autonomy, agency and learning opportunities presented. They acknowledged the value of getting to know other people and their ways of thinking as a key benefit of group therapy. *"Getting to know other people and other ways of thinking, I think that's a great value in a group session ..."* (AP5). Additionally, the participant mentioned their recent session as a bonding experience, emphasising how shared experiences, especially around shared vulnerabilities like shyness, could foster deep connections and individual agency within the group. This bonding was facilitated not just through verbal communication but also through shared feelings and experiences, underscoring the diverse ways group dynamics can evolve and strengthen over time.

Theme 4

5.3.4 Theme 4 – Meaning making through self-transcendent mechanisms

Music and art in SMIs enabled participants to explore self-transcendent aspects like nature, spirituality and purpose, enhancing mindfulness and psychodynamic understanding. These modalities seem to offer more than stress relief; they facilitate a deeper connection with oneself and the world, fostering a sense of meaning and personal growth. Through these creative expressions, participants found meaning-making pathways to resilience, purposeful living and a richer, more meaningful life. This theme explores self-transcendent mechanisms as coping strategies. These mechanisms appeared to enhance meaning-making.

5.3.4.1 *Transcending stress by finding peace in nature*

After the sessions, the participants indicated that they experienced a de-stressing effect, almost a peaceful feeling. Some of them explained this feeling of transcending

the self, as one in which they felt as if they were in nature. Participant 4 expressed their experience of a session through drawing a mandala, depicted in *Figure 5.22*:

Figure 5.22 (session 4)

Finding Serenity in Nature



The participant (P4) explains the mandala as their view of a tranquil scene, which they observed from a personal space of solace — the trampoline: *“In my mind’s eye, I saw my view from our trampoline, where I normally spend some time on most evenings after my children go to bed” (MP4)*. The participant found peace in the natural beauty of the changing sky colours at sunset, the flight of birds and bats, and the gentle movement of palm tree branches:

It’s normally around the time the sun sets and then I really find the changing colours of the sky, the birds and bats flying about, and the gentle swing of the branches of the palm trees very relaxing and refreshing. (MP4)

This scenario painted by participant 4 reflects how, through their deep appreciation for nature's soothing qualities, they were able to relax and re-energise after daily responsibilities.

Participant 2 also shared a transcending experience through a drawing of being in nature in *Figure 5.23*, which similarly brought a relaxed and peaceful feeling for them.

Figure 5.23

Peaceful Island Participant 2 (session 4)



The creation of this artwork (*Figure 5.23*) served as a mental escape to a peaceful island, a symbol of tranquillity and self-reflection. The participant's engagement with the music and this art piece allowed for a self-transcending journey into a serene and understanding state of mind, different from their usual experience. This process illustrated the transformative power of music and art depicting a nature-like experience, not only as a creative output but also as a tool for emotional exploration, coping and finding inner peace:

...now I have my picture, this picture that I wrote: "peace". Even if I were to go to that place, it still feels like I understand where I was there. If I was to concentrate on that picture I'm going to be in that Island. So, it was ... it was very different, and it was very interesting and now I think I can really like it. (MP2).

5.3.4.2 Transcending stress by holding on to spiritual elements

Some participants transcended their stress experience by re-anchoring themselves in their religious beliefs. Participant 6 depicted their religious foundation in *Figure 5.24* and reflected upon the importance of this for them in managing their stress:

Figure 5.24

Log and stones representing the Bible (session 4)



Note: (top half faded for illustration purposes)

For participant 6 this artwork (Figure 5.24) reflected the deep symbolic significance of their religious faith, symbolised by the log of wood and stones representing the Bible (the participant explained this afterwards) in providing stability, trust and hope. During a GIM session, participants reported that their faith deepened. This faith served as a foundation for using spiritual transcendence in their coping and mental well-being.

At the bottom is a huge log of wood and some big stones. This symbolises my faith (Bible) which keeps everything together and stable. There is a little moss here and there on the log, which I think is probably for reality – physically and virtually... the Bible being real, and a log would probably really have moss on it. I am sometimes in this area where I see and hear nothing around me but trust, belief and hope only. This can last for weeks sometimes. (ZP2)

Their (P6's) spiritual transcendence skill was further explored in Figure 5.25 during Session 4, expanding their coping skills to reduce stress:

Figure 5.25

Participant 6 - Spiritual Experience (session 4)



The mandala above (Figure 5.25) represents a personal sanctuary where the participant intertwined their affections for nature, family and spiritual beliefs. Central to the artwork is an angel, a profound symbol of protection, faith and the participant's real encounters with the divine:

I do sometimes see angels, so they are very real for me. At the time this picture was drawn, I had recently been thinking a lot about the last time I saw angels (with white and gold) and the magnitude of the coinciding, unimaginable event that followed and at that moment I thought that might also have been influencing my picture... (ZP6)

There were elements like trees, fish, flowers and gems to enrich the mandala, each contributing to a narrative of joy and spiritual contemplation as part of their spiritual transcendence. However, the session's aftermath revealed a deeper layer of emotion, where the angel in the middle also embodied the sorrow of lost loved ones. This duality in the artwork's symbolism highlighted the therapeutic process of transcending, meaning making and reconciling positive memories with the pain of loss through artistic expression:

This picture are things I like: Trees, nature, fish (who have to be in water), flowers, beautiful stones (crystals, gems), family... When I was drawing this, I was thinking of nice and happy things and about angels that protect us, my

faith, the Bible, and that is why it is so big, and in the middle (the Angel) ... After I left the session I felt very, very sad because I realised the angel also represented those who are not with us anymore. (MP6)

5.3.4.3 Transcending stress through mindfulness practices

Participant number 7's experience underscored the significance of stillness and mindfulness attained through music and art activities, illustrating how being present and relaxed, without excessive thinking, serves as a self-transcendent tool for creating meaning in life:

... just being still and refocusing your mind or just... being able to sit and relax and not think about anything.... That really helped quite a lot... focusing on the music or on drawing something and not really thinking of why and what, you know... we're in the moment because I think we forget to be in the moment most of the times. (ZP7)

During the focus group participant 4 described a lasting change in how they process emotions through mindfulness and then react to stressful situations, indicating a significant and enduring impact of the intervention on their emotional resilience:

Even after I left the venue, I felt like things stayed with me for a while, then I process them ... the effect carries on for a while and I think now... for example if I got an upsetting email, before this intervention I would be very upset and I would be angry... Now I'm like sort of amused, not a bad way or disrespectful way, but it's just, it doesn't have that effect anymore. (FP4)

During the same focus group discussion, another participant described a recurring mental image of a 'safe place' that they first encountered during relaxation exercises. This place had become a personal sanctuary, providing comfort and a sense of safety. The ease with which they can now, through mindfulness, access this mental and emotional space, suggests its growing transcending importance in their stress coping toolkit. The participant indicated that regularly returning to this imagined place was aiding them in coping with stress more effectively:

I go to the place because every time... the first place I went when we relaxed... every time that place comes back to me, so that feels like it's probably my safe

place and I'm getting comfortable going back there... and I can go back there quicker, which I think is helping me. (FP6)

Theme 5

5.3.5 Theme 5: Group dynamics - Building my resilience on yours and ours

Resilience is a critical component of group dynamics, particularly in high-pressure environments. Research indicates that group resilience can be cultivated through various strategies, including inspiring and motivating group members to strive for excellence, fostering a sense of ownership and responsibility, establishing a strong group identity rooted in a selfless culture and maintaining a positive outlook during stressful times (Morgan et al., 2019). Group dynamics play a crucial role in this process, especially when groups engage in shared experiences that build collective coping skills. GIM sessions, when experienced together, can serve as a powerful facilitator for strengthening these dynamics (Dukic, 2018; Heiderscheit, 2017). Through these sessions, the group reported a stronger sense of connection, trust, and mutual support. These factors appeared to support their resilience. The shared journey of GIM not only helped individuals manage stress more effectively but also reinforced a cohesive group identity, making the group better equipped to handle adversity and thrive in demanding circumstances.

I observed that the group was experiencing initial shyness and a certain degree of stress when we met and had our first session. This is the first phase of group-forming dynamics that Tuckman (1965) is referring to. This initial strangeness is naturally to be expected of a group of people unfamiliar with each other while also losing their individual distinctness (Bion, 2004). However, through the course of the GIM sessions, participants experienced a profound psychodynamic journey, reflected in the evolution between two group-drawn pictures from the first (see *Figure 5.26 – see one page further*) to the last session (see *Figure 5.27 – two pages further*). These visual representations capture the group's shared emotional and psychological shifts. They reflect a journey from initial stress and disconnection to a later sense of harmony, understanding, and perceived improvement in coping with stress. The process facilitated not only individual healing and insight but also deepened the group's

collective consciousness, revealing the dynamic interplay of personal and shared therapeutic experiences.

The initial tension and apprehension within the group that attributed to unfamiliarity with each other was highlighted by Participant 5. As the sessions progressed, there was a growing awareness and acknowledgment of shared problems and stressors amongst group members. This shift from initial wariness to recognising commonalities highlights the evolving nature of group dynamics and how these shared experiences influenced the group's collective coping mechanisms:

I think everybody was a little bit tense in the beginning, a little bit scared of each other, but maybe because we didn't know each other. (We have) the same problems or maybe have lesser stories to tell. I have my problems, or maybe we have different stresses. (ZP5)

During the interventions the participants as a group gained new insights and perspectives, particularly through observing and reflecting on the artwork of others in the group. It underscores the value of diverse viewpoints in enriching personal understanding and placing one's own experiences in a broader supporting context:

Your eyes are open to other perspectives that you didn't even think about. I mean, if I looked at other people's artwork and I was like, 'Wow, is that how you went with that?' and it's amazing cause it's equally valid for them as mine was for me, but it just also helps contextualise and put things in perspective. So I actually really enjoyed the group thing overall. (ZP4)

During this dynamic GIM process within the group, it was essential that each participant gave their own interpretation of their artwork, because art is intimately connected to the person who makes it and carries an artistic DNA. Participant 8 emphasised this advanced form of communication they have experienced through group pictures:

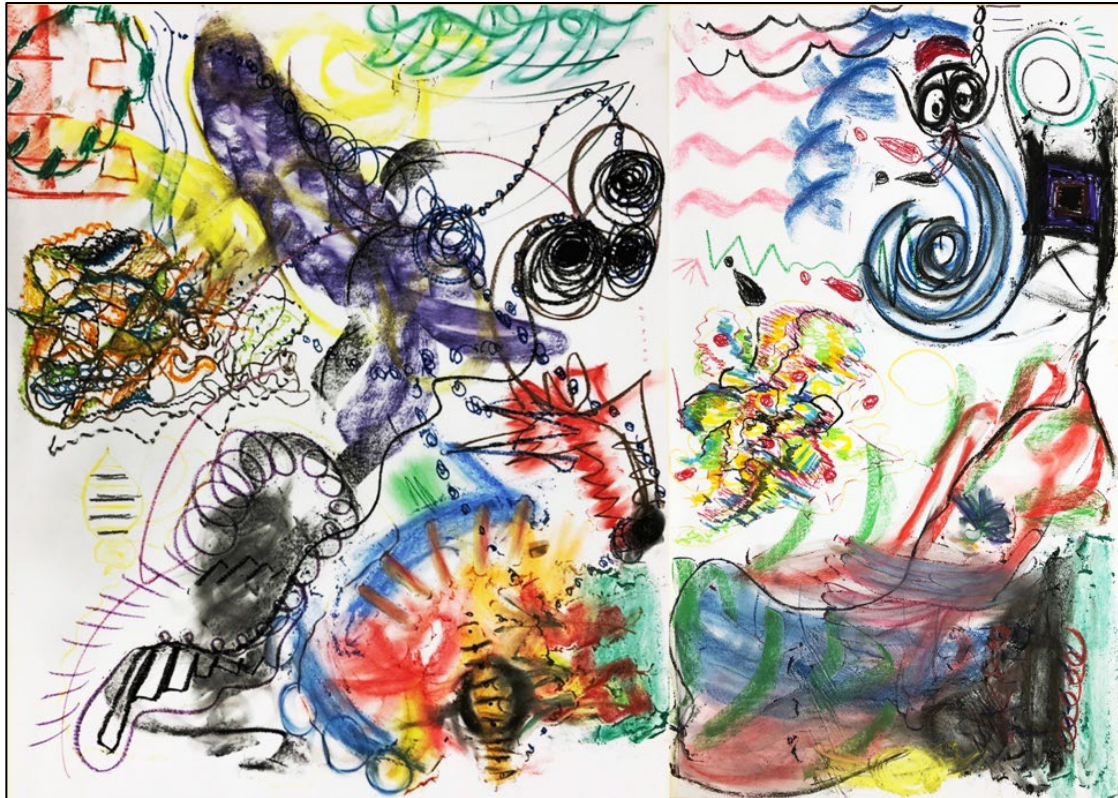
I enjoyed the art a lot especially... I think I said that... I enjoyed our very last session the most. Again, the interaction thing, so that was when we actually communicated, and I experienced it as communication. And to say a little bit more, explain more so that the other person understands more of what you're

actually trying to say rather than just, you know, hitting on what the problem is; just try and explain a little bit more. (ZP8)

Figure 5.26 below is the first group picture drawn simultaneously by participants during the first GIM session. (It was drawn over 2 pages).

Figure 5.26

First Group picture (session 1)



Note: At the beginning it was clear that participants were cautious not to flow over into each other's drawings. The overall feeling is also a dark picture with dark colours, almost leaving you with a sad feeling. Something of the non-bonding of the group is also visible in this first group picture. The individual pictures are quite discernible.

Right at the beginning of the interventions, during the first session, the group made an artwork over two pages. This process was repeated right at the end of the sixth session, where one group artwork was again produced. There was a very visible difference between the two artworks, with the first one in two parts, *Figure 5.26* displaying very individualistic, but also dark, sombre characteristics. The first artwork also depicts the characteristic and task of the first hypothesised stage in this group, namely "testing and dependence". The group was testing what interpersonal

behaviours were acceptable in the group. They tested it against the reactions of the therapist and against the reactions of other group members (Tuckman, 1965).

In contrast to the first group picture, the group picture of the last session *Figure 5.27* has quite a different appearance and meaning, indicating a much larger emotional cohesion between group members.

Figure 5.27

Last Group Picture (session 6)



Note: In the last group picture, it almost looks as if one person drew it. The colours and lines are flowing, which represents much more of the bonding of the group. Brighter colours were used, leaving one almost with a feeling of contentment and happiness. One black circle was attempted by a participant in the middle of the drawing, but it seems that other participants wanted to cover it up. It appears that a small stream of blood is running from it. But it appears like the group was saying: “Your hurt or fear is safe with us, we’ll contain it.”

This drawing reflects the therapeutic and supportive nature of collaborative art. The approach of participants to this art creation showcased a blend of agency, empathy and creativity. Initially uncertain, they found inspiration in contributing to the artwork of others, using rainbow colours as a symbol of support and positivity. The act of drawing a companion for a solitary butterfly signified a desire for companionship and

understanding. Similarly, drawing a bowl to catch another's tears represented a thoughtful and comforting response to expressions of sadness in art. These actions demonstrated how collaborative artistic expressions can foster coping enhancement, a sense of community, shared understanding and emotional support.

This collaborative coping enhancement was highlighted by participant 6:

The last picture was very bright and cheerful. Initially I could not think what to draw but then I thought I can/will support and fill in, with rainbow colours, where others are drawing. I like rainbow colours. When someone drew a butterfly, I immediately thought that butterfly cannot be alone, so I drew a companion. Someone drew what looked like tears, so I thought I can draw a bowl to catch the tears – like a way of comforting the other person. (ZP6)

Likewise, participant 4's experience with the group artwork underscored the significant role of group dynamics in their coping and healing processes. The collaborative nature of the artwork, with each member contributing positively to the others' creations, fostered a sense of support and empowerment to deal with daily stressors. This collective effort led to feelings of being seen and understood in ways not commonly experienced by the participant:

This artwork was very uplifting. I loved how everyone built on the others' pictures in a positive and empowering manner. It felt really supportive. I felt seen in a way that I don't normally feel. I felt like the process definitely contributed to a "whole that is more than its parts" kind of idea. It was the most enjoyable of all the art pieces. I identified with the left bottom side of the picture, with the rainbow and the butterflies, etc., as I felt very positive, calm and resilient following the session. (ZP4)

In the artwork, motifs such as rainbows and butterflies served as symbols of the session's rejuvenating and transformative power, fostering feelings of optimism, agency, tranquillity and fortitude. This outcome underscored the value of group engagement in art therapy, amplifying and refining the coping mechanisms against stress by fostering personal well-being within a collective, nurturing environment.

Participant 4 focused on how an individual's effort and self-expectation could be influenced by the participation level of others in a group. They suggested that

observing others, but not fully engaging, may lead to a lowered personal effort, providing a sort of excuse or justification. Conversely, it implied a higher self-driven motivation and stricter self-judgment in a solitary context, highlighting the significant impact of group dynamics on personal accountability and effort:

But on the other hand, I also think that if you see other people get away with not participating a 100%, for example, then it sort of gives you an excuse as well, whereas I might have pushed myself a bit harder if it hadn't been a group thing. But also, I would have been harder on myself if it hadn't been a group thing. (ZP4)

Individual awareness and concern about the potential emotional impact of their personal stories on other group members, was a concern with one of the participants. It highlighted a cautious approach to sharing, especially on topics like abuse, due to the uncertainty about how it might affect others emotionally. This reflected a deep consideration for the collective emotional well-being of the group:

And I was also cautious on sharing other... details because I didn't want to emotionally drain other people. You know, when you leave people like that because they (are)... saddened about your sad story, so I was a bit... holding because I didn't want... I was thinking about other people. I didn't know how they were going to take it... if I was to talk about abuse, I didn't know who was at peace, then what I'm going to trigger with that person. (ZP2)

The moment these once strangers in this group started to get to know each other, they wanted to know more about one another, in order to be able to share more freely. They experienced that there was not enough time to further bond the group. Some were also frustrated that they did not get enough time or turns to share.

However, some participants felt constraint in sharing their experiences within the structured format of group sessions. One participant expressed a desire to share more but felt limited by the need to take turns and accommodate others. *"I wanted to say more, but I couldn't because we had to keep turns and then we have to accommodate other people"* (ZP2). This emphasised how structured group dynamics can sometimes limit individual expression, and how different people may prefer different modes of communication (talking vs. other activities).

Although participant 9 initially experienced confusion and heightened stress, they described a journey of adaptation and growing comfort across the sessions. As they became more familiar with what to expect, they found themselves relaxing and increasingly enjoying the group activities:

The first week I was very confused, so not sure what to expect. I was stressed a lot but as the sessions progressed, I started relaxing, getting into it, I started enjoying it more and stuff like that. (ZP9)

This narrative underscores the process of individual adjustment within the group setting, illustrating how engagement and enjoyment can evolve over time as part of the experience of coping and group dynamics.

Participant 8's verbatim emphasises the importance of getting to know each other in a group setting to facilitate better connections and ease the process of sharing and interaction. The participant reflected on the potential benefits of understanding each other's stressors for creating a more comfortable and connected group environment. They also noted the variance in how different individuals open up over time, acknowledging that while some may remain reserved, others became more open, impacting the overall group dynamics. This evolving nature of group interactions and the potential positive impact of increased familiarity and understanding amongst group members is indicative to the development of positive coping responses with stress in the work environment:

...I do think if we spent a bit more time kind of getting to know each other, maybe a little bit like the stressors and that, I think that connection might have been a bit easier...It would be helpful but as the sessions developed, we got to...get to know some of, not everybody... which is fine. (ZP8)

I received valuable feedback from the therapist's observation regarding the group sessions:

The therapist emphasised the potential benefits of extending the duration of group therapy sessions, suggesting that longer-term interaction could foster deeper trust amongst group members. This trust is seen as crucial for participants to fully engage with therapeutic tools like drums and voices, which facilitate the expression of emotions and positively affect physical bodies and energy levels. She believed that

additional sessions could have provided opportunities for the group to explore live, improvised music more fully, enhancing the therapeutic impact through a progressive deepening of group dynamics and trust-building.

The therapist also observed that from sessions four to six, there was a noticeable deepening in group cohesion and presence during activities like imaging, drawing and sharing. However, she noted challenges such as inconsistent attendance, lateness and distractions like phone usage, which hindered the creation of a cohesive and engaged atmosphere. The absence of some members during a key session involving clay - a medium often seen as a turning point towards deeper involvement - was highlighted as a missed opportunity for further enhancing group dynamics. These challenges underscored the complexity of fostering a cohesive and productive atmosphere in group sessions, particularly when faced with variability in member participation and commitment.

Despite these setbacks, the therapist believes that all members benefitted from the sessions. Participants gained a better understanding of how stress manifests in their lives and experienced inner spaces of beauty, safety, calmness and being in the moment. Through a reflective process combined with written notes from session six, the therapist assisted members in transferring these insights into their everyday lives. Ultimately, the group developed a stronger sense of unity and shared purpose, reflecting the progress in their collective journey and the strengthening of group spirit and bonding (Tuckman, 1965; Temingh Swart, 2019).

Theme 6

5.3.6 Theme 6 - Neuro-somatic experiences enhancing emotional and physiological states

Participants engaged in GIM sessions and often reported profound neuro-somatic experiences, which were deeply interconnected with the practice of controlled breathing techniques (Lee et al., 2016). These sessions combined music and guided breathing to support the integration of mind and body. Participants reported perceived improvements in their emotional and physiological states (Marr, 2001). This holistic approach encouraged participants to explore and regulate their internal landscapes,

leading to notable improvements in stress management, emotional regulation and overall well-being. The rhythmic structure of music, in tandem with focused breathing, helped in synchronising physiological responses, promoting relaxation, reducing anxiety and fostering a deeper sense of physical and emotional harmony (Fox & McKinney, 2016). Through these practices, participants developed a heightened awareness of their bodily sensations and emotional states, enabling a transformative journey towards healing, destressing and balance (Shum, 2020). One participant (P6) realised that they entered the session with an unconscious emotional state and that the music brought these emotions to the surface, revealing feelings they had been unaware of, denying or suppressing. They described an unexpected reaction to music therapy during session 1, finding the music unexpectedly intense: *“I think I didn’t expect the music to be, can I say, hard... pushing in so it might have been... of outside pressure that I took in there”* (ZP6). They continued to explain that they experienced a significant physical reaction, specifically chest pains. This reaction, which persisted for an extended period, raised questions about the potential triggers, such as anxiety or the unfamiliar setting, despite their comfort in other public speaking scenarios:

I seemed to react to the music. The very first session I got chest pains, and it lasted the whole week. Well...it started when the music started. It was like, a couple of seconds and the chest pains started. (ZP6)

Through the immersive experience of music, two participants found a profound, unconscious connection to their soma, allowing them to express and give voice to deeply held pain and discomfort, manifested in sensations of tightness or pain. This process not only illuminated the therapeutic potential of music but also highlighted the body's innate capacity to communicate complex emotional states through physical symptoms. Neuro-somatic experiences surfaced a deeper connection to the body and its emotions, emphasising the integral relationship between physical sensations and emotional expression. Participant 2 indicated that they tried some of the GIM techniques on their own:

... so, I’ve tried to implement such things if I’m really in pain because of this situation, let me just give myself ten minutes... I tried to use those techniques. I’ve release most of my fears even it is not everything... I’ve learned to like me. (ZP2)

A Neuro-somatic relaxation response was experienced by participant 6, describing how music triggered a significant relaxation response, allowing them to detach from their immediate surroundings and mentally transport to a more peaceful state:

It triggered something that I must do that because it helps me a lot to relax, to just forget about what's around me and just go to that place even though there might not be music around. I was trying it last night and it seems if there's music it does actually help you to get there and to stay there. (ZP6)

They (P6) noted the effectiveness of music in facilitating this process, even experimenting with it outside the session environment. The participant's experience underscored the power of music as a tool for achieving and maintaining a focused, tranquil mental and somatic state, beneficial for coping with stress.

Participant 8 emphasised the significance of implementing breathing and relaxation techniques in managing stress. Another participant also acknowledged the need for time to integrate these practices into their routine and testified to the positive impact of such techniques, particularly in managing elevated stress levels:

I think (in) the long term you need more time to actually try and implement it, especially like a progressive relaxation and the breathing and those kind of things. I'm definitely thinking differently, acting differently, but I've noticed that if I'm stressful or have got a lot of stress, I would just sit for five minutes and do the breathing exercises, which helps a lot to get past that extra stress level that you're experiencing, because of things happening that unfortunately is beyond your command, yah. But now really to go sit down and do that breathing for 5 minutes, just switch off, do the breathing, relax and then continue. So yes, definitely, it helped me a lot. (ZP9)

As already discussed in 5.3.2.2 under emotional awareness, the uneasy bodily feelings that some of the participants experienced, also relate to much deeper psychodynamic processes. Participant 6 indicated that they also experienced these types of pains at a specific time of the year when they were overloaded with work and under a lot of stress. However, they added that their pain during the GIM sessions did not last for more than a week, and that it was gone by the second session: *"It was*

about a week. In fact, I almost want to say with the next session I didn't notice it anymore" (ZP6).

5.4 CHAPTER CONCLUSION

This chapter addressed the research question, *"How do HE employees experience a music- and art-based Stress Management Intervention in relation to their stress management and coping capacity?"* Through six key themes, the findings explored participants' experiences of coping with workplace stress and highlighted the transformative role of a music and art-based SMI in enhancing their coping strategies and overall well-being.

Theme 1 explored the driving forces behind participants' engagement in the SMI, highlighting the interplay between organisational demands, personal responsibilities, and the challenges of emotional regulation that prompted their participation.

Theme 2 examined the fortification of resilience through stress coping mechanisms, showcasing how participants employed problem-focused and emotion-focused coping strategies to manage stress and regain balance.

Theme 3 focused on empowering participants with a compassionate and agentic sense of self. This involved fostering self-acceptance, self-care, and self-discovery, leading to greater authenticity and an awareness of autonomy through self-choice and agency.

Theme 4 delved into meaning-making through self-transcendent mechanisms. Participants described finding peace and renewal through connections with nature, spiritual elements, and mindfulness practices, which collectively enabled them to rise above stress and achieve inner calm.

Theme 5 addressed the role of group dynamics in building resilience. Collaborative art projects and shared experiences in group settings fostered empathy, mutual support, and collective growth, empowering participants to draw strength from one another.

Theme 6 highlighted the importance of neuro-somatic experiences, emphasising the profound connection between the body and its emotions. Participants reported improved emotional processing, awareness of physical sensations tied to stress, and

the therapeutic value of creative interventions in unlocking and addressing deeply held emotional states.

In summarising these themes, the chapter demonstrated how a stress management intervention rooted in music, art, and group dynamics provided participants with holistic tools to enhance emotional resilience, foster self-discovery, and promote overall well-being. This chapter laid the foundation for understanding the potential of creative modalities in mitigating workplace stress and fostering long-term personal growth.

CHAPTER 6: THE VALUE OF GIM AS SMI IN THE WORK CONTEXT

6.1 INTRODUCTION

This study aimed to explore how HE employees experienced music and art as integrated stress management modalities in relation to their stress management and coping capacity. This discussion indicates why and how adapted GIM contributes to improved coping capacity, demonstrating its effectiveness in fostering resilience, enhancing emotional regulation, and supporting personal growth within the participants from a high-stress workplace context. Chapter 6 synthesises the findings presented in Chapter 5 with the literature reviewed in Chapters 3 and 4, presenting an approach to workplace stress management through GIM sessions. This chapter first contextualises the need for SMIs in HE, by reflecting on why participants engaged in the SMI sessions, highlighting the organisational and personal demands they faced and their struggles with emotional regulation.

The chapter then continues to discuss how participants' resilience was strengthened through GIM to enhance the use of problem- and emotion-focused coping strategies as the SMI progressed. Thirdly, the chapter describes how GIM facilitates growth toward a more compassionate, agentic self and the processes of meaning-making, including self-transcendence, connecting with nature, spirituality, mindfulness, and psychodynamic approaches.

This chapter also advocates for integrating music and art modalities into workplace wellness programs, emphasising their potential impact on personal growth, job satisfaction, and emotional resilience. Tailoring SMIs to the unique needs of employees is crucial for maximizing their effectiveness.

6.2 ARGUING THE IMPORTANCE OF SMI FOR HE EMPLOYEES

Theme one from the findings underlines the critical need for SMIs among HE employees, as reflected in their reasons for volunteering for the GIM program. The findings signalled a dual responsibility for stress management shared between the organisation and the employees themselves. While organisational demands contributed to employee stress, participants also recognised their role in managing

stress, particularly around challenges with emotional regulation and work-life balance. This section therefore argues how the stressors identified, coupled with participants' subjective experiences, established the need for SMIs. WLQ responses, individual interviews and a focus group provided deeper insights into how participants' lived experiences of stress lead to their decision to engage in GIM. These interactions revealed a complex interplay between organisational demands and personal challenges, often resulting in emotional overwhelm. This highlighted a strong need for SMIs in the HE work environment to support resilience and effective stress management. SMIs, like the one in this study, helped participants manage both external pressures and internal responses, promoting a comprehensive approach to stress management in HE workplaces.

6.2.1 Organisational Demands

Psychological safety is essential for organisational health, supporting innovation, collaboration, and resilience by allowing employees to share opinions and take risks without fear of punishment. However, participants highlighted the absence of such safety, noting that unsupportive management styles and rigid workplace structures restrained creativity and authentic expression. This lack of psychological safety left employees feeling isolated and disconnected, while they needed an environment that acknowledged their contributions and supported their well-being.

Unlike the ideal organisational environment, the participants' experiences highlighted how a lack of psychological safety can affect many aspects of workplace functioning. The majority (86%) of participants linked their stress to work demands; however, this study was not designed to determine the causes of employee stress. Certain studies emphasise that prolonged stress impairs cognitive functioning and motivation due to an overstimulated HPA axis and elevated cortisol levels (Cathomas et al., 2019; Godoy et al., 2018).

From a neuroscientific perspective, psychological safety reduces the brain's perceived threat levels. This, in turn, enhances cognitive engagement and creativity by moderating the amygdala's fear response (Lim et al., 2019; Ochiai & Otsuka, 2021). In an environment where employees feel safe, the brain's threat detection mechanisms relax, allowing for higher-order functions necessary for creativity and problem-solving (Klinoff et al., 2018). However, the overload of organisational

demands and the absence of psychological safety in this study heightened participants' stress. This limited their ability to reach a state of eustress or 'flow.' (Hargrove et al., 2016). Instead, they experienced distress. This resulted in emotional dysregulation and impaired resilience. The integration of neuroscience into organisational practice highlights the importance of fostering emotional intelligence and psychological safety. Emotional awareness in social settings helps reduce stress and build trust within groups (Lane et al., 2020). The absence of these elements in the study site hindered participants' cognitive and emotional functions. This made stress relief interventions, such as GIM, essential for fostering resilience and enhancing coping mechanisms (Smalley, 2019).

The centralised decision-making process also heightened stress by isolating employees from key organisational actions, reinforcing feelings of disempowerment and isolation (Chetty et al., 2016; Steyn & Cilliers, 2016). In this context, GIM offers a pathway to mitigate stress by creating a safe, introspective space for emotional regulation and resilience-building, addressing both personal and organisational demands. Through GIM, participants could engage in self-reflective practices that promoted neuroplasticity and emotional resilience, helping them navigate stress more effectively within a challenging work environment.

6.2.2 Personal demands

Personal demands outside the workplace also contributed significantly to participants' stress, amplifying the challenges they faced. Familial expectations and responsibilities added emotional strain, which combined with professional pressures, increased stress. Participants expressed a struggle to balance these family obligations with their personal goals, often feeling trapped by the weight of loved ones' hopes and expectations. This tension is reflected in Haar's (2017) findings, which indicate that balancing work and family responsibilities can place significant emotional pressure on employees.

The psychodynamic perspective offers insight into these stress responses, suggesting that unconscious conflicts and unresolved issues from past experiences can shape individuals' reactions to present challenges (Boeker, 2000). The balance between work and family roles increased participants' stress, leading to feelings of isolation, emotional overwhelm, and helplessness (Frone, 2000; Marti et al., 2022). These

insights highlight how stress from personal and professional demands led participants to seek the SMI as a way to regain balance and manage stress.

The burden of personal responsibilities and professional challenges impacted participants' well-being and job performance, motivating them to join the SMI. The SMI offered them a structured way to address and relieve emotional overwhelm, responding to the dual demands that shaped their experiences of stress.

6.2.3 Inability to regulate emotions (emotional overwhelm)

Emotional overwhelm, marked by an inability to regulate emotions, emerged as a significant factor motivating participants to seek support through SMIs. Interviews and the focus group discussion assisted participants struggling with the combined stress of organisational and personal demands, which weakened their ability to regulate their emotions. This constant pressure left them feeling overwhelmed, unimportant, and unable to engage in effective problem-solving, culminating in a cycle of despair and hopelessness that permeated both their work and personal lives.

The emotional toll of these demands often extended beyond the workplace, negatively impacting participants' productivity and well-being. The struggle to find personal time amidst persistent responsibilities intensified feelings of burnout and diminished fulfilment. Raza et al. (2024) describe similar effects in their study on workplace incivility, noting that aggressive or uncaring leadership behaviours aggravate employee dissatisfaction, reduce morale, and contribute to emotional exhaustion.

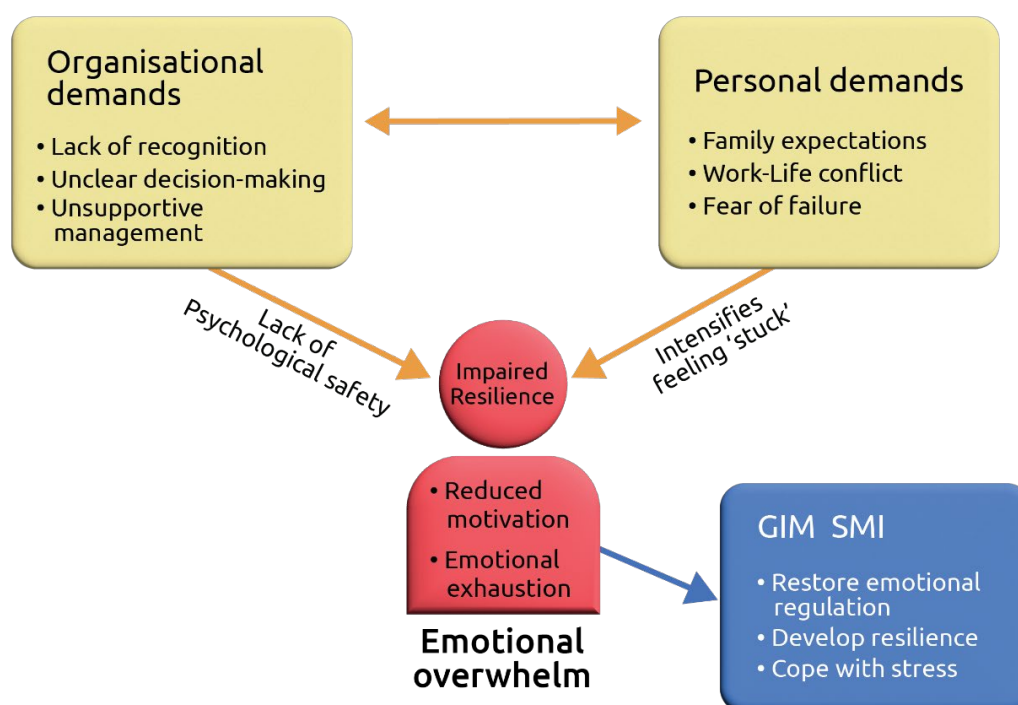
Participants express their emotional struggles vividly through the artworks produced in GIM sessions. Depictions of erupting volcanoes, collapsing caves, and internal battles symbolised the overwhelming weight of their stress and emotional conflicts. These visual metaphors offered a powerful representation of their experiences, allowing participants to externalise and process their emotional turmoil. This sub-theme of emotional overwhelm underscores the pressing need for interventions like GIM to help participants navigate and alleviate stress, ultimately promoting emotional resilience and well-being.

6.2.4 Summative reflection on the need for SMIs

Figure 6.1 highlights the intricate interplay between organisational demands, personal demands, and their combined effect on participants' stress. Organisational demands (such as lack of recognition, unclear decision-making, and limited psychological safety) and personal demands (such as family expectations, work-life conflicts, and fear of failure) converge, leading to emotional overwhelm and diminishing the participants' ability to regulate emotions effectively. This figure, aligned with the JD-R model, illustrates how personal demands intensify the impact of job demands, underscoring a need for interventions that address both aspects holistically.

Figure 6.1

Driving forces behind SMI participation



Note: Original work by the researcher

The significance of this integration within the context of a GIM-based SMI lies in its potential to restore emotional regulation and enhance resilience by targeting both organisational and personal sources of stress. By addressing the emotional and cognitive toll shown in this figure, GIM proves to be a valuable tool for improving the

coping capacity of HE employees, helping them manage the combined demands of their roles and responsibilities more effectively. This supports the research objective by demonstrating how GIM can be tailored to the unique demands within the HE environment, encouraging a healthier and more resilient workforce.

6.3 FORTIFYING RESILIENCE THROUGH STRESS COPING MECHANISMS

From the findings it was evident that through their engagement with the GIM, participants increasingly applied a combination of problem- and emotion-focused strategies to cope with stress. Despite their differences in how they evaluated, experienced, and coped with stress, participants demonstrated notable shifts in their coping approaches. These shifts may be indicative of strengthened emotional adaptability, although resilience itself was not directly measured. The GIM activities helped them access and use problem- and emotion-focused strategies more effectively. The GIM intervention emerged as a potentially valuable stress management approach. It appeared to encourage the use of more constructive coping strategies — processes often linked to resilience, although resilience was not directly measured.

6.3.1 Improved use of problem-focused coping strategies

Through GIM, participants developed a clearer, more objective approach to handling stressors, which fostered a heightened sense of control. They reported improved skills in compartmentalising and prioritising various aspects of their lives, helping them manage challenges with resilience and composure. This shift in perspective aligns with Khalizah et al. (2023), who found that natural environments promote cognitive restoration - similar effect participants experienced when engaging with nature-related imagery during GIM.

GIM provided a structured mental space that facilitated problem-focused coping, allowing participants to approach stressors with clarity and develop actionable solutions. These findings were confirmed by Beck et al. (2015a) and Gudi et al. (2023). For instance, Schaerlaeken et al. (2019) found that GIM aids stress reduction by encouraging individuals to engage deeply with their inner thoughts, leading to cognitive reorganisation. This restructuring is essential for HE employees, enabling

them to reframe negative thoughts related to work stress and adopt constructive coping strategies.

From a psychodynamic viewpoint, GIM served as a therapeutic medium where participants could explore and integrate unconscious material, facilitating alignment between conscious intentions and subconscious drives. This process of cognitive restructuring, as Battles (2018) describes, involves bringing unconscious content to conscious awareness, a transformative aspect which participants of this study also demonstrated during the GIM sessions.

Additionally, insights from neuroscience highlight how GIM influences neuroplasticity, promoting the rewiring of neural pathways associated with emotional regulation and coping. By engaging repeatedly in GIM, participants were able to modify maladaptive thought patterns, enhancing resilience through sustained growth. Alain et al. (2019) also noted increased neuroplasticity through therapeutic interventions, supporting the role of GIM in promoting adaptive coping mechanisms and emotional stability. The complex interaction of hormones and neurotransmitters, discussed in Chapter 4.4, further illustrates the multifaceted neuropsychological impact of GIM on participants.

6.3.2 Normalising the stress experience promotes coping

Within the realm of problem-focused coping, a key aspect that emerged from the GIM sessions was the normalising of stress experiences. For many participants, realising that stress is a shared, universal experience provided relief and validation. Comparing their experiences with those of peers promoted a sense of solidarity and resilience, reinforcing the comforting notion of *"I am not the only one."* This normalisation process cultivated a collective understanding of the challenges in managing life's stressors, promoting a supportive group dynamic.

From a psychodynamic perspective, normalising stress acts as a defence mechanism, helping individuals integrate distressing experiences into a shared reality and reducing their emotional impact (Edwards & Ashkanasy, 2018). Neuroscientifically, this process taps into the brain's social tendencies for comparison and validation, which help modulate emotional responses and facilitate adaptive coping (Cantero et al., 2021; Sievers et al., 2021).

In the GIM sessions, this collective experience was further enhanced through activities like collaborative art and group drumming. By observing others' creative expressions and engaging in shared activities, participants experienced a strong sense of camaraderie, described by Popa and Reynolds (2022) as collective sublimation. This sense of connection encouraged mutual support and collective resilience. Participants mentioned how shared activities, like group drawings and drumming, reflected a new sense of energy and unity. Such interactions allowed participants to embrace vulnerability, witnessing each other's challenges without judgment, and encouraging resilience.

While normalisation can serve as a powerful coping mechanism, it also risks obscuring individual distress by focusing too heavily on shared experiences, potentially overlooking unique emotional needs (Emerson-Smith, 2018). However, in this study, normalising stress within the group setting empowered participants to regain a sense of control and collective resilience.

Ultimately, the normalising of stress experiences in GIM highlights an interplay of psychodynamic defences, neurobiological mechanisms, and social dynamics. Through shared acknowledgment and validation, participants utilised collective resilience, enabling them to approach life's challenges with renewed courage and compassion, as noted by Anand et al. (2019) and Mendy (2020).

6.3.3 Becoming more proficient in applying emotion-focused coping strategies

Emotion-focused coping emerged as a crucial aspect of participants' journey toward managing stress during and after the GIM sessions. Through GIM, participants embarked on a transformative process of emotional self-awareness, enabling a deeper understanding of their inner world, a process supported by findings from Choudhury (2017) and Segall & Yinger (2022). This heightened emotional awareness allowed participants to express emotions more freely, overcoming one of the primary barriers of their stress experience. Enhanced emotional self-awareness and expression ultimately contributed to improved emotional self-regulation, equipping participants to respond to stressors with a more adaptive coping approach.

The creative medium of clay played an instrumental role for some participants, offering a tactile outlet for expressing and processing emotions. By moulding clay, participants found a concrete way to channel emotions and confront internal struggles. Beerse et

al. (2019) also highlight the therapeutic benefits of clay, noting its effectiveness in reducing stress and anxiety, particularly in academic settings. For participants in this study, clay modelling during GIM provided a powerful avenue for emotional expression, supporting a constructive coping response that contributed to their overall resilience.

6.3.3.1 Developing more Acute Emotional Awareness.

For several participants, the journey toward emotional awareness became a pivotal moment in discovering their own "happiness centre," providing hope amid stress and overwhelm. However, this path was not without challenges; some participants initially experienced discomfort in response to the music. From a psychodynamic perspective, this discomfort may reflect underlying emotions that participants were hesitant to confront (Mårtensson Blom, 2022; Vaudreuil et al., 2020).

Gently guided through GIM sessions, participants gradually deepened their connection to their emotions, opening unconscious connections between mind and body. This somatic awareness allowed them to express deeply held pain and discomfort through creative outlets like drawing, clay work, and music. Expressing their emotions through art offered a sense of relief, helping them release tension. This process encouraged a more effective way of coping with workplace stress. Ahonen (2018a) notes that memories and emotions can be evoked through music, particularly when linked to visual imagery, facilitating emotional awareness and expression (Fachner et al., 2019).

Artistic expression became a unique channel for participants to process emotions, as Arantzamendi et al. (2021, p.37) state: "*Artistic expression comes forth from the deepest part of oneself and this has a healing effect.*" For instance, one participant's exploration of colour symbolism in drawing illustrated the transformative impact of creative expression on emotional awareness. Ultimately, the emotion-focused coping strategies developed through GIM provided participants with a valuable way to enhance self-awareness. These strategies also supported their healing through creative expression.

6.3.3.2 Enabling Expression of Emotions.

From a psychodynamic perspective, expressing suppressed heartache and stress through music and art allowed participants to externalise unresolved emotions and

unconscious conflicts. The creative process provided a safe space for participants to confront these buried feelings, enabling them to process underlying psychological dynamics contributing to their stress. Through creative expression, participants discovered hidden motivations and gained a deeper understanding of their emotional challenges. Gerge et al. (2019) emphasise that art therapy plays a key role in improving emotional awareness and understanding through such expression.

Neuroscientifically, engaging with music and art activates brain regions involved in emotional processing, including the amygdala, prefrontal cortex, and limbic system (Putkinen et al., 2021). For example, rhythmic drumming stimulated neural circuits related to emotional regulation, inhibiting stress hormone release and promoting a sense of catharsis (Mckinney et al., 1997; Rojiani et al., 2018). Additionally, creating art triggered dopamine release in the brain's reward pathway, reinforcing positive emotions and providing fulfilment (Bronson et al., 2018). Through repeated engagement with these modalities, participants likely experienced neuroplastic changes that strengthened neural pathways associated with emotional resilience and coping (Alain et al., 2019; Gerge et al., 2019).

In summary, the integration of psychodynamic and neuroscientific perspectives reveals the multifaceted benefits of emotional expression through music and art in SMIs (Huang & Li, 2022). Accessing unconscious conflicts and activating neural pathways for emotional processing allowed participants to release suppressed emotions. This process helped build resilience and improve overall well-being (Zhang et al., 2020).

6.3.3.3 Regulating emotions more effectively.

In this study, the GIM sessions served as a powerful tool for enhancing emotional regulation, a key aspect of coping with workplace stressors. Through music and art, participants developed skills to manage their emotions constructively, transforming their stress response and fostering resilience in challenging situations.

By engaging with GIM, participants accessed deeper emotional awareness and self-regulation. They reported a heightened ability to centre themselves and respond to workplace stress with calmness and control. For instance, some participants, who initially felt overwhelmed, described learning to compartmentalise emotions and

address stressful situations proactively. This process aligned with findings by Ahonen (2018a) and Dukić (2018), who noted that therapeutic interventions like GIM can strengthen emotional resilience. Creative mediums like clay modelling and drawing also played a vital role. Participants conveyed complex emotions through these concrete outlets. One participant, for example, used nature imagery to symbolise their journey from darkness to light. Such expressions reinforced emotional stability and self-reflection, similar to findings by Mao (2022), who highlighted the role of music therapy in boosting creativity, reducing fatigue, and enhancing resilience.

The sense of belonging fostered within the group setting also contributed to emotional regulation. Initially, some participants felt out of place, but through shared activities like group drumming, they developed a sense of stability and balance. Kim et al. (2020) explain that psychological safety within a group context enhances individual and collective resilience, promoting an environment where participants could freely express themselves and process emotions.

From a psychodynamic perspective, GIM allowed participants to access unconscious emotional conflicts, revealing suppressed emotions and facilitating resolution through creative expression. This aligns with Steinmair and Löffler-Stastka (2022), who argue that engaging with unconscious material promotes self-awareness and emotional growth. Participants' creative activities, such as creating mandalas, served as pathways for processing deep-seated emotions. This approach supported the development of more effective coping mechanisms.

Neuroscientifically, the GIM sessions activated brain regions involved in emotion regulation, such as the amygdala and prefrontal cortex, allowing participants to experience mental calmness and resilience (Chatterjee et al., 2021). The repeated engagement with music and art led to neuroplastic changes, reinforcing pathways associated with emotional regulation and reducing stress responses (Ferreri et al., 2019). This neural adaptation enabled participants to manage stress with greater resilience and emotional insight.

In summary, the GIM sessions appeared to support emotional regulation through a combination of psychodynamic exploration and neurobiological processes. This approach helped participants manage immediate stressors while also building long-

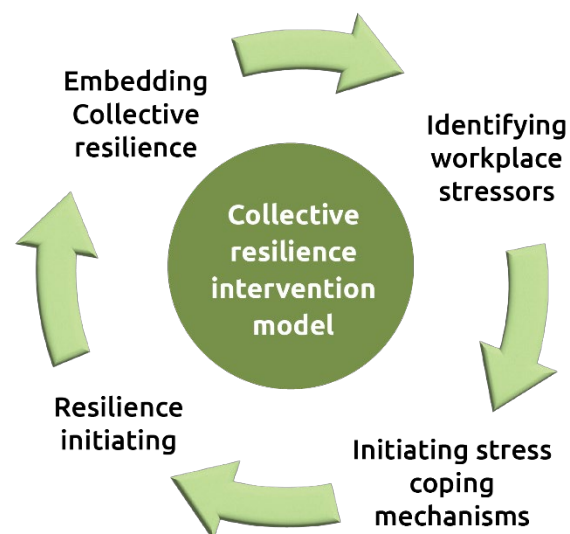
term emotional resilience. It appeared to help them approach workplace challenges with more constructive coping strategies.

6.3.4 Summative reflection on problem and emotion-focused competence

The illustration by Mendy (2020, p.360), Figure 6.2, illustrates the strength of collective resilience in problem-focused coping. It highlights how emotional interactions among individuals contribute to learning, organisational growth, and developmental outcomes, particularly in managing workplace stress.

Figure 6.2

Collective resilience intervention model



Note: *Adapted from Mendy, 2020*

During the GIM sessions, participants reported gradually using both problem- and emotion-focused strategies. These strategies appeared to support their resilience and foster a renewed sense of control. In adopting problem-focused coping strategies, they developed a realistic perspective on their stressors, enabling them to identify actionable solutions to manage these challenges. By normalising their stress and realising they were not alone, participants reported feeling supported by shared experiences. They also perceived an improvement in their ability to cope.

Participants also made progress in emotion-focused coping, gaining a deeper understanding and appreciation of their inner emotional world. Through emotional

awareness, expression, and regulation, they achieved a level of self-regulation that further fortified their resilience. This balanced approach empowered them to manage stressors more effectively and demonstrated the holistic impact of GIM on emotional self-management.

From a psychodynamic perspective, the GIM sessions allowed participants to access and process past experiences rooted in their unconscious. This transcendental experience enabled them to confront unresolved issues and develop resilience in facing their stressors. In addition, the neuroscientific framework of GIM sessions highlights the transformative effect of music and art in reshaping neural pathways and enhancing emotional well-being (Korsakova-Kreyn, 2018). By engaging with these therapeutic modalities, participants experienced changes in neural pathways that supported both emotional regulation and adaptive coping.

In sum, the GIM sessions facilitated the development of both problem- and emotion-focused competencies, enhancing participants' resilience. This dual approach, rooted in psychodynamic and neuroscientific principles, demonstrates the potential of GIM to bring about lasting improvements in stress management and emotional well-being for HE employees.

6.4 EMPOWERING A COMPASSIONATE AND AGENTIC SENSE OF SELF

A key outcome of the GIM-based SMI was the empowerment of a compassionate and agentic sense of self among participants, helping counteract the risk of workplace burnout (Kaur et al., 2017). This empowerment was reflected in three main areas: participants developed greater self-acceptance and self-care; they engaged in self-discovery, leading to a heightened sense of authenticity; and they embraced autonomy, becoming more aware of their personal agency and choices.

6.4.1 Gaining self-acceptance and applying self-care

Participants in the SMI reported a transformative journey toward self-acceptance and self-care, facilitated by therapeutic techniques and creative expression through art and music. Many participants successfully applied these techniques to confront fears and alleviate stress. One participant reported a significant reduction in stress and an increased sense of self-acceptance. Others found that artistic elements, such as

colour in their artwork, acted as powerful tools for self-care. Metaphors emerged in their creations, such as one participant's depiction of a bird symbolising a newfound approach to self-care, rising above challenges. This aligns with Zehetmair et al. (2019), who emphasised the role of stabilising techniques and guided imagery in promoting self-healing and resilience.

Participants also recognised the need to release unrealistic self-expectations, adopting a more balanced approach to life. For some, this involved visualising relaxation and self-compassion, resulting in a more relaxed mindset and reduced stress. This outcome supports broader research indicating that GIM can promote positive shifts in attention and emotional state, enhancing resilience (Schaffer et al., 2013; Zehetmair et al., 2019).

Psychodynamically, GIM helped participants develop essential self-care strategies. One participant used art to depict a relaxed setting, celebrating personal passions as a form of self-care. This approach allowed them to confront and reframe negative self-perceptions within a safe space, an outcome supported by Zehetmair et al. (2020). By visualising and processing past traumas, participants achieved greater control and acceptance of their experiences.

From a neuroscientific viewpoint, creative expression through GIM has been shown to improve neural connectivity and plasticity, fostering adaptive changes in brain function and behaviour (Tsirir et al., 2018). This process facilitated personal insight, fostering positive emotions and a redefined, compassionate sense of self (Gimpel, 2018).

In summary, participants' experiences underscored the transformative impact of GIM in empowering self-acceptance and self-care, essential components in managing workplace stress and fostering resilience.

6.4.2 Engaging in self-discovery lead to a sense of authenticity

Participants described a transformative shift in perspective, letting go of unrealistic expectations and focusing on achievable goals. Through their creative endeavours, they began a journey of self-reflection, discovering hidden aspects of their psyche. Engaging in artistic expression enabled participants to explore unacknowledged parts

of themselves, including shadow aspects previously beyond conscious awareness (Arantzamendi et al., 2021; Ingram, 2020; Shum, 2020).

Profound moments of self-discovery during GIM sessions deepened participants' sense of self and authenticity. One participant described feeling a strong sense of centeredness and peace, which they visually captured in their artwork, illustrating the therapeutic power of art in accessing one's true nature. From a psychodynamic perspective, such experiences represent the integration of unconscious aspects, enhancing self-understanding and authenticity (Ophir & Jacoby, 2020; Smollan & Pio, 2017).

Another participant was surprised by the depth of expression achieved through the combination of drawing and music, which provided insight into previously unexplored emotions. This experience aligns with psychodynamic theory, suggesting that the integration of unconscious conflicts and desires can lead to a more authentic self (Steinmair & Löffler-Stastka, 2022).

Neuroscientifically the fusion of art and music in GIM sessions activated multiple sensory modalities, enhancing neural connectivity and fostering emotional well-being. Studies indicate that engaging in creative processes supports neuroplasticity, creating a deeper connection with the self and fostering inner peace (Arantzamendi et al., 2021; Fachner et al., 2019). In summary, the experiences shared by participants illustrate the deep impact of GIM in facilitating self-discovery and authenticity. The use of artistic mediums during the interventions allowed participants to explore and express their true nature, promoting emotional well-being, authenticity, and inner harmony.

6.4.3 Embracing autonomy by being more aware of self-choice and agency

Participants in the SMI reported a renewed sense of empowerment and awareness of their self-choice and agency, supported by the integration of music and art as therapeutic tools. One participant recognised their ability to consciously invite positive influences, such as music and art, while setting boundaries against negative elements. This realisation transformed their view of being passive participants in life, highlighting their ability to actively shape their experiences and well-being. From a psychodynamic perspective, this shift represents a reorientation of unconscious dynamics toward more

adaptive behaviours, promoting a sense of self-efficacy and control (Schussler et al., 2018). The therapist's supportive role in creating a safe environment during GIM sessions further encouraged self-acceptance, exploration, and empowerment.

Research indicates that exercising agency in creative expression enhances neural connectivity and plasticity, supporting emotional regulation and resilience (Meadows & Wimpenny, 2017; Reybrouck et al., 2018). The therapeutic use of music and art enabled participants to express themselves freely, strengthening their sense of agency and empowering them to make choices that aligned with their emotional needs. This finding aligns with Kuan et al. (2018), who observed that engaging with calming music during imagery training reduced anxiety and increased self-confidence.

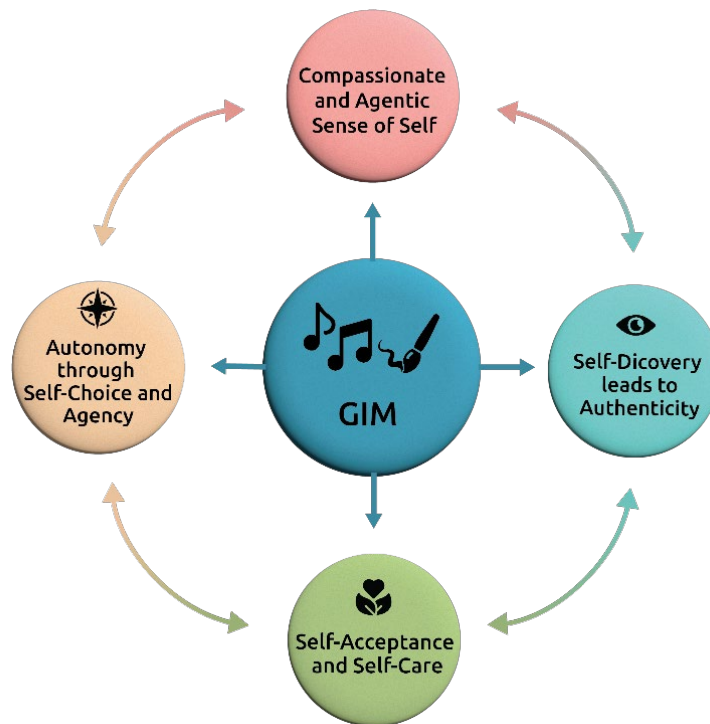
Participants displayed newfound confidence and emotional control. This was exemplified by one participant who assertively addressed disruptive behaviour in her classroom. This sense of empowerment stemmed from practical strategies learned during GIM, enabling participants to address challenges with self-efficacy—a key component of resilience discussed in Chapter 3. A participant's use of clay models to represent their journey, from a bumpy road of stress to a smoother path, empowered by self choice and agency, symbolises the intervention's transformative impact. Participants were empowered to actively contribute to their well-being, highlighting the significant potential of music and art as stimulus for personal growth, resilience, and empowerment. This form of learned resilient behaviour, as described by Dukic (2018) and Gupta (2020), supported participants in navigating both professional and personal challenges.

6.4.4 Summative Reflection on Empowering a Compassionate and Agentic sense of self

The following figure (*Figure 6.3*) reviews theme 3:

Figure 6.3

Compassionate and Agentic Sense of Self



Note: Original work by the researcher

Theme 3, "Compassionate and Agentic Sense of Self," encapsulated the development of a balanced, proactive, and self-aware identity. This theme comprised three interconnected sub-themes: *Self-Acceptance and Self-Care*, where individuals embraced themselves with kindness and prioritised well-being; *Self-Discovery Leading to Authenticity*, which highlighted alignment with genuine values through introspection; and *Autonomy through Self-Choice and Agency*, where participants exercised deliberate, self-directed decisions to shape their lives. Together, these sub-themes illustrated how cultivating compassion and empowerment enabled individuals to navigate stressors with resilience, confidence, and purpose.

By engaging with music and art as therapeutic tools, participants gradually moved away from the harmful effects of burnout, such as cynicism, depersonalisation, and diminished accomplishment. Instead, they began fostering self-compassion, authenticity, and autonomy. The GIM SMI facilitated this transformation, helping participants adopting self-compassion, which has been shown to buffer against burnout and stress in high-stress environments (Shum, 2020). Studies confirm that

self-compassion is associated with lower emotional exhaustion and burnout levels, particularly in healthcare professionals (Hashem & Zeinoun, 2020). This journey of self-discovery and empowerment allowed participants to emerge from the grip of stress with a sense of realism, control, and agency, fostering resilience and emotional well-being.

6.5 MEANING MAKING THROUGH SELF-TRANSCENDENT MECHANISMS

Theme 4 explored how participants rose above immediate stressors by connecting to something greater than themselves through five pathways: *engaging with nature*, *holding on to spiritual elements*, *finding purpose and meaning*, *practicing mindfulness*, and *exploring psychodynamic processes*. Together, these self-transcendent practices fostered meaning, resilience, and emotional well-being.

Music and art were pivotal in the SMIs, offering participants avenues to explore self-transcendence through nature, spirituality, and purpose. Borling (2024) confirms that GIM amplifies spiritual experiences, while Mead (2020) highlights the role of nature in fostering transcendent emotions and psychological flow.

Creative activities appeared to influence neural activity in the Default Mode Network, supporting mindfulness and a sense of interconnectedness (Savage et al., 2021). These experiences helped participants find meaning and purpose, fostering resilience and a sense of coherence (Dukić & Jakovljević, 2021; Messina & Aliel, 2019).

Through these creative expressions, participants not only relieved stress but also discovered pathways to purposeful living. Music and art provided tools for integrating personal experiences into meaningful narratives, empowering them to navigate life with clarity and purpose. As Blom (2014) echoes, such self-transcendent practices hold transformative potential, fostering richer, more meaningful lives.

6.5.1 Transcending stress and finding peace in nature

Participants in the GIM SMIs symbolically and metaphorically engaged with nature, highlighting its profound impact on mental well-being. One participant found relief in envisioning sunsets, birds, and swaying palm trees, illustrating nature's soothing

qualities as a source of mental refreshment and relaxation. These symbolic connections with nature facilitated meaning-making and emotional restoration, consistent with Sudimac's (2022) findings on the salutogenic effects of nature on stress-related brain regions.

Another participant described a mental escape to a tranquil island, symbolising self-reflection and inner peace. Guided imagery involving nature-like experiences served as a creative and therapeutic tool, enabling emotional exploration and stress reduction. Research by Yamashita et al. (2021) and Sudimac (2022) supports the notion that imaginative engagement with nature activates neural responses linked to relaxation, such as parasympathetic activation and endorphin release. The brain processes these representations as if they were real, resulting in similar calming effects.

These experiences underscore the transformative potential of integrating nature into GIM sessions. By immersing themselves in guided imagery evoking the sights and sounds of the natural world, participants found relief from stress, fostering emotional healing and self-discovery. This aligns with research by Lawes (2021) and Kearl (2017), which highlights the therapeutic value of symbolic connections with nature in promoting mental health and well-being.

6.5.2 Transcending stress by holding on to spiritual elements

For many participants, spiritual meaning was a cornerstone for coping with stress, highlighting the significant role of religious foundations and personal beliefs in their meaning-making processes. Participants reported that their spiritual connections provided comfort, resilience, and a sense of purpose during challenging times. One participant expressed their spirituality through a drawing that featured a log and stones as symbols of stability and faith, serving as tangible reminders of their spiritual grounding amidst workplace stress.

Another participant described entering a mental transcendent state characterised by deep trust, belief, and hope—similar to mindful or meditative isolation. This mental space provided inner strength and resilience, aligning with findings by Lawes (2022) and Killoren (2023), who note that transcendent spiritual experiences can foster peace and serenity, allowing individuals to navigate life's challenges with greater ease.

Similarly, another participant's mandala depicted a personal sanctuary blending elements of nature, family, and spirituality, with an angel as the central motif. This angel symbolised protection, faith, and a connection to divine encounters, emphasising the integration of spiritual beliefs into the participant's identity and coping strategies.

From a psychodynamic perspective, spiritual experiences and symbols, such as the angel, represent unconscious communication with transcendent realities and deeper aspects of the self (Shafranske, 2009). These symbols provide a medium through which participants explored their inner worlds and relationship with the divine. As noted by Dukic and Jakovljević (2021), GIM facilitates transcendent experiences, offering participants opportunities for healing and spiritual exploration.

Viewed through a neuroscientific lens, meditative and mindful states elicited by GIM influenced neural activity in areas responsible for emotion regulation and self-awareness, such as the prefrontal cortex and the default mode network. This strengthened participants' resilience, moving them from a state of feeling overwhelmed by stress to one of empowerment and effective coping. Studies by Mårtenson Blom (2022) and Miller (2019) further support the neural correlates of spiritual experiences in Guided Imagery, emphasising its potential to foster personally meaningful and transformative encounters.

Overall, the transcendent spiritual experiences of participants illustrate the intense impact of spirituality on meaning-making and stress management. By integrating religious beliefs, meditative practices, and symbolic representations, participants were able to find comfort, strength, and resilience. These experiences emphasise the significance of spiritual connections in fostering inner peace and the capacity to navigate stress with a greater sense of purpose.

6.5.3 Transcending stress through mindfulness practices

In this study, the primary intervention was an adapted Guided Imagery and Music (GIM) method, applied in the context of a stress management intervention (SMI). Mindfulness elements, such as focused breathing and non-judgemental awareness of thoughts and emotions, were incorporated into the GIM sessions to support relaxation and emotional regulation. This was not a formal Mindfulness-Based Stress Reduction

(MBSR) programme, and the intervention should therefore not be understood as MBSR. Figure 6.4 represents the proposed model of how the GIM-based SMI, with integrated mindfulness elements, could buffer against the effects of stress.

Mindfulness practices integrated with GIM offered participants a multifaceted approach to emotional healing and well-being. One participant described the significance of stillness and transcending mindfulness during the sessions, experiencing a sense of presence and relaxation. Another participant noted the ability to revisit this transcendent state outside the sessions, using it as a source of comfort and a stress-coping tool.

The therapeutic integration of mindfulness with GIM appeared to support participants' capacity for emotional regulation and stress reduction. Mindfulness-Based Stress Reduction (MBSR), which emphasises present-moment awareness and non-judgmental acceptance, aligns with the goals of GIM (Vitoula et al., 2018). By engaging with body scans, meditation, and guided imagery, participants heightened their awareness of bodily sensations and emotional states, facilitating emotional release and deeper self-insights. This combination fostered self-transcendence, a state of connection beyond oneself, promoting well-being and resilience (Hanley et al., 2023).

Participants also reported revisiting these sanctuary-like transcendent experiences outside of GIM, bringing a sense of safety and emotional balance into their daily lives. This aligns with research by Soons et al. (2010), which indicates that mindfulness meditation enhances psychological functioning and reduces stress. From a psychodynamic perspective, integrating these transcendent experiences allows for a deeper connection to the self and fosters emotional balance (Feingold & Tzur Bitan, 2022).

Neuroscientific evidence supports the physiological benefits of mindfulness, showing that it influences brain regions involved in emotional processing and stress regulation, such as the prefrontal cortex. Singleton (2014) found that mindfulness practices lead to structural and functional brain changes, enhancing emotional regulation and reducing stress responses.

In conclusion, mindfulness practices during GIM sessions offered participants a framework that appeared to help them transcend stress. Mindfulness fostered emotional awareness and promoted self-transcendence. It also seemed to support

resilience. In doing so, it complemented the therapeutic effects of GIM, addressing both the psychological and spiritual aspects of stress. This approach empowered participants to connect with their inner selves and the broader existential context, ultimately improving their overall well-being.

6.5.4 Transcending stress through psychodynamic processes

Psychodynamic processes, focusing on the interaction between conscious and unconscious forces, are central to how GIM enables individuals to transcend stress. By engaging with carefully selected music, participants accessed deeper layers of their psyche, revealing hidden emotions, memories, and conflicts. This therapeutic exploration facilitated psychological integration, emotional regulation, and stress relief (Bonny, 2002; Bruscia, 2018).

Participants described the SMI sessions as transformative, with some expressing sadness at their conclusion, reflecting their profound impact. One participant noted how music acted as a catalyst, initiating mental imagery that eventually led to deep emotional processing. These observations align with research by Bronson et al. (2018) and Halbert et al. (2018), which highlights music's role in activating deeper psychological processes.

Through GIM, participants communicated their stress experiences via group art, using drawings and colours to connect without words. This shared experience fostered a sense of *"I am not alone,"* alleviating workplace stress and highlighting the psychodynamic role of group dynamics, which will be explored further in the next section.

Music in GIM bypassed participants' conscious defences, enabling them to confront unconscious conflicts. For example, a participant might visualise a calming scene symbolising safety or a troubling figure representing repressed anger. By bringing these unconscious elements to light, participants worked through them in a safe, therapeutic environment, reducing stress and fostering inner peace (Bonny, 2002). This psychodynamic activation also facilitated long-term resilience, as participants gained self-awareness and coping strategies to manage stress outside therapy.

Research by McKinney & Honig (2017) confirms the efficacy of GIM in reducing anxiety, depression, and stress, while Dunphy et al. (2019) and Gimpel (2018) emphasise the value of art and music in tapping into unconscious thoughts and emotions. By integrating the emotive power of music with the expressive potential of art, GIM provided participants with a structured framework for emotional exploration and healing.

In summary, GIM serves as a powerful psychodynamic tool for transcending stress and promoting emotional growth. Its integration of music and imagery creates a safe space for individuals to resolve deep-seated conflicts, fostering resilience, self-awareness, and well-being.

6.6 GROUP DYNAMICS IN GIM: BUILDING COLLECTIVE RESILIENCE

In this research, the group dynamics cultivated during GIM sessions were crucial in shaping both individual and collective resilience. Participants connected through shared experiences of stress and healing, specifically within the context of the HE workplace. The GIM sessions fostered stress management and coping through the collective nature of the music and art-based experience. As participants navigated shared experiences of stress relief, their individual resilience was developed through the support and energy of the group. This mutual reinforcement—"building my resilience on yours and ours"—cultivated a resilient group culture, empowering individuals to cope with stress more effectively. Within this collective environment, participants expressed feelings of belonging and connection that were integral to their healing process. The group setting provided a safe space for emotional expression and vulnerability, allowing participants to confront their stressors while feeling supported. These dynamics not only facilitated personal growth but also strengthened the group's collective capacity for resilience and stress management.

The group dynamics within the GIM sessions highlighted the complex interaction between individual and collective processes. The initial stage of group formation, characterised by cautious individual expressions and sombre tones in their group artwork, reflected early uncertainties and self-protective attitudes. This phase highlighted the emergence of unconscious dynamics as participants navigated interpersonal boundaries and shared vulnerabilities.

As the sessions progressed, the transformation in group artwork, from sombre colours to cohesive, vibrant expression, symbolised a shift toward collective integration and support. Participants began to feel safer, fostering emotional openness and connection. The group environment became a sanctuary where participants supported and embraced each other's vulnerabilities. This was symbolically reflected in their collaborative art, such as the covering of a black circle representing pain and fear. This evolution underscored the role of group dynamics in fostering emotional regulation, resilience, and healing.

Neuroscientifically, the group dynamic influenced brain regions associated with social connection and emotional processing, such as the prefrontal cortex and reward circuits. Participants experienced increased empathy and contentment as the group fostered belonging and shared meaning-making. This shift is similar to research by Case (2018), which demonstrates how guided imagery in group settings enhances mood and quality of life through a sense of community and support. The shared creative process within the group enabled participants to express emotions non-verbally, communicating through colours and imagery rather than words. This non-verbal interaction cultivated connection, agency, and a sense of shared understanding, allowing participants to transcend individual concerns and tap into collective growth. As highlighted by Gerge et al. (2019) and Martin et al. (2018), such creative engagement promotes a sense of universal consciousness and empowerment.

By incorporating data from group experiences, this study deepened its understanding of how GIM fosters both individual and collective resilience. Participants' shared experiences of stress and healing created a collective meaning-making process, enriching their coping mechanisms. The structured nature of the sessions managed group dynamics effectively, providing a safe space for self-discovery and emotional exploration. This aligns with studies by Doğan et al. (2021), emphasising how guided imagery fosters introspection and relaxation within group settings.

Overall, the GIM sessions demonstrated the powerful role of group dynamics in shaping emotional regulation, resilience, and healing. By fostering a supportive and collaborative environment, art- and music-based interventions offer promising

pathways for promoting psychological well-being and stress management in workplace settings (Gold, 2016; Schruijer, 2021). The journey of these participants highlighted the transformative power of group cohesion and creative expression, exceeding individual stress to build collective resilience.

6.7 TRANSFORMING STRESS THROUGH NEURO-SOMATIC EXPERIENCES

The neuro-somatic experiences reported by participants during the GIM sessions revealed the deep interconnection between mind and body, facilitated through music and guided breathing techniques. These experiences, framed through psychodynamic and neuroscientific perspectives, underscored the role of GIM in integrating emotional and physical states for stress management and healing. The use of controlled breathing alongside music produced a synergistic effect, influencing brain regions involved in stress regulation and emotion processing, such as the amygdala and insula. This also led to a decrease in heart rate and blood pressure (Lee et al., 2016; Perciavalle et al., 2017).

Participants described how the rhythmic structure of the music aligned neural oscillations, promoting synchronisation in brain activity and enhancing emotional regulation (Knapik-Szweda, 2015). Some reported uneasy bodily sensations during sessions, interpreted as the somatic expression of repressed emotions or unresolved trauma. This aligns with Bonny's research, which highlights music as a catalyst for imagery, engaging both emotional and cognitive pathways (Grocke, 2014b). By processing unconscious material through music and guided breathing, participants gained greater emotional awareness and integration. This was facilitated by archetypal symbols and collective unconscious themes, as described by Jung and supported by Dukic (2019).

Functional neuroimaging studies (Messina & Aliel, 2019; Putkinen et al., 2021) further corroborate the neurobiological basis of these experiences, linking music-based interventions to improved emotional regulation, stress management, and overall well-being. For instance, Participant 6 noted how music triggered significant neural and somatic relaxation, enabling them to apply this calming skill in real-life stressful situations. This reflects the transformative potential of GIM in promoting emotional healing and practical stress-coping strategies.

A key theme that emerged from the sessions was "acceptance and letting go" where participants adopted a mindset of release and reduced resistance to stressors. This shift towards acceptance, as highlighted by Bruscia (2018), represents a critical turning point in managing life's challenges with resilience and composure. Participants reported using these newfound skills to address challenges directly, marking a transition to a more action-oriented and empowered mindset.

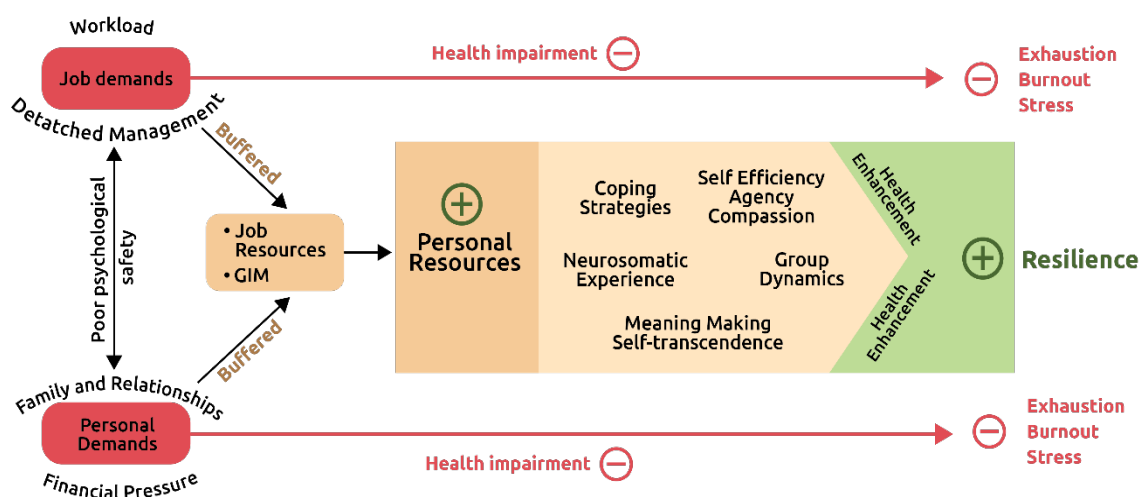
Overall, the neuro-somatic experiences within GIM provided participants with a holistic approach to emotional and physical harmony. By blending music, guided imagery, and breathing techniques, GIM facilitated the processing of complex emotions, enhancing resilience and proactive problem-solving in both personal and professional contexts. These findings underscore the therapeutic value of GIM in equipping individuals with practical tools to cope with workplace stress and promoting long-term well-being.

6.8 SYNTHESIS OF THE FINDINGS: THE VALUE OF GIM AS A SMI IN HE

As illustrated in *Figure 6.4*, the overwhelming workload and insufficient psychological safety in the HE (HE) work environment led to a detachment from management, reflecting a breakdown in communication and support. This detachment heightened feelings of isolation and increased vulnerability to stress. If left unaddressed, these conditions would likely have led to significant health impairments, including exhaustion and burnout, as predicted by the Job Demands-Resources (JD-R) framework, when job demands outweigh available resources.

Figure 6.4

Coping with stress through GIM and Personal Resources



In this chapter, findings were discussed through the lens of the JD-R model, revealing an imbalance between job demands and resources, as depicted in *Figure 6.4*. The study illuminated the significant organisational pressures contributing to stress, as highlighted by WLQ results. This stress was further intensified by personal demands, such as familial responsibilities and individual expectations, creating a multiplier effect. The interplay between organisational and personal demands intensified participants' emotional overwhelm, underscoring the multifaceted nature of workplace stress. These findings emphasise how personal and organisational demands intersect to amplify stress, leading to emotional and psychological vulnerability.

However, the GIM-based SMI acted as a buffer, mitigating these adverse outcomes by providing participants with a space to cultivate and strengthen personal resources. The intervention facilitated a health-enhancement process within the JD-R framework by addressing the stressors of the HE environment. It empowered participants to develop resources, including improved coping strategies, a compassionate and agentic sense of self, and meaning-making through self-transcendent mechanisms.

Additionally, participants benefited from positive group dynamics, which cultivated a sense of belonging, emotional support, and collective resilience. Neuro-somatic experiences, including the integration of music, guided imagery, and controlled breathing, further contributed to emotional regulation, reduced physiological stress responses, and promoted a sense of inner harmony and well-being. These elements provided participants with a holistic approach to stress management, enabling emotional healing and enhancing long-term resilience.

By balancing overwhelming job demands with strengthened personal resources, the GIM SMI promoted the health-enhancement process central to the JD-R framework. The intervention nurtured stress reduction, resilience, and coping, demonstrating its potential to mitigate the adverse effects of high-stress environments. Participants found a refuge amidst external challenges, embracing personal growth, self-discovery, and resilience as pathways toward healing and wholeness.

In conclusion, this study advocates for a holistic approach to employee well-being, leveraging the transformative potential of music and art to create resilient and harmonious workplaces. By synthesising insights from psychodynamics and neuroscience, this study deepens understanding of workplace stress and resilience,

paving the way for comprehensive interventions that foster well-being and flourishing. From a psychodynamic perspective, the music and art interventions provided a platform for participants to explore and reconcile internal conflicts, address defence mechanisms, and develop adaptive coping strategies, ultimately promoting personal growth and emotional well-being.

6.9 CHAPTER CONCLUSION

In this chapter, the findings were discussed to show how a GIM-based SMI appeared to support participants' stress management and coping capacity within the HE workplace context. This chapter reflected on the six interconnected themes to illustrate the value of GIM. The chapter began with an exploration of the stress landscape of planning an SMI, where participants' experiences reflected the interplay between organisational and personal demands and the need for innovative interventions.

Building on this foundation, the chapter explored how participants' resilience was strengthened through stress coping mechanisms, with a focus on the role of problem- and emotion-focused strategies in enhancing their ability to cope. This was followed by an exploration of empowering a compassionate and agentic sense of self, which illustrated how participants cultivated self-acceptance, authenticity, and autonomy through the GIM sessions.

The chapter then considered meaning-making through self-transcendent mechanisms, where participants connected with something greater than themselves through nature, spirituality, mindfulness, and psychodynamic processes. This was complemented by a discussion of group dynamics in GIM, highlighting how shared experiences of stress relief and emotional connection appeared to support collective resilience within the group setting. Finally, the chapter addressed transforming stress through neuro-somatic experiences, emphasising the integration of mind and body through music, breathing techniques, and emotional awareness, which facilitated profound emotional regulation and healing.

By integrating psychodynamic and neuroscientific perspectives with the lived experiences of participants, this chapter underscores the transformative potential of GIM-based SMIs in addressing workplace stress. Together, the themes presented a

holistic view of how these interventions promoted resilience, emotional well-being, and practical coping strategies for participants.

CHAPTER 7: SIGNIFICANCE AND CONCLUSION

7.1 INTRODUCTION

The central theme of this thesis, *"The value of a GIM-informed music- and art-based stress management intervention: a qualitative case study in a HE work context"* was introduced with the metaphor: *Life is like a piano. The white keys represent happiness, and the black keys represent sadness. But as you go through life's journey, remember that with music and art, you have the power to play both the white and black keys, creating a harmonious melody that can help you cope with the stresses in the workplace.* This quote captures the essence of the research, emphasising that both joy and adversity are part of life, and through creative interventions like music and art, individuals can navigate these stressful experiences with greater harmony and resilience. The thesis aimed to explore how HE employees experienced the value and effect of a music- and art-based SMI on their stress management and coping capacity. The purpose of this chapter is to indicate the significance of this study.

In this chapter I first present a precis of the study, then I continue to summarise all the chapters of this thesis and highlight the key findings. I further expand on this study's contribution to theory and practise. This is followed by a discussion of the strengths and limitations of the study. I continue providing recommendations for future research and the practical implications of this study. Finally, I discuss my own possible intervention model: Creative Coping and Resilience Enhancement Program (CCREP).

7.2. PRÉCIS OF THE STUDY

7.2.1 Restating the Research Problem and Objectives

The background and rationale for the study were grounded in my personal observations and experiences as a member of the HE community. Over the years, I witnessed how the unique stressors of the HE environment—academic pressures, administrative burdens, and emotional strain—impacted the well-being of personnel. These stressors are often exacerbated by the demands of balancing teaching, research, and service, making effective stress management vital. Grounded in the JD-R framework, the research examined how job demands overshadow job resources, leading to psychological detachment, exhaustion, and potential burnout. Recognising

the limitations of traditional stress management approaches, this research sought to explore alternative modalities, specifically music and art, as mechanisms for enhancing coping responses. The integration of creative interventions like these could potentially address the diverse needs of employees within this high-pressure environment. However, through the introduction of GIM sessions, employees reported resilience-building benefits. These included more constructive coping strategies, a sense of self-efficacy and self-agency, and positive neuro-somatic experiences. During my training as a GIM Fellow (with registration nearing completion), I witnessed first-hand the transformative potential of this intervention method in the lives of both adults and students. A key component of my training involved undergoing GIM sessions myself. These experiences proved invaluable, enabling me to access the unconscious and acquire transformative tools and skills to effectively manage stress and address various psychological challenges.

The problem statement identified the prevalence of stress in the HE workplace and the lack of effective coping interventions tailored to the specific needs of employees. Stress affects not only their mental health and well-being but also their overall performance and job satisfaction. By addressing the primary research question—*“How do HE employees experience a music- and art-based Stress Management Intervention in relation to their stress management and coping capacity?”* and its sub-questions, the study explored the psychological, neural, and experiential effects of these creative modalities on stress regulation, offering new insights into how these interventions can promote a healthier, more balanced work environment.

Using IPA, the study revealed that the intervention facilitated meaning-making through self-transcendence, fostered positive group dynamics, and bolstered psychological safety in the workplace. These outcomes emphasised the potential of GIM to support stress regulation and psychological well-being through more constructive coping processes. While resilience and neuroplasticity were not directly measured, the reported experiences suggest that such creative modalities may play a complementary role in fostering emotional adaptability. The findings contribute to a growing body of evidence supporting the use of expressive interventions in workplace stress management and offer preliminary insights into their possible relevance for promoting resilient functioning and healthier organisational climates.

7.2.2 Summary of Chapters

In Chapter 3, I explored the multifaceted nature of stress, emphasising its conceptualisation through the JD-R theory. This framework provides insight into how the job demands of employees, when exceeding available job resources, leads to health impairment and risk of burnout. I examined the impact of burnout in detail, identifying the crucial role of resilience and the development of a SOC as protective factors. The chapter also delved into various coping strategies, categorising them into problem-focused, emotion-focused, meaning-making, and avoidance coping mechanisms. Each of these strategies were examined in the context of workplace stress, providing a toolkit for addressing the different ways in which individuals manage stress. This exploration revealed the importance of tailored interventions to enhance employee resilience and overall mental health.

Chapter 4 examined innovative SMIs, moving beyond conventional methods like cognitive-behavioural techniques and mindfulness. I explored how music and art served as powerful mediums for emotional release and self-discovery, combining psycho-dynamic principles with the expressive nature of these creative forms. A particular focus was placed on GIM, highlighting how it blended music with the power of imagination to foster emotional processing and transformation. Additionally, the chapter explored theoretical perspectives from the neuroscience of music and art, illustrating how these interventions may influence neural circuitry and contribute to stress regulation. While no neurobiological data were collected, existing research was used to contextualise the potential mechanisms through which music and art-based approaches might support emotional processing and adaptive functioning. Group dynamics were also considered, as they played a significant role in shaping individual therapeutic experiences, fostering collective empathy, and contributing to overall recovery and resilience.

The findings of Chapter 5 revealed the complexities of workplace stress within the HE environment, highlighting challenges such as difficulties in achieving mindfulness, balancing personal and professional demands, and the lack of psychological safety due to poor communication from management. These stressors were further exacerbated by tight deadlines and financial instability. The therapeutic use of music and art, however, emerged as a valuable tool, enabling participants to express, process, and manage stress in metaphorical ways. The research demonstrated how

these interventions helped individuals balance emotional states and reclaim a sense of control. Participants experienced a wide range of emotions and group activities such as collaborative art, fostered empowerment and support. The chapter concluded with an exploration of meaning-making and self-transcendence through connecting with nature, spirituality, and mindfulness, revealing pathways to inner peace and resilience.

Chapter 6 contextualised the findings within the JD-R framework, emphasizing how excessive job demands, combined with inadequate psychological safety, led to health impairment risks for employees. The GIM intervention appeared to buffer against these stressors by strengthening participants' perceived personal resources, including enhanced self-efficacy and emotionally grounded, neuro-somatic experiences. While resilience was not directly assessed, participants' narratives suggested adaptive shifts commonly associated with resilient functioning. Participants reported improvements in problem-solving skills and the ability to manage anxiety through visualisation and breathing techniques. The role of group dynamics was further analysed, revealing how collaborative art fostered empathy, comfort, and reduced pressure, while also providing an environment for shared learning and emotional growth. This chapter highlighted the potential value of group settings in supporting coping responses and promoting personal growth. These processes appeared to contribute to stress management in both personal and professional contexts.

7.2.3 Key Findings

The findings of this study revealed that in the HE institution under investigation, the JD-R model was skewed heavily towards job demands, with employees experiencing a significant lack of psychological safety. The demanding nature of their roles, including high workloads, administrative pressure, and emotional strain, far outweighed the available job resources such as managerial support or opportunities for recovery. This imbalance led to health impairment, with employees reporting increased levels of stress, exhaustion, and disengagement. The psychological strain these individuals endured placed them at high risk for burnout. As a result, participants voluntarily engaged in the SMI through GIM, which incorporated music and art as key modalities. As evidenced in the findings, these creative processes appeared to play a pivotal role in supporting the development of personal resources and promoting overall health and well-being. While resilience was not directly measured, participants' reflections suggested experiences aligned with resilient functioning.

The key findings demonstrated that the SMI with GIM significantly contributed to participant employees' personal resources, which acted as a buffer against the adverse effects of excessive job demands. Through this intervention, participants reported improved self-efficacy, self-agency, and a heightened ability to manage stress more effectively. Music and art allowed for deeper emotional expression and cognitive processing, which in turn led to meaning-making and self-transcendence. These personal resources not only appeared to improve participants' ability to cope with immediate stressors but also seemed to strengthen their perceived capacity to manage future challenges. While resilience was not directly assessed, the development of adaptive coping strategies may indicate a movement toward more sustainable emotional regulation. Importantly, the GIM intervention also fostered positive neuro-somatic experiences, which contributed to stress regulation and overall well-being.

Approaching this study from an interpretive paradigm, I adopted constructionism as a qualitative inquiry method, using a hermeneutic phenomenological approach to explore the lived experiences of participants. This methodology allowed for an in-depth understanding of how individuals made sense of their experiences with stress. It also showed how the integration of music and art in their coping strategies provided psychological relief and appeared to support their coping capacity. Through this interpretive lens, the findings revealed that personal meaning and emotional expression are critical components of stress regulation, underscoring the importance of holistic interventions in managing workplace stress effectively. The implications suggest that integrating music and art into stress management programmes may offer a dynamic and emotionally engaging approach to support employees' coping and well-being, particularly in high-stress environments such as HE. These outcomes, while not confirming resilience as a measured construct, resonate with the characteristics of resilient responses.

The key findings of this study indicated that participants perceived workplace stress in HE to be primarily driven by excessive job demands and a lack of psychological safety, which they felt led to health impairments and a heightened risk of burnout. Participants reported feeling overwhelmed by tight deadlines, lack of managerial support, and emotional strain, which significantly impacted their well-being. Without intervention, this environment created a recipe for disengagement and potential burnout. However,

the research revealed that the GIM intervention provided an effective avenue for addressing these stressors.

Through the GIM intervention, participants appeared to access and strengthen personal resources such as self-efficacy and embodied (neuro-somatic) experiences. While resilience was not explicitly measured, several participants described shifts in coping and emotional processing that align with resilient functioning. These creative interventions, particularly using music and art, allowed individuals to process their emotions in a non-threatening way, enabling them to manage their stress responses more effectively. Participants reported enhanced emotional regulation, improved problem-solving skills, and a sense of emotional balance. Music and art acted as transformative tools for stress release, offering a unique, expressive outlet that promoted inner calm and self-awareness.

Additionally, group dynamics played a crucial role in the effectiveness of the intervention allowing participants to share in the emotional experiences of others. This group setting reduced individual isolation and created a sense of community, contributing to overall stress reduction in participants. The findings directly addressed the research question by demonstrating that music and art-based interventions significantly enhance the coping capacity of participant employees, improving their ability to manage workplace stress within the HE context.

The broader implications of these findings in the field of Industrial Psychology, particularly regarding health improvement in the work environment, have been found to be significant. Firstly, the findings suggest that traditional stress management strategies may not fully address the complex needs of employees in high-stress environments such as HE. The success of creative interventions like GIM and the use of art-based coping strategies highlights the importance of integrating non-traditional, holistic approaches into workplace health programs. By recognising the emotional and psychological benefits of these modalities, industrial psychologists can develop more comprehensive SMIs that cater to the diverse needs of employees, promoting mental well-being and reducing the risk of burnout.

Additionally, these findings emphasise the critical role of personal resources, such as resilience and self-efficacy in mitigating workplace stress. By fostering these resources through creative interventions, organisations can empower employees to take an

active role in managing their own health. This shift from purely external support to employee-driven health improvement aligns with the focus of contemporary industrial psychology on enhancing individual agency and coping capacities. The results also underline the importance of creating supportive environments where group dynamics, empathy, and collective approaches to stress management are encouraged, contributing to a healthier workforce and fostering conditions that may promote resilient functioning.

Finally, these findings advocate for the expansion of employee wellness programs to include expressive therapies like music and art as part of psychosocial support systems. By doing so, organisations can create a more supportive and psychologically safe work environment that not only improves the ability of employees to cope with stress but also contributes to overall organisational effectiveness. Industrial psychologists can use these insights to advocate for policy changes and design interventions that improve psychological safety, enhance emotional well-being, and ultimately foster healthier workplaces.

7.3 CONTRIBUTIONS TO THEORY AND PRACTICE

7.3.1 Theory

First and foremost, the study addressed a significant gap in the existing literature by focusing on the unique stress experiences of employees in HE (see *Table 1.1*). While previous research has examined stress and coping in various occupational settings, the specific challenges and stressors faced by individuals in the HE context have not received adequate attention (see *Table 1.1*). The research sought to fill this gap by shedding light on the stressors specific to HE and understanding how music and art as modalities can effectively contribute to developing more adaptive coping responses, encompassing strategies, mechanisms, and resources, within this stressful environment.

Moreover, the research contributed to the field of stress management in the disciplines of IOP, organisational well-being, and the meta-theories of neuroscience and psychodynamics. This interdisciplinary approach allowed for a comprehensive examination of stress and coping, drawing from multiple theoretical frameworks and providing a holistic understanding of the phenomena under investigation. By

integrating these perspectives, the research offers a nuanced and multifaceted exploration of stress management and coping responses.

This thesis advances existing theories such as the JD-R model, burnout theory, and resilience frameworks by demonstrating how creative interventions, specifically GIM, can enhance personal resources to counterbalance excessive job demands. Traditionally, the JD-R model focuses on the balance between job demands and resources, but this research extends the model by emphasising the role of personal resources—self-efficacy, emotional regulation, and neuro-somatic experiences—that can be cultivated through creative coping strategies. By integrating music and art into stress management, the research provides a more nuanced understanding of how resilience is not only a pre-existing trait but can be actively developed through targeted interventions, offering a dynamic addition to existing resilience theories.

Moreover, this work offers an exploratory contribution to burnout theory by illustrating how creative, emotionally engaging interventions such as GIM may support employees in managing stress more constructively. While the present study did not directly measure burnout prevention, the findings suggest that by addressing the emotional and psychological dimensions of stress in a personalised and meaningful way, expressive interventions have the potential to contribute to mental health and well-being. This points to a broader, more holistic perspective on workplace health promotion that merits further empirical investigation. The findings suggest that creative interventions may serve as valuable tools for enhancing coping and supporting emotional well-being in high-demand work environments such as HE. Although not empirically measured, resilience-related outcomes were reflected in participants' narratives, indicating potential for burnout prevention.

While this study did not employ neuroimaging techniques or physiological measures to directly investigate the psychological and neural mechanisms underlying the effects of music and art on stress management, in-depth post-intervention interviews provided retrospective insights into participants' perceptions of cognitive and emotional processes. These subjective accounts offer preliminary, experience-based perspectives that can inform theoretical considerations and point toward practical applications. However, future research using dedicated measurement tools and more robust evaluation designs would be required to examine these mechanisms in greater

depth (Abrams et al., 2018; Gerge & Pedersen, 2017). Furthermore, the integration of psychodynamic and neuroscientific perspectives added depth and richness to the research. It allowed for a holistic understanding of the mind-body connection and the potential for creative outlets to facilitate emotional regulation and well-being (Blom, 2014). The importance and the effect of the neurobiology of wellbeing was also emphasised by Jackson (2018) and Putkinen et al. (2021).

7.3.2 Practice

The findings of the case study also have the potential to generate transferable knowledge and best practices that can be shared across other HE institutions. By examining the experiences and coping strategies of employees in one institution, the research identified patterns, themes, and effective approaches that may have broader applicability. This can contribute to the development of evidence-based strategies and interventions that can be adapted and implemented in different HE contexts as suggested by du Plessis (2020) and Urbina-Garcia (2020).

Practically, this thesis offers direct applications for workplace stress management, particularly through the implementation of GIM as a coping response. The findings demonstrate that GIM can be effectively incorporated into employee wellness programs to enhance stress management capacity and promote emotional well-being. Industrial psychologists and HR professionals can integrate GIM into organisational health strategies, offering employees a structured but flexible tool for emotional expression and stress regulation. This approach is particularly relevant for workplaces with high levels of psychological stress, such as HE, healthcare, or corporate environments.

Additionally, the research suggests that organisations should prioritise developing personal resources in employees through creative interventions, offering opportunities for emotional growth and resilience development. Group-based GIM sessions can foster a sense of community and collective empathy, strengthening workplace relationships and improving overall morale. As a practical outcome, the thesis supports the implementation of art and music-based stress management workshops, alongside traditional stress reduction methods like cognitive-behavioural therapy, to offer employees more diverse, holistic coping strategies. These practices can be tailored to

different organisational settings, making them versatile tools for improving psychological safety and reducing burnout.

7.4. Strengths and Limitations of the Study

7.4.1 Strengths of the Study

A significant strength of this study is its repeated-intervention design, with six sessions conducted over a six-week period, allowing for the exploration of evolving participant experiences. This design allowed for a more comprehensive exploration of how participants responded to the GIM and art-based interventions over time, rather than capturing only a single snapshot of their experiences. The extended duration gave participants the opportunity to fully engage with the interventions, allowing the study to capture both immediate and evolving responses to these creative coping strategies. This strengthened the findings by demonstrating the cumulative impact of these interventions on emotional regulation, personal resource development, and overall stress management.

Another strength lies in the depth of qualitative insight provided through the hermeneutic phenomenological approach. By focusing on the live experiences of participants over the course of several sessions, the study was able to capture nuanced shifts in coping mechanisms, emotional resilience, and group dynamics. This enriched the understanding of how group-based interventions foster collective empathy and collaboration, enhancing workplace well-being through shared experiences. Additionally, the study's exploration of creative interventions provided a fresh perspective on how art and music can be powerful, non-conventional tools in promoting mental health in the workplace.

To capture the lived experiences of participants, this study employed a triangulation of data sources, ensuring a comprehensive and nuanced understanding of the phenomenon. Data were gathered through personal interviews, focus group transcripts, participants' artworks and the therapist's observation notes, offering rich qualitative insights. Additionally, participants' artworks created during the intervention provided a creative and expressive dimension to the data, while the WLQ results on stress levels added a quantitative perspective. This triangulated approach allowed for

the validation and deep exploration of findings, enhancing the credibility and depth of the study

7.4.2 Limitations of the Study

Despite the strengths, the study also has limitations. While the inclusion of six interventions over six weeks is beneficial, the relatively small sample size limits the generalisability of the findings to broader populations. The experiences and outcomes observed in this case study may not fully represent the diverse stress responses or coping styles present in larger or different organisational contexts.

Moreover, although the study captured changes over a six-week period, it did not assess the long-term sustainability of the improvements in stress management and resilience. Future research could expand on this by conducting follow-up assessments to determine whether the benefits of the interventions endure over longer periods.

Additionally, the subjective nature of qualitative reporting remains a limitation, as the reflections of participants are influenced by personal perspectives and emotional states, which may introduce bias. Further quantitative measures could provide additional objectivity to complement the rich qualitative data.

Although personal observational notes were taken during the SMI sessions, these were not systematically analysed as a formal data source. Their exclusion limited the opportunity to capture and report process changes and group development over time in a more structured manner. Incorporating such observational data in future workplace SMI research could enrich the depth of process evaluation and provide a more nuanced understanding of participant experiences.

7.5 Recommendations for Future Research

Longitudinal Studies on the Sustainability of Interventions: Future research should focus on conducting long-term follow-up studies to assess the sustainability of the benefits derived from GIM and art-based interventions. While this study demonstrated the short-term impact over a six-week period, further research could investigate whether these effects on stress management and resilience endure over six weeks or more, providing insights into the lasting influence of creative coping strategies in workplace settings.

Exploration of Diverse Work Environments: Expanding the research to include a broader range of work environments beyond HE could provide valuable insights into the generalisability of creative SMIs. Industries such as healthcare, corporate sectors, and public services, where employees face high job demands, could be examined to determine if similar interventions yield comparable improvements in personal resources and coping mechanisms.

Quantitative Measures to Complement Qualitative Insights: While qualitative methodologies have provided rich, in-depth insights, future research could benefit from integrating quantitative measures to assess the impact of creative interventions on stress management. Objective metrics such as stress hormone levels, heart rate variability, or standardised stress and resilience scales could be used alongside qualitative data to provide a more comprehensive understanding of the effects of these interventions.

Comparative Studies of Different Intervention Modalities: Future research could explore how different creative interventions compare in their effectiveness for stress management. Comparative studies between GIM, art therapy, mindfulness practices, and cognitive-behavioural interventions could help identify the most effective strategies for different types of stressors and individual preferences, offering more tailored approaches to workplace wellness programmes.

Investigation of Group Dynamics in Interventions: Given the positive role of group dynamics observed in this study, future research could delve deeper into how group cohesion, peer support, and collective empathy enhance the effectiveness of SMIs. Exploring the specific elements of group interaction that foster emotional regulation and resilience could provide more targeted recommendations for designing group-based therapeutic programs.

7.6 Practical Implications

The findings of this research offer valuable practical implications for workplace stress management, particularly in industries with high job demands, like HE. Firstly, the reported success of GIM and art-based interventions in supporting emotional regulation and the development of personal resources suggests that creative therapies hold promise for inclusion in employee wellness programmes. While resilience was not directly assessed, participants' experiences indicated patterns often associated

with resilient functioning. These interventions provide employees with accessible and effective ways to cope with stress, enhance their emotional well-being, and reduce the risk of burnout. Implementing such programmes can help organisations build a psychologically safe environment where employees feel supported and valued.

Traditional stress management approaches have predominantly focused on cognitive-behavioural techniques, relaxation exercises, and mindfulness practices as confirmed by Grover et al. (2017) and Janssen et al. (2018). While these methods have proven effective for many individuals, there is a need for diverse and alternative coping strategies (e.g., humour, nature, music and art, aroma, storytelling, religion) that cater to the unique preferences and needs of individuals.

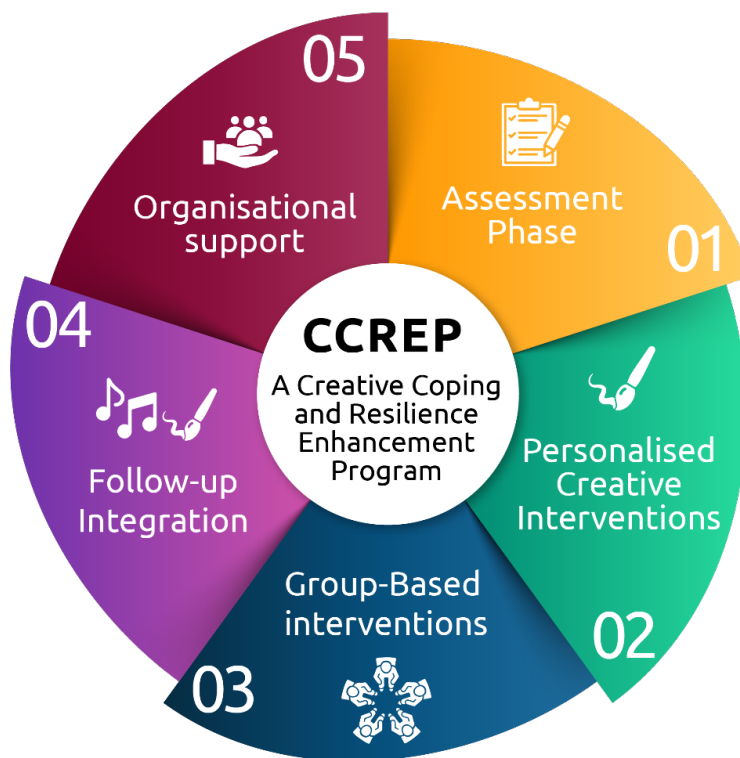
Additionally, the research highlights the importance of group dynamics in SMIs. The supportive and non-judgmental nature of group settings encouraged empathy, collaboration, and shared resilience among participants. This finding suggests that group-based interventions, such as collaborative art or music sessions, can be an effective component of organisational stress management strategies. Companies can foster a sense of community, where employees feel connected and supported, improving overall morale and mental health.

7.7 Possible Intervention Model: Creative Coping and Resilience Enhancement Program (CCREP)

The *Creative Coping and Resilience Enhancement Program (CCREP)* is my proposed model based on the findings of this study, designed to integrate music, art, and group-based interventions into workplace stress management. This model (*Figure 7.1*) consists of the following key components:

Figure 7.1

Creative Coping and Resilience Enhancement Program (CCREP)



Note: Original work by the researcher

7.7.1 Assessment Phase

Employees undergo initial stress and resilience assessments using standardised tools like the Perceived Stress Scale (PSS) and Resilience Scale (RS) to identify baseline stress levels and coping capacities. Individual preferences for creative outlets (music, art, guided imagery) are gathered to tailor the intervention.

7.7.2 Personalised Creative Interventions

GIM sessions are offered to employees, focusing on emotional expression and stress processing. These sessions are personalised based on individual stress profiles. Art-based therapy sessions are designed to allow employees to express stress visually, providing them with tools to metaphorically represent and process their emotional experiences.

7.7.3 Group-Based Interventions

Collaborative art and music sessions are organised to foster group cohesion, empathy, and collective coping. These sessions encourage employees to share their experiences and find collective strength in group support. Group reflections and discussions after each session help participants process their emotions and reinforce the development of personal resources like resilience and self-efficacy.

7.7.4 Follow-up and Integration

Ongoing assessments of participants track progress in stress management and resilience, using the same standardised tools employed in the initial phase. Employees are encouraged to incorporate creative practices into their daily routines, such as listening to music for relaxation or creative journaling, to maintain stress reduction and personal growth beyond the structured intervention.

7.7.5 Organisational Support

Regular check-ins by mental health professionals or therapists ensure continued psychological support. Management is encouraged to support these interventions by fostering a psychologically safe workplace and creating opportunities for employees to engage in creative outlets during their workday.

The CCREP model provides a holistic framework for improving stress management and resilience, with an emphasis on creative, emotional expression and group dynamics to enhance both individual and collective well-being in the workplace.

7.8 Concluding Remarks

In conclusion, this thesis has explored the pressing issue of workplace stress, particularly within the context of HE, and the potential of creative interventions like GIM and art-based therapies to enhance the coping mechanisms of employees. The findings highlight the potential value of personal resources—such as self-efficacy, perceived resilience, and neuro-somatic awareness—in managing stress within a demanding work environment. While not directly measured, these constructs emerged as recurring themes in participants' reflections. By integrating these creative modalities, organisations can shift from traditional, one-size-fits-all approaches to more holistic and personalised stress management strategies.

The study also underscores the importance of group dynamics in fostering emotional support and shared coping among employees. Participants' experiences suggest that these social processes may contribute to a sense of collective strength in the face of stress. Collaborative sessions using music and art not only improve individual well-being but also create a sense of community, enhancing the overall psychological safety within the workplace. Through this work, I have demonstrated that creative, expressive interventions offer both theoretical advancements and practical applications in the field of industrial psychology, contributing to a more human-centred approach to stress management and well-being in organisational settings.

Ultimately, this research provides a foundation for future explorations of creative stress management interventions, offering valuable insights into how organisations can promote healthier workforces and support adaptive functioning in the face of stress. By adopting models like the proposed Creative Coping and Resilience Enhancement Program (CCREP), employers can take meaningful steps towards enhancing employee well-being, preventing burnout, and fostering an environment where individuals thrive both personally and professionally.

As HE institutions navigate the complexities of the modern workplace landscape, attending to the holistic well-being of their employees emerges as not only a moral imperative but a strategic imperative for cultivating a resilient, innovative, and engaged workforce. Ogamba et al. (2021) reiterated that many HE Institutions prioritised corporatisation and student satisfaction, often inadvertently overlooking the well-being of academic staff, despite university management presenting staff welfare as a key priority. In addition, Riihimäki (2019) stressed that therapeutic and ethical considerations are regarded as essential, including practice design, goal setting, and addressing the specific needs of each employee by tailoring the approach to foster positive changes in their situation.

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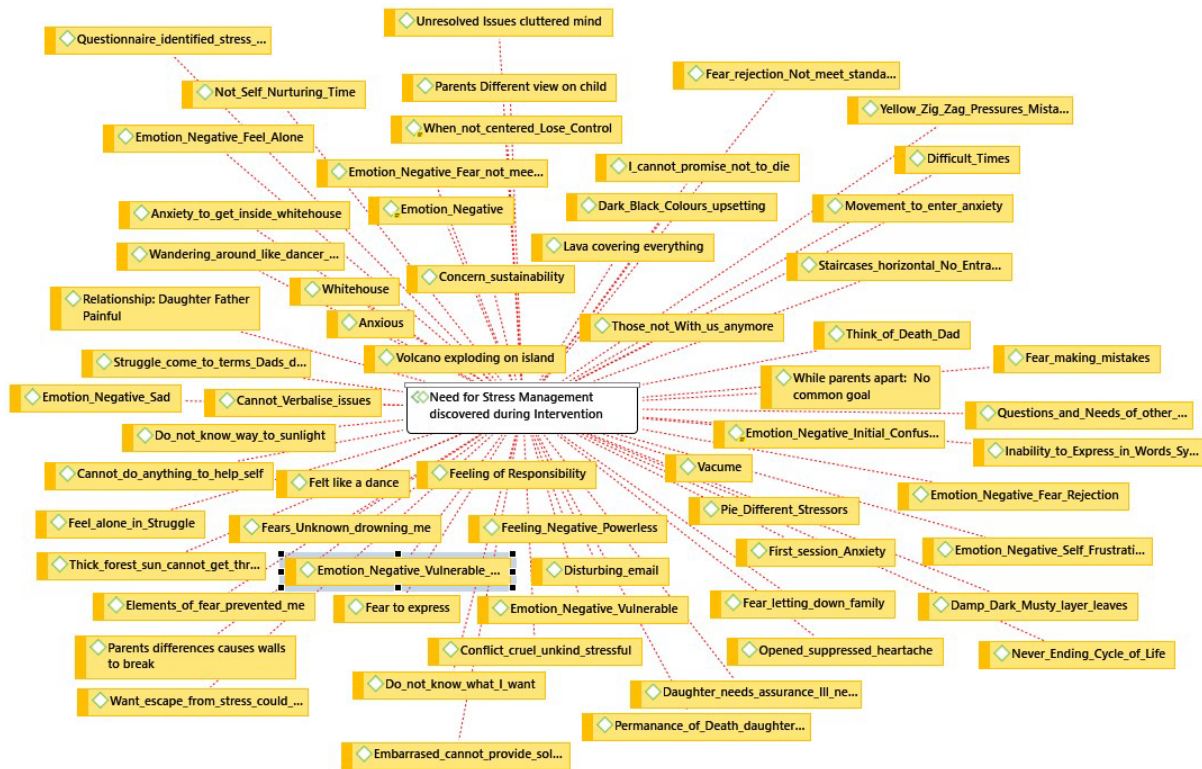
ADDENDA

Addendum 1 – Analysis mapped into networks

1a Group dynamics experience



1b Need for stress management



1c Picture interpretation



1f Improvement in stress handling



Addendum 2 – Participant Information and Consent

1



PARTICIPANT INFORMATION SHEET

Ethics clearance reference number:

Research permission reference number:

10 August 2018

Title:

Stress Management in the Workplace: Exploring Coping Response Through Music and Art

Dear Prospective Participant

My name is Kobus Fourie and I am doing research with Prof. Antoni Barnard a Professor in the Department of Department of Industrial and Organisational Psychology School of Management Sciences towards a PhD Industrial & Organisational Psychology at the University of South Africa. We have some funding from UNISA and TUT for the practical application. We are inviting you to participate in a study entitled "Stress Management in the Workplace: Exploring Coping Response Through Music and Art".

WHAT IS THE PURPOSE OF THE STUDY?

I am conducting this research to find out if Music and Art has an effect on stress management in the workplace.

WHY AM I BEING INVITED TO PARTICIPATE?

Why did you choose this particular person/group as participants?

We found your details from your reaction on our internal advertisements, as well as our TUT webmail communication. For the purposes of this study it is important that the participant should indicate that they experience stress in their working environment. You indicated that it was indeed the case with you. The approximate number of participants would be between ten and twelve.



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WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

Describe the participant's actual role in the study.

The study involves *audio recording of semi-structured interviews and focus groups, after the five music and art intervention sessions*. Indicate what sort of questions will be asked or show the questions on this document.

Examples of the personal interview questions will be:

- “You recently participated in an SMI. Tell me the story of why you decided to participate in the SMI”? (The idea with this question would be to elicit a narrative that would reveal that the person needed stress management due to struggling to cope with several issues in work-life).
- “How did the music-based activities during the SMI work for you? What did you feel/think differently after the SMI”?
- “How did the art-based activities during the SMI work for you? What did you feel/think differently after the SMI”?
- “Was there any improvement in your handling of stress after the SMI? Please elaborate”.
- “What do you feel and think differently as a result of participating in the SMI”?
- “How do you now react to the initial stressors that you told me about that motivated you to participate in this SMI”?

A possible question for the focus group is:

“The purpose of this focus group is to discuss your experience of the SMI and how it impacted on the way that you think and feel and the way in which you now handle things the same or differently. Who would like to start?”

The expected duration

Your expected duration of participation and the time needed to complete specific research activities like the interventions, interviews and focus group:

1. Interventions: 5 x 1.5 hours = 7.5 hours (over a period of 5 weeks – 1.5 hour per week)
 2. Personal Interview: 30 minutes (once only)
 3. Focus Group: 1.5 Hours (once only)
- Total Hours over a 7-8 week period: 9.5 Hours

Please ensure that you obtain **permission** from your Line Manager to be available at the specific time slots for the duration of the study.



Anonymity and Confidentiality

Please be aware that the researcher is both a postgraduate researcher at UNISA, as well as an employee at TUT. The information received during the project will only be used for research purposes and not be released for any employment-related performance evaluation, promotion and/or disciplinary purposes.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary and you are under no obligation to consent to participation. If you 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. *No identifiable details will be made available during the research. You will be given an anonymous number, e.g. Participant 3.*

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

According to the experienced Music and Art Therapist (registered with the HPCSA) there is a good chance that you will experience a destressing effect due to the Music or Art intervention. As such, this should be a good motivation for you to participate in this research. If you have such a positive destressing experience, it will benefit you in your work environment as well as in your personal life. Your institution might then have less stressed employees.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

According to the experienced and registered (HPCSA) Music and Art Therapist, the chances are that you might rather experience a positive than a negative feeling. Although in some cases a more sad emotional experience might be experienced. In such a case a registered Psychologist or Counsellor will counsel you on request and refer you if needed. They will be on standby during the intervention sessions as well as during the interviews and focus group session.

During the Focus group the idea is not to share personal information, and the chances are slim that you might have a negative experience. In the rare event of this happening, a registered psychologist and counsellor will be available to assist you. Your focus group will of course consist of approximately 10 candidates.



Although all participants will be convinced to keep everything confidential, by signing a non-disclosure confidentiality form, there is a possibility that a specific participant might leak some information. Therefore you are advised not to share sensitive personal information within the group.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research OR your name will not be recorded anywhere and no one will be able to connect you to the answers you give. Your answers will be given a code number or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

A transcriber will have access to the data, but in this case you will only be identified by your pseudonym or unidentifiable code. The researcher worked with this transcriber previously, and she also signs a non-disclosure confidentiality agreement. Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Your anonymous data may be used for other purposes, such as a research report, journal articles and/or conference proceedings. Your privacy will be protected in any publication of the information by not identifying you as participant in any recognizable form. Please keep in mind that it is sometimes impossible to make an absolute guarantee of confidentiality or anonymity, e.g. when focus groups are used as a data collection method. Although the members of the focus group will also sign a non-disclosure confidential document.

A focus group is a group of people with the same interest, which is assembled with the purpose of sharing their experience during a certain event or experience. While every effort will be made by the researcher to ensure that you will not be connected to the information that you share during the focus group, I cannot guarantee that other participants in the focus group will treat information confidentially. I shall, however, encourage all participants to do so. For this reason I advise you not to disclose personally sensitive information in the focus group.



HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet *at the researcher's home* for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. After this period, hard copies will be shredded and disposed, and electronic copies will be permanently deleted from the hard drive or any other storing device of the computer through the use of a relevant software programme.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

No incentives or payment will be obtained when partaking in this study.

HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of the College of Economic and Management Sciences, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Jacobus Fourie at kfourie@telkomsa.net. The findings are accessible for six months.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Jacobus Fourie at kfourie@telkomsa.net

Should you have concerns about the way in which the research has been conducted, you may contact Prof. Antoni Barnard at barnaha@unisa.ac.za. Contact the research ethics chairperson of the CAES General Ethics Review Committee, Prof EL Kempen on 011-471-2241 or kempeel@unisa.ac.za if you have any ethical concerns.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.



Jacobus Fourie

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 inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the *voice recording* of the *personal interview* and the *focus group* I'll be attending.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname..... (please print)

Participant Signature.....Date.....

Researcher's Name & Surname **Jacobus Fourie** (please print)

Researcher's signature  Date **10 August 2018**



Addendum 3 – Confidentiality Code of Conduct Focus Group Template



Faculty of Economic and Management
Sciences

Department of Industrial and
Organisational Psychology

FOCUS GROUP MEMBER CONFIDENTIALITY AGREEMENT

I, _____, hereby agree to:

1. Abide by the confidentiality requirements of this study, as approved by the Research Ethics Review Committee of UNISA, by ensuring that the identities and information of the participants are not revealed during and after the course of study;
2. Keep all the research information shared with me confidential by not discussing or sharing the research information in any form or format with anyone other than the Principal Investigator(s);
3. After consulting with the Principal Investigator(s), erase or destroy all research information in any form or format regarding this research project that is not returnable to the Principal Investigator(s) (e.g. information stored on computer hard drive).

If you have any questions or concerns about this study, please contact:

Prof. Antoni Barnard

email: barnaha@unisa.ac.za

This study has been reviewed and approved by the Senate Committee for Research Ethics at UNISA. For questions regarding your rights and/or the ethical conduct of research, contact the Research Ethics Review Committee (CEMS-RERC) Chairperson, Prof EL [Kempen at kempeel@unisa.ac.za](mailto:kempeel@unisa.ac.za) or leepibj@unisa.ac.za

Therapist/Transcriber/Data Capturer/Focus Group Member:

Print name Signature Date

Principal Investigator:

Print name Signature Date

Addendum 4 – GIM Musical tracks used during SMI's (Music Therapist)

Contemporary Pieces:

- *A Childhood Remembered* (album) by Kostia and Arkenstone – track names *Green Door* and *Cello Song*
- *Once in a Red Moon* (album, 2002), by Secret Garden, composed by Rolf Lovland, performed by Rolf Lovland and Fionnuala Sherry – track name *The Promise* (many relaxing tracks)
- *White Stones* (album 1997), by Secret Garden (Composed by Rolf Lovland, performed by Rolf Lovland and Fionnuala Sherry), track name *Home* (many relaxing tracks)
- *Life Blood* (album) by Joanne Shenandoah – track 1 *Messenger* and track 3 *When eyes meet* – (most tracks are relaxing)
- *Sunsinger* (album) by Paul Winter – track names *Dolphin Morning* and *Reflections in a summer pond* (very old – from 60's/70's, some other very relaxing tracks as well)
- *Celtic Woman* (album 2005), by *Celtic Woman* – track name *Nella Fantasia* (original music, *Gabriel's Oboe*, from the motion picture *The Mission*)
- *Migrations* (album) by Peter Kater and R.C. Nakai – track names *Wandering* and *Walking the path*
- *Pagan Saints* by Peter Kater – track name *Dirge*
- Vollenweider – *Dancing Lion*
- Movie *Gladiator* sound track – *Now we are free*

“Classical” Pieces:

- JS Bach: (Stokowski version): *Sheep may safely graze*
- JS Bach: *Air on a G-string*
- Massenet: *Suite for Orchestra*
- Chopin: *Concerto for Piano no.1 in e minor, Romance – Larghetto*