

**THE INFLUENCE OF EMOTIONAL INTELLIGENCE AND MINDFULNESS ON
SELF-LEADERSHIP AMONG GRADUATES IN THE EARLY CAREER STAGE**

by

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DECLARATION

I, Anneline Hattingh, student number 2013021403, hereby declare that the entirety of this thesis, unless explicitly specified otherwise, is an original scholarly work authored solely by me and has not been submitted previously for any academic qualification at any other institution.

All citations and contributions originating from external sources, encompassing but not limited to the internet, are rigorously cited in adherence to the APA 7th Edition standards.

Furthermore, I confirm that ethical clearance for the research conducted in this thesis has been secured from the Department of Industrial Psychology at the University of the Free State.

Signed: Anneline Hattingh

Date: 08 December 2023

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ABSTRACT

The study embarked on a comprehensive examination of the intricate dynamics among emotional intelligence, mindfulness, and self-leadership within the context of early-career graduates, aiming to discern the extent to which emotional intelligence and mindfulness influenced self-leadership. A secondary objective involved exploring gender differences in self-leadership levels. Employing a non-experimental, quantitative survey research design, electronic self-administered questionnaires collected data from 160 participants enrolled in a Free State higher education institution.

The study applied Multiple Regression Analysis to unravel the relationships under scrutiny. Significantly, the analysis revealed a positive relationship between emotional intelligence and self-leadership. Higher emotional intelligence levels were associated with elevated self-leadership behaviours, aligning with existing literature (Chen & Liang, 2013). This finding underscored the pivotal role of emotional intelligence in shaping effective leadership behaviours, emphasising the importance of emotional regulation and awareness in fostering self-directed leadership skills (Goleman et al., 2002).

In the context of mindfulness and self-leadership, the analysis yielded no statistically significant relationship. This nuanced finding suggested that, within the specific parameters of this study, mindfulness may not directly predict self-leadership behaviours among early-career graduates. This outcome prompted further exploration into the distinct impacts of emotional intelligence and mindfulness on self-leadership, providing a nuanced understanding of the multifaceted interplay among these constructs.

The study underscored the critical role of emotional intelligence in influencing self-directed leadership skills, evidenced by the positive correlation established through multiple regression analysis. The findings aligned with Chen and Liang's (2013) findings, highlighting the positive correlation between emotional intelligence and self-leadership components such as self-awareness and self-regulation. The study thus contributed to the theoretical understanding of the influential factors shaping self-leadership behaviours among early-career graduates.

The finding also indicated gender difference in self-leadership levels, with females demonstrating higher levels of self-leadership than their male counterparts. The statistical significance of this difference added a noteworthy dimension to the exploration of self-leadership, suggesting potential gender-related nuances in leadership behaviours among early-career professionals. However, caution was advised in interpreting these results due to potential measurement variance, emphasising the need for further exploration in future studies.

In conclusion, this study not only enriched the understanding of the relationships between emotional intelligence, mindfulness, and self-leadership but also uncovered gender-related disparities in self-leadership levels among early-career graduates. The implications extended to the fields of career and industrial-organisational psychology, providing valuable insights for practitioners, and laying the groundwork for future research endeavours. The recommendations for future research, including the integration of established emotional intelligence competency models and exploration of context-specific mindfulness interventions, aimed to enhance the depth and generalisability of findings in diverse contexts (Goleman & Boyatzis, 2007; Dane & Brummel, 2014).

Keywords: *Self-leadership, Emotional Intelligence, Mindfulness, Graduates, Early career stage.*

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CHAPTER 1: INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION

The global workforce has seen a significant transformation driven by a diverse range of socio-economic, technological, and environmental factors, fundamentally reshaping jobs and required skills (World Economic Forum, 2016). Additionally, the pervasive influence of artificial intelligence (AI) and automation technologies has revolutionised work processes and skill requirements (Nurski, 2022) and the COVID-19 pandemic accelerated remote work adoption. In an increasingly volatile, uncertain, complex, and ambiguous (VUCA) world, adaptability and resilience have gained paramount importance. Globalisation continues to impact employment, necessitating cross-cultural competencies, while the growing focus on environmental sustainability has spurred the rise of green jobs. These multifaceted factors collectively drive the ongoing transformation of the employment landscape (Smith & Johnson, 2022). Graduates entering this dynamic job market face numerous challenges demanding adaptability and a commitment to continuous learning (Jones & Lee, 2023). Within this evolving landscape, employers increasingly seek candidates with technical competencies and vital soft skills, including self-leadership, emotional intelligence, and mindfulness (Jackson & White, 2022).

In this chapter, a holistic approach was taken to analyse the evolving global workforce landscape and its extensive consequences for recent graduates. Additionally, an investigation into the South African work environment was carried out, with a particular emphasis on its impact on graduates in terms of self-leadership, emotional intelligence, and mindfulness. The chapter will outline research questions, hypotheses, and objectives, culminating in a comprehensive summary.

1.2 BACKGROUND AND PROBLEM STATEMENT

From a global perspective, technological advancements, digitisation of work processes, automation, artificial intelligence, and digitalisation have played pivotal roles in transforming job markets across sectors and have fundamentally altered job characteristics across industries (Anderson & Smith, 2022; Brown, Anderson & Lee, 2021). Automation has displaced routine tasks while creating new opportunities in areas demanding creativity and complex problem-solving (Smith et al., 2022). Additionally, the global economic landscape, influenced by trade tensions and market volatility,

has introduced uncertainties regarding job stability and career advancement (Johnson et al., 2021). Globalisation, thus, has intensified competition for jobs on a global scale, necessitating greater mobility and adaptability among job seekers (Brown & Lee, 2022).

Furthermore, the gig economy, characterised by short-term contracts and freelance work, has introduced new complexities to the employment landscape, further complicating this transformation (Brown & Lee, 2022). Conversely, the gig economy has ushered in alternative work arrangements, offering flexibility but often lacking the job security and benefits associated with traditional employment (Johnson & Williams, 2023).

In response to these shifts, evolving employer expectations have emphasised soft skills, adaptability, and resilience (Smith & Davis, 2021). Therefore, candidates who excel in an environment marked by volatility, uncertainty, complexity, and ambiguity (VUCA) have become in high demand, with such abilities now crucial for navigating the swiftly evolving job market and making significant contributions to organisational achievements (Smith & Davis, 2021).

Navigating this ever-evolving professional world, graduates must grapple with the extensive implications of these changes. Graduates, those who have successfully completed a course of study or training, including obtaining diplomas or university degrees (Oxford Dictionary, n.d.), find themselves at the nexus of profound changes in the global workforce. Graduates must adapt to rapidly evolving job requirements, acquire a diverse set of skills, and demonstrate resilience in the face of uncertainty (Brown et al., 2021). The gap between educational curricula and the dynamic demands of the job market remains a pressing concern (Jackson & Lee, 2023). Additionally, the profound impact of these global shifts on graduates' employability and career prospects warrants deeper exploration, particularly in the context of a post-COVID-19 world (Anderson & Smith, 2022).

Turning the focus to the South African landscape, it becomes evident that graduates in South Africa encounter a unique set of challenges within the broader context of global workforce dynamics. For example, the younger population in South Africa faces ongoing challenges in the job market, experiencing a higher unemployment rate compared to the national average. As per the data from the Quarterly Labor Force Survey (QLFS) in the initial quarter of 2023, the unemployment rate was 63.9% for individuals aged 15-24 and 42.1% for those aged 25-34, surpassing the national rate, which currently stands at 34.5% (Statistics South Africa, 2023). Structural issues, including skills

mismatches and limited opportunities in certain sectors, further contribute to the challenge (Department of Labor, 2023).

The educational systems in South Africa play a pivotal role in shaping graduates' preparedness for the workforce. In response to the evolving job market, the country has implemented reforms to align curricula with current job market needs (Ministry of Education, 2023). However, questions persist regarding the effectiveness of these reforms and their ability to equip graduates with the necessary skills for success (Ministry of Education, 2023). Furthermore, socio-economic factors, such as income inequality and access to quality education, significantly influence graduates' employability and career prospects in South Africa. There are more than 10 million individuals in South Africa aged 15-24 years, however only 2.5 million of them are part of the labour force, encompassing both employment and unemployment. A significant majority of this demographic, amounting to 7.7 million or 75.1%, is categorised as being out of the labour force, meaning they are inactive. The primary factor contributing to their inactivity is discouragement, indicating a loss of hope in securing a job aligned with their skills or within their residential area (Statistics South Africa, 2023). Limited access to quality education in certain regions and disparities in opportunities exacerbate challenges faced by graduates from disadvantaged backgrounds (Smith & Johnson, 2022). Additionally, the impact of the Grey Listing by the Financial Action Task Force (FATF, 2023) on South Africa's economy could further exacerbate the unemployment problem, making it harder to attract foreign investment and create new job opportunities (Schoeman & Du Toit, 2021).

Addressing these challenges is crucial for enhancing graduate employability and contributing to the country's economic development (Brown & Lee, 2022). As graduates traverse the early stages of their careers, they encounter myriad tasks and challenges (Coetzee, 2016). One of the primary responsibilities during this phase is adapting to the demands of the workplace and acquiring new skills. Graduates must take ownership of their learning and development to stay relevant in the job market (Du Plessis & Van Niekerk, 2019). They should actively seek opportunities for growth, engage in continuous learning, and enhance their skill sets through training programs, online courses, or professional certifications (Fletcher & Bailey, 2020).

Du Plessis and Van Niekerk's (2019) research underscores the critical role of proactive learning in graduates' career development. Graduates who take initiative in seeking opportunities for growth tend to exhibit higher levels of adaptability and resilience, positioning themselves as valuable assets

to employers in the dynamic world of work. Furthermore, Fletcher and Bailey (2020) emphasise the importance of ongoing skill enhancement, noting that graduates who invest in developing their capabilities through various learning avenues are better equipped to navigate the evolving job landscape. In this regard, self-leadership, emotional intelligence, and mindfulness can serve as foundational skills, enabling graduates to excel in their continuous learning journey and further enhancing their career prospects (Fletcher & Bailey, 2020).

Self-leadership, a competency defined as the ability to take responsibility for one's actions, set goals, and manage emotions to achieve those goals (Manz, 1986), emerges as a critical skill for graduates in this career stage. In the rapidly changing world of work, self-leadership empowers graduates to set clear goals, manage their time efficiently, and take responsibility for their actions (Manz & Neck, 2017). The capacity to set clear goals and proactively manage one's actions aligns with the findings of Stander and Van Zyl (2018), who assert that self-leadership skills are essential for graduates in proactively shaping their career paths and seizing emerging opportunities. This self-influence process is vital for graduates as they navigate the complexities of the modern workforce (Houghton, Neck & Mans, 2020).

Strong self-leadership skills tend to exhibit higher levels of job satisfaction, career success, and overall well-being (Houghton & Neck, 2002; Stander & Van Zyl, 2018). Research conducted by Houghton and Neck (2002) underscores the positive impact of self-leadership on job satisfaction and career success. Graduates who can effectively regulate their behaviour and emotions in the workplace are more likely to experience greater job satisfaction and success in their chosen careers, contributing to their overall well-being (Houghton & Neck, 2002).

Breevaart, Bakker, Demerouti, and Derks (2015) discovered that employees who demonstrated high levels of self-leadership were more adept at handling the demands of the new work environment and had reduced levels of stress and burnout. Their research highlights the stress-buffering effect of self-leadership, especially advantageous for employees at the beginning of their careers (Breevaart et al., 2015). Moreover, Manzoor and Alvi's (2019) study found that self-leadership skills are crucial in developing job performance. Individuals who possess these skills are better equipped to control their learning and development, build resilience, and stay relevant in a rapidly changing work environment (Manzoor & Alvi, 2019).

According to Coleman et al., (2002) self-leadership and Emotional Intelligence (EI) are interconnected constructs that synergise to empower graduates in their career journey. As graduates' step into the early stages of their professional lives, they face a dynamic and challenging work environment. As previously discussed, self-leadership includes the ability to set clear goals, manage actions, and take responsibility for one's behaviour (Manz, 1986). When integrated with EI, these competencies enhance graduates' self-awareness and self-regulation and enable them to navigate the intricate landscape of interpersonal relationships and emotional dynamics within the workplace (Coleman et al., (2002). The incorporation of graduates' self-awareness and self-regulation empowers them to excel in a range of career aspects, spanning from individual performance to leadership roles (Many, 1986). Connecting emotional intelligence with self-leadership, it becomes evident that these constructs are complementary (Coleman et al., 2002). Self-leadership equips graduates with the ability to set clear goals, manage their time, and proactively shape their actions (Manz & Neck, 2017). When combined with EI, graduates can not only set these goals but also foster strong relationships and effectively manage the emotional aspects of their journey. For instance, self-leadership helps graduates take responsibility for their actions and behaviours, while EI enables them to do so while considering the emotional impact on themselves and others. Leadership roles that possess dual competence can be especially influential as they involve the capacity to establish a clear vision and inspire others while also considering their emotions, which can significantly impact one's success (Goleman, 1998).

Mindfulness enhances self-leadership by improving self-awareness, self-control, and self-efficacy. Individuals gain deeper insights into their thoughts and emotions, aiding their self-leadership journey (Manz & Neck, 2017). Mindfulness fosters self-control, enabling graduates to regulate their actions and emotions, a key aspect of self-leadership. Additionally, it boosts self-efficacy, enhancing individuals' belief in their ability to succeed in their careers (Munir, Azam & Azam, 2021; Manz & Neck, 2017).

Mindfulness, defined as being present without judgment, plays a vital role in personal and professional development, complementing emotional intelligence and self-leadership (Hafenbrack, Kinias & Barsade, 2014). In today's VUCA world, mindfulness equips graduates to cope with challenges, including job-related stress and uncertainty (Liu et al., 2021; Chiesa & Serretti, 2010).

Reb, Narayanan, and Ho's (2020) research highlights mindfulness's practical benefits in the workplace, including reduced stress and increased job satisfaction. Individuals practicing mindfulness excel in decision-making despite distractions and information overload, enhancing their overall job performance (Lomas et al., 2019). The profound impact of mindfulness extends to self-leadership by promoting self-awareness, self-regulation, and self-reflection, which are foundational components of self-leadership (Sarros, Cooper, & Santora, 2008). Individuals practicing mindfulness are more likely to self-reflect, critically evaluating their behaviours and actions to improve and grow as professionals. Engaging in introspection reinforces self-awareness and self-regulation, enabling graduates to assume responsibility for their actions, establish well-defined objectives, and efficiently manage their time and resources (Manz & Neck, 2017).

In essence, mindfulness serves as a cornerstone construct for individuals in the modern world of work. It offers a transformative pathway to bolster emotional intelligence, self-awareness, and self-leadership, empowering individuals not only to endure but also to flourish in the dynamic and demanding professional landscape they encounter (Liu et al., 2021).

Self-leadership, emotional intelligence, and mindfulness do not operate in isolation. Instead, they form a powerful triad that equips graduates to overcome obstacles, navigate complex relationships, and thrive in the new world of work. Self-leadership empowers individuals to set clear goals, manage their time efficiently, and take responsibility for their actions (Manz & Neck, 2017). Emotional intelligence enables them to recognise and manage their own emotions, as well as those of their colleagues, fostering stronger interpersonal relationships (Goleman et al., 2002). Furthermore, mindfulness practices enhance employees' self-awareness and resilience, equipping them for their challenges (Lomas et al., 2019).

It is crucial to note that these competencies do not exist in isolation but rather interact synergistically, offering individuals a comprehensive skillset that empowers them to surmount obstacles and successfully navigate the intricate and ever-evolving world of work (Hafenbrack, Kinias & Barsade, 2014). To gain a deeper understanding of the impact of these competencies on individuals' career outcomes and overall well-being, further research is imperative (Reb, Narayanan, & Ho, 2020).

In conclusion, graduates face a rapidly changing global workforce landscape characterised by volatility, technological advancements, and economic shifts (Statistics, 2023) The challenges are

even more pronounced in South Africa, with high unemployment rates and a skills mismatch (Statistics South Africa, 2023). In the complex and challenging environment that graduates face in the early stages of their careers, self-leadership, emotional intelligence, and mindfulness are essential competencies. Self-leadership empowers graduates to set clear goals, manage their time efficiently, and take responsibility for their actions (Manz & Neck, 2017). Emotional intelligence, on the other hand, enables them to understand and manage their emotions, as well as those of others, leading to stronger interpersonal relationships (Goleman et al., 2002). Mindfulness practices, in turn, help individuals to develop self-awareness and resilience, further preparing them to face the challenges of their careers (Liu et al., 2021).

1.3 RESEARCH QUESTIONS

From the previous introduction and problem statement, the following research questions are identified:

Primary research question: Does emotional intelligence and mindfulness influence self-leadership amongst graduates in the early career stage?

Secondary research question: Does gender impact self-leadership amongst graduates in the early career stage?

1.4 RESEARCH OBJECTIVES

In answering the research questions, the research objectives are stated as follows:

Primary research objective: To determine by means of a non-experimental research design whether emotional intelligence and mindfulness influence self-leadership amongst graduates in the early career stage.

Secondary research objective: To determine using a non-experimental research design whether gender impacts the levels of self-leadership amongst graduates in the early career stage.

1.5 RESEARCH HYPOTHESIS

The following research hypotheses resulting from the research objectives were investigated in this study:

Hypothesis 1:

Null Hypothesis (H₀₁): The proposed structural model of self-leadership, emotional intelligence and mindfulness does not demonstrate close fit.

Alternative Hypothesis (H_{a1}): The proposed structural model of self-leadership, emotional intelligence and mindfulness demonstrate close fit.

H₀₁: RMSEA > 0.05.

H_{a1}: RMSEA < 0.05.

Hypothesis 2:

Null Hypothesis (H₀₂): Emotional intelligence has no statistically significant influence on self-leadership amongst graduates in the early career stage.

Alternative Hypothesis (H_{a2}): Emotional intelligence has a statistically significant impact on self-leadership amongst graduates in the early career stage.

Hypothesis 3:

Null Hypothesis (H₀₃): Mindfulness has no statistically significant influence on self-leadership amongst graduates in the early career stage.

Alternative Hypothesis (H_{a3}): Mindfulness has a statistically significant influence on self-leadership amongst graduates in the early career stage.

Hypothesis 4:

Null Hypothesis (H₀₄): Gender has no statistically significant difference in the scores achieved on self-leadership amongst graduates in the early career stage.

Alternative Hypothesis (H_{a4}): Gender has a statistically significant difference in the scores achieved on self-leadership amongst graduates in the early career stage.

Statistical hypothesis for the various pathways in the proposed model

H₀₂: $\gamma_1 = 0$

H_{a2}: $\gamma_1 > 0$.

H₀₃: $\gamma_2 = 0$

H_{a3}: $\gamma_2 > 0$.

Secondary research hypothesis question hypothesis in statistical terms

H_{o4}: $\mu_0 = \mu_1$

H_{a4}: $\mu_0 \neq \mu_1$

1.6 OUTLINE OF THE SECTIONS

The mini dissertation is structured as follows:

In Chapter one, presented an exploration of the introduction and problem statement, research questions, objectives, and hypothesis.

Chapter two provided an examination of the existing self-leadership literature, encompassing definitions, theories, models, and prior research. Furthermore, this chapter will also explore potential gender variations in self-leadership.

Chapter three offered a review of the literature pertaining to emotional intelligence. This section emphasised definitions, theories, models, and past research findings related to emotional intelligence. Additionally, it delved into the relationship between emotional intelligence and self-leadership.

The fourth chapter delved into the literature on mindfulness, incorporating definitions, theories, models, and previous research findings. This section discussed the interconnection between mindfulness and self-leadership, as well as the correlation between emotional intelligence and mindfulness.

Chapter five was dedicated to the research methodology, encompassing a discussion on the selection of participants, the instruments for data collection, and the statistical methods, which include both descriptive and inferential statistics, proposed for the study.

Chapter six presented a comprehensive overview of the research findings, utilising descriptive and inferential statistics to summarise the collected data.

Concluding the study, chapter seven addressed the study's conclusions, considering limitations such as sample size, and provide recommendations for future research. This approach is designed to contribute to academic discourse, foster enhanced understanding, and stimulate further investigations in the field.

1.7 CONCLUSION

In conclusion, the research addressed the need to equip graduates with essential competencies for a successful entry into the workforce. By concentrating on this specific group, the study made two significant contributions to the existing literature. Firstly, it enhanced the understanding of the factors that contribute to self-leadership among early career graduates. While self-leadership has been explored in various contexts, limited research has specifically focused on this critical transitional period. Identifying these predictors can provide valuable insights for developing strategies and interventions to support graduates in their early career journeys. Secondly, the study shed light on better preparing graduates for the workforce by identifying personal attributes instrumental in fostering self-leadership behaviours. The knowledge served to inform educational institutions, career counsellors, and employers in designing programs and initiatives aimed at enhancing self-leadership capabilities among graduates, thereby increasing their chances of success in their early careers.

Chapter 1 of the study provides background information on the research problem, presented a preliminary literature review of the variables under investigation, and established the context and rationale for studying the predictors of self-leadership among early career graduates. It also outlined the research questions, objectives, and hypotheses guiding the study, aiming to contribute significantly to the field of graduate employability and career development.

In the following chapter, a discussion on the concept of self-leadership will be provided. The discussion will delve into the theoretical foundations of self-leadership, exploring its key dimensions, such as self-goal setting, self-motivation, and self-reward, among others.

CHAPTER 2: SELF-LEADERSHIP

2.1 INTRODUCTION

The modern landscape of work is undergoing profound transformations as a result of technological advancements, and socio-economic factors (Brown & Posner, 2016). In response to these changes, the concept of self-leadership emerges as a compelling and adaptable solution (Brown & Posner, 2016). Self-leadership empowers individuals to proactively shape their actions, behaviours, and decisions, enabling them to navigate the dynamic world of work with resilience and effectiveness (Houghton & Neck, 2002).

Chapter two highlighted self-leadership as a construct by exploring earlier perspectives, and more contemporary views and definitions of self-leadership. Thereafter, theories, models, and strategies of self-leadership was explored, and gender differences in self-leadership were addressed.

2.2 SELF-LEADERSHIP: CONCEPTUALISED

The concept of self-leadership traces its origins back to Manz (1983), who initially introduced the idea of self-management (Manz & Sims, 1980). In 1986, Manz further solidified the theoretical groundwork of self-leadership by publishing a seminal work in the *Academy of Management Review*, laying out crucial leadership strategies relevant to contemporary organisations (Manz, 1986). This evolution led to the emergence of "super leadership," a process aimed at leading others in a way that encourages self-leadership, empowering followers to become self-leaders (Manz, 1992a). The exploration into self-leadership's development was expanded by Neck and Houghton (2006) and later elaborated on by Manz and Neck (2017) in their book "Mastering Self-Leadership: Empowering Yourself for Personal Excellence."

The modern perspective on self-leadership views it as a set of learned control strategies applicable to enhance individual career success (Murphy & Ensher, 2001) and a positive contributor to personal and professional development, even in challenging workplace conditions (Neck & Manz, 2013). Lovelace, Manz, and Alves (2007) underscored that self-leadership grants individuals the ability to lead themselves efficiently, utilising self-influence for self-motivation and self-direction crucial for desirable career outcomes (Jooste & Roux, 2014).

The concept of self-leadership, introduced by Manz (1986), signifies a self-influence process (Neck & Manz, 1992) that revolves around individuals' thoughts and self-behaviours, encompassing mental imagery, self-talk, beliefs, thought patterns, and assumptions (Bozyiğit, 2019). Mahembe, Engelbrecht, and De Kok (2013) similarly define self-leadership as a self-influential process enabling individuals to attain the self-direction and self-motivation required for fulfilling their duties. In alignment with this definition, Houghton and Neck (2002) observe self-leadership as a process where individuals utilise self-direction and self-motivation for successful outcomes.

Neck and Manz (2010) define self-leadership as a means of self-influence, a perspective supported by Bryant and Kazan (2012), who view self-leadership as a state where individuals possess a well-developed sense of self-identity, direction, and the capability to influence their emotional responses while pursuing their goals. Thus, self-leadership posits that effective individuals can exert self-control through cognitive and behavioural strategies (Houghton & Neck, 2002).

Moreover, self-leadership, as articulated by Neck and Houghton (2006), is conceived as a process wherein individuals regulate their behaviour through cognitive and behavioural strategies, enhancing personal effectiveness (Neck & Houghton, 2006). For this study, the definition provided by Neck and Houghton (2006) is particularly fitting as it encapsulates a comprehensive summary of the self-leadership strategies central to this research.

Despite its compelling theoretical appeal, self-leadership has encountered challenges in terms of development and critical scrutiny. Early self-leadership research remained primarily conceptual, with limited empirical studies examining its practical application within organisational contexts (Manz & Sims, 1987). However, the field has evolved, shifting focus towards understanding individual skills contributing to performance and work engagement (Raabe, Frese, & Beehr, 2007). This evolution has ushered in a fresh perspective on self-leadership in organisations, empowering individuals to make decisions regarding their tasks and actively participate in their implementation (Fletcher & Kaufer, 2003).

The theoretical foundations of self-leadership draw from various disciplines, emphasising the capacity of individuals to influence themselves through cognitive and behavioural strategies (Manz, 1986). Building on this foundation, the subsequent section will delve into the key theories and

concepts underpinning the development of self-leadership practices, elucidating how they can be harnessed to enhance personal and professional outcomes.

2.3 THEORETICAL FOUNDATIONS OF SELF-LEADERSHIP

The underpinnings of self-leadership practices are anchored in foundational concepts and theories, empowering individuals to exert self-influence for achieving desired outcomes and enhancing personal and professional lives (Manz & Neck, 2004). Among these theories, Social Cognitive Theory and Self-Regulation Theory play pivotal roles.

Social Cognitive Theory (Bandura, 1986) underscores the dynamic relationship between internal influences, external factors, and behaviour, highlighting how individuals learn through observation, imitation, and interaction within their environment. This theory is crucial for comprehending the acquisition and application of self-leadership strategies across diverse contexts. In contrast, Self-Regulation Theory (Carver & Scheier, 1998) explores the conscious mechanisms individuals employ to control thoughts, emotions, and behaviours, facilitating goal achievement. Effective self-leadership finds its cognitive and emotional foundation in self-regulation.

These theories collectively shed light on the cognitive, behavioural, and motivational aspects underpinning self-leadership practices. While widely supported, it is imperative to acknowledge that they are not without critiques and complexities, as detailed in subsequent sections.

2.3.1 Social Cognitive Theory

The theoretical foundation of self-leadership is grounded in Bandura's (1986) Social Cognitive Theory, providing the overarching framework for the concept's operation (Bandura, 1991). This theory posits a triadic reciprocal relationship among internal influences, external factors, and behaviour, explaining human behaviour. Essentially, Social Cognitive Theory suggests that individuals continuously interact with their environment (Satterfield & Davidson, 2000). Behavioural consequences are considered sources of both information and motivation, shaping subsequent actions (Schunk, 2001).

The amalgamation of Social Cognitive Theory with self-regulation theory contributes to the foundational concepts underlying self-leadership strategies. This integrated perspective elucidates

how self-leaders think and behave, drawing from cognitive, motivational, and behavioural strategies (Prussia et al., 1998; Yun et al., 2006). This perspective underscores that the development of self-leadership has been significantly influenced by Bandura's work within the framework of Social Cognitive Theory, emphasising that individuals are not exclusively driven by internal forces nor passively shaped by their environment. Instead, a dynamic interplay exists between internal cognitions and environmental stimuli, contributing to the formation of individual motivations and behaviours (Bandura, 1991).

Integral to self-leadership is the process of self-monitoring, serving as a fundamental self-influencing mechanism upon which the cognitive strategies of self-leadership are grounded (Bandura, 2011). Echoing the principles of the self-regulation theory, social cognitive theory posits that the core structure of the self-regulatory system comprises processes encompassing self-monitoring, self-judgments, and self-reactions (Houghton & Neck, 2002). At the heart of this theory is the assumption that individuals possess the capacity to establish their performance standards, drawing upon past performance experiences as reference points. Through this deliberate process, individuals set performance goals designed to create performance discrepancies, thereby mobilising their efforts to reduce these discrepancies. As discrepancies are effectively addressed, individuals proceed to set higher standards, perpetuating this iterative cycle (Bandura, 2011).

Social Cognitive Theory has strengths, notably its emphasis on the reciprocal relationship between individuals and their environment (Bandura, 1986). The perspective views behaviour as a product of the ongoing interaction between internal cognitions, environmental influences, and actual behaviour, rendering it more comprehensive than theories focusing solely on one aspect (Schunk, 2001). Furthermore, the theory underscores the significance of self-efficacy, representing an individual's belief in their ability to succeed in specific situations (Bandura, 1977). Self-efficacy plays a pivotal role in shaping behaviour and motivation; individuals with strong self-belief in their ability to succeed are more inclined to tackle challenging tasks and persist in the face of obstacles (Bandura, 1997).

However, social cognitive theory is not immune to criticism. Some argue that the theory inadequately addresses individual differences, such as personality and motivation, in the development and maintenance of self-regulatory processes (Neff & Montag-Smitz, 2013).

Additionally, critics contend that the theory oversimplifies the intricacies of human behaviours and the interplay between internal and external factors (Rhodes & Kelly, 2014). Another critique is that the theory tends to overemphasise individual control over one's environment and behaviour while overlooking the influence of societal and cultural factors (Biglan & Hops, 1990). Researchers also suggest that the theory may underestimate the role of emotions in regulating behaviour and the significance of unconscious processes in shaping behaviour (Maher, 2005).

In conclusion, while social cognitive theory provides a valuable framework for comprehending self-regulation and self-leadership, it is crucial to acknowledge its limitations and criticisms. Further research is warranted to address these concerns and to deepen the understanding of the intricate interplay between internal and external factors in shaping human behaviour.

2.3.2 Self-Regulation Theory

Self-regulation theory is based on a psychological perspective that focuses on how individuals control their thoughts, emotions, and behaviours to attain their goals (Baumeister & Vohs, 2016). The theory has its roots in the 1970s and 1980s, when a group of researchers, including Roy Baumeister, began to explore the processes involved in self-control and goal attainment (Baumeister, 1984).

Self-regulation theory has been used within the career context to provide insight into how individuals can effectively manage their career aspirations, while also successfully navigating the challenges and uncertainties that arise along their career paths (Savickas, 2005). The theory posits that individuals must actively use their limited cognitive and attentional resources to regulate their thoughts, emotions, and behaviours to achieve their career goals (Baumeister & Vohs, 2016). For example, individuals may use self-regulation strategies to overcome obstacles and manage stress in their careers, such as setting achievable goals, monitoring their progress, and adjusting their approach as needed (Savickas, 2005). In addition, self-regulation theory can help individuals understand how to build their career resilience, or their ability to adapt and recover from setbacks and challenges in their careers (Kaufman & Mossholder, 2002).

Self-regulation theory has been used to understand the role of motivation in career development. For instance, individuals who are highly motivated to achieve their career goals may be more likely

to engage in self-regulatory behaviours, such as seeking out relevant information, seeking feedback, and taking proactive steps to develop their skills and knowledge (Kaufman & Mossholder, 2002).

Self-regulation theory provides a valuable foundation for building self-leadership due to its emphasis on the active control of thoughts, emotions, and behaviours to achieve goals (Carver & Scheier, 1998). Specific strengths of the self-regulation theory in relation to building self-leadership, includes:

1. **Focus on proactive behaviour:** Self-regulation theory recognises the importance of proactive behaviour in achieving goals and highlights the role of individuals in directing their own behaviour (Neck & Houghton, 2006). This focus on proactive behaviour is a key aspect of self-leadership, as it emphasises the importance of taking initiative and being responsible for one's own development.
2. **Emphasis on effortful control:** The theory's emphasis on effortful control highlights the importance of intentional and conscious behaviour in achieving goals (Baumeister, 1984). This emphasis on effortful control is crucial for building self-leadership, as it underscores the importance of taking deliberate actions to reach desired outcomes.
3. **Relevance to personal growth and development:** Self-regulation theory provides a useful framework for understanding personal growth and development, including career development (Guzzo, 1998). By providing a comprehensive explanation of goal-directed behaviour, self-regulation theory can inform strategies for building self-leadership in the career context.
4. **Empirical support:** The empirical support for self-regulation theory highlights its validity and reliability as a framework for understanding human behaviour and goal attainment (Baumeister & Vohs, 2016). This empirical support lends credibility to its applicability in building self-leadership.

Self-regulation theory states that individuals can actively control their own thoughts, emotions, and behaviours through a process of self-reflection and monitoring. While the theory has received

widespread support and has been successful in explaining a range of psychological phenomena, it has also faced criticism (McGuire, 2018).

One criticism is that self-regulation is often limited by cognitive and attentional resources (Baumeister & Vohs, 2016). This means that individuals can only regulate themselves to a certain extent, beyond which their self-regulatory abilities become depleted, and they are unable to continue regulating their thoughts and behaviours. Another criticism is that self-regulation may not always lead to optimal outcomes, as individuals may not be able to accurately monitor or change their thoughts and behaviours in a way that leads to desired results (Kwok, Fishbach, & Zhang, 2011).

In conclusion, self-regulation theory provides a valuable framework for understanding the complex career development and goal attainment processes. By using self-regulation strategies, individuals can effectively manage the challenges and uncertainties of their careers, build their career resilience, and increase their chances of success.

2.4 STRATEGIES OF SELF-LEADERSHIP

Expanding on the earlier theoretical foundations, it becomes apparent that the primary aim of self-regulation theory is to elucidate the reasons behind human behaviour while acknowledging potential shortcomings in self-regulation. In contrast, self-leadership theory offers a distinct focus by delineating various behavioural and cognitive strategies individuals can employ to enhance their self-regulatory capabilities (Breevaart et al., 2016).

Within the broader scope of self-leadership, Manz and Neck (2008) have identified and categorised three pivotal strategies: behaviour-focused strategies, natural reward strategies, and constructive thought pattern strategies. These strategies collectively constitute a cohesive set of cognitive and behavioural tools significantly influencing subsequent outcomes.

These self-leadership strategies are intricately designed to fortify individual self-regulation through heightened self-awareness, precise feedback interpretation, the formulation of well-defined objectives, and the cultivation of elevated self-efficacy (Neck & Houghton, 2006). The primary goal of these strategies is to enhance the effectiveness of individual self-regulation (Manz & Neck, 2004). This perspective has been deliberately adopted as the most suitable theoretical framework

for this study, aligning seamlessly with the definition outlined in section 2.2 and providing a lucid delineation of the strategies integral to self-leadership development, forming an essential component of the measurement scale used to collect data. A visual representation of the self-leadership theory, elucidating its various strategies, is presented in Figure 2.1, and thereafter discussed.

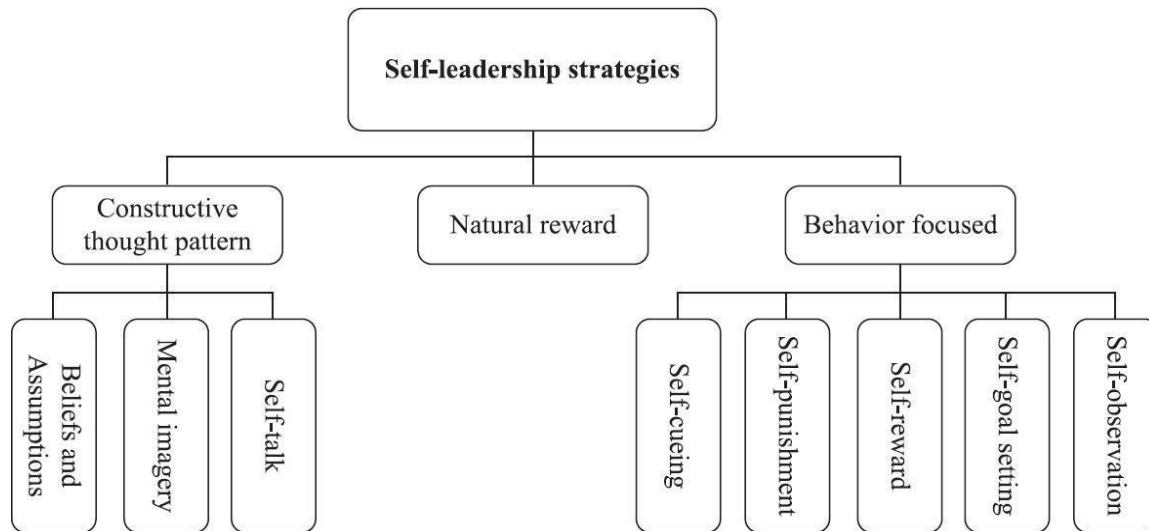


Figure 2. 1 Self-leadership strategies (Manz & Neck, 2004).

2.4.1 Behaviour-focussed strategies

Behavior-focused strategies involve self-implemented techniques for managing oneself during challenging yet essential tasks (Neck & Manz, 2013). These strategies are especially effective for handling behaviours associated with completing necessary yet disagreeable tasks and include self-observation, self-goal setting, self-reward, self-punishment, and self-cueing (Van Zyl, 2013). They play a crucial role in heightening self-awareness and managing personal behaviours effectively (Neck & Houghton, 2006).

Within the category of behaviour-focused strategies, five distinct techniques are identified: self-observation, self-goal setting, self-reward, self-punishment, and self-cueing (Houghton & Neck, 2002).

2.4.1.1 Self-observation

This process evaluates an individual's awareness of how, when, and why certain behaviours are displayed, involving a conscious assessment of ongoing experiences and objective self-evaluation (Tuovinen, 2010).

2.4.1.2 Self-goal setting

Defined as identifying specific end states describing the regularity, intensity, or duration of desired behaviour, self-goal setting creates deadlines, provides motivation, and aligns activities with one's purpose (Brown & Fields, 2011).

2.4.1.3 Positive self-reward

The degree to which employees impact themselves using rewards, self-reward involves creating contingencies linked to self-set goals to motivate and direct effort toward goal attainment (Tuovinen, 2010).

2.4.1.4 Self-punishment

A self-correcting feedback process involving useful self-evaluation of failures and unproductive behaviours, self-punishment comprises negative self-applied consequences to decrease undesired behaviour (Van Zyl, 2009).

2.4.1.5 Self-cueing

Rehearsal practice to improve performance by repeating activities, enhancing an individual's ability to perform desirable behaviours and eliminate undesirable ones (Boss & Sims, 2008).

2.4.2 Constructive thought pattern strategies

The second strategy centres around constructive thought patterns, involving deliberate construction and upkeep of functional thinking patterns (Neck & Houghton, 2006). This strategy empowers individuals to convert dysfunctional thoughts into functional ones through a rigorous self-assessment process (Neck & Manz, 2013). It includes fostering positive self-talk, employing mental imagery, and evaluating and rectifying dysfunctional beliefs and assumptions (Neck & Manz, 2013).

2.4.2.1 Positive self-talk

Defined as covert self-dialogue, individuals should heighten awareness of internal dialogues, reducing negative self-talk and encouraging a more optimistic self-dialogue (Hardy, 2006).

2.4.2.2 Positive mental imaginary

An alternative strategy employed within the framework of constructive thought patterns is the use of mental imagery, which involves envisioning successful performance before the actual execution (Neck & Manz, 1992). This process encompasses visualising or mentally rehearsing successful performance in advance (Neck & Houghton, 2006). Essentially, mental imagery allows individuals to symbolically create and experience virtual behaviours similar to real ones. Individuals who engage in positive mental imagery are more likely to succeed in the actual task compared to those visualizing negative scenarios. Moreover, positive mental imagery contributes to an individual's capacity for self-leadership by enhancing constructive thought patterns through the creation and symbolic experience of imagined goal achievement (Manz & Neck, 1999). This practice involves reducing discrepancies between current and desired states (Neck & Houghton, 2006), enabling employees to better monitor, compare, and regulate their present and desired states.

Prior research indicates that engaging in mental imagery of positive actions and performance increases the likelihood of individual success. Those who use mental imagery can anticipate the outcomes of their behaviour before they occur, reinforcing their actions. Seligman (1991) argued that individuals tend to develop either optimistic or pessimistic thoughts. Optimists perceive problems as challenges to be solved, while pessimists believe that problems will persist, causing disruption or conflict. The enhanced use of imagination contributes to more favourable outcomes, with mental imagery encouraging a perspective that views problems as opportunities rather than obstacles. This mindset aids in fostering persistence essential for implementing creative ideas (Neck & Manz, 2010).

2.4.2.3 Beliefs and assumptions

Recognising and substituting negative beliefs and assumptions holds significance, grounded in the concept that dysfunctional beliefs and assumptions possess the potential to give rise to habitual dysfunctional thought processes, leading to conditions such as depression, unhappiness, and personal ineffectiveness (Neck & Manz, 2010). Individuals who lead themselves proactively

cultivate positive thought processes by eliminating negative beliefs and assumptions linked to dysfunctional thought processes, replacing them with constructive counterparts (Neck & Manz, 1992). Norris (2008) highlighted that reducing destructive thought patterns, which negatively impact the emotional and behavioural states of employees, inherently enhances their constructive and positive thought process capabilities. This ability characterises self-leading individuals, enabling them to monitor and self-regulate their thought patterns effectively (Neck & Manz, 2013).

Thought patterns are both integrative and repetitive, allowing individuals to adapt either constructive or destructive patterns that significantly influence their emotional and behavioural states and reactions (Gagné & Deci, 2005). For instance, individuals may modify their thought patterns during challenging times to focus on potential opportunities rather than perceiving difficulties as insurmountable obstacles.

The nature of an individual's thought pattern plays a crucial role in shaping behaviours, outcomes, and subsequently affecting job performance (Neck & Manz, 1992). Positivity in thoughts and beliefs enhances individual efficiency, while negativity contributes to dysfunctional thought processes. Examples of dysfunctional thinking processes include all-or-nothing thinking, where imperfections are viewed as complete failures, mental filtering, characterized by dwelling on a single negative detail while neglecting positive information, and disqualifying the positive, wherein individuals dismiss positive outcomes as irrelevant or atypical (Manz & Neck, 2004). Identifying and altering these distorted and irrational beliefs and assumptions empowers individuals to minimize dysfunctional thought processes and enhance cognitive effectiveness (Neck & Houghton, 2006).

2.4.3 Natural reward strategies

Natural reward strategies aim to foster positive and enjoyable feelings directly associated with an activity, with the goal of energising behaviour conducive to task accomplishment and discouraging negative aspects (Neck & Manz, 2007). The subsequent self-leadership model introduces the natural reward approach, defined by Neck and Manz (2013) as the positive reinforcement inherently integrated into an activity. The model distinguishes between rewards for tasks and rewards for thinking style (Manz & Neck, 2004). Tasks are consciously chosen for their natural rewards, while

rewards for thinking style involve directing thoughts toward the inherent rewards of the activity (Neck & Houghton, 2006).

These strategies are designed to cultivate situations where individuals find tasks intrinsically pleasurable, fostering motivation through the enjoyment of the activity (Neck & Manz, 2013). The focus is on making individuals feel motivated or rewarded by the inherently enjoyable aspects of the task or activity, emphasising intrinsic rewards and incentives built into specific tasks (Norris, 2008). This dimension includes one subscale: directing thoughts on natural rewards—intrinsic rewards embedded in the task or being rewarded by the task itself.

The conceptual foundation of natural rewards is grounded in Deci and Ryan's intrinsic motivation theory (1985). Two natural reward strategies are outlined: the first involves incorporating more enjoyable aspects into a task to make the activity inherently rewarding (Manz & Sims, 2001; Neck & Manz, 2013). The second strategy entails shifting attention away from less enjoyable aspects of a task and redirecting focus to the task's naturally rewarding facets (Manz & Sims, 2001; Neck & Manz, 2013). Neck and Houghton (2006) assert that these strategies aim to instil feelings of self-efficacy and self-determination, contributing to improved performance in work-related behaviours. Frayne and Geringer (2000) support this, stating that naturally rewarding activities enhance competence, self-control, and purpose, fostering an enjoyable work environment and increasing overall performance.

Cognitive self-leadership encourages individuals to adopt natural reward strategies, embedding tasks with intrinsic rewards for self-motivation (Neck & Houghton, 2006). By intentionally focusing on the natural rewards inherent in task performance, individuals can cognitively experience intrinsic motivation without altering the physical nature of tasks (Houghton, Neck, & Manz, 2003; Gagné & Deci, 2005). Embedding tasks with natural rewards is argued to enhance perceptions of control over work, emphasising the importance of intrinsic rewards for self-leadership. This concept aligns with research on personal initiative and proactive personality, highlighting that individuals who are action-oriented and self-starting tend to initiate and adapt work situations to foster their own higher performance (Frese & Frey, 2001).

2.5 MODELS OF SELF-LEADERSHIP

Expanding on the earlier-discussed self-leadership strategies, Manz and Neck's (2004) extensive model suggests that these foundational self-leadership strategies collaboratively influence and enhance each other. This section explores two self-leadership models: the comprehensive self-leadership model and the self-leadership development model.

2.5.1 Comprehensive self-leadership model

The comprehensive self-leadership model, proposed by Manz and Neck (2004), posits that key dimensions of self-leadership mutually influence one another. The focal point of this concept is the mind and body, highlighting self-leadership's ultimate focus on behaviour, thoughts, and their impact on personal effectiveness. Figure 2.2 depicts the self-leadership strategies and their effects on individual and team effectiveness. The model emphasises the reciprocal influence between a person's psychological world and corresponding thoughts and behaviour, providing a comprehensive systematic approach to self-leadership.

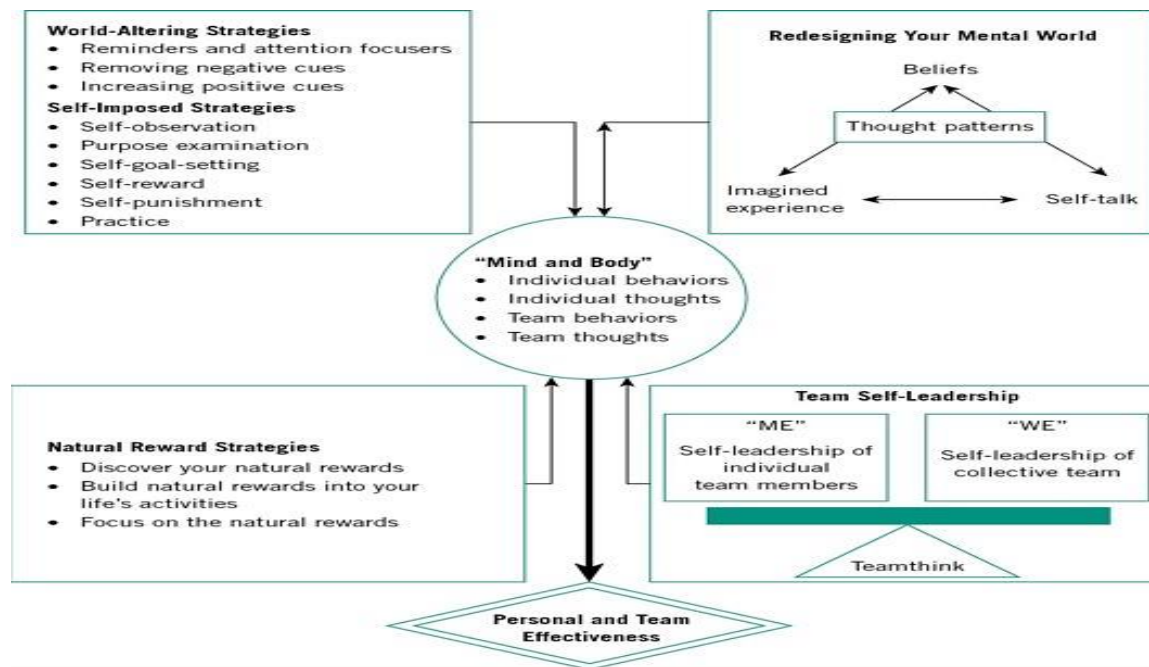


Figure 2. 2 Comprehensive Self-leadership model (Manz & Neck, 2004, p69).

While the Comprehensive Self-Leadership Model is commended for its thoroughness and systematic approach, critics point out potential limitations. The model's reliance on self-leadership strategies and individual responsibility for success may overlook external factors affecting effective

leadership, such as organisational culture and resources (Vancouver et al., 2002). Additionally, the focus on the individual's mind and body may not fully consider the impact of social and environmental factors on self-leadership (Mayer et al., 2008). Despite its merits, it's crucial to acknowledge the model's limitations in understanding the complexities of self-leadership.

2.5.2 Self-leadership development model

Pereira (2005) developed the self-leadership development model, rooted in the idea that self-leadership pursues objectives beyond self-centred success, aiming for higher individual meaning. The model comprises four principles, beginning with recognising innate talents or capabilities as unique gifts from a higher power (Mokuoane, 2017). The second principal underscores individuals taking responsibility for identifying their talents and finding personal fulfilment and significance by sharing their excellence with others (Pereira, 2005, in Mokuoane, 2017).

The self-leadership development model by Pereira (2005) accentuates the significance of individual meaning and fulfilment. The first two principles focus on acknowledging and developing unique talents, with individuals assuming responsibility for sharing these talents. The model further delineates four levels.

Level 1 involves self-awareness, understanding one's hard-wired capabilities, passions, and values, enhancing this through soul-searching, personality, and experiences (Pereira, 2005).

Level 2 is understanding one's life purpose, empowered by self-awareness and soul-searching, enabling individuals to clarify their mission and identity (Zhang & Zhao, 2012).

Level 3, planning, sees the self-leader expressing desired changes, incorporating vision and strategy (Pereira, 2005).

Level 4, action, follows levels 1 to 3, with the self-leader generating meaningful results, empowering others, and adding value to society (Pereira, 2005).

Limited critiques exist for Pereira's (2005) self-leadership development model. One potential criticism is its perceived influence by a Christian worldview, potentially limiting applicability to individuals of other faiths or non-religious backgrounds (Mokuoane, 2017). The model's emphasis

on individual talents may be considered excessive, neglecting external factors like societal barriers impacting success (Mokuoane, 2017). Despite potential criticisms, the model offers a unique perspective on self-leadership, underscoring the importance of personal growth.

In conclusion, Mokuoane (2017) asserts that in a dynamic business environment, every individual possesses the potential and responsibility to function as a positive change agent through self-leadership (Pereira, 2005).

In the context of this study, two prominent theories, social cognitive theory (Bandura, 1986) and self-regulation theory (Carver & Scheier, 1998), along with two self-leadership models, Manz and Neck's comprehensive self-leadership model (2004) and Pereira's self-leadership development model (2005), are considered. These theories provide a foundational understanding of cognitive, behavioural, and motivational aspects underlying self-leadership practices. For this specific research, the choice of framework should align with the research objectives. social cognitive theory and self-regulation theory are apt for exploring the psychological underpinnings of self-leadership, while the comprehensive self-leadership model is practical for organisational implementation. Pereira's self-leadership development may be relevant when focusing on personal growth within self-leadership.

2.6 GENDER AND SELF-LEADERSHIP

Higher education serves as an educational setting that not only imparts occupational knowledge and skills but also supports the personal development of graduates. In navigating this environment, students physically separated from their families encounter various tasks and responsibilities, necessitating skills in goal setting, emotional regulation, and behavioural management (Manz, 2015). These competencies, integral to daily life, are often collectively termed as self-leadership in the literature (Maya & Uzman, 2019).

Self-leadership, acknowledged as a crucial element for individual success in today's competitive world, denotes an individual's capacity to self-motivate and guide toward desired outcomes (Manz and Neck, 2012). It encompasses a spectrum of practices and techniques aimed at fostering personal growth, motivation, and goal attainment (Neck and Houghton, 2006).

Recent research delves into the connection between self-leadership strategies and gender, revealing potential roles in shaping the strategies individuals employ. Taylor and Baker's (2017) study, for instance, suggests that women tend to adopt more collaborative and interpersonal self-leadership strategies, while men lean towards task-oriented and independent approaches. Moreover, cultural, and societal norms contribute to gender differences in self-leadership strategies, as seen in Park and Park's (2018) findings. In cultures promoting gender equality, women are inclined towards independent and proactive self-leadership, while in traditional gender role-oriented cultures, women may exhibit less engagement in such strategies due to societal expectations.

The exploration of gender differences extends to various work-related domains, including emotional regulation, moral decision-making, leadership style, and self-construal (McRae et al., 2008; Jaffee & Hyde, 2000; Eagly, Johannesen-Schmidt, & Van Engen, 2003; Guimond et al., 2006). These insights underscore the potential impact of gender on an individual's self-leadership.

In summary, this research underscores the influence of gender on the adoption of self-leadership strategies. Continued exploration of this relationship is essential for a comprehensive understanding of how gender may shape an individual's ability to engage in self-leadership behaviours. Such insights contribute to the development of effective strategies for promoting self-leadership across genders.

2.7 CONCLUSION

This chapter focused on defining and exploring the concept of self-leadership. It covered the most comprehensive definition of self-leadership provided by Neck and Houghton (2006), which was used as the basis for measuring self-leadership in this study. The chapter also discussed two models of self-leadership, the comprehensive self-leadership model, and the self-leadership development model. The comprehensive model emphasises the reciprocal relationship between an individual's psychological world and their thoughts and behaviours, while the development model places a focus on developing a sense of purpose and meaning beyond self-centred success. Additionally, the chapter explored various strategies for promoting self-leadership and discussed previous research findings on gender differences in self-leadership.

These definitions and explanations were provided to deliver a solid understanding of self-leadership and its role in personal and career development. As self-leadership is a significant topic in industrial

and organisational psychology, it is crucial to have a clear understanding of the factors impacting self-leadership, particularly in the context of emotional intelligence and mindfulness, to make informed conclusions and discussions.

CHAPTER 3: EMOTIONAL INTELLIGENCE

3.1 INTRODUCTION

In the current fast-paced and constantly evolving world, emotional intelligence (EI) is increasingly recognised as a crucial skill in various domains, including work and self-leadership. High levels of EI have been associated with better coping with the emotional demands of one's job, effective communication with others, and managing stress more effectively (Goleman, 1995). Furthermore, individuals with high EI are more likely to succeed in developing and maintaining successful relationships with colleagues, customers, and clients (Côté & Miners, 2006). As such, EI is increasingly valued in the workplace and is considered an essential component of effective leadership, with many organisations now providing training and development programs aimed at enhancing employees' emotional intelligence skills.

Thus, emotional intelligence is a critical aspect of personal and professional success that can help individuals navigate the complexities of the modern work environment and succeed in their careers. As such, it is an important consideration for graduates as they prepare to enter the workforce and begin their careers.

3.2 EMOTIONAL INTELLIGENCE: CONCEPTUALISED

The journey into the realm of Emotional Intelligence (EI) begins in the early 1990s, when two pioneering psychologists, Peter Salovey and John Mayer, unveiled a groundbreaking concept. They defined Emotional Intelligence as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action" (Salovey & Mayer, 1990, p. 189). This definition marked a pivotal moment in the history of psychology, expanding the boundaries of intelligence beyond traditional cognitive aspects and embracing the emotional dimension.

Initially, the focus of EI was primarily on an individual's capacity to understand and manage their own emotions. The introspective approach was a significant leap forward in recognising the importance of emotional self-awareness. However, as the field of EI continued to evolve, researchers began to broaden their horizons. Bar-On (1997) contributed to this evolution by defining EI as "an array of non-cognitive abilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures" (p. 10). The expanded perspective

acknowledged that EI extends beyond intrapersonal skills, encompassing the interpersonal domain too (Bar-on, 1997).

A pivotal moment in the popularisation of EI came with the work of Daniel Goleman in 1995. Goleman emphasised the significance of EI in both personal and professional realms, cementing its status as a crucial component of social and emotional intelligence. Emotional Intelligence had firmly taken its place in the lexicon of success, both within oneself and in interactions with others (Goleman, 1995).

In subsequent years, the domain of emotional intelligence (EI) saw sustained growth, marked by ongoing research endeavours that enhanced our understanding of the intricate connections between emotions and cognitive functions, decision-making processes, and overall psychological well-being (Mayer, Salovey, & Caruso, 2004). What began as a modest exploration of emotional self-awareness had grown into a comprehensive discipline, recognising the profound impact of emotions on our lives (Mayer, Salovey, & Caruso, 2004)

In the contemporary context, emotional intelligence occupies an unequivocal and universally acknowledged position as a fundamental determinant of both individual and professional success (Goleman, 1995; Mayer & Salovey, 1997). This paradigm encompasses the profound capacity not only to comprehend and regulate one's own emotional states but also to discern and react to the emotional states of others, thereby exerting a significant influence on cognitive processes and behavioural responses (Mayer & Salovey, 1997; Mayer, Salovey & Caruso, 2004). Consequently, emotions have ascended to a paramount role, playing a pivotal role in the dynamics of our interpersonal relationships, our conduct, and all aspects of human existence (Goleman, 1995; Mayer & Salovey, 1997).

Recent studies have underscored the immense value of emotional intelligence, illustrating its contribution to enhanced performance and more informed decision-making, both on a personal and professional level (Tripathy, 2020). Indeed, emotional intelligence stands as a testament to the power of human emotions, demonstrating their potential to illuminate the path to success, self-awareness, and empathy (Tripathy, 2020).

In this journey of conceptualising emotional intelligence, the work of Peter Salovey and John Mayer remains foundational (Salovey & Mayer, 1990). Their definition, which captures the essence of EI as the ability to reason with emotions and leverage them to enhance thought, sets the stage for our exploration (Salovey & Mayer, 2004). Additionally, Goleman's acknowledgment of EI's pivotal role in personal and professional success reinforces its significance (Goleman, 1995).

However, Schutte's (Schutte et al., 1998) definition of emotional intelligence offers a particularly insightful perspective. She defines it as "the ability to perceive, appraise, and express emotions accurately and appropriately, to use emotions to facilitate thinking, and to manage emotions in oneself and others effectively" (Schutte et al., 1998, p. 184). For the focus of this study, it is best to use Schutte's, (1998) definition of emotional intelligence as it aligns closely with the objectives of this research and serves as the basis for the Schutte Emotional Intelligence Scale (SEIS) employed in this study. Schutte's definition emphasises the comprehensive understanding and management of emotions, making it a suitable framework for investigating the role of emotional intelligence among early-career graduates.

In essence, the concept of emotional intelligence has journeyed from its modest beginnings as a novel idea in psychology to becoming an indispensable aspect of human understanding and success. Along the way, it has transformed the way we perceive ourselves, our interactions, and the world around us, emphasising the profound influence of emotions on our journey through life.

3.3 MODELS OF EMOTIONAL INTELLIGENCE

The field of emotional intelligence (EI) has been approached from three main perspectives: the trait approach, the mixed approach, and the ability approach (Dhani & Sharma, 2016). Each perspective offers unique insights into understanding and measuring emotional intelligence. In this section, these perspectives were explored by examining three influential models: the Bar-On Model (1997) of Emotional Intelligence, Goleman's Model (1995) of Emotional Intelligence, and Mayer and Salovey's (1997) Four Branch Model.

3.3.1 BAR-ON MODEL OF EMOTIONAL INTELLIGENCE

The Bar-On Model of Emotional Intelligence, formulated by Reuven Bar-On in 1997, presents a holistic viewpoint on emotional intelligence by amalgamating cognitive abilities and personality traits (Bar-On, 2006). This model underscores the interdependence of emotional intelligence and

personality in shaping an individual's overall well-being. Emotional intelligence is defined as the ability to comprehend and regulate emotions, along with the capacity to utilise emotions to guide thoughts and actions (Bar-On, 2006).

While the preceding section covered the conceptualisation of emotional intelligence, this section delves into the structure of the Bar-On Model and its correlations with the five domains and scales, supported by scholarly references. The model posits that Emotional Intelligence comprises five core domains: intrapersonal, interpersonal, adaptability, stress management, and general mood (Bar-On, 1997). These domains collectively represent the behavioural manifestations of emotional and social competencies, impacting an individual's performance and conduct (Faltas, 2017). The model introduces five specific emotional intelligence scales linked to these domains: self-perception, self-expression, interpersonal, decision-making, and stress management (Faltas, 2017).

These scales serve as comprehensive measures assessing diverse aspects of emotional intelligence. The model further incorporates 15 subscales elucidating specific facets, including self-regard, self-actualisation, emotional self-awareness, assertiveness, empathy, problem-solving, emotional expression, reality testing, independence, impulse control, stress tolerance, optimism, interpersonal relationships, social responsibility, flexibility, and driving human behaviour and relationships (Faltas, 2017).

The intricate structure highlights the multifaceted nature of emotional intelligence within the Bar-On Model, emphasising that it encompasses various competencies and personality traits interconnectedly (Bar-On, 2006). This interconnectedness is pivotal to the model's assertion that emotional intelligence significantly influences an individual's behaviour, relationships, and overall well-being (Faltas, 2017).

One of the model's strengths lies in its comprehensive framework for understanding emotional intelligence by integrating cognitive abilities and personality traits (Bar-On, 2006). This holistic approach provides a thorough assessment of emotional capabilities, offering a nuanced understanding of an individual's emotional intelligence. However, the model is not without its limitations. Critics have raised concerns about challenges in measuring emotional intelligence

through the Bar-On Model, primarily relying on self-report measures susceptible to social desirability bias and lacking complete objectivity (Zeidner, Matthews, & Roberts, 2012).

Moreover, questions about the model's predictive validity have been raised, suggesting inconsistent correlations with crucial outcomes like job performance (Joseph & Newman, 2010). This limitation poses concerns about its practical applicability, especially in workplaces. The model's complex structure, with multiple domains, scales, and subscales, may be perceived as overly intricate and challenging to apply in real-world settings (Joseph & Newman, 2010), potentially limiting its usability for practitioners seeking straightforward assessments of emotional intelligence.

In summary, the Bar-On Model of Emotional Intelligence provides a holistic perspective by incorporating both abilities and personality traits, defining emotional intelligence in terms of understanding, managing, and using emotions to guide thoughts and actions. The model's complexity, with its five domains, five scales, and 15 subscales, underscores the intricate and interrelated nature of emotional intelligence and its impact on behaviour and relationships (Bar-On, 2006; Faltas, 2017).

Transitioning from the comprehensive framework of the Bar-On Model of Emotional Intelligence, an exploration of Goleman's Model of Emotional Intelligence is essential for a nuanced understanding of emotional intelligence's significance across different domains. While the Bar-On Model emphasises the interplay between abilities and personality traits (Bar-On, 2006; Faltas, 2017), Goleman's model concentrates on the practical application of emotional intelligence in real-life situations, particularly in the workplace, highlighting its pivotal role in determining an individual's success (Goleman, 1995, 1998). This shift in perspective facilitates a holistic understanding of emotional intelligence as not only an internal personal construct but also as a valuable skill influencing professional achievements and overall well-being. Examining Goleman's model bridges theoretical foundations with real-world implications, offering a comprehensive perspective on emotional intelligence.

3.3.2 GOLEMAN'S MODEL OF EMOTIONAL INTELLIGENCE

Goleman's (1995) model of emotional intelligence has attracted considerable attention across psychology, education, and business and has undergone extensive research and validation. Particularly, Goleman's (1998) underscores the workplace's critical role, asserting that emotional

intelligence is twice as crucial as cognitive intelligence or technical skills for individual success. Therefore, possessing a high level of emotional intelligence becomes a significant asset for achieving success and excelling in one's career.

According to Goleman, emotional intelligence comprises competencies crucial for managers and leaders' workplace performance (Faltas, 2017). The model focuses on four capabilities: self-awareness, relationship management, self-management, and social awareness. These competencies form the basis of twelve emotional intelligence subscales, including emotional self-awareness, adaptability, emotional self-control, positive outlook, coaching and mentoring, conflict management, organisational awareness, inspirational leadership, teamwork, influence, achievement orientation, and empathy (Faltas, 2017).

Goleman's (1995) emotional intelligence model has received extensive attention and research, particularly for its relevance to personal and professional success. The model's strength lies in its workplace emphasis, highlighting emotional intelligence's pivotal role in professional settings, surpassing the importance of cognitive intelligence or technical skills (Goleman, 1998; Faltas, 2017).

Another strength of the model is its categorisation of emotional intelligence into four core competencies—self-awareness, relationship management, self-management, and social awareness (Faltas, 2017). These competencies offer a structured framework for understanding and evaluating emotional intelligence. Additionally, the model provides a detailed assessment through twelve specific emotional intelligence subscales, enabling a nuanced examination of various emotional capabilities (Faltas, 2017). This comprehensive approach allows for the identification of specific areas for improvement and development.

However, Goleman's model is not exempt from limitations. One significant concern revolves around the measurement of emotional intelligence, with critics questioning the challenges in accurately and objectively assessing it, especially in a standardised manner (Mayer, Caruso, & Salovey, 2016). The reliance on self-report measures and the potential influence of social desirability bias pose challenges to the assessments' validity and reliability.

Furthermore, debates have arisen regarding the model's predictive validity in specific contexts, with some studies challenging the consistent correlation of emotional intelligence, as defined by Goleman, with critical outcomes like job performance (Joseph & Newman, 2010). This limitation raises questions about the model's effectiveness as a predictor of success in professional settings.

In conclusion, Goleman's (1995) model of emotional intelligence significantly contributes to understanding emotional capabilities and their impact on personal and professional success. Its strengths, including practical applicability to the workplace, a structured competency framework, and specific subscales for assessment, are noteworthy. However, challenges related to the measurement of emotional intelligence and debates about predictive validity should be considered by researchers and practitioners when utilizing the model in their respective fields.

3.3.3 MAYER AND SALOVEY'S FOUR BRANCH MODEL

Mayer and Salovey's Four Branch Model, introduced in 1990, presents a comprehensive framework for grasping emotional intelligence (Faltas, 2017). This model delineates four key dimensions of human capabilities, systematically organised from basic psychological processes to more intricate cognitive functions (Mayer & Salovey, 1997).

As depicted in Figure 3.1, the four branches are organised hierarchically, with the first branch, "perceive emotion," focusing on recognising and interpreting emotions in oneself and others. Beginning in childhood, individuals develop the foundational skill of identifying emotions through observation and social interactions (Mayer & Salovey, 1997).

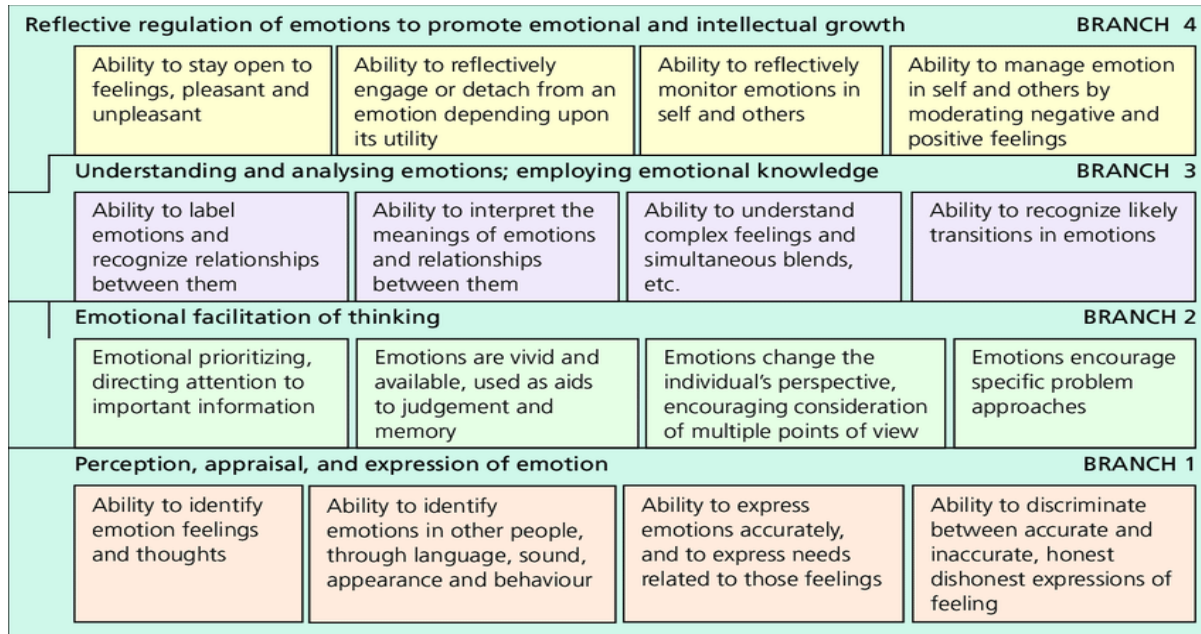


Figure 3. 1 Depiction of the four-branch model of Emotional Intelligence as depicted by Mayer and Salovey's (1997). (Adapted from Mayer and Salovey (1997, p. 507).

Advancing to the second branch, "use emotions to facilitate thought processes," the model emphasises the role of emotions as an alerting system that directs attention to environmental changes and cues. Emotions serve to guide cognitive processes, directing focus towards significant shifts in the surroundings and enabling the consideration of emotional consequences in decision-making (Mayer & Salovey, 1997).

The third branch, "understanding emotions," delves deeper into emotional intelligence, involving the labelling and comprehension of various emotions and their interrelationships. Individuals in this stage not only recognise emotions but also gain a nuanced understanding of their connections and transitions, crucial for navigating complex social situations (Mayer & Salovey, 1997).

The fourth and most intricate branch, "managing emotions," represents the pinnacle of emotional intelligence. This involves the conscious regulation of emotions, including acknowledging and accepting them, engaging, or disengaging as needed, and developing meta-evaluations and meta-regulation of mood. Those proficient in this branch can effectively manage and harness their emotions across various life situations (Mayer & Salovey, 1997).

Mayer and Salovey's Four Branch Model is a structured framework emphasising the developmental nature of emotional competencies and their relevance to cognitive processes and decision-making (Faltas, 2017). While criticised for lack of specificity and a narrow focus on cognitive aspects (Zeidner et al., 2012; Lopes et al., 2006), it remains widely recognised and influential for understanding emotional intelligence in personal and professional contexts.

In the realm of emotional intelligence assessment, the Schutte Self-Report Emotional Intelligence Scale (SEIS) stands out, aligning closely with Salovey and Mayer's theoretical framework (Schutte et al., 1998). Developed as a tool for operationalising the Salovey and Mayer model, the SEIS encompasses three primary categories: appraisal and expression of emotions, regulation of emotions, and utilisation of emotions in problem-solving. While valuable for empirical measurement, the SEIS does not introduce novel dimensions beyond the original model. Hence, this study adopts Mayer and Salovey's Four Branch Model as the theoretical framework, utilising the SEIS for data collection.

In conclusion, the three emotional intelligence models—Bar-On Model, Goleman's Model, and Mayer and Salovey's Four Branch Model—offer unique perspectives, each with distinctive strengths and limitations. The Bar-On Model emphasises the interplay with personality, Goleman's Model highlights workplace importance, and Mayer and Salovey's Four Branch Model provides a comprehensive developmental framework for understanding and enhancing emotional intelligence in diverse contexts.

3.4 OUTCOMES OF EMOTIONAL INTELLIGENCE

According to Chernisse and Coleman (2001) individuals with higher EI tend to have better job performance, better relationships with co-workers and supervisors, and overall job satisfaction. Jordan, Ashkanasy and Härtel's (2002) research found a positive correlation between EI and leadership effectiveness. Furthermore, several studies have explored the link between emotional intelligence and well-being, with results indicating that individuals with high emotional intelligence are more likely to experience greater life satisfaction and lower levels of stress and anxiety (Petrides & Furnham, 2001).

Studies have consistently demonstrated that individuals with high EI exhibit a range of valuable skills (Salovey & Mayer, 1990; Bar-On, 1997). These skills encompass emotional regulation, which

refers to the adept control and management of one's own emotions. Such regulation not only aids in coping with stress and uncertainty but also contributes to overall emotional well-being (Salovey & Mayer, 1990).

Furthermore, individuals with elevated EI exhibit heightened social awareness, enabling them to comprehend and respond appropriately to the emotions of others. This social acumen is integral to fostering and sustaining effective relationships, as it facilitates empathy and enhances interpersonal interactions (Bar-On, 1997).

Empathy, a core component of EI, characterises the capacity to not only understand but also share the emotions of others. This empathetic ability plays a pivotal role in conflict resolution and the establishment of trust within relationships (Salovey & Mayer, 1990).

Moreover, individuals with high EI possess exceptional problem-solving skills. They can analyse emotions adeptly and harness them as tools to address challenges and navigate complex, uncertain situations. This problem-solving capacity is invaluable in both personal and professional contexts (Salovey & Mayer, 1990).

In essence, the empirical evidence indicates that a strong EI equips individuals with the ability to regulate their emotions effectively, grasp the emotional landscapes of others, demonstrate empathy, and utilise emotions as a constructive force in resolving problems. These skills collectively contribute to enhanced emotional well-being and more fruitful relationships, emphasising the significance of emotional intelligence in various aspects of life (Salovey & Mayer, 1990; Bar-On, 1997).

Moreover, research has shown that organisations that foster a culture that values EI tend to have employees who are more engaged, productive, and committed (Cherniss & Adler, 2001). Hence, graduates should also seek out organisations that value EI and provide opportunities for its development.

Research has shown that individuals with high emotional intelligence are more likely to have better relationships, both personally and professionally, and are better able to handle difficult situations and emotions (Mayer, Caruso, & Salovey, 1999). Additionally, studies have found that emotional intelligence can be a predictor of job performance and success in leadership positions (Lopes, Salovey, & Straus, 2003).

Importantly Lopes, Salovey and Straus's (2003) research indicated that EI plays a significant role in predicting academic and career success for university graduates. EI can support graduates in the early career stage to thrive in a VUCA environment by providing them with the necessary skills to effectively manage emotions, communicate with others, and navigate challenging situations (Al-Sawai, 2016). To develop these EI skills and be successful in navigating the new world of work, graduates need to engage in activities that promote EI development, such as self-reflection, emotional regulation practices, and social skills training (Goleman, 1998).

3.5 THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND SELF-LEADERSHIP

The relationship between EI and self-leadership has been extensively studied and found to be positively related (Chen & Liang, 2013). Emotional intelligence (EI) and self-leadership are two interrelated constructs that play a significant role in career development (Duong, and Nguyen, 2019).

High EI individuals tend to exhibit higher self-awareness, self-regulation, and self-motivation, which are crucial components of self-leadership (Day & Carroll, 2004). In addition, individuals with higher EI are better equipped to handle stress and adapt to change, which are important skills for self-leadership (Goleman, Boyatzis, & McKee, 2002). Self-leadership, on the other hand, involves taking personal responsibility and control of one's own motivation, behaviour, and development (Kouzes & Posner, 2007).

Self-leadership and EI can both be utilised in career development (Stewart, 2012). High EI individuals are more likely to have better interpersonal skills, which are essential for building and maintaining professional relationships (Bar-On, 1997), which can translate into better networking opportunities and job promotions. On the other hand, self-leadership skills can help individuals set career goals, stay motivated and engaged in their work, and continuously develop their skills (Kouzes & Posner, 2007).

In the early career stage, graduates with high levels of EI and self-leadership are more likely to experience success and job satisfaction (Day & Carroll, 2004). A study by Chen and Liang (2013) found that graduates with higher levels of EI and self-leadership reported higher levels of job satisfaction, organisational commitment, and career success compared to their peers. Moreover,

individuals with high EI and self-leadership are better equipped to handle challenges and setbacks, which are common in the early career stage (Goleman et al., 2002).

In conclusion, EI and self-leadership are crucial for career development. Individuals with high levels of EI and self-leadership are better equipped to build and maintain professional relationships, set career goals, stay motivated and engaged in their work, and handle challenges and setbacks.

3.6 CONCLUSION

This section focused on emotional intelligence. During this chapter, specific focus was placed on the background of emotional intelligence, models of emotional intelligence and the influence of emotional intelligence on self-leadership. In the next chapter, mindfulness will be discussed.

CHAPTER 4: MINDFULNESS

4.1 INTRODUCTION

Mindfulness, a term rooted in ancient contemplative traditions, has emerged as a prominent subject of interest in contemporary psychology and personal development (Brown & Ryan, 2003; Kabat-Zinn, 1990) and is often associated with various mental and emotional benefits, including reduced stress, improved well-being, and enhanced self-leadership abilities (Baer, 2003; Shapiro et al., 2006).

The focus of the chapter involved conceptualising mindfulness, whereafter various Mindfulness models were evaluated. The impact of mindfulness on self-leadership and its potential outcomes on other aspects of life was examined. Additionally, practical guidance on basic mindfulness practices was provided.

4.2 CONCEPTUALISATION OF MINDFULNESS

Mindfulness is a concept that originated from the Buddhist tradition and is considered a fundamental pillar of all streams of Buddhist meditative practice (Kabat-Zinn, 1994). The term mindfulness was introduced to Western countries by Jon Kabat-Zinn in 1982 (Kabat-Zinn, 1994). Since then, it has been incorporated into multiple therapeutic interventions and utilised in multiple psychological schools (Baer, Smith, & Allen, 2004). Mindfulness is regarded as almost entirely secular within the Western world and has become an overwhelming point of interest for psychologists (Brown & Ryan, 2003). However, the focus of mindfulness has shifted to include its role in improving social relationships, resiliency, task performance, and task commitment (Carmody & Baer, 2008).

Several definitions and conceptualisations of mindfulness exist today, making it difficult for scholars to precisely translate it into a clear and operationalised construct (Bishop et al., 2004), resulting in a lack of clarity surrounding the exact nature of mindfulness, making it a complex construct to understand and study. Nevertheless, with the increasing popularity of mindfulness and its potential benefits, researchers continue to work towards defining and operationalising the concept (Kabat-Zinn, 2013).

In Buddhist tradition, mindfulness refers to the qualities of awareness and presence of mind in one's actions, thoughts, and experiences (Kabat-Zinn, 1994). One of the common definitions of mindfulness is that of Kabat-Zinn, who states that mindfulness is the awareness that arises through paying attention on purpose and in a non-judgmental way (Kabat-Zinn, 1994). In contemporary western psychology, mindfulness is defined as the intentional and non-judgmental awareness of one's present-moment experiences to reduce suffering by encouraging kindness and self-control (Brown & Ryan, 2003).

Mindfulness is acknowledged as a psychological attribute characterised by its dynamic nature within an individual across different moments. Those with elevated trait mindfulness exhibit a greater capacity to openly and accurately apprehend both internal and external realities (Brown & Ryan, 2003). This psychological trait encapsulates a distinct state of consciousness, wherein

individuals focus on the present moment while maintaining an attitude of receptivity, inquisitiveness, and impartiality (Brown & Ryan, 2003).

For this study, the primary focus will be on the definition of mindfulness as proposed by Brown and Ryan, (Brown & Ryan, 2003), as the definition aligns most closely with the models discussed in this research, specifically Shapiro et al.'s (2006) mechanisms of mindfulness model (Shapiro et al., 2006). Brown and Ryan, (2003) define mindfulness as the intentional and non-judgmental awareness of one's present-moment experiences, aimed at reducing suffering and encouraging kindness and self-control. Thus, the definition emphasises attention and awareness of the present moment, which resonates with the components of intention, attention, and attitude outlined in Shapiro et al.'s, (2006) model. By focusing on this definition, the study aims to explore how mindfulness, as characterised by attention and awareness, influences psychological processes and outcomes.

4.3 MODELS OF MINDFULNESS

This section explored two prominent models of mindfulness: Bishop's et al., (2004) two-component model and Shapiro et al.'s (2006) model of mindfulness mechanisms. These models hold considerable significance and are extensively utilised in the fields of psychology, neuroscience, and medicine (Shapiro et al., 2006). Bishop's et al., (2004) two-component model characterises mindfulness as the self-regulation of attention and one's orientation to the present moment experience. On the other hand, Shapiro et al.'s (2006) model posits that intention, attention, and attitude constitute the foundational principles underlying all subsequent effects of mindfulness. The following sections will provide a detailed examination of both models.

4.3.1 Two-component Model of mindfulness

Bishop et al., (2004) introduced a two-component model of mindfulness. As depicted in Figure 4.1, the first component focuses on the self-regulation of attention directed toward the present moment experience. Simultaneously, the second component pertains to one's orientation or attitude toward the present moment experience.

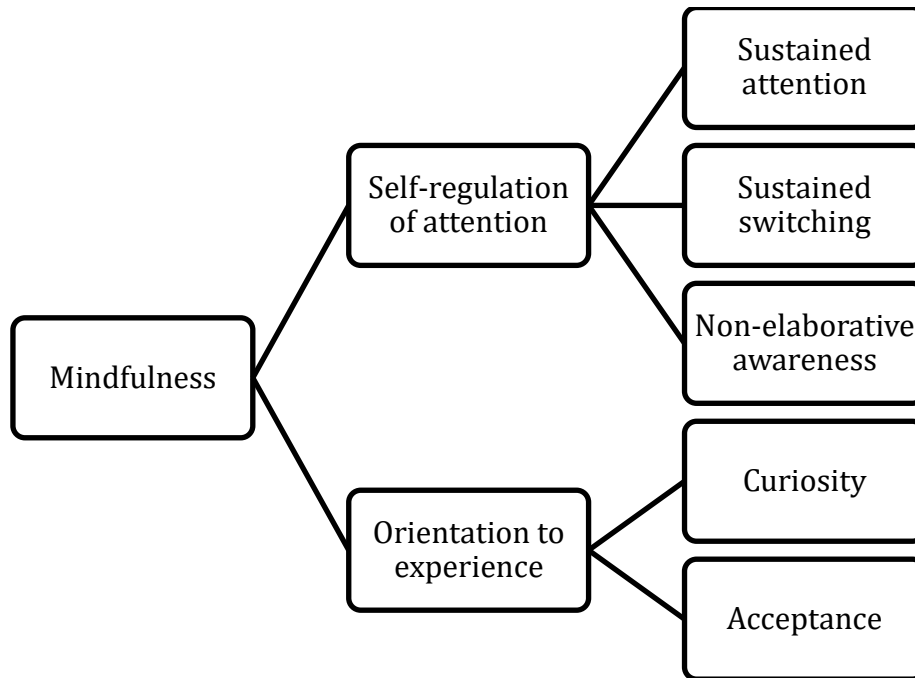


Figure 4.1 Conceptual outline of the two-component model of mindfulness (Bishop et al., 2004, p. 233).

Self-regulation of attention:

Mindfulness involves consciously being aware of the present-moment experience, requiring the regulation of attention directed towards thoughts, feelings, and sensations in each moment (Bishop et al., 2004). Garland and Howard (2013) support this perspective, noting that engagement in mindfulness practices enhances attentional control and present-moment awareness.

Bishop’s et al., (2004) model suggests that the self-regulation of attention can positively impact various attentional processes, including sustained attention, attention switching, and non-elaborative awareness. Sustained attention refers to the ability to maintain awareness over time, while attention switching involves the intentional adjustment of focus in response to changing needs (Wimmer, Bellingrath, & Von Stockhausen, 2016). Tang, Yang, Leve, and Harold’s (2012) research offers empirical support, demonstrating that brief mindfulness interventions can improve sustained attention and working memory.

Moreover, Bishop et al., (2004) argue that attention regulation contributes to non-elaborative awareness of one’s thoughts, feelings, and sensations as they arise, preventing automatic responses

to events. Mindfulness practice is linked to promoting non-reactivity and fostering acceptance of internal experiences. Kabat-Zinn et al., (1992) for example, found that mindfulness-based stress reduction (MBSR) reduced rumination and increased self-acceptance. Additionally, Baer et al., (2008) reported that mindfulness training was associated with reduced negative affectivity and improvements in emotion regulation.

Orientation to Experience:

Bishop et al., (2004) proposes that engaging in mindfulness entails adopting an attitude of curiosity towards the present-moment experience, fostering an acceptance of that experience. Therefore, mindfulness can be conceptualised as a process involving open engagement with one's own experiences.

However, Bishop's et al., (2004) model has a notable limitation in its predominant focus on the cognitive and attentional aspects of mindfulness, which allows for a more in-depth exploration of the underlying psychological processes. The model lacks explicit consideration of the emotional and attitudinal dimensions integral to mindfulness.

To address this limitation and achieve a comprehensive understanding of mindfulness, it is crucial to consider its emotional and attitudinal aspects. This is where Shapiro's et al., (2006) model becomes relevant. Shapiro proposes a mindfulness model grounded in three fundamental principles: intention, attention, and attitude (Shapiro et al., 2006). These principles align with Kabat-Zinn's (1994) definition of mindfulness, which will be further discussed in the subsequent model.

4.3.2 Shapiro's mechanisms of mindfulness model

Shapiro et al., (2006) put forth three foundational 'axioms' that collectively contribute to the process of mindfulness. As illustrated in Figure 4.2, these three axioms are intention, attention, and attitude. The authors derived these principles from Kabat-Zinn's (1994) definition of mindfulness, which states: "Paying attention [attention] in a particular way [attitude]: On purpose [intention], in the present moment, and non-judgmentally" (p.145).

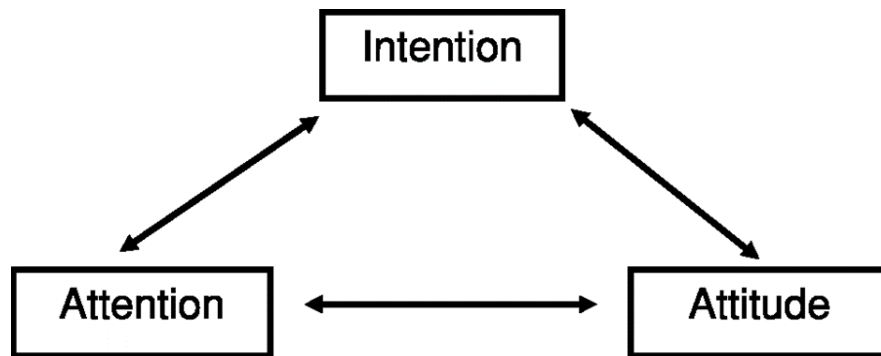


Figure 4. 2 The Model of Mindfulness: The Axioms from Shapiro, Carlson, Astin, and Freedman (2006, p. 375).

Intention

Intention holds a central role in mindfulness, representing an individual's envisioned goals through being present and aware. Kabat-Zinn (1994) underscores that one's intention sets the stage for what is achievable and acts as a constant reminder of personal values. Clarity about one's actions and their underlying reasons constitutes intention. Establishing a clear intention enhances individuals' ability to concentrate efforts and attention on the present moment, fostering effectiveness in actions and instilling a sense of purpose and meaning (Shapiro et al., 2006).

Attention

Another vital aspect of mindfulness is attention. Mindfulness practice involves observing one's moment-to-moment internal and external experiences (Brown & Ryan, 2004).

Attitude

Attitude encompasses the qualities of attention and reflects "how we attend" (Shapiro et al., 2006). It represents the affective and evaluative aspect directed towards a specific object or activity. Shapiro et al., (2006) argue that an attitude characterised by "patience, compassion, and non-striving" (p. 377) is crucial for effective mindfulness practice, cultivating the ability to confront and refrain from avoiding pain.

Moreover, Shapiro et al., (2006) assert that intention, attention, and attitude serve as foundational principles for all subsequent effects of mindfulness. They argue that these principles initiate a

process leading to the realisation that one's consciousness is distinct from its contents, resulting in enhanced self-regulation, value clarification, and improved cognitive, behavioural, and emotional flexibility. The three axioms successfully expose individuals to previously troubling internal states.

In the research, the focus will be on Shapiro's et al., (2006) mechanisms of mindfulness model, emphasising the components of intention, attention, and attitude to elucidate the mechanisms of mindfulness. This approach aligns with Brown and Ryan's (2003) definition of mindfulness, centring on attention and awareness of the present moment experience.

4.4 FACTORS IMPACTING MINDFULNESS

The following discussion will deal with four factors impacting mindfulness: personality, spirituality, age, and gender. These factors play a significant role in shaping an individual's mindfulness practices and experiences. Personality traits, for instance, have been found to influence one's receptivity to mindfulness practices (Brown & Ryan, 2003), while spirituality can serve as a motivation for engaging in mindfulness exercises, enhancing overall well-being (Koenig, McCullough, & Larson, 2001). Age and gender also have notable implications for the adoption and effectiveness of mindfulness techniques, with research showing variations in how different age groups and genders engage with and benefit from mindfulness practices (Reinelt et al., 2019; Smith, 2018). Understanding the impact of these factors on mindfulness is crucial for tailoring mindfulness interventions and promoting their effectiveness in diverse populations.

4.4.1 Personality Traits

Certain personality traits have a direct impact on mindfulness and refers to an individual's stable patterns of thoughts, feelings, and behaviours. (Brown & Ryan, 2003). The implication hereof is that individuals who possess personality traits such as extraversion, openness, and low neuroticism are likely to score higher on measures of mindfulness (Brown & Ryan, 2003).

Furthermore, the Big Five Personality Traits Model has been used to examine the relationship between personality and mindfulness (Brosschot, Verkuil, & Verloo, 2006). In this model, the five dimensions of personality include openness, conscientiousness, extraversion, agreeableness, and neuroticism. Studies (Brosschot et al., 2006; van den Berg et al., 2007) have shown that high levels of openness and low levels of neuroticism are positively related to mindfulness. Van den Berg et al. (2007) also found that mindfulness and the personality trait of conscientiousness are positively

correlated. Conscientious individuals tend to be organized, responsible, and planful; these are essential characteristics for practising mindfulness.

In conclusion, Individuals who possess certain personality traits, such as openness, low neuroticism, and conscientiousness, are more likely to have higher levels of mindfulness (Brown & Ryan, 2003; Brosschot et al., 2006; van den Berg et al., 2007).

4.4.2 Spirituality

Spirituality is defined as an individual's sense of connection to something greater than themselves, and it involves the search for meaning, purpose and fulfilment in life (Puchalski, 2000). Brown and Ryan (2003) state that spirituality is a key factor in the development of mindfulness, with spiritual practices such as meditation, prayer, and mindfulness meditation being used to cultivate a greater sense of awareness and connectedness with the present moment.

Park, Hong and Lee's (2014) study found that spiritual well-being, defined as an individual's satisfaction with their spiritual life, was positively correlated with mindfulness. In addition, spirituality was found to mediate the relationship between mindfulness and psychological well-being, suggesting that spirituality may play a role in the development of mindfulness and its impact on well-being.

Another study by Wong et al., (2017) found that spirituality was a predictor of mindfulness, even after controlling for demographic variables such as age and gender. Furthermore, the study found that spirituality was positively associated with mindfulness, as well as with well-being, suggesting that spirituality may play a role in the development of mindfulness and its impact on well-being.

In conclusion, spirituality is seen as a key factor in the development of mindfulness and its impact on well-being, with the two factors being positively associated (Garland et al., 2015).

4.4.3 Age

According to a study by van den Berg, Rosendal and Tufte, (2015), age can be considered a factor impacting mindfulness. Older adults tend to score higher on mindfulness scales compared to younger adults, which could be since older adults may have more life experience and a greater tendency to reflect on their emotions and thoughts, leading to an increased ability to regulate their

emotions. Furthermore, younger adults may be more focused on external factors such as work or education, leading to a lower level of mindfulness (Grossman et al., 2004).

However, not all studies support the notion that older adults score higher on mindfulness. For instance, studies have found that younger adults tend to score higher on mindfulness than older adults, especially when it comes to trait mindfulness (van den Berg et al., 2015). Overall, research suggests that age can be a determinant of mindfulness, but the direction of the relationship between age and mindfulness is still unclear and needs further investigation (van den Berg et al., 2015).

4.4.4 Gender

Khoury et al., (2013) have investigated the role of gender as a determinant of mindfulness, with some evidence suggesting that there may be gender differences in mindfulness levels. For example, MacCoon et al., (2012) Weare and Nind (2011) found that women score higher on mindfulness measures than men. Weare and Nind (2011), findings reported women having higher levels of mindfulness and were more likely to use mindfulness as a coping strategy.

Other studies, however, have found no significant differences in mindfulness levels between men and women (Chiesa & Serretti, 2009; Burke & Barni, 2009). In a meta-analysis by Burke and Barni (2009), the authors concluded that gender did not significantly affect mindfulness levels.

It is important to note that the relationship between gender and mindfulness may be influenced by cultural and social factors, as well as individual differences in personality and spirituality. Further research is needed to understand the complex relationship between gender and mindfulness fully.

4.5 OUTCOMES OF MINDFULNESS

The following discussion will deal with three different outcomes of mindfulness: neurological factors, self-leadership, and emotional intelligence. These outcomes hold substantial significance in the realm of mindfulness practices. Neurological research has shown that mindfulness can lead to structural and functional changes in the brain, contributing to enhanced cognitive and emotional functioning (Tang et al., 2015). Furthermore, the cultivation of self-leadership skills through mindfulness techniques has been associated with improved decision-making, self-regulation, and overall well-being (Hülshager et al., 2013). Additionally, mindfulness has demonstrated a profound impact on emotional intelligence, with studies revealing that mindfulness training can improve emotional awareness and regulation, fostering better interpersonal relationships and psychological

health (Hülshager et al., 2013; Tang et al., 2015). Understanding the neurological, self-leadership, and emotional intelligence outcomes of mindfulness is pivotal for harnessing the full potential of mindfulness practices in personal and professional development.

4.5.1 Neurological factors

According to Tang and Leve (2016), mindfulness practice can lead to changes in brain structure and function, resulting in improved self-regulation (Tang & Leve, 2016). Mindfulness practices have been shown to increase attention and cognitive control, as well as reduce mind wandering and distractions (van den Berg, 2015). For example, a study by van den Berg and colleagues (2015) found that mindfulness meditation training led to improved performance on attention tasks and reduced mind wandering compared to a control group.

Another component of enhanced self-regulation that mindfulness is linked to is altered self-awareness. Mindfulness practice has been found to increase self-awareness and the ability to regulate emotions, thoughts, and behaviours (Schuman-Olivier, 2014). Research by Schuman-Olivier (2014) showed that mindfulness practice was associated with increased self-awareness and improved ability to regulate emotions.

Finally, improved emotional regulation is another component of enhanced self-regulation that is attributed to mindfulness practice. Mindfulness has been shown to help individuals regulate their emotions, increase positive emotions, and reduce negative emotions (Hölzel et al., 2011). For example, a study conducted by Hölzel, and colleagues (2011) found that mindfulness practice was associated with increased positive emotions and reduced negative emotions.

Overall, the evidence suggests that mindfulness is linked to the three components of enhanced self-regulation: enhanced attention control, altered self-awareness, and improved emotional regulation (Van den Berg, 2015). Further research is needed to better understand the mechanisms underlying these effects and the impact of mindfulness on the brain.

4.5.2 Mindfulness and self-leadership

Self-leadership and mindfulness are two related concepts in the field of psychology that have garnered increasing attention in recent years (Avolio & Gardner, 2005). Self-leadership refers to the ability of an individual to regulate and direct their own thoughts, emotions, and behaviours to meet personal and professional goals (Avolio & Gardner, 2005). On the other hand, mindfulness is

defined as a state of present-moment awareness and non-judgmental attention to one's experiences (Baer et al., 2006).

According to Garnder and Avolio (1998), self-leadership and mindfulness are closely linked, with mindfulness as a critical antecedent of self-leadership. Being aware of one's thoughts, feelings, and actions in the present moment is essential for self-leadership, as it allows individuals to make intentional and deliberate choices about how to respond to situations. Furthermore, mindfulness can enhance self-awareness and increase emotional regulation, leading to more effective self-leadership (Brown & Ryan, 2003).

Sampl et al., (2017) highlights that mindfulness and self-leadership are related through self-regulation processes. Mindfulness involves self-observation and goal setting and is linked to self-leadership through the goal-oriented self-observation process. The process involves monitoring one's performance towards a goal and provides feedback to help refocus and stay on track. Mindfulness also helps increase awareness and promote flexible, adaptive responses to events, leading to better self-leadership. Sampl et al., 2017 found a relationship between mindful observing and self-leadership. Additionally, mindfulness has been found to enhance intrinsic motivation, leading individuals to engage in activities for their own satisfaction rather than external rewards (Van den Berg & Cropley, 2015).

Moreover, mindfulness has been found to have a positive impact on stress management and well-being, which are critical components of self-leadership (Shao & Skarlicki, 2014). Lastly, Falkenstrom (2010) found that mindfulness can reduce stress and increase well-being by reducing negative thoughts and emotions.

In conclusion, self-leadership and mindfulness are two closely related concepts, with mindfulness serving as a critical antecedent of self-leadership. Mindfulness enhances self-awareness, emotional regulation, goal setting and motivation, stress management, and well-being, all of which are essential components of self-leadership (Van den berg & Cropley, 2015).

4.5.3 Mindfulness and emotional intelligence

Prior research indicates that heightened mindfulness levels are linked to improved emotional functioning, specifically measured as emotional intelligence (Baer et al., 2004; Brown & Ryan, 2003). Emotional intelligence, defined by Mayer et al., (2008) and Salovey and Mayer (1990),

encompasses the abilities to perceive, understand, manage, and effectively utilize emotions in oneself and others. The fundamental components of mindfulness play a role in elucidating the association between mindfulness and emotional intelligence.

As outlined by Brown et al., (2007), mindfulness contributes to enhanced clarity, moment-to-moment awareness of experiences, and self-regulated functioning in response to psychological, physical, and environmental cues. Koole (2009) also observes that mindfulness aids in the development of emotional regulation. Consequently, mindfulness is posited to foster the advancement of emotional intelligence competencies, including accurate emotion perception, regulation, and effective emotion utilisation. Furthermore, the non-evaluative nature of mindfulness may contribute to a more precise understanding of emotions.

However, assessing the distinctiveness between mindfulness and emotional intelligence presents challenges due to the inherent characteristics of both constructs (Testa, 2014). While both mindfulness and emotional intelligence facilitate improved emotional regulation, differences exist between the two. Mindfulness centres on the present moment, emphasising "being," whereas emotional intelligence focuses on future problem-solving and decision-making resulting from the assessment of emotions, emphasising "doing" (Testa, 2014).

Testa (2014) states that individuals engaging in mindfulness practice focus exclusively on themselves and their own inner experience. Emotional intelligence explicitly involves the interaction between thoughts and emotions on an interpersonal and intrapersonal level (Testa, 2014). Another prominent characteristic of emotional intelligence consists of the use of emotions to facilitate action or decision-making (Testa, 2014).

Individuals with high emotional intelligence can assess their own emotions and the emotions of others, and in turn, show their feelings in socially acceptable ways (Testa, 2014). Mindfulness, on the other hand, involves the intent to support awareness of one's emotions. Therefore, emotional intelligence can be described as a skill of the mind, whereas mindfulness reflects a style of life focused on improving awareness, living in the present moment, and suspending judgment (Testa, 2014).

Since facets of mindfulness and emotional intelligence share comparable outcomes (e.g., assessing and regulating emotions), it is possible to describe the relationship between these two constructs (Brown et al., 2007). For instance, mindfulness encourages closer, moment-to-moment contact with experiences that enhance self-regulating functioning (Brown et al., 2007). Also, mindfulness promotes and enhances the development of self-regulating one's emotions, accurately perceiving one's and others' feelings, and understanding those perceived emotions (Schutte & Malouff, 2011). Taken together, these critical outcomes of mindfulness accelerate dimensions of emotional intelligence, which include perceiving feelings, understanding emotions, and utilising emotions to enhance interpersonal contact (Testa, 2014).

4.6 CONCLUSION

The focus of the chapter was firstly on the origins of mindfulness and its introduction to the Western world by Kabat-Zinn from Buddhist traditions (Kabat-Zinn, 1994). The nature and definitions of mindfulness were examined, focusing on the main contributing factors of attention and awareness. The determinants of mindfulness were also addressed, along with a discussion of two different models of mindfulness that provided insight into the process of becoming mindful. The relationship between mindfulness and self-leadership was also explored, as this is a crucial aspect of this study, and the evidence showed that mindfulness positively impacts self-leadership. The next chapter will delve into the research methodology used in this study and the process for obtaining the data.

CHAPTER 5: RESEARCH METHODOLOGY

5.1 INTRODUCTION

The key objective of the study was to explore the influence that emotional intelligence and mindfulness had on self-leadership among graduates in the early career stage. Additionally, the study aimed to determine whether gender had an impact on the levels of self-leadership among graduates in the early career stage. The following chapter provides a discussion of the strategy and design that was employed to test the hypotheses. A brief discussion on the research design, selection of the sample, data collection, and analysis procedures was followed.

5.2 RESEARCH STRATEGY AND DESIGN

The study employed a non-experimental, quantitative survey research design to obtain and analyse data. Quantitative research objectively tested theories by examining the connections between variables, which were measured using tools to collect numerical data that could then be analysed using statistics (Levitt et al., 2018).

Coertzen (2015) outlines several advantages of quantitative research. Firstly, quantitative research aims to maintain objectivity in its analysis of information, avoiding any subjective biases. Additionally, the use of numerical data allows for precise measurement and quantification of the obtained data. Statistical analysis provides a means of evaluating the findings, enabling researchers to draw statistically significant conclusions. Complex problems are also represented using variables, facilitating the analysis of relationships between them. Finally, quantitative research results can be compared, summarised, or generalised, providing a basis for further research and exploration. Other advantages of quantitative research included its ability to produce results that were generalisable to a larger population, as well as its capacity to test hypotheses and establish causal relationships between variables (Kothari, 2004; Creswell, 2014). Additionally, quantitative research allows for the use of larger sample sizes, enhancing the statistical power of the study and increasing the reliability of the findings (Polit & Beck, 2017). One disadvantage of using a quantitative research design, however, is that it might not provide a complete or nuanced understanding of the experiences, beliefs, and perspectives of the participants being studied. Quantitative research often relies on standardised measures and closed-ended questions, which might not capture the richness and complexity of human experiences (Creswell, 2018). Thus, even though there are critiques against employing a quantitative research design, the positives outweigh the disadvantages (Creswell, 2018).

5.3 ETHICAL CONSIDERATIONS

Following the guidelines required by the HPCSA (2021) and APA (2010), the information reported on the measures taken to comply with ethical and legal standards confirms that the research in this study was accomplished ethically. To ensure that ethical considerations were properly addressed in the study, the following implications and mitigation strategies were considered:

Obtaining Ethical Clearance: The study adhered to the ethical guidelines set by the University of the Free State ensuring that the study was conducted in an ethical manner respecting the rights and well-being of participants. Thus, the study underwent a thorough ethical review process, including a departmental review and approval by the faculty's ethical research review committee. The study's ethics number is UFS-HSD2023/0535. No data was gathered before the study received ethical approval.

Gatekeepers' Permission: Since the research involved the University of the Free State, gatekeepers' permission was sought prior to conducting the study. Formal requests, such as written proposals and comprehensive instructions and communication, were made to the Department of Internal Marketing and Communication at the University of the Free State to explain the research objectives and obtain their support for conducting the study.

Informed Consent: Participants were provided with clear and comprehensive information about the study, including its purpose, procedures, potential risks, and benefits (refer to appendix A). They were given the opportunity to ask questions and provide voluntary informed consent before participating. Consent forms were utilised to document participants' agreement to participate.

Confidentiality and Anonymity: Measures were implemented to ensure that the data collected remained confidential and that participants' identities were protected. Identifying information was kept separate from the research data, and participants were assigned unique identifiers. Data was stored securely and only accessible to authorised personnel involved in the research.

Loss of Work Time/Study Time: Recognising the potential impact on participants' work or study commitments, efforts were made to minimize disruption. The data collection process, such as electronic self-administered questionnaires, was designed to be convenient and time-efficient for participants. Additionally, flexible scheduling options were provided to accommodate participants' availability.

No Harm (Physically, Emotionally, and Psychologically): Measures were put in place to ensure that participants did not experience any harm during the research. This included carefully designing the questionnaire to avoid sensitive or triggering questions, providing clear instructions, and offering support mechanisms or referrals to appropriate resources if participants experienced any distress.

By addressing these ethical considerations, the study aimed to uphold the rights, well-being, and confidentiality of participants while minimising any potential negative impact on their work or study commitments.

5.4 PARTICIPANTS AND SAMPLING

The rationale for the selection of participants in this study was to focus on early-career graduates who had completed their tertiary education at the University of the Free State. Individuals were viewed as graduates based on their successful completion of specific academic programs and

obtaining recognised qualifications. To ensure clarity and eligibility, the following inclusion and exclusion criteria were used to select participants:

Inclusion Criteria: Participants were required to be within the early career stage after completing their tertiary education, thereby encompassing first-degree graduates, as well as those who had completed Honors, Masters, PhD, and other advanced degrees. Participants were also expected to have completed their studies at the University of the Free State, representing diverse educational backgrounds.

Exclusion Criteria: Individuals who had not completed any level of tertiary education or had not obtained a recognised degree were excluded from the study. Additionally, individuals who had graduated from institutions other than the University of the Free State were not included in the participant selection.

To select participants, a non-probability convenience sampling approach was employed. The method involved selecting individuals based on their availability and willingness to participate without following a systematic selection process (Sekeran, 2003). The researcher distributed invitations to participate in the study to potential participants through the Department of Internal Communication and Marketing at the University of the Free State. The department utilised communication channels such as Blackboard and email to reach the target population and facilitate the distribution of electronic invitations and survey links.

Prospective participants who met the inclusion criteria could voluntarily participate in the study by accessing and completing the electronic self-administered questionnaires provided through the Survey monkey software. The convenience sampling approach allowed for flexibility in participant selection, as individuals who were available and interested in the study could easily participate.

While the convenience sampling method provided practicality and accessibility, it was essential to acknowledge that this sampling approach might limit the generalisability of the findings to the larger population (Sekeran, 2003). The study's findings primarily represented the perspectives of early-career graduates from the University of the Free State who were willing to participate (Sekeran, 2003; Creswell & Creswell, 2017). Therefore, caution should be exercised when generalising the results to other populations or contexts. The limitation is significant to recognise because convenience sampling often entails selecting participants who are readily available and

willing to participate, potentially introducing selection bias (Bryman, 2016). Consequently, the findings may not accurately reflect the perspectives and experiences of individuals who chose not to participate or those from different demographic backgrounds or educational institutions. Nonetheless, despite this limitation, the study's focus on a specific group of early-career graduates provides valuable insights into the mindfulness experiences of this population, which can be beneficial for similar contexts and future research in this area.

Regarding the determination of the sample size, the choice was influenced by various factors, including the type of statistical tests employed. In this study, structural equation modelling (SEM) was utilised to analyse the relationships between variables. Although there was no consensus in the literature regarding the appropriate sample size for SEM, previous research suggested that a sample size ranging from 100 to 150 participants generally considered the minimum for conducting structural equation modelling (Wolf, Harrington, Clark, & Miller, 2013). However, some researchers argued that a larger sample size of 200 is appropriate for structural equation modelling. To ensure robust analysis and to account for potential attrition or incomplete responses, the researcher aimed to collect data from a sample size of 250 early-career graduates.

Electronic self-administered questionnaires were utilised. The method proved to be cost-effective, required minimal staff involvement, and facilitated quick data collection (Babbie & Mouton, 2015). However, the potential for a low response rate existed. To mitigate this, follow-up emails were sent to participants to encourage their active participation in the study (Babbie & Mouton, 2015). The follow-up emails served as reminders and emphasised the importance of their contribution to the research, thereby potentially increasing the response rate.

5.5 DATA COLLECTION AND DOCUMENTATION

The recruitment strategy for this study involved a collaboration between the researcher and the Department of Internal Communication and Marketing at the University of the Free State. The researcher sought permission from the Department of Scientific Review before proceeding with the recruitment process. The Department of Internal Communication and Marketing assisted in distributing electronic invitations and survey links to all graduates via Blackboard and email communication. This partnership ensured a wider reach and facilitated the dissemination of the study information to the target population effectively.

To obtain permission from gatekeepers, who were individuals or departments responsible for granting access to the participants, a systematic approach was followed. It was crucial to establish a clear and concise communication plan that highlighted the purpose and benefits of the data collection, as well as the ethical considerations and confidentiality measures in place. The gatekeepers needed to understand the value and relevance of the study to grant permission for data collection.

In the cover letter accompanying the invitation (refer to Appendix B), it was emphasised that participation in the study was voluntary. The cover letter ensured that potential participants felt under no obligation to take part in the research. The cover letter also emphasised the use of electronic self-administered questionnaires, highlighting the convenience and flexibility it offered to respondents.

The data collection process involved administering several questionnaires, including the Revised Self-Leadership Questionnaire (RSLQ), the Schutte Emotional Intelligence Scale (SEIS), and the Mindfulness Attention Awareness Scale (MAAS). These questionnaires provided valuable data for the analysis of self-leadership, emotional intelligence, and mindfulness among early-career graduates. In addition, a biographical questionnaire was included to gather information on participants' gender, age, and highest level of education. All questionnaires were administered using the Survey Monkey software, an online survey tool that ensured efficient and secure data collection.

5.5.1 The Revised Self-Leadership Questionnaire (RSLQ)

The following section outlines the nature and composition of the Revised Self-Leadership Questionnaire (RSLQ), including the reliability and validity of this questionnaire.

5.5.1.1 Nature and Composition

The Revised Self-Leadership Questionnaire (RSLQ) was developed by Houghton and Neck (2009), and assesses three self-leadership strategies, including behaviour-focused, natural reward, and cognitive thought strategies. Each of these three main clusters contains multiple subscales that measure different aspects of self-leadership (Van Zyl, 2012).¹

¹ Full descriptions of the sub-dimensions of self-leadership are available on pages 28 - 32.

According to Houghton and Neck (2009), the behaviour-focused cluster consists of five subscales that measure self-goal setting, self-reward, self-punishment, self-observation, and self-cueing. The natural reward cluster consists of a single subscale that measures the use of natural rewards to motivate oneself. The cognitive thought cluster consists of three subscales that measure using visualisation, self-talk, and the assessment of beliefs and assumptions. The RSLQ scale contains nine subscales, with a total of 35 items. It took approximately three minutes to complete the questionnaire.

5.5.1.2 Reliability and Validity

The reliability and validity of the Revised Self-Leadership Questionnaire (RSLQ) have been established through a series of studies, providing evidence of its psychometric properties. These studies offer insights into the instrument's ability to consistently measure the intended construct and its capacity to assess self-leadership among respondents.

Reliability

Houghton and Neck (2002) conducted two studies to evaluate the reliability of the RSLQ. These studies involved respondents from two introductory management courses at a large Southeastern University (USA). The results of these studies indicated a satisfactory level of internal consistency, as evidenced by a coefficient alpha of 0.74. A coefficient alpha of 0.7 or higher is generally considered acceptable for reliability in psychological measurement (Nunnally, 1978). Therefore, the coefficient alpha value of 0.74 suggests that the RSLQ items are reliably measuring the same underlying construct of self-leadership.

Validity

The construct validity of the RSLQ was assessed through confirmatory factor analysis, as conducted by Houghton and Neck (2002). Confirmatory factor analysis is a statistical technique used to determine whether the observed relationships between items and their underlying constructs align with the theoretical model. The analysis indicated that the RSLQ items were measuring the self-leadership construct as intended.

Furthermore, additional studies by Houghton, Bonham, Neck, and Singh (2004) and Neubert & Wu (2006), as cited in Van Zyl (2012), provided further support for the construct validity of the RSLQ. The studies confirmed that the factor structure of the RSLQ was stable and distinct from personality

variables and demonstrated that the RSLQ indeed measures self-leadership as a distinct and meaningful construct.

In summary, the reliability of the RSLQ was supported by studies showing a satisfactory level of internal consistency, with a coefficient alpha of 0.74. The construct validity of the RSLQ was established through confirmatory factor analysis and subsequent research, which demonstrated that the instrument accurately measures the self-leadership construct and distinguishes it from personality variables. These findings collectively suggest that the RSLQ is a reliable and valid instrument for assessing self-leadership in research settings (Houghton & Neck, 2002; Houghton, Bonham, Neck, & Singh, 2004; Neubert & Wu, 2006 in Van Zyl, 2012).

5.5.1.3 Rationale for Inclusion

Mahembe et al. (2013) found that the RSLQ is a reliable and valid measure of self-leadership with potential for use in empirical research and practical applications. The questionnaire provides scores that align with the theoretical structure of self-leadership, as described by Van Zyl (2012). Additionally, the RSLQ has been standardised in South Africa, making it a suitable instrument for the present study (Mahembe et al., 2013).

The RSLQ has demonstrated strong internal consistency across a range of studies. For example, Van Zyl and Mathys (2013) reported Cronbach's alpha coefficients ranging from .73 to .89 across the subscales of the RSLQ. Similarly, Mahembe et al. (2013) reported high internal consistency, with Cronbach's alpha coefficients ranging from .77 to .89. The RSLQ has also been found to have good test-retest reliability, with coefficients ranging from .72 to .85 over a two-week period (Van Zyl and Mathys, 2013). Overall, the strong psychometric properties of the RSLQ make it a reliable and valid tool for measuring self-leadership in research and practice in South Africa.

5.5.2 The Schutte Emotional Intelligence Scale (SEIS)

The following section includes an outline of the nature and composition of the Schutte Emotional Intelligence Scale (SEIS), the reliability and validity of this questionnaire, as well as the rationale for inclusion.

5.5.2.1 Nature and composition

The nature and composition of emotional intelligence will be assessed in the study using the Schutte Emotional Intelligence Scale (SEIS) (Schutte et al., 1998). The SEIS consists of 33 self-referencing

statements, and participants are required to rate their level of agreement or disagreement with each statement on a five-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree) (Ciarrochi, Chan, & Caputi, 2000). The self-report responses capture three aspects of emotional intelligence, including the appraisal and expression of emotions in oneself and others, regulation of emotions in oneself and others, and utilisation of emotions in problem-solving (Schutte et al., 1998).²

5.5.2.2 Reliability and Validity

The Schutte Emotional Intelligence Scale (SEIS) has been examined in various studies to assess its reliability and validity. Schutte et al. (1998) propose that the SEIS demonstrates both reliability and validity. Jonker and Vosloo (2008) conducted a study on the SEIS and reported acceptable Cronbach's alpha coefficients for the SEIS factors across 28 international samples. In a study by Schutte et al. (2009), the measure exhibited an average Cronbach's alpha of 0.87, indicating good internal consistency, convergent, and divergent validity. In contrast, Ciarrochi, Deane, and Anderson (2002) found lower reliability coefficients for the SEIS factors compared to the overall measure, which has shown strong reliability. Additionally, studies on the SEIS have consistently indicated its reliability as an emotional intelligence measure (Jonker & Vosloo, 2008).

Schutte et al. (2009) assert that the SEIS exhibits reliability and validity, reporting a Cronbach's alpha coefficient of .87. They published alpha coefficients from 27 studies, with the mean alpha coefficient across these studies being .87. Another study by Francis et al. (2011) reports an alpha reliability coefficient of .81.

Moving on to the validity, the SEIS demonstrates some discriminant and criterion validity (Ciarrochi et al., 2002). Freudenthaler, Neubauer, and Haller (2008) found that the SEIS exhibited correlations of .51 for managing one's own emotions and .25 for managing others' emotions with self-reported intrapersonal emotional intelligence. Additionally, Schutte et al., (1998) reported good results in terms of reliability and predictive validity for the SEIS. These findings support the view that the SEIS is a reliable and valid measure of emotional intelligence, demonstrating consistent results across multiple studies (Schutte et al., 1998).

² Full descriptions of the sub-dimensions of emotional intelligence are available on pages 46-47.

5.5.2.3 Rationale for inclusion

The selection of the Schutte Emotional Intelligence Scale (SEIS) for the current study is based on its alignment with the theoretical framework and the established definition of emotional intelligence. Grant (2007) conducted research demonstrating the changeability of emotional intelligence measured by the SEIS, emphasising its responsiveness to targeted interventions, such as coaching skills training. Therefore, the SEIS, chosen as the measure of emotional intelligence, effectively aligns with the emotional intelligence model proposed by Salovey and Mayer (1997).

The SEIS has been extensively validated and found to possess strong psychometric properties. Studies have reported its validity and reliability across various populations and settings (Schutte et al., 1998). Furthermore, several studies have corroborated the suitability of the SEIS for assessing emotional intelligence. For example, Parker et al., (2004), found a significant positive relationship between SEIS scores and job performance in a sample of managers. Moreover, Jordan et al., (2002) examined the SEIS's validity in predicting academic achievement among college students.

By employing the SEIS as the chosen measure of emotional intelligence in this study, it is expected that the measurement tool will effectively capture the constructs and nuances of emotional intelligence as defined by the theoretical framework. Additionally, the established validity and reliability of the SEIS contribute to the confidence and trustworthiness of the findings generated from its implementation in this research.

5.5.3. Mindfulness Attention Awareness Scale (MAAS)

The following sections include an overview of the nature and composition of the Mindful Attention Awareness Scale (MAAS), as well as a discussion on the reliability, validity, and rationale for inclusion of this questionnaire.

5.5.3.1 Nature and composition

The Mindful Attention Awareness Scale (MAAS) (Brown & Ryan, 2003) is a 15-item instrument measuring the general tendency to be attentive to and aware of present-moment experiences in daily life (Baer et al., 2006). It has a single-factor structure and yields a single total score (Baer et al., 2006). Using a 6-point Likert-type scale (almost always to rarely), respondents' rate how often they have experiences of acting on automatic pilot, being preoccupied, and not paying attention to the present moment. Items include, "I find myself doing things without paying attention" and "I break

or spill things because of carelessness, not paying attention, or thinking of something else” (Baer et al., 2006).³

5.5.3.2 Reliability and validity

Brown and Ryan (2003) assessed the internal consistency of the MAAS using Cronbach’s Alpha and obtained a value of 0.82. Furthermore, they conducted a test-retest reliability analysis, yielding a coefficient of 0.82, indicating satisfactory reliability. The authors also explored convergent validity by establishing positive correlations between the MAAS and related measures, such as well-being. This alignment with well-being was evident in their study. In a separate investigation in South Africa, Kotze and Nel (2016) reported an acceptable reliability estimate of 0.89 for the MAAS. To verify the one-dimensionality of the MAAS, Osman et al., (2015) executed confirmatory factor analyses, which offered support for the proposed one-dimensional model.

Baer et al., (2006) examined the factor structure and convergent validity of the MAAS and found that it had good convergent validity with other measures of mindfulness. The study also found that the MAAS had good internal consistency and test-retest reliability. Similarly, Carlson and Brown (2005) conducted a study on the relationship between mindfulness and self-regulation using the MAAS as a measure of mindfulness. They found that the MAAS had good internal consistency and test-retest reliability and concluded that it is a reliable and valid measure of mindfulness.

Moreover, Kotze and Nel (2016) discovered a moderate correlation between the MAAS and the Freiburg Mindfulness Inventory (FMI), providing further evidence of the convergent validity of the MAAS. They additionally confirmed that the MAAS demonstrated an acceptable fit for a one-dimensional model, with an RMSEA value of 0.065, a CFI value of 0.97, and an SRMR value of 0.054. These fit indices align with the criteria established by Hu and Bentler (1999). The selection of the MAAS for this study is grounded in its extensive empirical track record, affirming its status as a valid and reliable measure of trait mindfulness.

5.5.3.3 Rationale for inclusion

Several studies have examined the validity and reliability of the Mindful Attention Awareness Scale (MAAS) as a measure of mindfulness. For example, Brown and Ryan (2003) conducted a study on

³ Higher scores reflect higher levels of dispositional mindfulness.

the psychometric properties of the MAAS and found that it had good internal consistency and test-retest reliability.

5.6 DATA ANALYSIS AND INTERPRETATION

Data analysis is an essential component of any research study, involving the process of categorising, ordering, manipulating, and summarising data to answer research questions and test hypotheses (Field, 2018). Since the current study was quantitative and aimed to examine the influence between emotional intelligence and mindfulness on self-leadership, it employed statistical software such as Jamovi for data analysis. Jamovi was used to analyse the collected data and explore the potential relationships, correlations, and patterns among the variables (Field, 2018).

The data analysis consisted of two stages, including descriptive statistical analysis and inferential statistical analysis (Refer to Figure 5.1)

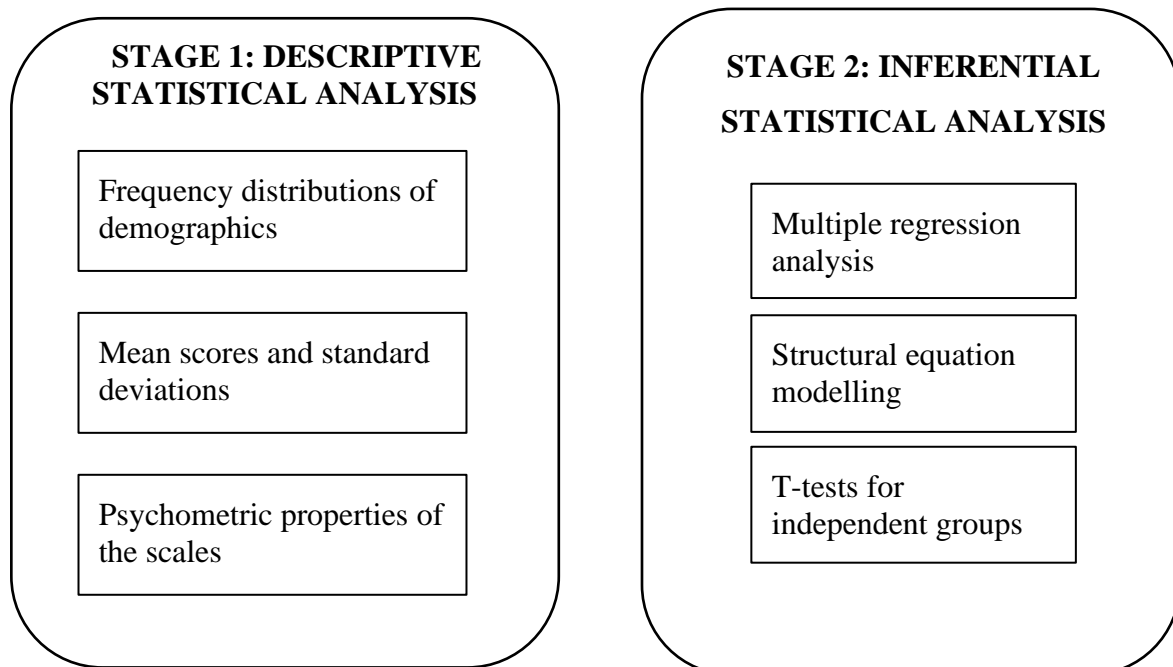


Figure 5. 1. The data analysis process followed by this study.

Using Jamovi in the data analysis process enhanced the rigor and accuracy of the study's findings. The statistical data analysis procedure included two stages, each comprising different steps, such as descriptive and inferential statistical analysis. The following section will discuss the descriptive and inferential statistics that were utilised to analyse the obtained results (Field, 2018).

5.6.1 Descriptive statistics

Descriptive statistics functions as a technique for presenting quantitative information in a more easily understandable format (Babbie & Mouton, 2015). Its purpose is to condense data from intricate details into manageable summaries that can be visually presented (Babbie & Mouton, 2015).

To analyse the demographic characteristics of the sample, frequency distribution tables were employed. Additionally, the internal consistency reliabilities of the RSLQ, SEIS, and MAAS were determined through Cronbach's alpha coefficients. Finally, the means and standard deviations, as assessed by the RSLQ, SEIS, and MAAS, were computed to depict the study sample and offer an overview of the relationships among the proposed variables. Babbie and Mouton (2015) define the mean (M) as the sum of the observed values divided by the number of cases, and the standard deviation (SD) as a measure of the average variation around the mean.

5.6.2 Inferential statistics

Inferential statistics generalise the subset data findings to the broader life and universe and refer to techniques used to infer specific characteristics of the more general population by looking at the data obtained from a subset sample (Lombard et al. 2010). Inferential statistics, such as correlation and regression analyses, were conducted to examine the relationships and predictive power between the variables.

5.6.2.1 Structural Equation Modelling

Structural Equation Modelling (SEM) is an expansive statistical methodology employed for illustrating, estimating, and examining a network of theoretical relationships, primarily linear, among variables, including both measured variables and latent constructs (Hoyle, 1995; Rigdon,

1998). SEM assesses hypothesised patterns of directional and non-directional relationships within a set of observed (measured) and unobserved (latent) variables (MacCallum & Austin, 2000).

In this study, SEM was utilised to investigate the impact of emotional intelligence and mindfulness on self-leadership (Hair, Black, Babin, & Anderson, 2010). Initially, Confirmatory Factor Analysis (CFA) was conducted to appraise the validity and reliability of the measurement models for each construct—emotional intelligence, mindfulness, and self-leadership. CFA serves as a statistical technique to evaluate whether the indicators of each construct are distinct and effectively measure the intended construct (Brown, 2015).

Following the confirmation of the measurement models' validity and reliability, SEM was employed to assess the hypothesised model, specifically examining the positive influence of emotional intelligence and mindfulness on self-leadership. Goodness-of-fit indices, including the chi-square test, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA), were scrutinised to ascertain the model's adequacy (Kline, 2016). The SEM outcomes provided insights into the strength and direction of relationships among emotional intelligence, mindfulness, and self-leadership, facilitating the determination of the significant impact of emotional intelligence and mindfulness on self-leadership. Refer to Table 5.1 for detailed cut-off points employed to interpret model fit indices, as outlined by various authors.

Table 5. 1 Model fit indices

Name of index	Cut off points	Comment	Reference
RMSEA	< 0.05 0.05 < RMSEA > 0.10	Good fit Acceptable fit	MacCallum et al (1996) Schermelleh & Moosbrugger (2003)
SRMR	< 0.05 0.05 < SRMR > 0.09	Good fit Acceptable fit	Diamantopoulos et al (2000) Hu & Bentler, (1998)
DF	< 0.3	Good fit	Kline (1998)

	$3 < DF > 5$	Acceptable fit	Marsh & Hocevar (1985)
CFI	1 > 0.95 > 0.90	Perfect fit Good fit Acceptable fit	Hu & Bentler (1998) Hu & Bentler (1998)
TLI	1 > 0.95 $0.09 < TLI < 0.95$	Perfect fit Good fit Acceptable fit	West et al (2012) West et al (2012)

Using SEM in this study allowed for a comprehensive examination of the relationship between emotional intelligence, mindfulness, and self-leadership. Figure 5.2 provides a graphical representation of the of the proposed conceptual model for the study.

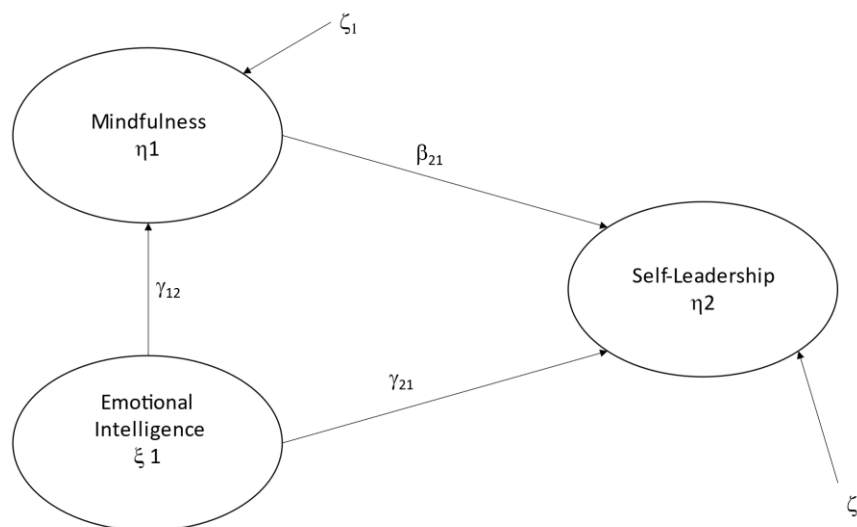


Figure 5. 2 Proposed conceptual model for the study.

5.6.2.2 Multiple Regression Analysis

Multiple regression analysis stands out as a widely utilised multivariate method for scrutinising the contribution of independent variables, either individually or collectively, to the variance observed in a dependent variable (Howell, 2017). It proves particularly valuable when investigating the

influence of two or more predictor variables. Essentially, multiple regression analysis aids in establishing whether a rise or alteration in one or more variables corresponds to a similar change or increase in another variable.

The beta (β) values derived from multiple regression analysis serve to indicate the average increment in the dependent variable when there is an increase in the independent variable. A positive correlation suggests that as the value of the independent variable rises, there is a concurrent increase in the predictive value of the dependent variable, and conversely (Howell, 2017). In the proposed research, multiple regression analysis was employed to assess whether the scores obtained for emotional intelligence and mindfulness had an impact on the scores achieved for self-leadership.

5.6.2.3 T-tests for independent groups

The t-test for independent samples was used to measure the differences in the means of two unrelated groups (Wall Emerson, 2017). In this study, the means of the two gender groups, males, and females, was analysed using the t-test to examine the differences in self-leadership, which is the dependent variable. This test addressed research question two of the study and provide insight into any gender differences in self-leadership (Wall Emerson, 2017).

T-tests are commonly used statistical tests that compare the mean scores between two groups, assuming that the data are normally distributed, and the individual scores are independent (Wall Emerson, 2017). In this study, the mean scores of males and females will be compared using a t-test. To interpret the strength and size of the statistically significant difference, Cohen's d, which is a table that provides standardised effect size measures, will be used (Cohen, 1998). The results of the t-test and the Cohen's d interpretation will be reported in Table 5.2.

Table 5. 2 Cohen's d – Effect Sizes (Cohen, 1998)

Value of d	Interpretation
< 0.1	Very small
0.2	Small

0.5	Medium
0.8	Large
>1	Very large

The T-test for independent samples was used to identify if there was a statistically significant difference amongst self-leadership regarding gender.

5.7 CONCLUSION

The current chapter emphasised the significance of the research methodology and outlined the approach that was adopted in this study. The measuring instruments, including descriptive and inferential statistics, were described in detail, demonstrating their suitability for testing the various hypotheses.

CHAPTER 6: RESEARCH RESULTS

6.1 INTRODUCTION

In the previous chapter, an examination of the research methodology deployed in the study was provided. Chapter 6 delves into the outcomes of the research, offering a detailed account of the descriptive statistics pertaining to the sample which entailed an explanation of the demographic attributes of the participants, and a presentation of the mean scores and standard deviations for each variable under research. Subsequently, the discussion shifts to explaining inferential statistics, which involves methods like multiple regression analyses, structural equation modelling, and independent groups t-tests.

6.2 DATA PREPARATION

The data collection was facilitated through the utilisation of Survey Monkey software. The process of data preparation involved extracting the data from Survey Monkey, followed by coding it into a statistical format. Subsequently, a meticulous screening process was implemented to ensure data integrity. The initial dataset comprised 228 responses, with 160 identified as completed cases, indicating that each respondent had answered all questions across all questionnaires. Incomplete

cases were identified and subsequently discarded. Additionally, an assessment for items with completely missing cases at random was conducted. To address the missing cases and enhance the dataset's completeness, a simulation technique known as nearest neighbour imputation was employed, which involved evaluating instances where a respondent might have accidentally skipped a question and simulating a likely response based on the nearest neighbours' answers. Notably, only 1.8% of the entire dataset had missing cases, and the imputation process was applied judiciously.

For the ensuing data analysis, Jamovi software was utilised. The subsequent analysis and discussion of results in this study were based on the imputed set of data, providing a comprehensive examination of patterns and findings within the entirety of the collected responses.

6.3 DESCRIPTIVE STATISTICS

Descriptive statistics serve the purpose of numerically characterizing the fundamental attributes of the sample. This segment provides an overview of the descriptive statistics in this study, encompassing the frequency distributions of the sample's demographic characteristics. Following this, the mean scores, and standard deviations for each variable under investigation are outlined, along with an examination of the psychometric properties of the involved scales.

6.3.1 Frequency Distributions of Demographics

In this section, the demographic characteristics of the sample, including age, gender, and highest academic qualification, are presented, and discussed. Table 6.1 presented a summary of the demographic characteristics of the sample, encompassing 160 respondents. Regarding age distribution, most participants fell within the 18 to 28 years category, constituting 53.8% of the sample. The subsequent age brackets included 29 to 38 years (21.9%), 39 to 48 years (12.5%), and 49 to 58 years (11.9%). In terms of gender, the sample exhibited a notable gender imbalance, with 70.1% identifying as female and 28.1% as male. Regarding the highest level of education, diverse qualifications were observed, with 13.1% holding a Matric certificate, 5% possessing a Diploma, 33% attaining a bachelor's degree, 30% achieving an Honours degree, 16.3% obtaining a master's

degree, and 2.5% reaching the level of a Ph.D. These demographic findings provided a comprehensive overview of the participant characteristics, which is crucial for contextualising and interpreting subsequent research results.

Results Disclaimer: The interpretations drawn from the results in this discussion should be considered in light of certain limitations in the data collection process. It's important to note that the sample set, while aimed at focusing on graduates, may have inadvertently included participants outside the intended inclusion and exclusion criteria. The survey link, distributed internally to postgraduates through the University of the Free State's internal marketing and communications department, lacked strict control over access. This open nature of the survey link means that respondents beyond the initially specified criteria might have participated, introducing potential variability that could influence the study's outcomes.

Table 6. 1 Demographic characteristics of the sample (n = 160)

Demographic Variables	Labels	Frequency	Percentage %
Age	18 - 28 years	86	53.8%
	29 - 38 years	35	21.9%
	39 - 48 years	20	12.5%
	49 - 58 years	19	11.9%
Gender	Male	45	28.1%
	Female	113	70.1%
Highest level of education	Matric	21	13.1%
	Diploma	8	5%
	Bachelors	53	33%
	Honours	48	30%
	Masters	26	16.3%

	PhD	4	2.5%
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6.3.2 Mean and Standard deviation

The following section reports on the mean scores and standard deviations for each of the variables under investigation, i.e., Self-leadership, Emotional Intelligence and Mindfulness.

6.3.2.1 Self-leadership

Table 6.2 provides a summary of the mean scores and standard deviations for the overall Revised Self-leadership Questionnaire (RSLQ). The analysis of the RSLQ employed a 5-point Likert scale, revealed promising results. The mean scores indicated a generally sufficient distribution, with some scores leaning slightly towards the higher end, though most were centred around the middle of the scale. Standard deviation scores fell within the typical range of SD = 1.2 to SD = 1.8, signifying an appropriate level of variability across most items. Notably, item 28 stood out with a higher mean (M = 4.14; SD = 0.765) and a smaller standard deviation, suggesting limited variation among respondents. This item, inquiring about thinking about goals, may warrant attention for further investigation, though it was retained to preserve the scale's integrity. Skewness and kurtosis values within normal levels affirm the dataset's variability. In summary, the RSLQ'S mean and standard deviation appeared universally satisfactory, while item 28 merits consideration for potential flagging and future exploration.

Table 6. 2 Mean Scores and Standard Deviations (Self-leadership)

Descriptives

	N	Missing	Mean	Median	SD	Minimum	Maximum	Skewness		Kurtosis		Shapiro-Wilk	
								Skewness	SE	Kurtosis	SE	W	p
SL1	160	0	3.66	4.00	1.098	1.00	5.00	-0.739	0.192	-0.08809	0.381	0.866	<.001
SL2	160	0	4.00	4.00	0.862	1.00	5.00	-0.896	0.192	0.75642	0.381	0.818	<.001
SL3	160	0	3.98	4.00	1.012	1.00	5.00	-0.957	0.192	0.34408	0.381	0.825	<.001
SL4	160	0	3.66	4.00	1.181	1.00	5.00	-0.709	0.192	-0.21435	0.381	0.868	<.001
SL5	160	0	3.89	4.00	0.988	1.00	5.00	-0.775	0.192	-0.00951	0.381	0.845	<.001
SL6	160	0	3.82	4.00	1.186	1.00	5.00	-0.787	0.192	-0.32947	0.381	0.844	<.001
SL7	160	0	3.91	4.00	1.075	1.00	5.00	-0.982	0.192	0.38917	0.381	0.831	<.001
SL8	160	0	3.43	4.00	1.091	1.00	5.00	-0.484	0.192	-0.32577	0.381	0.896	<.001
SL9	160	0	3.73	4.00	1.297	1.00	5.00	-0.871	0.192	-0.34818	0.381	0.826	<.001
SL10	160	0	3.65	4.00	1.193	1.00	5.00	-0.890	0.192	0.02473	0.381	0.842	<.001
SL11	160	0	4.00	4.00	0.951	1.00	5.00	-1.024	0.192	0.86798	0.381	0.823	<.001
SL12	160	0	3.94	4.00	1.029	1.00	5.00	-0.972	0.192	0.55034	0.381	0.834	<.001
SL13	160	0	3.51	4.00	1.244	1.00	5.00	-0.620	0.192	-0.49905	0.381	0.875	<.001
SL14	160	0	3.69	4.00	0.946	1.00	5.00	-0.779	0.192	0.58768	0.381	0.858	<.001
SL15	160	0	3.91	4.00	1.118	1.00	5.00	-0.946	0.192	0.19441	0.381	0.832	<.001
SL16	160	0	3.79	4.00	0.946	1.00	5.00	-0.931	0.192	0.94760	0.381	0.840	<.001
SL17	160	0	3.96	4.00	0.871	1.00	5.00	-0.955	0.192	1.09410	0.381	0.820	<.001
SL18	160	0	3.84	4.00	1.149	1.00	5.00	-0.988	0.192	0.28898	0.381	0.831	<.001
SL19	160	0	3.59	4.00	1.129	1.00	5.00	-0.715	0.192	-0.20197	0.381	0.868	<.001
SL20	160	0	3.96	4.00	0.882	1.00	5.00	-0.872	0.192	1.09025	0.381	0.836	<.001
SL21	160	0	3.88	4.00	0.937	1.00	5.00	-0.770	0.192	0.46537	0.381	0.855	<.001
SL22	160	0	3.51	4.00	1.208	1.00	5.00	-0.572	0.192	-0.49939	0.381	0.884	<.001
SL23	160	0	3.67	4.00	0.950	1.00	5.00	-0.629	0.192	0.22053	0.381	0.873	<.001
SL24	160	0	4.11	4.00	1.014	1.00	5.00	-1.179	0.192	0.93827	0.381	0.796	<.001
SL25	160	0	4.02	4.00	0.907	1.00	5.00	-1.315	0.192	2.35740	0.381	0.785	<.001
SL26	160	0	3.77	4.00	0.979	1.00	5.00	-0.701	0.192	0.21166	0.381	0.868	<.001
SL27	160	0	3.71	4.00	1.006	1.00	5.00	-0.861	0.192	0.59006	0.381	0.854	<.001
SL28	160	0	4.14	4.00	0.765	1.00	5.00	-0.923	0.192	1.54622	0.381	0.799	<.001
SL29	160	0	3.85	4.00	0.863	1.00	5.00	-0.656	0.192	0.26671	0.381	0.848	<.001
SL30	160	0	3.71	4.00	1.125	1.00	5.00	-0.795	0.192	-0.03523	0.381	0.860	<.001
SL31	160	0	3.97	4.00	0.850	1.00	5.00	-0.749	0.192	0.51422	0.381	0.838	<.001
SL32	160	0	3.83	4.00	0.940	1.00	5.00	-0.991	0.192	1.34332	0.381	0.833	<.001
SL33	160	0	3.89	4.00	0.962	1.00	5.00	-0.900	0.192	0.70353	0.381	0.844	<.001
SL34	160	0	3.69	4.00	1.059	1.00	5.00	-0.568	0.192	-0.29878	0.381	0.882	<.001
SL35	160	0	3.96	4.00	0.846	1.00	5.00	-1.002	0.192	1.72276	0.381	0.817	<.001

6.3.2.2 Emotional intelligence

Table 6.3 provides a summary of the mean scores and standard deviations for the overall Schutte Emotional Intelligence Scale (SEIS). The examination of the SEIS, administered through a 5-point Likert scale, produced valuable insights. Mean scores revealed a generally satisfactory distribution, with some scores leaning towards the higher end, while the majority clustered around the mid-point of the scale. Standard deviation scores generally fell within the expected range of SD = 1.2 to SD = 1.8, indicating appropriate variability across most items. Notably, item 24 emerged as a potentially restricted item, with a substantial mean and a smaller standard deviation (M = 4.49; SD = 0.66), suggesting minimal variation among respondents in complimenting others for achievements. Items 16 and 17 also displayed some restriction, characterised by higher means and

smaller standard deviations. Specifically, item 16 exhibited a mean of 4.08 (SD = 0.65), while item 17 showed a mean of 4.28 (SD = 0.61). Despite potential flags, these items were retained to preserve the scale's overall integrity. Skewness and kurtosis values within normal levels indicated satisfactory variability across the dataset. While certain items demonstrated higher means and lower variability, the overall mean and standard deviation for the Schutte Emotional Intelligence Scale remained universally satisfactory. However, items 16, 17 and 24 merits consideration for future investigation and potential flagging.

Table 6. 3 Mean Scores and Standard Deviations (Emotional intelligence)

Descriptives													
	N	Missing	Mean	Median	SD	Minimum	Maximum	Skewness		Kurtosis		Shapiro-Wilk	
								Skewness	SE	Kurtosis	SE	W	p
EI1	160	0	3.99	4.00	0.904	1.00	5.00	-0.906	0.192	0.7409	0.381	0.831	<.001
EI2	160	0	4.08	4.00	0.809	1.00	5.00	-0.873	0.192	1.0445	0.381	0.816	<.001
EI3	160	0	3.93	4.00	0.840	1.00	5.00	-0.964	0.192	1.0462	0.381	0.795	<.001
EI4	160	0	4.13	4.00	0.815	1.00	5.00	-0.877	0.192	0.9107	0.381	0.818	<.001
EI5	160	0	3.53	4.00	1.103	1.00	5.00	-0.532	0.192	-0.5307	0.381	0.881	<.001
EI6	160	0	4.34	4.00	0.681	2.00	5.00	-0.904	0.192	1.0698	0.381	0.756	<.001
EI7	160	0	3.81	4.00	0.884	1.00	5.00	-0.617	0.192	0.3297	0.381	0.862	<.001
EI8	160	0	3.66	4.00	1.010	1.00	5.00	-0.528	0.192	-0.2264	0.381	0.884	<.001
EI9	160	0	4.05	4.00	0.860	1.00	5.00	-1.298	0.192	2.3649	0.381	0.770	<.001
EI10	160	0	3.98	4.00	0.901	1.00	5.00	-0.748	0.192	0.4213	0.381	0.846	<.001
EI11	160	0	3.21	3.00	1.112	1.00	5.00	-0.291	0.192	-0.7040	0.381	0.905	<.001
EI12	160	0	3.44	4.00	0.909	1.00	5.00	-0.524	0.192	-0.0204	0.381	0.871	<.001
EI13	160	0	3.46	4.00	1.039	1.00	5.00	-0.359	0.192	-0.6883	0.381	0.886	<.001
EI14	160	0	4.06	4.00	0.750	1.00	5.00	-1.009	0.192	2.0813	0.381	0.778	<.001
EI15	160	0	3.68	4.00	0.919	1.00	5.00	-0.657	0.192	0.2702	0.381	0.865	<.001
EI16	160	0	4.08	4.00	0.654	2.00	5.00	-0.357	0.192	0.3543	0.381	0.790	<.001
EI17	160	0	4.28	4.00	0.614	3.00	5.00	-0.241	0.192	-0.5943	0.381	0.762	<.001
EI18	160	0	4.13	4.00	0.817	2.00	5.00	-0.947	0.192	0.7545	0.381	0.789	<.001
EI19	160	0	3.86	4.00	0.935	1.00	5.00	-0.937	0.192	0.9438	0.381	0.837	<.001
EI20	160	0	4.16	4.00	0.740	1.00	5.00	-0.921	0.192	1.7947	0.381	0.792	<.001
EI21	160	0	3.52	4.00	0.923	1.00	5.00	-0.393	0.192	-0.1446	0.381	0.888	<.001
EI22	160	0	3.92	4.00	0.847	1.00	5.00	-1.104	0.192	1.8809	0.381	0.798	<.001
EI23	160	0	3.98	4.00	0.820	1.00	5.00	-1.004	0.192	1.6815	0.381	0.806	<.001
EI24	160	0	4.49	5.00	0.663	1.00	5.00	-1.721	0.192	5.3388	0.381	0.671	<.001
EI25	160	0	3.91	4.00	0.867	1.00	5.00	-0.754	0.192	0.4257	0.381	0.837	<.001
EI26	160	0	3.66	4.00	1.010	1.00	5.00	-0.677	0.192	-0.1321	0.381	0.860	<.001
EI27	160	0	3.52	4.00	0.890	1.00	5.00	-0.375	0.192	0.0746	0.381	0.881	<.001
EI28	160	0	3.89	4.00	1.044	1.00	5.00	-0.921	0.192	0.3510	0.381	0.841	<.001
EI29	160	0	3.50	4.00	0.925	1.00	5.00	-0.628	0.192	0.2456	0.381	0.868	<.001
EI30	160	0	4.12	4.00	0.686	2.00	5.00	-0.628	0.192	0.8937	0.381	0.785	<.001
EI31	160	0	3.99	4.00	0.727	1.00	5.00	-0.877	0.192	1.9364	0.381	0.787	<.001
EI32	160	0	4.11	4.00	0.718	2.00	5.00	-0.790	0.192	1.1295	0.381	0.780	<.001
EI33	160	0	3.73	4.00	0.982	1.00	5.00	-0.888	0.192	0.5020	0.381	0.839	<.001

6.3.2.3 Mindfulness

Table 6.4 provides a summary of the mean scores and standard deviations for the overall Mindful Attention Awareness Scale. The analysis of the Mindfulness Attention Awareness Scale (MAAS), employing a 6-point Likert scale, yielded consistently positive results. Mean scores across all items demonstrated a satisfactory distribution, indicating a balanced response pattern. Standard deviation scores, falling within an acceptable range, reflected appropriate variability across the scale, contributing to a comprehensive understanding of respondents' mindfulness levels. The chosen scale format of 6 points did not hinder the overall reliability of the results; instead, it allowed for nuanced responses without sacrificing statistical robustness. Skewness and kurtosis factors remained within normal levels, affirming the dataset's satisfactory variability. Importantly, all items exhibited sufficient variability, attested by the universally satisfactory mean and standard deviation scores. These favourable statistics indicate that the MAAS effectively captured the desired diversity of responses within the sample, providing a solid foundation for the subsequent analysis and discussion of mindfulness levels among participants.

Table 6. 4 Mean Scores and Standard Deviations (Mindfulness)

Descriptives													
	N	Missing	Mean	Median	SD	Minimum	Maximum	Skewness		Kurtosis		Shapiro-Wilk	
								Skewness	SE	Kurtosis	SE	W	p
Mind1	160	0	3.26	3.00	1.44	1.00	6.00	0.0429	0.192	-0.949	0.381	0.929	<.001
Mind2	160	0	2.64	2.00	1.68	1.00	6.00	0.5946	0.192	-1.066	0.381	0.838	<.001
Mind3	160	0	2.96	3.00	1.53	1.00	6.00	0.3631	0.192	-0.946	0.381	0.909	<.001
Mind4	160	0	3.81	4.00	1.55	1.00	6.00	-0.2724	0.192	-0.996	0.381	0.918	<.001
Mind5	160	0	3.14	3.00	1.64	1.00	6.00	0.2366	0.192	-1.174	0.381	0.905	<.001
Mind6	160	0	3.69	4.00	1.64	1.00	6.00	-0.1459	0.192	-1.074	0.381	0.913	<.001
Mind7	160	0	3.24	3.00	1.53	1.00	6.00	0.2123	0.192	-0.904	0.381	0.925	<.001
Mind8	160	0	2.94	3.00	1.40	1.00	6.00	0.3508	0.192	-0.695	0.381	0.918	<.001
Mind9	160	0	3.29	3.00	1.46	1.00	6.00	0.2556	0.192	-0.834	0.381	0.928	<.001
Mind10	160	0	3.12	3.00	1.44	1.00	6.00	0.2609	0.192	-0.675	0.381	0.927	<.001
Mind11	160	0	3.66	4.00	1.53	1.00	6.00	-0.1792	0.192	-1.018	0.381	0.923	<.001
Mind12	160	0	2.94	3.00	1.52	1.00	6.00	0.4520	0.192	-0.714	0.381	0.908	<.001
Mind13	160	0	3.84	4.00	1.55	1.00	6.00	-0.0831	0.192	-1.073	0.381	0.915	<.001
Mind14	160	0	3.09	3.00	1.50	1.00	6.00	0.3665	0.192	-0.830	0.381	0.918	<.001
Mind15	160	0	2.53	2.00	1.57	1.00	6.00	0.7427	0.192	-0.647	0.381	0.847	<.001

6.4 INFERENCE STATISTICS

The following section outlines the results obtained on the inferential statistics of this study, including multiple regression analyses, structural equation modelling, and t-tests for independent groups. More specifically, multiple regression analyses, as well as structural equation modelling results, were presented and discussed in relation to the primary research question: Does emotional intelligence and mindfulness influence self-leadership amongst graduates in the early career stage? The t-test for independent groups results is presented and discussed in line with the secondary research question: Does gender impact self-leadership amongst graduates in the early career stage?

6.4.1 Structural Equation Modelling

Structural equation modelling (SEM) is employed to analyse the interrelationship among the three variables, emotional intelligence, mindfulness, and self-leadership. Confirmatory factor analysis was first conducted to assess the validity and reliability of the measured models for each construct, namely emotional intelligence, mindfulness, and self-leadership.

Prior to the application of Confirmatory Factor Analysis (CFA) to elucidate the research findings, a preliminary evaluation was conducted employing Mardia's Coefficients to assess the multivariate normality of the dataset. The examination of both skewness and kurtosis indicated a departure from normality assumptions, prompting the recognition that an alternative analytical technique would be more appropriate. Given the non-normal distribution of the data, the present study opted for the Robust Maximum Likelihood technique to enhance the robustness of the analysis and accommodate the characteristics of the observed data, ensuring a more accurate and reliable interpretation of the structural relationships in the subsequent Confirmatory Factor Analysis.

6.4.1.1 Estimation and model fit of Self-leadership

In this section, the focus shifts towards a meticulous examination of the Estimation and Model Fit of the Structural Equation Models (SEMs) employed in the study. The analysis is segmented into individual assessments of the self-leadership, emotional intelligence, and mindfulness models, each constituting a critical facet in understanding the complex interplay among these constructs (Bandura, 2001; Salovey & Mayer, 1990; Kabat-Zinn, 1994). Within this analytical framework, the

discussion unfolds in a dual-pronged manner. Firstly, a comprehensive exploration of goodness of fit is undertaken, scrutinising the alignment between the proposed models and the observed data. Subsequently, a nuanced examination ensues, focusing on the estimation, model outline, and reliability indices associated with each construct (Hair et al., 2019). This bifurcated approach seeks to contribute methodologically to the scholarly discourse by offering an in-depth assessment of the self-leadership model, ultimately enriching the broader understanding of its intricate associations with emotional intelligence and mindfulness within the structural equation modelling paradigm.

Table 6. 5 Goodness of fit analysis of Self-leadership

	S-B X²	SRMR	CFI	TLI	RMSEA	Upper	Lower
Value	697	0.072	0.915	0.904	0.045	0.053	0.037
Df	524						
P	< .001				0.829		

Note - S-B X² = Satorra Bentler scale Chi-square; RMSEA = root-mean-square error of approximation; SRMS = standardised root-mean-square residual; CFI = comparative fit index; TLI = Tucker-Lewis index. **p* < .05. ***p* < .01.

The goodness of fit for the self-leadership model was assessed using several indices. The Satorra-Bentler scale Chi-square (S-B X²) yielded a statistically significant result (S-B X² = 697, df = 524, *p* < .001), indicating a potential lack of fit. However, it is important to note that the S-B X² does not have a predefined cutoff value, and its interpretation is often considered in conjunction with other fit indices (Satorra & Bentler, 2010). Further examination of fit indices revealed a Standardised Root Mean Square Residual (SRMR) of 0.072, falling within an acceptable range for model fit (Hu & Bentler, 1999). The Root Mean Square Error of Approximation (RMSEA) demonstrated a favourable fit with a value of 0.045, below the recommended threshold of 0.05 (Browne & Cudeck, 1992). Additionally, the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) were both in the range of 0.9, indicating a mediocre fit (Hu & Bentler, 1999). Despite the statistically significant S-B X², the overall fit of the self-leadership model can be considered acceptable based on the SRMR and RMSEA values, while the CFI and TLI suggest a moderately satisfactory fit within the specified cutoffs.

Table 6. 6 Estimates of Self-leadership

Measurement model

<i>Latent</i>	<i>Observed</i>	<i>Estimate</i>	<i>SE</i>	<i>95% Confidence Intervals</i>		λ	<i>z</i>	<i>p</i>
				<i>Lower</i>	<i>Upper</i>			
SG	SL2	1.000	0.000	1.000	1.000	0.541		
	SL11	1.621	0.243	1.145	2.097	0.795	6.68	< .001
	SL20	1.631	0.243	1.156	2.107	0.862	6.73	< .001
	SL28	0.916	0.239	0.446	1.385	0.558	3.82	< .001
	SL34	1.381	0.246	0.898	1.864	0.608	5.61	< .001
SR	SL4	1.000	0.000	1.000	1.000	0.800		
	SL13	1.233	0.103	1.031	1.436	0.937	11.93	< .001
	SL22	1.230	0.102	1.030	1.429	0.962	12.07	< .001
SP	SL6	1.000	0.000	1.000	1.000	0.761		
	SL15	1.053	0.117	0.824	1.282	0.851	9.01	< .001
	SL24	0.844	0.113	0.622	1.065	0.752	7.46	< .001
	SL30	0.909	0.114	0.686	1.131	0.729	8.00	< .001
SO	SL7	1.000	0.000	1.000	1.000	0.675		
	SL16	0.742	0.158	0.432	1.053	0.570	4.69	< .001
	SL25	0.933	0.142	0.655	1.211	0.746	6.57	< .001
	SL31	0.821	0.144	0.539	1.102	0.700	5.71	< .001
SC	SL9	1.000	0.000	1.000	1.000	0.992		
	SL18	0.733	0.120	0.499	0.968	0.821	6.13	< .001
VS	SL1	1.000	0.000	1.000	1.000	0.685		
	SL10	1.237	0.167	0.909	1.564	0.779	7.40	< .001
	SL19	1.284	0.135	1.018	1.549	0.855	9.48	< .001
	SL27	1.033	0.125	0.787	1.278	0.772	8.26	< .001
	SL33	0.763	0.107	0.554	0.972	0.596	7.16	< .001

<i>ST</i>	<i>SL3</i>	1.000	0.000	1.000	1.000	0.704		
	<i>SL12</i>	1.236	0.153	0.936	1.535	0.855	8.08	< .00 1
	<i>SL21</i>	1.182	0.145	0.898	1.465	0.899	8.17	< .00 1
<i>EV</i>	<i>SL5</i>	1.000	0.000	1.000	1.000	0.626		
	<i>SL14</i>	1.272	0.176	0.928	1.616	0.832	7.25	< .00 1
	<i>SL23</i>	0.822	0.159	0.510	1.133	0.536	5.17	< .00 1
	<i>SL29</i>	0.953	0.153	0.654	1.252	0.684	6.25	< .00 1
<i>NR</i>	<i>SL8</i>	1.000	0.000	1.000	1.000	0.611		
	<i>SL17</i>	0.614	0.154	0.313	0.915	0.470	4.00	< .00 1
	<i>SL26</i>	0.926	0.147	0.637	1.215	0.630	6.28	< .00 1
	<i>SL32</i>	0.956	0.194	0.576	1.336	0.677	4.93	< .00 1

In the analysis of the Structural Equation Model (SEM) estimates illustrated in Table 6.6, the primary focus was assessing the statistical significance of each item's loading onto the factors representing sub-dimensions within the self-leadership construct. All items demonstrated statistical significance ($p < 0.05$), affirming the reliable reflection of each questionnaire item on its corresponding factor within its cluster. This significance was further reinforced by the visual representation of the SEM model in figure 6.1, providing a clear depiction of the robust relationships between items and their respective factors.

Shifting attention to the regression coefficients (λ) reported in Table 6.6, the magnitudes ranged from a minimum of 0.470 to a maximum of 0.992. These coefficients indicate the strength and direction of the relationship between each item and its associated factor. The diverse range in regression coefficients underscores the variability in the influence of individual items on their respective factors, enriching the nuanced understanding of the self-leadership construct.

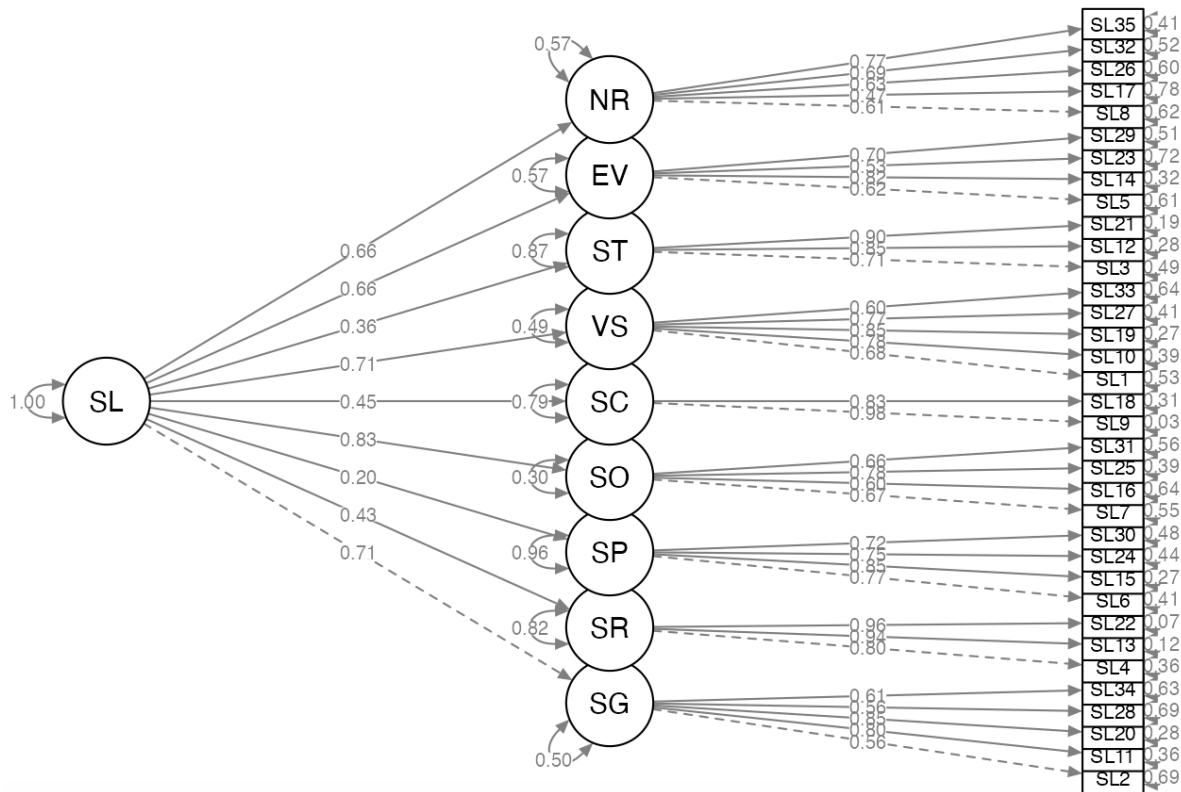


Figure 6. 1 Second-order measurement model of Self-leadership

Transitioning to the discussion of figure 6.1, which visually presents the SEM model, the analysis extends to examining residuals⁴. Residuals, portrayed on the side of the table, signify the portion of variance in each item that remains unaccounted for by the construct. Notably, a substantial amount of variance is explained through the construct, emphasising the model's effectiveness in capturing and representing the intricate nature of the self-leadership construct. The consideration of residuals contributes valuable insights into the nuanced relationships between items and factors within the SEM framework.

⁴ Residuals refer to the differences between the observed values and the values predicted by a model. They represent the unexplained variability in the data after fitting a model.

Table 6. 7 Reliability indices of the subdimensions of Self-leadership

Reliability indices

Variable	α	ω_3	AVE
SG	0.797	0.817	0.475
SR	0.926	0.932	0.819
SP	0.854	0.857	0.601
SO	0.766	0.762	0.453
SC	0.894	0.916	0.848
VS	0.855	0.865	0.564
ST	0.859	0.856	0.672
EV	0.754	0.774	0.458
NR	0.767	0.767	0.407

Note - α = Cronbach's Alpha; ω_3 = Macdonald's Omega; AVE = Average variance extracted.

In assessing the reliability indices of the self-leadership model, with a specific focus on its sub-dimensions, various metrics were considered, including Cronbach's alpha, MacDonald's omega, and the Average Variance Extracted (AVE). These indices provide insights into the internal consistency and the extent of reliable variance captured by each sub-dimension. The results indicate that all sub-dimensions exhibit satisfactory internal consistency, as evidenced by the alpha coefficients. Additionally, MacDonald's omega, a measure that considers the factor loadings and communalities, further supports the conclusion that the scale demonstrates sufficient reliability.

The AVE, which assesses the proportion of variance captured by the construct relative to measurement error, was examined to determine if more than 50% of the variance in each sub-dimension was declared. While all sub-dimensions showed sufficient reliability, it is noteworthy that the Natural-Reward Strategies sub-dimension had the lowest average reliable variance (AVE: 0.407), while the Self-Cueing sub-dimension reflected the highest average reliable variance (AVE: 0.848). These findings highlight the variability in the amount of reliable variance explained by each sub-dimension.

In summary, the combination of reliability indices, goodness-of-fit assessments, and estimates from the SEM model suggests that the self-leadership model is sufficiently operationalised. The statistical significance of items, satisfactory goodness-of-fit indices, and robust reliability metrics collectively supported the conclusion that the model effectively captures the intended constructs. This affirmation lays the foundation for the continued analysis and interpretation of the self-leadership model in the subsequent stages of the study.

6.4.1.2 Estimation and model fit of Emotional intelligence

The goodness-of-fit assessment for the Emotional Intelligence model was conducted using various indices. The Satorra-Bentler scaled Chi-square test (S-B X^2) produced a statistically significant result (S-B $X^2 = 785$, $df = 460$, $p < .001$), indicating a potential model misfit. While there is no specific cutoff value for the S-B X^2 , its interpretation is often considered alongside other fit indices (Satorra & Bentler, 2010). The Standardised Root Mean Square Residual (SRMR) was 0.098, suggesting an acceptable fit (Hu & Bentler, 1999). However, the Root Mean Square Error of Approximation (RMSEA) of 0.090 exceeded the recommended threshold of 0.05, indicating a less favourable fit (Browne & Cudeck, 1992). Additionally, the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) both fell below the desired range, with values of 0.587 and 0.554, respectively, suggesting a poor fit (Hu & Bentler, 1999). Notably, the statistically significant p-value underscores the misfit indicated by other indices. In summary, the Emotional Intelligence model's fit can be deemed less than satisfactory based on most fit indices, warranting careful consideration in the interpretation of subsequent analyses.

Table 6. 8 Goodness of fit analysis of Emotional intelligence

	S-B X²	SRMR	CFI	TLI	RMSEA	Upper	Lower
Value	785	0.098	0.587	0.554	0.090	0.097	0.083
Df	460						
P	< .001				0.001		

Note - S-B X² = Satorra Bentler scale Chi-square; RMSEA = root-mean-square error of approximation; SRMS = standardised root-mean-square residual; CFI = comparative fit index; TLI = Tucker-Lewis index. **p* < .05. ***p* < .01.

Diagonally Weighted Least Squares (DWLS) was identified as a suitable alternative in this scenario. DWLS is specifically designed for ordinal data and is particularly robust when dealing with non-normally distributed datasets and smaller sample sizes (Muthén & Muthén, 2017). This method was implemented in the analysis presented in Table 6.9, acknowledging the ordinal nature of the data and addressing the limitations posed by non-normality and smaller sample sizes. By opting for DWLS, the analysis aimed to improve the accuracy and reliability of parameter estimation within the Structural Equation Modelling (SEM) framework, enhancing the validity of the results in the context of the specific characteristics of the dataset at hand (Flora & Curran, 2004; Muthén & Muthén, 2017).

Table 6. 9 Goodness of fit for Emotional intelligence (DWLS Method)

	S-B X²	SRMR	CFI	TLI	RMSEA	Upper	Lower
Value	573	0.094	0.945	0.941	0.039	0.049	0.028
Df	460						
P	< .001				0.961		

Note - S-B X² = Satorra Bentler scale Chi-square; RMSEA = root-mean-square error of approximation; SRMS = standardised root-mean-square residual; CFI = comparative fit index; TLI = Tucker-Lewis index. **p* < .05. ***p* < .01.

After the Diagonally Weighted Least Squares (DWLS) technique was implemented, a new goodness-of-fit evaluation for the Emotional Intelligence model can be found in Table 6.9. The assessment utilized various fit indices to gain a comprehensive understanding of the model's

appropriateness. The Satorra-Bentler scaled Chi-square test (S-B X^2) still yielded a statistically significant result (S-B $X^2 = 573$, $df = 460$, $p < .001$), suggesting potential disparities between the model and observed data. While no predefined cutoff value exists for S-B X^2 , its interpretation was contextualised alongside other fit indices (Satorra & Bentler, 2010). The Standardised Root Mean Square Residual (SRMR) of 0.094 suggested an acceptable fit (Hu & Bentler, 1999), indicating the average standardised difference between observed and predicted correlations. The Root Mean Square Error of Approximation (RMSEA) at 0.039, falling within the range of 0.028 to 0.049, signalled a good fit (Browne & Cudeck, 1992), underscoring the model's ability to approximate the population covariance matrix. Moreover, the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI), with values of 0.945 and 0.941, respectively, implied a moderately satisfactory fit (Hu & Bentler, 1999), albeit slightly below the desirable threshold of 0.95. In summary, the model exhibited statistically significant fit, with the SRMR and RMSEA indicating a more favourable fit compared to the CFI and TLI values, offering nuanced insights into the appropriateness of the Emotional Intelligence model.

Table 6. 10 Estimates of Emotional intelligence

Measurement model

Latent	Observed	Estimate	SE	95% Confidence Intervals		λ	z	p
				Lower	Upper			
PE	EI5	1.000	0.000	1.0000	1.000	0.437		
	EI9	0.979	0.246	0.4966	1.461	0.549	3.98	< .001
	EI15	1.290	0.281	0.7390	1.842	0.677	4.59	< .001
	EI18	0.985	0.231	0.5319	1.438	0.581	4.26	< .001
	EI19	0.998	0.265	0.4789	1.517	0.515	3.77	< .001
	EI22	0.980	0.270	0.4519	1.509	0.558	3.64	< .001
	EI25	1.386	0.285	0.8272	1.946	0.771	4.86	< .001
	EI29	1.138	0.250	0.6481	1.628	0.593	4.55	< .001
	EI32	0.912	0.231	0.4584	1.365	0.613	3.94	< .001
	EI33	0.690	0.190	0.3176	1.062	0.339	3.63	< .001
UE	EI6	1.000	0.000	1.0000	1.000	0.173		
	EI7	3.115	1.756	-0.3273	6.557	0.415	1.77	0.076
	EI8	3.691	2.030	-0.2872	7.670	0.431	1.82	0.069

	EI17	2.307	1.209	-0.0617	4.676	0.443	1.91	0.056
	EI20	3.717	2.007	-0.2164	7.650	0.592	1.85	0.064
	EI27	4.456	2.300	-0.0514	8.964	0.590	1.94	0.053
ME	EI2	1.000	0.000	1.0000	1.000	0.426		
	EI3	1.353	0.347	0.6722	2.034	0.555	3.90	< .001
	EI10	1.600	0.386	0.8437	2.357	0.612	4.15	< .001
	EI12	1.250	0.286	0.6898	1.810	0.474	4.37	< .001
	EI14	0.947	0.262	0.4337	1.460	0.435	3.62	< .001
	EI21	1.151	0.337	0.4912	1.811	0.429	3.42	< .001
	EI23	1.588	0.305	0.9892	2.186	0.667	5.20	< .001
	EI31	1.277	0.267	0.7542	1.800	0.605	4.79	< .001
MOE	EI1	1.000	0.000	1.0000	1.000	0.370		
	EI4	1.104	0.343	0.4312	1.776	0.453	3.22	0.001
	EI11	0.785	0.337	0.1246	1.446	0.236	2.33	0.020
	EI13	1.312	0.395	0.5375	2.087	0.422	3.32	< .001
	EI16	0.920	0.256	0.4183	1.422	0.471	3.59	< .001
	EI24	0.769	0.281	0.2184	1.319	0.388	2.74	0.006
	EI26	1.169	0.411	0.3623	1.975	0.387	2.84	0.005
	EI30	1.073	0.253	0.5770	1.569	0.523	4.24	< .001
EI	PE	1.000	0.000	1.0000	1.000	0.733		
	UE	0.248	0.157	-0.0600	0.556	0.743	1.58	0.115
	ME	0.604	0.229	0.1559	1.052	0.620	2.64	0.008
	MOE	0.980	0.304	0.3846	1.575	1.035	3.23	0.001

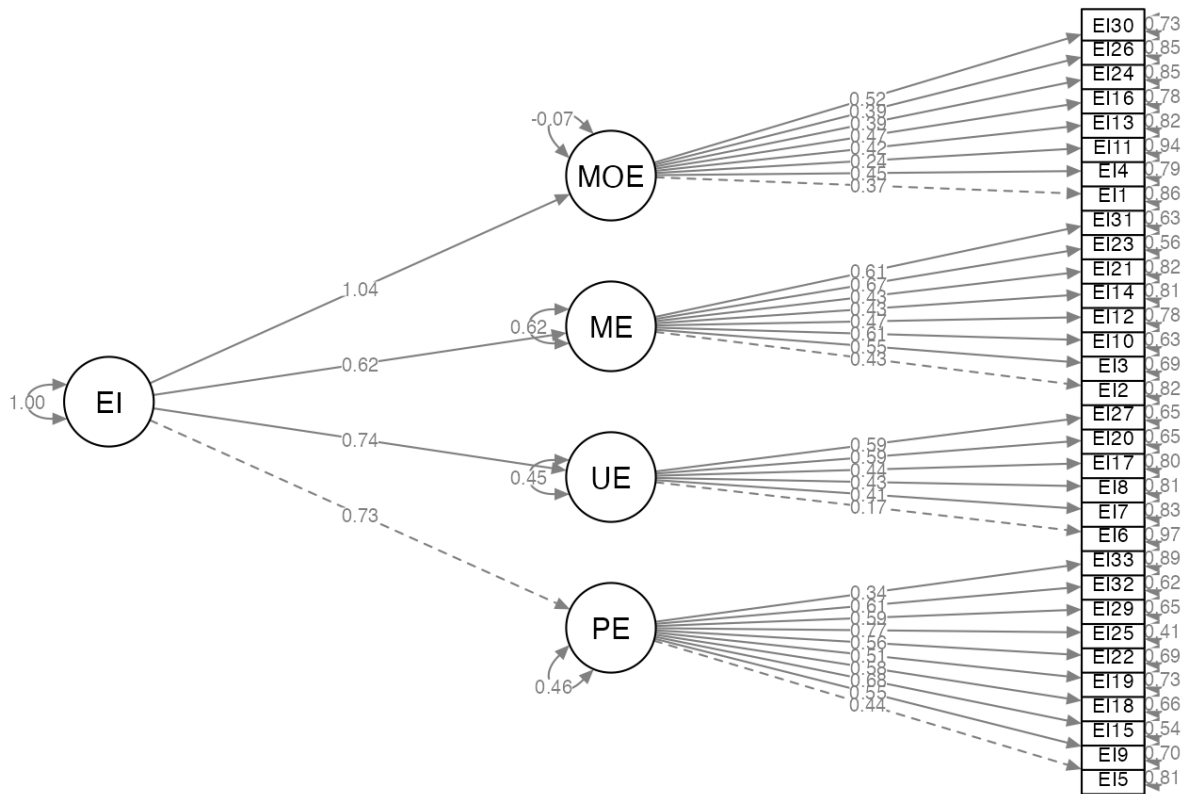


Figure 6. 2 Second-order measurement model of Emotional intelligence

In the examination of the Structural Equation Model (SEM) estimates presented in Table 6.10 for the Emotional Intelligence model, the primary emphasis was on evaluating the statistical significance of each item's loading onto the factors representing sub-dimensions within the emotional intelligence construct. A thorough scrutiny of the table revealed that the statistical significance of the pathways varied, with a notable number of cases showing non-significance. This implies that certain items do not effectively load onto their respective factors.

A decision was made to address this concern by excluding item 28 from the model due to its lack of statistical significance ($p < .277$). Further investigation into item 28's residual indicated that a substantial 99% of its variance could not be explained, reinforcing the decision to remove it from the analysis. This re-evaluation prompted a shift in the analytic approach, leading to the decision to conduct an exploratory factor analysis to gain a more comprehensive understanding of the underlying structure of the emotional intelligence construct. This strategic adjustment aims to enhance the model's robustness and ensure a more accurate representation of the data.

Table 6. 11 Exploratory Factor Analysis of Emotional intelligence

Factor Loadings

	<i>Factor</i>						<i>Uniqueness</i>
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	
<i>EI1</i>							0.846
<i>EI2</i>		0.455					0.765
<i>EI3</i>		0.634					0.665
<i>EI4</i>					0.927		0.193
<i>EI5</i>	0.528						0.624
<i>EI6</i>							0.913
<i>EI7</i>			0.555				0.687
<i>EI8</i>				0.351		0.636	0.468
<i>EI9</i>				0.819			0.258
<i>EI10</i>		0.686					0.461
<i>EI11</i>						0.351	0.828
<i>EI12</i>		0.387					0.684
<i>EI13</i>						0.461	0.598
<i>EI14</i>		0.318					0.736
<i>EI15</i>	0.622						0.452
<i>EI16</i>	0.330	0.434					0.677
<i>EI17</i>			0.470				0.600
<i>EI18</i>	0.571		0.325				0.515
<i>EI19</i>				0.443			0.639
<i>EI20</i>			0.616				0.544
<i>EI21</i>	0.327	0.523	-0.325				0.556
<i>EI22</i>				0.671			0.404
<i>EI23</i>		0.568					0.547
<i>EI24</i>					0.428		0.756
<i>EI25</i>	0.687						0.341
<i>EI26</i>			0.442				0.709
<i>EI27</i>			0.439				0.619
<i>EI28</i>			-0.351				0.816

EI29	0.669			0.436
EI30			0.399	0.669
EI31		0.375	0.431	0.447
EI32	0.407			0.550
EI33	0.328			0.823

Note. 'Maximum likelihood' extraction method was used in combination with a 'Promax' rotation

The decision to conduct an exploratory factor analysis (EFA) using the Jamovi program, with Maximum Likelihood extraction and promax rotation, was pivotal in refining the structure of the Emotional Intelligence model. The EFA results diverged from the initial four sub-dimensions and proposed a reconfiguration into six distinct sub-dimensions. The current sub-dimensions encompass Perceptions of Emotion, Utilisation of Emotions, Managing Own Emotions, Managing the Emotions of Others, and two additional nuanced themes, denoted as Dimensions 5 and 6.

Notably, the robustness of the emotional intelligence construct has led to variations in factor structures across studies. The EFA results align with the findings of Jonker and Vosloo (2008), who identified six factors, including 'positive affect,' 'emotion-others,' 'happy emotions,' 'emotions-own,' 'non-verbal emotions,' and 'emotional management.' On the other hand, Petrides and Furnham (2000) identified four factors in a sample of British universities, while Schutte et al. (2009) proposed a unidimensional construct based on their factor analysis findings.

In the context of analysing Likert scale data with an ordinal ranking and a relatively small dataset (n = 160), the choice of estimation technique becomes crucial. While Robust Maximum Likelihood is generally preferred for its accuracy and robustness, it assumes continuous data and may be less suitable for non-normally distributed, ordinal datasets with smaller sample sizes. Therefore, the exploration of alternative estimation methods is essential to ensure the appropriateness of the chosen technique.

Table 6. 12 Reliability indices of the subdimensions of Emotional intelligence

Reliability indices

<i>Variable</i>	α	ω_3	<i>AVE</i>
<i>PE</i>	0.817	0.757	0.300
<i>UE</i>	0.568	0.550	0.205
<i>ME</i>	0.749	0.728	0.268
<i>MOE</i>	0.581	0.559	0.147

Note - α = Cronbach's Alpha; ω_3 = Macdonald's Omega; *AVE* = Average variance extracted.

The examination of reliability indices for the Emotional Intelligence (EI) scale, employing Diagonally Weighted Least Squares, reveals nuanced insights into the internal consistency of the construct and its sub-dimensions. The assessment includes Cronbach's alpha, McDonald's omega, and the Average Variance Extracted (AVE), each shedding light on different aspects of reliability.

Beginning with Cronbach's alpha, a common benchmark for internal consistency, the data highlights that the critical cut-off of 0.6 is not met for certain sub-dimensions. This suggests some challenges in achieving the desired level of reliability for these components of the EI scale. The findings from Table 6.12 indicate that the AVE is relatively low, ranging between 20% to 30% for each sub-dimension. This implies that the EI scale is capturing only a modest proportion of the variance within these components.

In summary, the reliability indices, particularly the alpha and AVE, suggest challenges in achieving optimal internal consistency for certain sub-dimensions of the EI scale. These insights prompt a thoughtful consideration of the scale's reliability and may guide future refinements or adaptations to enhance the robustness of the measurement instrument.

Despite the ambiguity surrounding the factor structure of the Emotional Intelligence (EI) model, the decision to continue with its analysis is grounded in the comprehensive exploration of goodness-of-fit indices, estimation techniques, and the iterative refinement process. The implementation of Diagonally Weighted Least Squares (DWLS) addressed the challenges posed by the ordinal nature of Likert scale data and the relatively small sample size, ensuring a more suitable estimation approach. While the factor structure revealed nuances, including a deviation from the initial four sub-dimensions to a proposed six-sub-dimension model, the recognition of the complexity of emotional intelligence underscores the need for adaptability in modelling. By acknowledging the

variations in factor structures across different studies, we align with the evolving nature of the EI construct. Therefore, the decision to persist with the EI model is informed by the understanding that, despite the nuanced complexities, we are capturing valuable insights within the framework of emotional intelligence, contributing to the broader understanding of this multifaceted construct.

6.4.1.3 Estimation and model fit of Mindfulness

The evaluation of the Mindfulness Scale's goodness of fit, utilizing various fit indices, provides valuable insights into the appropriateness of the model. The Satorra-Bentler scaled Chi-square test (S-B X^2) resulted in a statistically significant outcome (S-B $X^2 = 129$, $df = 90$, $p < .005$), indicative of potential discrepancies between the model and observed data. While there is no defined cutoff value for S-B X^2 , its interpretation is commonly considered alongside other fit indices (Satorra & Bentler, 2010). The Standardised Root Mean Square Residual (SRMR) of 0.059 suggests an acceptable fit (Hu & Bentler, 1999), reflecting the average standardised difference between observed and predicted correlations. The Root Mean Square Error of Approximation (RMSEA) at 0.052, within the range of 0.033 to 0.060, indicates a good fit (Browne & Cudeck, 1992), highlighting the model's ability to approximate the population covariance matrix. Furthermore, the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) with values of 0.959 and 0.952, respectively, imply a highly satisfactory fit (Hu & Bentler, 1999), surpassing the commonly recommended threshold of 0.95. The statistically non-significant p-value ($p = 0.419$) further supports the model's fit. Overall, the Mindfulness Scale exhibits a statistically significant and robust fit, emphasising its suitability for capturing the intended construct.

Table 6. 13 Goodness of fit analysis of Mindfulness

	S-B X^2	SRMR	CFI	TLI	RMSEA	Upper	Lower
Value	129	0.059	0.959	0.952	0.052	0.069	0.033
Df	90						
P	< .005				0.419		

Note - S-B X^2 = Satorra Bentler scale Chi-square; RMSEA = root-mean-square error of approximation; SRMS = standardised root-mean-square residual; CFI = comparative fit index; TLI = Tucker-Lewis index. * $p < .05$. ** $p < .01$.

The examination of the Structural Equation Model (SEM) estimates for the Mindfulness Scale, as depicted in Table 6.14, emphasises the statistical significance of each item's loading onto the overarching construct of mindfulness. Notably, all items demonstrate statistically significant loadings ($p < 0.05$), underscoring the robust relationship between each questionnaire item and the mindfulness construct. This statistical significance is further exemplified by specific instances such as Item 6, which reports a p-value of 0.002, signifying a remarkably low probability of chance occurrence. In the visual representation of the SEM model presented in figure 6.3, the examination shifts to the regression coefficients (λ), ranging from 0.316 to 0.874. These coefficients illuminate the magnitude of the relationship between each item and the mindfulness construct, revealing varying degrees of contribution to the overall model.

Table 6. 14 Estimates of Mindfulness

Measurement model

Latent	Observed	Estimate	SE	95% Confidence Intervals		λ	z	p
				Lower	Upper			
MI	Mind1	1.000	0.000	1.000	1.00	0.447		
	Mind2	1.359	0.289	0.792	1.93	0.522	4.70	< .001
	Mind3	1.543	0.294	0.967	2.12	0.649	5.25	< .001
	Mind4	1.299	0.254	0.802	1.80	0.537	5.12	< .001
	Mind5	1.069	0.235	0.608	1.53	0.420	4.54	< .001
	Mind6	0.807	0.256	0.305	1.31	0.316	3.15	0.002
	Mind7	1.812	0.353	1.121	2.50	0.763	5.14	< .001
	Mind8	1.833	0.333	1.180	2.49	0.841	5.50	< .001
	Mind9	1.589	0.303	0.995	2.18	0.702	5.25	< .001
	Mind10	1.869	0.357	1.169	2.57	0.834	5.23	< .001
	Mind11	1.387	0.289	0.821	1.95	0.582	4.80	< .001
	Mind12	1.707	0.354	1.013	2.40	0.720	4.82	< .001
	Mind13	1.162	0.276	0.620	1.70	0.481	4.20	< .001
	Mind14	2.044	0.387	1.285	2.80	0.874	5.28	< .001
	Mind15	1.493	0.308	0.890	2.10	0.613	4.85	< .001

Additionally, the analysis extends to the residuals, representing unexplained variance in each item that cannot be attributed to the mindfulness construct. The observed residuals affirm that a

substantial amount of variance is effectively captured by the model, affirming the SEM's efficacy in accounting for the complexity within the Mindfulness Scale. This comprehensive evaluation of statistical significance, regression coefficients, and residuals collectively reinforces the validity and reliability of the Mindfulness Scale within the SEM framework. The nuanced findings strengthen the argument that the model, employing the robust maximum likelihood technique, successfully captures and explains the inherent variance within the mindfulness construct, providing robust support for the scale's effectiveness in measuring mindfulness as intended.

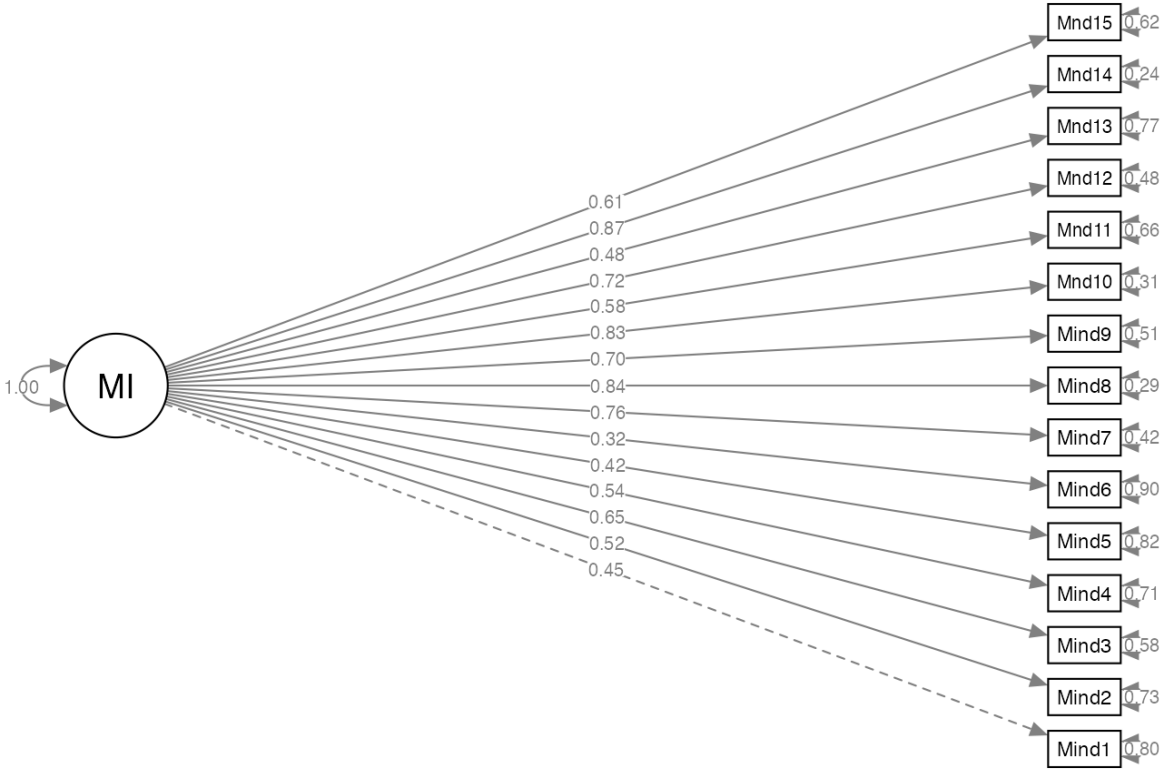


Figure 6. 3 First order measurement model of Mindfulness

In the evaluation of reliability indices for the Mindfulness Scale, critical metrics such as Cronbach's alpha, MacDonald's omega, and the Average Variance Extracted (AVE) were systematically considered. These indices offer valuable insights into the internal consistency and the proportion of reliable variance captured by the mindfulness construct.

The results revealed robust internal consistency, with Cronbach's alpha coefficient reaching 0.902. This metric signifies a high level of reliability within the scale, indicating that the items within the

Mindfulness Scale consistently measure the intended construct. MacDonald's omega, another essential measure accounting for factor loadings and communalities, further supports the scale's reliability, yielding a commendable value of 0.893.

Turning attention to the Average Variance Extracted (AVE), which gauges the proportion of variance captured by the construct relative to measurement error, the obtained value of 0.398 indicates a moderate level of reliability. While falling slightly below the conventional benchmark of 0.50, the AVE still signifies a reasonable amount of reliable variance captured by the mindfulness construct.

In summary, the convergence of reliability indices, goodness-of-fit assessments, and estimates from the SEM model provides a comprehensive affirmation of the Mindfulness Scale's operationalization. The notable Cronbach's alpha and MacDonald's omega coefficients, signalling strong internal consistency, are complemented by the Average Variance Extracted (AVE), which, despite slightly falling below the ideal threshold, attests to a significant portion of reliable variance captured by the mindfulness construct. This collective robustness reinforces the model's effectiveness in measuring mindfulness.

Aligning with the earlier structure, the statistical significance of individual items, coupled with favourable goodness-of-fit indices and robust reliability metrics, collectively reinforce the conclusion that the Mindfulness Scale adeptly captures the intended constructs. This collective affirmation establishes a sturdy foundation for the ongoing analysis and interpretation of the mindfulness scale in the subsequent phases of the study, bolstering confidence in the reliability and validity of the scale for assessing mindfulness within the study's context.

Table 6. 15 Reliability indices of the subdimensions of Mindfulness

Reliability indices

<i>Variable</i>	<i>α</i>	<i>ω_3</i>	<i>AVE</i>
<i>MI</i>	<i>0.902</i>	<i>0.892</i>	<i>0.398</i>

Note - α = Cronbach's Alpha; ω_3 = Macdonald's Omega; AVE = Average variance extracted .

6.4.2 Multiple regression analysis

In the subsequent section, the examination delves into the intricate connections between self-leadership, emotional intelligence, and mindfulness, seeking to address the primary research question of the study: Does emotional intelligence and mindfulness influence self-leadership amongst graduates in the early career stage? A stepwise multiple regression analysis was employed to investigate the relationships between the variables. The choice of Multiple Regression Analysis, a fundamental technique in statistical modelling, stems from its capability to unravel complex relationships among multiple variables. By doing so, this analytical approach sheds light on the degree to which one or more predictors contribute to the variability observed in a specified outcome variable (Howell, 2017). This methodological choice aligns with the study's objective of comprehensively understanding the impact of emotional intelligence and mindfulness on self-leadership within the context of early career-stage graduates.

6.4.2.1 Item Parcelling

For the process of item parcelling, the employed technique is known as domain representative parcelling. Domain representative parcelling involves grouping and representing items within a scale based on the broader content domains they collectively capture (Little, Cunningham, Shahar, & Widaman, 2002). The utilisation of item parcels, particularly in the context of smaller sample sizes, is advantageous for several reasons. Item parcels help mitigate issues associated with item-level variability, potentially enhancing the stability and reliability of latent constructs (Little et al., 2002). This technique is particularly beneficial in situations where the sample size may be limited, as it allows for a more robust estimation of latent variables with reduced parameter estimates. Additionally, the use of item parcels simplifies the automation of analyses, facilitating the implementation of complex statistical procedures, especially when using programs like Jamovi (Little et al., 2002). This strategic approach to item parcelling enhances the precision and efficiency of the analysis, providing a methodological advantage in the examination of latent constructs within the specified research framework. In Table 6.16, the item parcels are presented, illustrating the specific way items are grouped within the domain representative framework. The table organizes parcels for each construct: Self-Leadership (SLDP), Emotional Intelligence (EIDP), and Mindfulness (MIDP). Each parcel within the Self-Leadership construct (SLDP 1-3) contains items from all nine sub-dimensions of self-leadership, ensuring a comprehensive representation.

Similarly, Emotional Intelligence (EIDP 1-3) and Mindfulness (MIDP 1-3) parcels adhere to the same principle, encompassing items from all relevant sub-dimensions.

Table 6. 16 Item Parcels for Self-leadership, Emotional intelligence and Mindfulness

<i>Construct</i>	<i>Parcel</i>	<i>Items</i>
<i>Self-Leadership</i>	<i>SLDP1</i>	<i>1; 2; 3; 4; 5; 6; 7; 8; 9; 28; 30; 31</i>
	<i>SLDP2</i>	<i>10; 11; 12; 13; 14; 15; 16; 17; 18; 27; 29; 32</i>
	<i>SLDP3</i>	<i>19; 20; 21; 22; 23; 24; 25; 26; 33; 34; 35</i>
<i>Emotional Intelligence</i>	<i>EIDP1</i>	<i>1; 2; 5; 6; 12; 13; 17; 18; 23; 25; 26</i>
	<i>EIDP2</i>	<i>3; 4; 7; 9; 14; 16; 19; 20; 29; 30</i>
	<i>EIDP3</i>	<i>8; 10; 11; 15; 21; 22; 24; 27; 31; 32</i>
<i>Mindfulness</i>	<i>MIDP1</i>	<i>1; 4; 7; 10; 13</i>
	<i>MIDP2</i>	<i>2; 5; 8; 11; 14</i>
	<i>MIDP3</i>	<i>3; 6; 9; 12; 15</i>

6.4.2.2 Research question 1: Testing of the full measurement model

The interpretation of the data for the full measurement model encompassing Self-leadership, Emotional Intelligence, and Mindfulness serves the purpose of evaluating the adequacy with which the grouped item parcels, as presented in Table 6.16, capture the intended constructs. The ensuing discussion centres on key analytical components, including goodness-of-fit statistics, R^2 values, estimates, and reliability indices, offering a comprehensive assessment of the measurement model's efficacy. Emphasising methodological robustness, the employed technique for estimation is Robust Maximum Likelihood, chosen for its ability to handle non-normally distributed data and its reliability in smaller sample sizes.

The focus on goodness-of-fit statistics provides insights into how well the proposed model aligns with the observed data, offering a holistic perspective on its appropriateness. R^2 values elucidate

the proportion of variance explained by the latent constructs, shedding light on the model's explanatory power. Estimates from the SEM model unravel the intricate relationships among variables, contributing to a nuanced understanding of the interplay between Self-leadership, Emotional Intelligence, and Mindfulness. Additionally, reliability indices, including alpha, omega, and AVE, offer crucial insights into the internal consistency and reliability of the constructs.

This comprehensive evaluation aims to provide a robust foundation for affirming the adequacy of the full measurement model, ensuring that the item parcels effectively capture the intended constructs across Self-leadership, Emotional Intelligence, and Mindfulness.

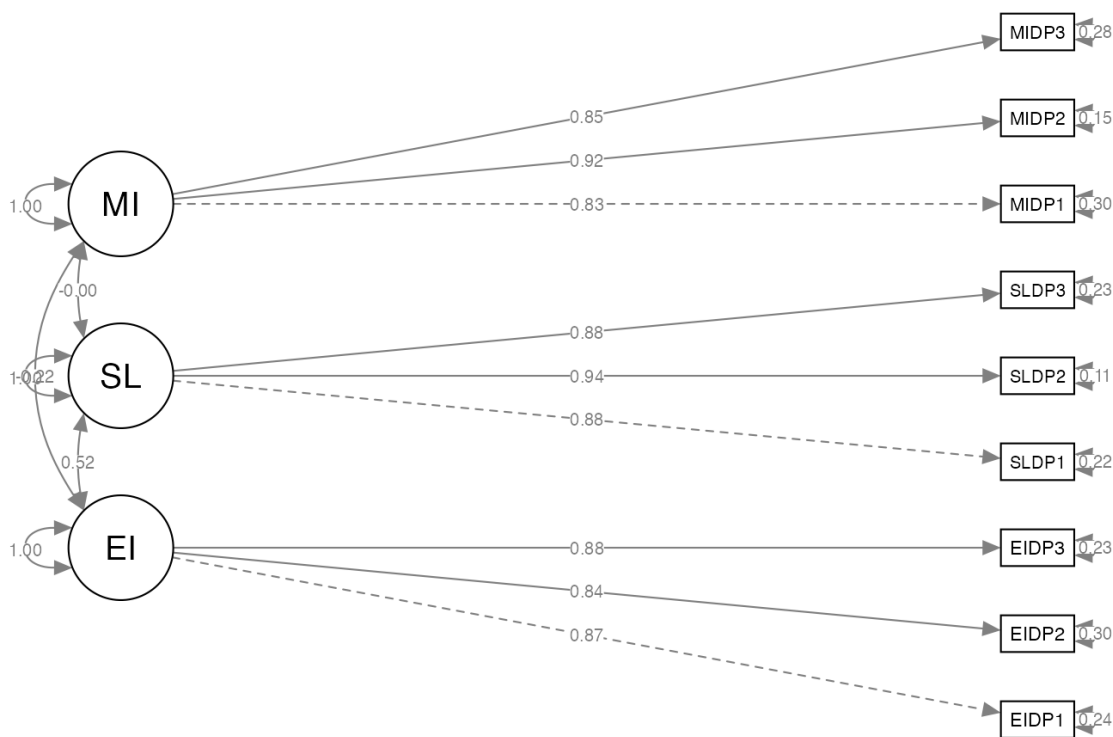


Figure 6. 4 Full measurement model

6.4.2.2.1 Goodness of fit

Table 6. 17 Goodness of fit for the full measurement model

	S-B X²	SRMR	CFI	TLI	RMSEA	Upper	Lower
Value	24.2	0.036	0.997	0.996	0.007	0.063	0.000
Df	24						
P	< .450				0.862		

Note - S-B X² = Satorra Bentler scale Chi-square; RMSEA = root-mean-square error of approximation; SRMS = standardised root-mean-square residual; CFI = comparative fit index; TLI = Tucker-Lewis index. *p < .05. **p

After applying the robust maximum likelihood technique to estimate the full measurement model encompassing Emotional Intelligence (EI), Self-leadership (SL), and Mindfulness, the evaluation of goodness-of-fit indices offers insights into the model's appropriateness. The Satorra-Bentler scaled Chi-square test (S-B X²) resulted in a statistically non-significant finding (S-B X² = 24.2, df = 24, p = 0.450), indicating a favourable alignment between the proposed model and the observed data. The Standardised Root Mean Square Residual (SRMR) at 0.036 suggests an acceptable fit (Hu & Bentler, 1999), denoting the average standardised difference between observed and predicted correlations. The Root Mean Square Error of Approximation (RMSEA) at 0.007, within the range of 0.000 to 0.063, indicates a superb fit (Browne & Cudeck, 1992), affirming the model's capability to approximate the population covariance matrix. Furthermore, the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) with values of 0.997 and 0.996, respectively, signify a near-excellent fit (Hu & Bentler, 1999), surpassing the conventional threshold of 0.95. Overall, the model demonstrates a statistically non-significant fit with excellent SRMR, RMSEA, CFI, and TLI values, suggesting a robust alignment between the specified constructs and the observed data.

6.4.2.2.2 Estimates

The examination of estimates within the full measurement model provides valuable insights into the significance and strength of the relationships between the parcels representing Emotional Intelligence (EI), Self-leadership (SL), and Mindfulness. Notably, all parcels demonstrate a high level of statistical significance (p < .001), underscoring the robustness of the relationships between the latent constructs. The β values associated with each parcel further emphasise the strength of these relationships, with values ranging from the lowest at $\beta = 0.834$ to the highest at $\beta = 0.943$. These high β values signify a substantial and positive influence of each parcel on its respective construct, indicating that each parcel effectively represents and contributes to the comprehensive understanding of Emotional Intelligence, Self-leadership, and Mindfulness within the model. The consistently high statistical significance and substantial effect sizes affirm the reliability and validity of the parcels in capturing and representing the intended constructs.

Table 6. 18 Estimates

Measurement model

Latent	Observed	Estimate	SE	95% Confidence Intervals		β	z	p
				Lower	Upper			
EI	EIDP1	1.000	0.0000	1.000	1.00	0.874		
	EIDP2	0.969	0.0761	0.820	1.12	0.839	12.7	< .001
	EIDP3	1.050	0.0964	0.861	1.24	0.877	10.9	< .001
SL	SLDP1	1.000	0.0000	1.000	1.00	0.885		
	SLDP2	1.176	0.0841	1.011	1.34	0.943	14.0	< .001
	SLDP3	1.087	0.0892	0.912	1.26	0.876	12.2	< .001
MI	MIDP1	1.000	0.0000	1.000	1.00	0.834		
	MIDP2	1.160	0.0987	0.966	1.35	0.924	11.7	< .001
	MIDP3	1.003	0.0795	0.847	1.16	0.847	12.6	< .001

6.4.2.2.3 R² Values

The examination of the R² values within the full measurement model, encompassing Emotional Intelligence (EI), Self-leadership (SL), and Mindfulness, reveals substantial explanatory power. R², as an overarching effect size measure of the structural model, serves as an indicator of the percentage of variance in an indicator explained by the model. Notably, the R² values for all parcels within the model are notably high, surpassing the conventional threshold. The variance captured in each parcel exceeds 70%, underscoring the robustness of the model in elucidating the intricate relationships and providing comprehensive insights into the constructs of Emotional Intelligence, Self-leadership, and Mindfulness.

Table 6. 19 R² of the parcels

R²

Variable	R ²
EIDP1	0.764
EIDP2	0.704
EIDP3	0.769
SLDP1	0.782
SLDP2	0.888

<i>SLDP3</i>	0.768
<i>MIDP1</i>	0.696
<i>MIDP2</i>	0.853
<i>MIDP3</i>	0.718

6.4.2.2.4 Reliability indices

The assessment of reliability indices within the full measurement model indicated strong internal consistency and reliability across the constructs of Emotional Intelligence (EI), Self-leadership (SL), and Mindfulness (MI). For Emotional Intelligence, the alpha (α) coefficient is 0.897, MacDonald's omega (ω) is 0.898, and the Average Variance Extracted (AVE) is 0.746. Self-leadership exhibits even higher reliability with an alpha of 0.928, omega of 0.929, and AVE of 0.815. Similarly, Mindfulness demonstrates robust reliability indices with an alpha of 0.902, omega of 0.904, and AVE of 0.759. These results collectively affirm the internal consistency of the measurement model, indicating that the items within each construct are highly correlated and reliably measure the intended latent variables. The strong reliability indices across all constructs further enhance the overall validity and trustworthiness of the full measurement model in capturing the multifaceted dimensions of Emotional Intelligence, Self-leadership, and Mindfulness.

The comprehensive analysis of the full measurement model establishes that the item parcels effectively capture the constructs of Emotional Intelligence (EI), Self-leadership (SL), and Mindfulness (MI). The robustness of the model is affirmed through favorable goodness-of-fit indices, high R^2 values indicating substantial explained variance, and statistically significant estimates with substantial effect sizes. Additionally, the reliability indices underscore strong internal consistency across the constructs. This collective evidence supports the conclusion that the item parcels successfully and accurately represent the intended latent variables, validating their effectiveness in capturing the multifaceted dimensions of EI, SL, and MI within the study's dataset.

Table 6. 20 Reliability indices

Reliability indices

Variable	α	ω_s	AVE
EI	0.897	0.898	0.746
SL	0.928	0.929	0.815
MI	0.902	0.904	0.759

6.4.2.3 Research question 1: Testing of the full structural model

After the successful confirmation of the item parcels accurately capturing the constructs of Emotional Intelligence (EI), Self-leadership (SL), and Mindfulness (MI), the study was poised to delve into the intricate relationships between these variables. Armed with a validated measurement model, the focus then shifted to the nuanced exploration of how EI, SL, and MI interrelate within the context of graduates in the early stages of their careers. The groundwork laid by the meticulous assessment of item parcels set the stage for a comprehensive analysis of the interplay between these essential constructs, providing valuable insights into the dynamics of self-leadership, emotional intelligence, and mindfulness in the early career stage.

Table 6.21 presented the results obtained regarding the path coefficients and their associated p-values and β values, followed by a discussion of the results.

Table 6. 21 Path coefficients

Parameters estimates

Dep	Pred	Estimate	SE	95% Confidence Intervals		β/γ	z	p
				Lower	Upper			
SL	MI	0.0571	0.0369	-0.0151	0.1294	0.118	1.55	0.121
SL	EI	0.6760	0.1060	0.4684	0.8837	0.550	6.38	< .001
MI	EI	-0.5607	0.2742	-1.0981	-0.0234	-0.220	-2.05	0.041

The beta coefficient for the relationship between self-leadership and emotional intelligence is $\gamma = 0.550$, with a p-value of ($p = 0.001$). Given that the p-value is less than 0.05, the relationship

between self-leadership and emotional intelligence can be deemed statistically significant. Conversely, the path coefficient between self-leadership and mindfulness is $\gamma = 0.118$, with a p-value of 0.1212, exceeding the required minimum of 0.05. Consequently, the relationship between self-leadership and mindfulness can be interpreted as statistically non-significant. Intriguingly, the observed relationship between emotional intelligence and mindfulness, represented by a path coefficient of -0.220 with a p-value of 0.041, suggests a statistically significant inverse association between the two constructs. This implies that as emotional intelligence increases, mindfulness tends to decrease. This counterintuitive finding prompts consideration of potential explanations rooted in psychological literature. According to research (e.g., Brown & Ryan, 2003), mindfulness involves being present in the moment without judgment. Conversely, individuals with high emotional intelligence may possess heightened emotional awareness, potentially leading to increased introspection and a reduced capacity for the non-judgmental, present-focused mindset characteristic of mindfulness. Literature suggests that an individual's strong connection to their emotions might interfere with the ability to maintain a state of mindfulness (Shapiro, Carlson, Astin, & Freedman, 2006). This interpretation aligns with the idea that an intense focus on emotional experiences may detract from the capacity to be fully present in the moment, highlighting the complexity of the interplay between emotional intelligence and mindfulness.

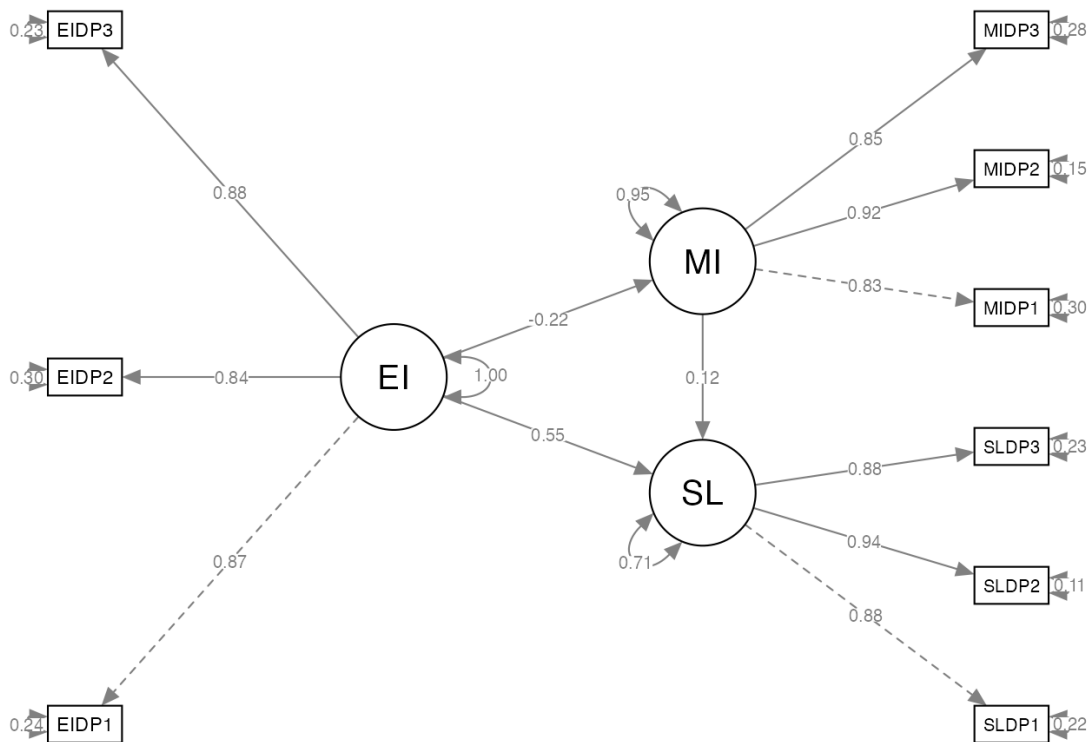


Figure 6.5 Parameter estimates

6.4.2.4 Research Question 2

T-Tests for independent groups test results are presented and discussed in line with the secondary research question: Do differences exist in levels of self-leadership among graduates in the early career stage regarding gender?

6.4.2.4.1 Gender differences in Self-leadership

In examining the gender differences in self-leadership, a sample comprising 45 males and 113 females was analysed. The mean self-leadership score for males was found to be 128, suggesting that, on average, male participants exhibited this leadership characteristic at this level. Conversely, females demonstrated a higher mean self-leadership score of 138. This disparity in means implies that, as a group, females tended to express higher levels of self-leadership compared to their male counterparts. The statistically significant difference ($p = 0.009$) further reinforces this observation, indicating that the distinction is not likely due to random chance. The effect size, measured at 0.467,

signifies a moderate difference, offering additional insight into the practical significance of the gender disparities in self-leadership scores. These findings suggest that, within the context of this study, gender plays a role in influencing the expression of self-leadership, with females generally demonstrating higher levels than males.

Table 6. 22 Group statistics

Group Descriptives

	<i>Group</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>SD</i>	<i>SE</i>
<i>TOTSLMAX</i>	<i>M</i>	45	128	129	17.6	2.62
	<i>F</i>	113	136	136	16.6	1.57

The examination of gender differences in self-leadership revealed statistically significant disparities between male and female participants. Utilising t-tests for independent groups with $df = 156$, the analysis yielded a p-value of 0.009, indicating the presence of significant variations in self-leadership scores. Furthermore, the effect size of 0.467, representing a moderate magnitude of difference, underscores the practical significance of these observed distinctions. These findings suggest that, on average, individuals of different genders exhibit notable differences in self-leadership behaviours.

Table 6. 23 T-tests for independent groups

Independent Samples T-Test

	Statistic	df	p	Effect Size	95% Confidence Interval	
					Lower	Upper
TOTSL	Student's t	15	0.0	Cohen's d	-	-
MAX	t's t	6	09	n's d	0.46	0.81
					7	7

Note. $H_a \mu_0 \neq \mu_1$

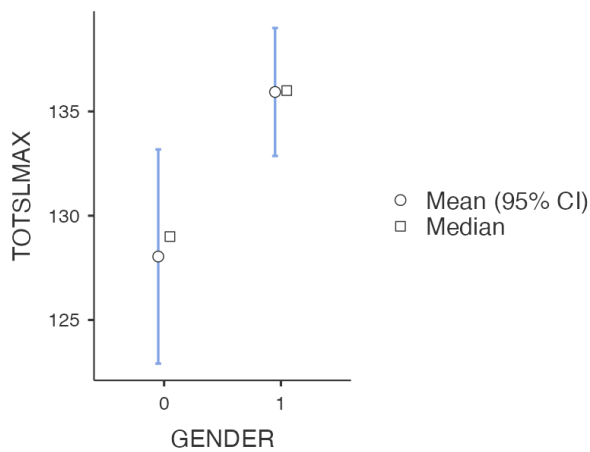


Figure 6. 6 Spread between males and females

6.5 CHAPTER SUMMARY

In this chapter, a comprehensive examination of emotional intelligence, mindfulness, and self-leadership unfolded, shedding light on the intricate dynamics among these constructs in the context of early-career graduates. The emotional intelligence model, while facing challenges in its initial fit assessment, underwent refinement through the Diagonally Weighted Least Squares (DWLS) technique, resulting in a more suitable estimation approach. Exploratory Factor Analysis (EFA)

revealed a shift from the initial four sub-dimensions to a nuanced six-sub-dimension model, aligning with the complexity of emotional intelligence. However, reliability indices indicated challenges in achieving optimal internal consistency for specific sub-dimensions, prompting consideration for future refinements.

Conversely, the Mindfulness Scale exhibited robust goodness-of-fit indices, high factor loadings, and commendable reliability, affirming its effectiveness in capturing mindfulness as intended. Structural Equation Model (SEM) estimates emphasised the significance of each item, and the first-order measurement model further confirmed the scale's reliability. Surprisingly, a significant inverse association between emotional intelligence and mindfulness surfaced, challenging conventional expectations, and offering a nuanced perspective on the interplay between heightened emotional awareness and the non-judgmental mindset characteristic of mindfulness.

The subsequent Multiple Regression Analysis delved into the relationships between self-leadership, emotional intelligence, and mindfulness. Emotional intelligence emerged as a statistically significant predictor of self-leadership, underscoring its pivotal role in shaping leadership behaviours among early-career graduates. Unexpectedly, a significant inverse association between emotional intelligence and mindfulness was identified, adding a layer of complexity to the understanding of these constructs. This revelation implies that heightened emotional awareness, a component of emotional intelligence, may interfere with the capacity for the non-judgmental, present-focused mindset associated with mindfulness.

Finally, the exploration of gender differences revealed statistically significant variations in self-leadership scores. Females, on average, demonstrated higher levels of self-leadership compared to their male counterparts, emphasising the influence of gender on the expression of self-leadership behaviours. In conclusion, this chapter not only contributed to the evolving understanding of emotional intelligence, mindfulness, and self-leadership but also provided practical insights for organisations aiming to enhance leadership development initiatives among early-career professionals. The study laid a robust foundation for future research, acknowledging the dynamic and interconnected nature of these constructs in the evolving landscape of leadership development.

CHAPTER 7: DISCUSSION OF RESULTS

7.1 INTRODUCTION

The chapter begins with a discussion on the theoretical and empirical conclusions drawn from this study. It further highlights the limitations of this study, followed by recommendations for future research.

7.2 CONCLUSIONS

The following section provides a two-way discussion on the theoretical and empirical conclusions drawn from this study, with specific focus on the following research questions outlined in Chapter 1, namely, to determine whether:

1. Does emotional intelligence and mindfulness influence self-leadership among graduates in the early career stage; and
2. Does differences exist in the levels of self-leadership regarding gender among graduates in the early career stage.

7.2.1 Theoretical Conclusions

The overarching objective of this study was to explore the relationship among emotional intelligence, mindfulness, and self-leadership. The aim was to offer practitioners valuable insights into facilitating effective career management for graduates in the early stages of their professional journey within the dynamic landscape of contemporary work environments. The study endeavoured to theoretically conceptualise the constructs of emotional intelligence, mindfulness, and self-leadership to achieve this aim. By delving into these theoretical frameworks, the research sought to contribute evidence that can inform practical strategies for supporting graduates in navigating and succeeding in their careers amid the complexities of the modern workplace.

7.2.1.1 Conceptualising self-leadership

In conceptualising self-leadership, the focal point of the study was Neck and Houghton's (2006) definition, which positions self-leadership as the process of influencing oneself to establish the self-direction and self-motivation needed to perform. The definition emphasises the internal processes

in guiding one's behaviour and motivation. The study delved into the intricacies of self-leadership, identifying three core strategies proposed by Neck and Houghton (2006) behaviour-focused, natural reward, and constructive thought pattern. These strategies collectively form the foundation of self-leadership, encompassing a range of practices aimed at enhancing personal growth, motivation, and goal attainment (Neck and Houghton, 2006).

The theoretical framework guiding this study embraced the Social Cognitive Theory (Bandura, 1986) and Self-Regulation Theory (Carver & Scheier, 1998). This choice of framework provided a foundational understanding of the cognitive, behavioural, and motivational aspects that underpin self-leadership practices. Social Cognitive Theory elucidates the role of observational learning, social influence, and self-efficacy in shaping individual behaviour, aligning with exploring how individuals influence themselves in the context of self-leadership (Bandura, 1986). Similarly, Self-Regulation Theory contributes insights into the processes of goal setting, self-monitoring, and self-control, which are integral components of self-leadership (Carver & Scheier, 1981).

The study examined the intersectionality of self-leadership with emotional intelligence and mindfulness. The literature reviewed underscored the interconnectedness of self-leadership with emotional intelligence, emphasising the importance of understanding and managing one's emotions to enhance self-leadership effectiveness. Additionally, mindfulness emerged as a complementary element, highlighting the significance of cultivating present-moment awareness and attention to bolster self-leadership practices. Furthermore, gender dynamics were explored within the realm of self-leadership, revealing that gender may influence the types of self-leadership strategies individuals employ. Studies indicated variations in strategy preferences, with women often leaning towards collaborative and interpersonal approaches, while men gravitate towards task-oriented and independent strategies (Eagly & Carli, 2007).

In conclusion, this literature review meticulously unpacked the multifaceted concept of self-leadership, drawing primarily from Neck and Houghton's (2006) definition and framework. The exploration of self-leadership's strategies, theoretical underpinnings, and its interconnectedness with emotional intelligence, mindfulness, and gender provides a robust foundation for the research investigation. The nuanced understanding developed in this review sets the stage for a comprehensive examination of self-leadership in the specific context of the study's objectives.

7.2.1.2 Conceptualising emotional intelligence

In this comprehensive exploration of emotional intelligence (EI) and its intersections, the literature revealed the multifaceted nature of EI and its far-reaching implications for personal and professional success (Salovey & Mayer, 1990; Goleman, 1995; Bar-On, 1997). The study primarily centred on Peter Salovey and John Mayer's (1990) definition of EI as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action." Salovey and Mayer's definition served as the foundation for understanding EI in terms of emotional regulation, social awareness, empathy, and problem-solving skills.

The three prominent models of emotional intelligence—Bar-On Model (Bar-On, 1997), Goleman's Model (1995), and Mayer and Salovey's Four Branch Model (Mayer & Salovey, 1997)—offer distinct perspectives. The focus of this study was on Mayer and Salovey's Four Branch Model due to its comprehensive developmental approach, which encompasses the essential components of emotional intelligence, from perceiving and understanding emotions to effectively managing them. This model was deemed most suitable given its structured and systematic framework, which aligns with the study's objective of understanding and enhancing emotional intelligence in various personal and professional contexts (Mayer & Salovey, 1997).

The outcomes of high emotional intelligence encompass effective emotional regulation, heightened social awareness, empathy, and advanced problem-solving skills (Salovey & Mayer, 1990; Bar-On, 1997). Graduates with elevated EI are not only more likely to succeed in interpersonal relationships but also experience greater job satisfaction and lower stress levels (Petrides & Furnham, 2001). Organisation that value EI tend to have more engaged and committed employees (Cherniss & Adler, 2001).

The relationship between emotional intelligence and self-leadership was a key focus, with studies consistently showing a positive correlation (Chen & Liang, 2013). High EI individuals demonstrate essential components of self-leadership, such as self-awareness, self-regulation, and self-motivation (Day & Carroll, 2004). Moreover, individuals with high EI and self-leadership are better equipped

for career success, job satisfaction, and navigating the challenges of the early career stage (Chen & Liang, 2013; Goleman et al., 2002).

In conclusion, emotional intelligence is a pivotal determinant of success, influencing various aspects of life, including self-leadership and career development. Mayer and Salovey's Four Branch Model emerged as a focal point in this study, providing a systematic and developmental perspective that aligns seamlessly with the study's objectives. Additionally, the examination of emotional intelligence (EI) encompasses the utilisation of the Schutte Self-Report Emotional Intelligence Scale (SEIS), developed by Schutte et al. (1998) to operationalise the foundational framework proposed by Salovey and Mayer (1990). The SEIS, deeply rooted in Salovey and Mayer's theoretical model, served as a valuable instrument for data collection, ensuring a comprehensive exploration of emotional intelligence across its multifaceted dimensions.

7.2.1.3 Conceptualising mindfulness

In the exploration of mindfulness, the chapter was initiated by tracing the roots of mindfulness to its origins in Buddhist traditions, emphasising its subsequent introduction to the Western world by Kabat-Zinn (1994). The central focus on attention and awareness, the fundamental components of mindfulness, was underscored, with specific attention to the definitions provided by Kabat-Zinn (1994) and Brown and Ryan (2003). The intricate nature of mindfulness, stemming from various conceptualisations and definitions, was acknowledged, with a particular spotlight on the definition proposed by Brown and Ryan (2003), aligning closely with the study's chosen models.

Two significant models of mindfulness, Bishop et al.'s (2004) two-component model and Shapiro et al.'s (2006) mechanisms of mindfulness model, were discussed. The former involves the self-regulation of attention and one's orientation to the present moment, with distinct components such as sustained attention and attention switching, coupled with an orientation of curiosity. The latter, Shapiro et al.'s (2006) model, revolves around three key principles: intention, attention, and attitude. The study's primary focus rested on Shapiro et al.'s model, aligning seamlessly with Brown and Ryan's (2003) definition, emphasising attention and awareness of the present moment experience.

Moving forward, the chapter delved into factors impacting mindfulness, including personality traits, spirituality, age, and gender. Personality traits like openness, low neuroticism, and conscientiousness were identified as influencing mindfulness levels, while spirituality emerged as a key factor, positively associated with mindfulness and well-being. Age exhibited varying influences, with older adults often scoring higher on mindfulness scales, contrasting with contradictory findings in some studies. Gender's role in mindfulness remained inconclusive, with studies presenting conflicting evidence.

The subsequent sections shed light on the outcomes of mindfulness, elucidating its neurological impacts, the interplay between mindfulness and self-leadership, and the intricate relationship between mindfulness and emotional intelligence. Neurologically, mindfulness was linked to enhanced self-regulation, affecting attention control, self-awareness, and emotional regulation. The integration of mindfulness and self-leadership was explored, emphasising mindfulness as a critical antecedent to effective self-leadership, influencing self-awareness, emotional regulation, goal setting, motivation, stress management, and overall well-being. Lastly, mindfulness was intricately connected to emotional intelligence, with studies suggesting a positive correlation between mindfulness and emotional functioning.

In conclusion, this comprehensive exploration encapsulates the intricate facets of mindfulness, ranging from its conceptualisation and definitions to the examination of influential factors and subsequent outcomes. The chosen focus on Brown and Ryan's (2003) definition and Shapiro's et al., (2006) model was driven by their alignment with the study's objectives. The multifaceted nature of mindfulness, influenced by personality, spirituality, age, and gender, was unveiled. The neurological, self-leadership, and emotional intelligence outcomes of mindfulness were also thoroughly elucidated. This thorough groundwork provides a robust theoretical foundation for the subsequent research methodology and data collection in the forthcoming chapter.

7.2.2 Empirical Conclusions

The following section provides a discussion of the research results that were reported in Chapter 6, with specific focus on the two main aims outlined in Chapter 1.

7.2.2.1 Research Question 1: The empirical effect between self-leadership, emotional intelligence, and mindfulness.

Statistically Significant Relationship Between Self-Leadership and Emotional Intelligence:

- Beta coefficient (β) = 0.550 with a p-value of 0.001, indicating a statistically significant positive association.
- Suggests that higher levels of emotional intelligence correspond to enhanced self-leadership.

The observed statistically significant positive association ($\beta = 0.550$, $p = 0.001$) between self-leadership and emotional intelligence in the current study showed to be in harmony with and reinforced the findings of previous research in the field. Numerous scholars have delved into the intricate relationship between emotional intelligence and self-leadership, highlighting the crucial role of emotional competence in effective self-guidance and leadership.

A robust foundation for understanding the relationship between emotional intelligence (EI) and self-leadership has been laid by Schutte, (1998), who introduced the Emotional Intelligence Scale (SEIS). This scale captures the intricate facets of EI, including the appraisal and expression of emotion, utilisation of emotion, and emotional regulation (Schutte et al., 1998). Schutte et al.'s (1998) work aligns seamlessly with the present study's findings, indicating that individuals with heightened emotional intelligence are more likely to demonstrate enhanced self-leadership capabilities. This concordance emphasises the integral role of emotional intelligence in the self-leadership domain, as individuals proficient in recognising, comprehending, and managing emotions may exhibit superior self-guidance skills (Schutte et al., 1998). Schutte and colleagues' (1998) contribution underscores the intricate interplay between emotional intelligence and self-leadership, providing valuable insights into the nuanced dynamics of these constructs.

Furthermore, the positive relationship observed between emotional intelligence and self-leadership resonated with the comprehensive model proposed by Mayer and Salovey (1997), known as the Four Branch Model of Emotional Intelligence. This model posits that emotional intelligence involves the ability to perceive, understand, manage, and utilise emotions effectively. The link between emotional intelligence and self-leadership can be interpreted through the lens of these four

branches, where individuals with a heightened emotional intelligence capacity are better equipped to manage themselves and, consequently, exhibit more effective self-leadership (Mayer & Salovey, 1997).

The findings also echo the work of scholars like Zeidner et al. (2012) and Lopes et al. (2006), who, while critiquing aspects of Mayer and Salovey's model, acknowledged the significance of emotional intelligence in influencing cognitive processes and decision-making. This convergence of results strengthens the assertion that emotional intelligence is a foundational element contributing to enhanced self-leadership (Zeidner et al., 2012; Lopes et al., 2006).

In summary, the current study's identification of a statistically significant positive association between self-leadership and emotional intelligence aligned seamlessly with a rich body of literature. From the foundational works of Schutte et al. (1998) and Mayer and Salovey (1997) to more contemporary studies by Goleman and Boyatzis, the prevailing consensus underscored the integral role of emotional intelligence in fostering effective self-leadership abilities. This consistent pattern of findings contributed to the robustness of the argument that higher levels of emotional intelligence indeed correspond to elevated self-leadership capabilities.

Non-Significant Relationship Between Self-Leadership and Mindfulness:

- Path coefficient of 0.118 with a p-value of 0.1212, exceeding the threshold of 0.05.
- Implies that the relationship between self-leadership and mindfulness is statistically non-significant.
- Raises questions about the direct impact of self-leadership on mindfulness in the observed context.

The finding indicated a non-significant relationship between self-leadership and mindfulness prompts a nuanced exploration of existing literature to illuminate potential explanations and contextualise the observed outcome.

One plausible interpretation is rooted in the distinct conceptualisations and operationalisations of self-leadership and mindfulness. While self-leadership emphasises individual agency, goal setting, and behaviour regulation (Houghton & Neck, 2002), mindfulness centres on present-moment

awareness, non-judgmental observation, and acceptance (Kabat-Zinn, 1994). Previous research by Bodner and Langer (2001) emphasises the potential divergence in cognitive processes and focus between self-leadership and mindfulness. They posit that self-leadership strategies may predominantly engage executive functions and planning, whereas mindfulness encourages a non-analytical, non-judgmental awareness that might not align seamlessly with self-leadership's proactive and intentional orientation.

Moreover, the non-significant relationship between self-leadership and mindfulness aligns with a growing body of research that explores the intricate interplay between individual differences in cognitive styles and the effectiveness of specific interventions (Vago & Silbersweig, 2012). In this context, the non-significant path coefficient may reflect the variability in individuals' cognitive styles and preferences in adopting self-leadership strategies versus mindfulness practices.

These interpretations draw support from the broader literature on the distinctiveness of self-leadership and mindfulness. By acknowledging the diversity in cognitive processes and the multifaceted nature of human behaviour, these findings underscore the need for a nuanced and context-specific understanding of how self-leadership and mindfulness intersect or remain disparate in influencing individual outcomes.

Intriguing Inverse Relationship Between Emotional Intelligence and Mindfulness:

- Path coefficient of -0.220 with a p-value of 0.041, indicating a statistically significant inverse association.
- Suggests that as emotional intelligence increases, mindfulness tends to decrease.
- Contradictory finding prompts further exploration into the nuanced interplay between emotional intelligence and mindfulness.

The unexpected inverse relationship between emotional intelligence (EI) and mindfulness observed in the study found support in nuanced perspectives within the literature. One plausible explanation may be rooted in the diverse facets of emotional intelligence, particularly the distinction between strategic EI and experiential EI (Mayer & Salovey, 1997). While strategic EI involves the effective

use of emotions for goal attainment, experiential EI centres on the understanding and management of one's emotions (Mayer & Salovey, 1997).

This tension between strategic and experiential facets of EI has been explored in previous research. Mayer and Salovey (1997) emphasize that individuals high in strategic EI may excel in goal-directed activities, utilizing emotions effectively for achievement. However, this heightened focus on goal attainment may inadvertently lead to reduced attention to the present moment, diminishing the inclination toward mindfulness.

The concept of emotional intelligence as a multifaceted construct is further supported by Goleman (1995), who introduced the idea of emotional intelligence domains, including self-awareness, self-regulation, motivation, empathy, and social skills. The nuanced interplay between these domains may contribute to variations in the relationship with mindfulness. For instance, a high emphasis on self-regulation and motivation, characteristic of strategic EI, might lead individuals to prioritize future-oriented tasks over present-moment awareness (Mayer and Salovey, 1997).

Moreover, the potential trade-off between strategic EI and mindfulness aligns with the notion that individuals high in strategic EI may face challenges in fully engaging with experiential aspects, such as mindfulness (Mayer and Salovey, 1997). This is consistent with the work of Lutz et al. (2008), who discuss how a heightened focus on emotion regulation, a core component of EI, may influence receptivity to present-moment experiences.

The interplay between emotional intelligence and mindfulness is context-dependent and influenced by individual differences (Jiménez-Picón, 2021). Workplace demands, personal stressors, and varying conceptualizations and practices of mindfulness contribute to the complexity of this relationship (Ciarrochi, Deane, & Anderson, 2002). Therefore, the observed inverse relationship prompts a closer examination of these contextual factors and their impact on the intricate dynamics between emotional intelligence and mindfulness (Lopes et al., 2005; Ciarrochi et al., 2002).

In summary, the literature provided a robust foundation for understanding the diverse facets of emotional intelligence and their potential implications for mindfulness. The tension between strategic and experiential EI, as well as the context-dependent nature of this relationship, offers valuable insights into the unexpected findings in your study.

7.2.2.2 Research Question 2: Differences between males and females regarding self-leadership

The statistical analysis of gender differences in self-leadership scores revealed a statistically significant distinction ($p = 0.009$) between male and female participants. The mean self-leadership score for males was 128, while females demonstrated a higher mean score of 138. The effect size of 0.467 further emphasises the practical significance of this observed variation. The results provide robust statistical evidence supporting the conclusion that gender differences have a significant impact on the scores achieved on self-leadership, with females exhibiting higher levels compared to their male counterparts.

The statistical analysis of gender differences in self-leadership scores unveiled compelling insights, resonating with existing literature on gender and leadership. The identified statistically significant distinction ($p = 0.009$) between male and female participants aligns with a rich body of research exploring the nuanced relationship between gender and leadership qualities.

The mean self-leadership score for males (128) and the higher mean score for females (138) substantiate findings from numerous studies that have delved into gender-based variations in leadership-related traits. Eagly and Carli (2003) argue that societal expectations and norms contribute to differences in self-perceptions and behaviours between genders, influencing leadership qualities. Your results echo this sentiment, suggesting that, on average, females exhibit higher levels of self-leadership.

The effect size of 0.467 further underscored the practical significance of the observed gender-related variation in self-leadership scores. Cohen's (1988) work on effect sizes emphasises the importance of considering both statistical and practical significance. In the context of the study, the moderate effect size suggested that the observed gender differences are not only statistically meaningful but also of practical importance, reinforcing the real-world impact of these distinctions.

The study's findings contribute to the broader literature on gender and leadership, aligning with the work of Eagly and Johnson (1990), who found that women often demonstrate higher levels of transformational leadership behaviours. Transformational leadership encompasses aspects of self-leadership, such as motivation and goal setting, aligning with the constructs measured in your study.

The results provided robust statistical evidence supporting the conclusion that gender differences significantly influence the scores achieved on self-leadership, with females exhibiting higher levels compared to their male counterparts. This conclusion aligns with the evolving understanding of gender roles in leadership, challenging traditional stereotypes and emphasising the importance of recognising and leveraging the unique strengths that women bring to leadership roles (Eagly & Johannesen-Schmidt, 2001).

In summary, the findings on gender differences in self-leadership scores contributed to a nuanced understanding of leadership dynamics, supported by existing literature on gender and leadership. The practical significance of these differences underscores the need for organisation to acknowledge and leverage gender-specific nuances in self-leadership and leadership capabilities, fostering more inclusive and effective leadership development initiatives.

7.3 LIMITATIONS OF THE STUDY

- **Study Limitations Disclaimer:** A recognised limitation in this study pertains to the data collection process. The sample set, while intended to be focused, may have included participants outside the specified inclusion and exclusion criteria. This challenge is compounded by the survey link's open distribution, which was internally shared with postgraduates through the University of the Free State's internal marketing and communications department. The lack of stringent control over access to the survey link raises concerns about the sample's size and introduces ambiguity about who participated in the survey. This potential variability in the participant pool impacts the precision and generalizability of the study's findings, and this limitation should be considered in interpreting the results.
- **Sample Representation and Generalizability:** The study's results were based on a relatively small and heterogeneous sample, cautioning against broad generalisations, particularly to the broader population of graduates in the early career stage.
- **Inconsistent Factor Structures in Emotional Intelligence (EI) within the South African Context:** The study addressed the challenge of inconsistent factor structures in emotional intelligence within the South African context. The identification of a six-factor

structure through Exploratory Factor Analysis (EFA) departs from the conventional four-factor model, emphasising the need for context-specific investigations.

- **Measurement Variance in Gender Differences on Self-Leadership:** The exploration of gender differences in self-leadership introduced concerns about potential measurement variance in the scale across different genders. Statistically significant differences in self-leadership scores may be influenced by diverse interpretations of the questionnaire rather than actual disparities in self-leadership behaviours.
- **Acknowledgment of Gender-Related Biases in Self-Leadership Questionnaire:** The study did not specifically validate if the self-leadership questionnaire is free from gender-related biases in interpretation. Caution is warranted in making definitive conclusions about the operationalization of the self-leadership construct across genders.

7.4 RECOMMENDATIONS

With the research conclusions and limitations in mind, this section outlines recommendations for the field of Industrial and Organisational (I/O) psychology as well as future research.

7.4.1 Recommendations for the I/O Psychology field

- **Integrate Emotional Intelligence Competency Models:** Considering the findings from the present study, organisation within the I/O Psychology field are encouraged to incorporate established emotional intelligence competency models. The Schutte Emotional Intelligence Scale (SEIS) developed by Schutte et al. (1998) is one such model that can be integrated into talent management and leadership development initiatives. This systematic integration is designed to facilitate the identification, development, and assessment of emotional intelligence skills crucial for effective self-leadership.
- **Explore Context-Specific Mindfulness Interventions:** Building on the insights gained from this study, further research is needed to explore the efficacy of mindfulness interventions tailored to specific industrial contexts. Investigating how mindfulness practices can be adapted to address industry-specific challenges and demands will contribute to a more contextually grounded understanding of their impact on self-leadership (Dane & Brummel, 2014). This exploration is essential for developing targeted and effective mindfulness strategies within diverse work environments.

7.4.2 Recommendations for future research

Based on the current study, the following recommendations are made for future research:

- **Enhance Sample Representation:** Given the relatively small and diverse sample in this study, future research should prioritise adopting a larger and more demographically representative sample. This approach aims to enhance the generalisability of the results.
- **Explore Different Career Stages:** This research focused specifically on graduates in the early career stage. Future studies could consider investigating the relationships among the variables in different samples, such as individuals on varying skill levels or in different stages of their career development.
- **Conduct Longitudinal Studies:** Researchers in industrial psychology are encouraged to conduct longitudinal studies that delve deeper into the dynamic interplay between emotional intelligence, mindfulness, and self-leadership. A longitudinal approach can provide a more nuanced understanding of how these constructs evolve over time in early career stages, offering valuable insights for organisational interventions (Luthans, Youssef-Morgan, & Avolio, 2015).
- **Examine Cross-Cultural Variations:** Given the globalised nature of many industries, future research in industrial psychology should consider cross-cultural variations in the relationships between emotional intelligence, mindfulness, and self-leadership. Understanding how cultural factors influence these dynamics is essential for developing culturally sensitive interventions and leadership practices (Matsumoto, 2020).
- **Contextual Exploration of Gender Differences:** While the results for gender differences on self-leadership offered valuable insights, it is essential to consider potential confounding variables or contextual factors that may contribute to the observed gender differences in self-leadership. Further research exploring specific dimensions or contextual influences could enhance the understanding of the nuances within gender-related leadership behaviours.
- **Validate Measurement Invariance:** Future research should prioritise investigating and validating the measurement invariance of the self-leadership scale to ensure that observed gender differences truly reflect variations in self-leadership behaviours rather than

differences in interpretation or response bias. Addressing this recommendation would contribute to the robustness and generalisability of findings regarding gender-related nuances in self-leadership.

7.5 CHAPTER SUMMARY

Chapter 7 provided a comprehensive synthesis of the theoretical and empirical findings derived from this study, centred on the exploration of the relationships among emotional intelligence (EI), mindfulness, and self-leadership among early-career graduates. The conceptualisation of self-leadership highlighted its three core strategies, forming a robust foundation for subsequent empirical investigation. Emotional intelligence, explored through Mayer and Salovey's Four Branch Model, emerged as a pivotal determinant of success, influencing self-leadership and career development. The multifaceted nature of mindfulness, examined through Brown and Ryan's definition and Shapiro et al.'s model, is thoroughly elucidated, providing a theoretical basis for the empirical investigation.

Moving to the empirical conclusions, Research Question 1 investigated the relationships between self-leadership, emotional intelligence, and mindfulness. The results revealed a statistically significant positive association between self-leadership and emotional intelligence, emphasising the critical role of emotional intelligence in fostering self-directed leadership skills. Conversely, the relationship between self-leadership and mindfulness is deemed statistically non-significant, suggesting a lack of direct impact. Intriguingly, an inverse relationship was identified between emotional intelligence and mindfulness, prompting further exploration into this nuanced interplay.

Research Question 2 explored gender differences in self-leadership among early-career graduates. The findings indicated a statistically significant difference, where females demonstrated higher levels of self-leadership than their male counterparts. However, caution is advised due to potential measurement variance and the need for further exploration of gender-related nuances in self-leadership behaviours.

Limitations of the study, including a small and heterogeneous sample, and the challenge of inconsistent factor structures in the South African context, were acknowledged. Recommendations

for future research encompass integrating established emotional intelligence competency models, conducting longitudinal studies, exploring context-specific mindfulness interventions, and examining cross-cultural variations. These recommendations aimed to enhance the generalisability and depth of understanding regarding the relationships among emotional intelligence, mindfulness, and self-leadership in diverse contexts. Overall, the study contributes valuable insights to the fields of career psychology and industrial-organisational (I/O) psychology, paving the way for future research endeavours.

APPENDIX A

Research study information leaflet and consent form

Date

January 2023-December2023

Title of the research project

The influence of Emotional Intelligence and Mindfulness on Self-Leadership amongst Graduates in the Early Career Stage.

Principle investigator / researcher(s) name(s) and contact number(s):

Anneline Hattingh

Student number: 2013021403

068 371 1895

Faculty and Department:

Economic and Management Sciences

Department of Industrial Psychology

Study leader(s) name and contact number:

Ronel Kleynhans

(051) 401 2846

What is the aim / purpose of the study?

The main aim and purpose of this study will be to determine whether emotional intelligence and mindfulness influence self-leadership amongst Graduates in the Early Career Stage. The results

of this study will serve to improve upon the understanding of how emotional intelligence and mindfulness influence self-leadership in Graduates in the Early Career Stage.

Who is doing the research?

My name is Anneline Hattingh, and I am currently a master's student of industrial psychology at the University of the Free State. I am conducting this study as part of the requirements to complete my master's degree.

Has the study received ethical approval?

The study has received approval from the Research Ethics Committee of UFS.

Approval number: UFS-HSD2023/0535

Why are you invited to take part in this research project?

The target population for the study will consist of early-career graduates who will have completed or will be in the process of completing tertiary education. Respondents will be selected through non-probability convenience sampling, which involves selecting participants based on their availability and willingness to participate.

What is the nature of participation in this study?

Your participation will contribute to the growing knowledge of the effect emotional intelligence and mindfulness can have on Graduates' self-leadership. This study involves a questionnaire survey with empirically proven reliability and validity. The question within these questionnaires aims to discover the degree to which you intend to express emotional intelligence and mindfulness, to determine the effect it may have on your self-leadership strategies. Some examples include: 'I establish specific goals for my own performance.', 'I confront problems without demeaning those who work with me.', 'I drive places on 'automatic pilot' and then wonder why I went there'. The questionnaire survey, which consists of four sections (Section A, B, C, and D), should take you approximately

8 minutes to complete.

Can the participant withdraw from the study?

You are free to decide if you want to partake in this study at your own choice. Participation is voluntary, and you are welcome to withdraw from this study at any moment without giving a reason, and without fear of consequence prior to the submission of the questionnaire. Please note it will not be possible to withdraw once you have submitted the questionnaire. 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.

What are the potential benefits of taking part in this study?

The results of this study will be a valuable contribution to the field of Industrial Psychology, and to the general body of knowledge around this topic, where the findings of this study will be able to indicate whether Emotional Intelligence and Mindfulness influence Graduates' Self leadership strategies. Additionally, the finding will also assist with identifying where the strongest connections are present.

What is the anticipated inconvenience of taking part in this study?

Participants in this study face minimal risks, with the only potential concern being the potential loss of work time. To mitigate this risk, an online questionnaire is designed that allows respondents to complete it at their own convenience, preferably during their spare time, to ensure it does not interfere with their work responsibilities. Similarly, we understand that students may have busy schedules due to their academic commitments, such as studying. We encourage students to find a suitable time to complete the questionnaire that aligns with their availability and does not disrupt their academic obligations.

Will what I say be kept confidential?

All information that is acquired in relation with this current study will remain confidential and used only for the generation of knowledge. Your answers will be given a fictitious

code number or a pseudonym and will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings etc. The data and records that can identify you will only be available and accessible by the people working on the study, which includes myself (Anneline Hattingh) and my research supervisor (Mrs. R. Kleynhans), unless you provide permission for other people to see the records. In addition, all answers from you may be reviewed by people responsible for making sure that this research is done properly, which includes the University of the Free State's transcriber, external coder, and members of the Research Ethics Committee. Only the collective results, which does not include any personal or identifiable information on any participant and organization, of this study may be published by the University of the Free State for lecturers and students for academic purposes should the University of the Free State decide to do so (e.g., research reports, journal articles, conference presentations, etc.). Strict confidentiality will be maintained for all organisation and individual participants that partakes in this study. All identifiable information that is provided by you will be kept private and protected in any publication of the information.

How will the information be stored and ultimately destroyed?

Hard copies of the results will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet with the department of industrial psychology for future research or academic purposes. Electronic information will be stored on a password protected computer only accessible by the researcher. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. After a period of five years, the hard copies of all the answers will be destroyed through shredding, and electronic copies of the answers will be erased.

Will I receive payment or any incentives for participating in this study?

Participants will not receive payment or an incentive for participating in the study. The biggest value for the participant is the contribution they are making towards knowledge building as well as assisting possible future Graduates. A possible risk for participants is that they may be identified. To alleviate this risk the researcher will use pseudonyms and all identifiers will be removed from the data. If any psychological stress results because

of the research, the participants may withdraw from the research without any explanation or reason. Furthermore, the researcher will provide contact detail of experts in the necessary fields if the need arises.

How will the participant be informed of the findings / results of the study?

If you require any further information or want to contact the researcher about any aspect of this study or would like to be informed of the final research findings, please contact Anneline Hattingh on 068 371 1895 or annelinehattingh1@gmail.com. The findings are accessible for [time frame to be confirmed]. Should you have concerns about the way in which the research has been conducted, you may contact Mrs. R. Kleynhans on +27 51 401 2846, or via email at kleynr@ufs.ac.za.

Thank you for taking the time to read this information sheet and for participating in this study.

Consent to participate in this study

I, the undersigned, _____ (participant's full names to be included), (the "Participant") confirm that I voluntarily agree to participate in the research study referred to as the _____ (the "Study") in relation to _____ and which Study is being conducted by _____ (Anneline Hattingh), (the "**Researcher**").

I, the undersigned Participant, further confirm that–

1. the Researcher has explained the nature, procedure, potential benefits, and anticipated inconvenience of my participation in the Study;
2. I have read (or had explained to me) and understood the Study as explained in the attached information sheet;
3. I have had sufficient opportunity to ask questions and am prepared to participate in the Study;
4. I understand that my participation in the Study is entirely voluntary and that I am free to withdraw at any time without penalty (if applicable);
5. I voluntarily provide the UFS and the Researcher with my personal information and consent to the UFS and the Researcher collecting, disclosing, and processing my personal information to conduct the Study and any related activities in relation thereto;
6. I hereby acknowledge and confirm that I understand the purpose for which the UFS and the Researcher may collect, store, use, delete, destroy, outsource, transfer or otherwise process, as the context and circumstances may require and as contemplated in terms of POPIA, my personal information as set out herein;
7. I am aware that the findings of the Study will be anonymously processed into a research report, journal publications and/or conference proceedings and that my personal information will be aggregated and deidentified at such stage;
8. I also give the UFS permission to share, without notification, the collected data with other researchers at the UFS or other Higher Education Institutions. This permission is dependent on the same principles of ethical research practices, anonymity/confidentiality, safekeeping of information, and other issues listed above applying.

I, the Participant, agree to participate in the research survey.

Full Name of Participant:

Signature of Participant: _____

Date: _____

Full Name(s) of Researcher(s): _____

Signature of Researcher: _____

Date: _____

APPENDIX B

Subject line: Invitation to Participate in a Research Project on The Influence of Emotional Intelligence and Mindfulness on Self-leadership among graduates in the early career.

Dear [Participant's Name],

I would like to extend a special invitation to you to take part in a research study that aims to investigate the influence of emotional intelligence and mindfulness on self-leadership among graduates in the early stage. We believe that your participation in this study will contribute greatly to our understanding of this important topic.

Ethical considerations: I would like to assure you that this study adheres to strict ethical guidelines and procedures, and your participation will be kept completely confidential. Your privacy and rights as a participant will be respected and protected throughout the study.

Enclosed, you will find detailed information about the study, including what it entails and the steps you need to take to participate. We have also included a confidentiality form and four questionnaires that we kindly request you to complete.

I understand that your time is valuable, and we appreciate your willingness to participate in this study. By taking part, you will not only be contributing to the advancement of knowledge in this field, but you will also gain insights into your own emotional intelligence, mindfulness, and self-leadership.

Please take the time to carefully review the information provided, and do not hesitate to reach out to us if you have any questions or concerns. Your participation and input are essential to the success of this research, and we look forward to hearing from you soon.

What is expected from you:

- To complete the confidentiality form (see attachment) to ensure that your personal information is kept confidential and protected.

- To complete the four questionnaires (see attachment) to provide us with accurate and reliable data for our study.

Thank you for considering our invitation to participate in this study. Your contribution is invaluable, and we greatly appreciate your time and effort.

Warmest regards,

Anneline Hattingh

APPENDIX C



GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

10-Sep-2023

Dear Mej Anneline Hattingh **Application Approved** Research Project Title:

THE INFLUENCE OF EMOTIONAL INTELLIGENCE AND MINDFULNESS ON SELF-LEADERSHIP AMONG GRADUATES IN THE EARLY CAREER STAGE.

Ethical Clearance number:

UFS-HSD2023/0535

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. Furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Yours sincerely

Dr Adri Du Plessis

Chairperson: General/Human Research Ethics Committee

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Park West Bloemfontein 9301 South Africa

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9337

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**Adri Du
Plessis**

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