Assessing the relationship between mindfulness and authentic leadership amongst MBA students in a selected higher education institution

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DECLARATION

I, **Nolan Lombard Laubscher,** student number **20551584,** declare that this study, titled ***Assessing the relationship between mindfulness and authentic leadership amongst MBA students in a selected higher education institution*****,** is my own work and has never been submitted for any degree at any other university. All sources in this study have been indicated and acknowledged by means of direct and indirect references.



Signed

31 Mar. 21

Date

DEDICATION

I would like to dedicate this mini-dissertation to the most important people in my life, who played a pivotal role in supporting me throughout this research study.

I would like to dedicate this work to a very strong and resilient woman whom I call *Carrots*, *my guiding light*, my Mother, Elaine Yvonne Laubscher, the one who taught me to aim for the stars and to always strive towards achieving my dreams in life. This work I dedicate to you, Mum, for being the most important person in my life. It is through this work that you have played a pivotal role in helping me overcome some of life's greatest challenges by being resilient, loving, supportive, and compassionate. This would not have been possible without your advice and guidance at every step of the way, which I shall remember for the rest of my life, especially when I had thoughts of quitting and not finishing what I'd started. You will forever be present in my work and the life lessons that I hope to teach my children one day. Thank you for always being there when I needed you the most, and I'm grateful for continuing this journey with you.

"*No matter how difficult it may seem, there is always something you can do and succeed at.*"

Stephen Hawking

ACKNOWLEDGMENTS

First, I would like to thank God, *The Almighty*, for giving me hope and granting me the strength throughout my journey as an MBA student, and for believing in myself to successfully complete my research study. The journey was long, and the challenges were daunting, but God's unconditional love and enduring strength pulled me through, and I will forever be grateful to Him.

I would like to express my most sincere and deep gratitude to Professor Yvonne du Plessis, a woman I truly respect and admire. Professor Yvonne du Plessis was my supervisor, and I would like to thank her for her guidance, support, and patience through a tough but very important chapter in my life. Thank you for always taking the time and giving your undivided attention to help, guide, and encourage me throughout the whole process of this mini-dissertation. This would not have been possible without your nurturing spirit, caring personality, and constant communication. I thank Professor you for your assistance and for being part of this chapter in my life and when I needed to be steered in the right direction.

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"*The true beauty of Nepal isn't the mountains.*

It's the people who live in their shadow."

Apa Sherpa

Assessing the relationship between mindfulness and authentic leadership amongst MBA students in a selected higher education institution

ABSTRACT

There is little consensus in the literature on what leaders can and ought to do to spark the best performance from their people. Over the years, the construct of effective leadership has grown into an entire industry in which leadership experts have built a career testing and coaching executives for the sole purpose of creating talented leaders. However, the challenge lies in determining what a leader should do to affect performance to get results. The purpose of this study was to assess the relationship between mindfulness and authentic leadership among MBA students to determine whether the constructs support similar values, actions, and behaviours.

It is proposed that, for leaders to be truly effective in contemporary times, their talents must not only be linked to planning, strategies, securing financing, and organisational profit-making but also demonstrate a healthy combination of mindful behaviour and authenticity in leadership behaviour. This study aimed to assess the levels of cognition to demonstrate both mindful behaviour and authenticity in leadership behaviour, using a sample of n = 41 students. The motivation for this study was a gap in the knowledge regarding the interconnectedness of mindfulness and authentic leadership based on the various facets of the constructs. Several research studies have found that mindfulness functions as a predictor for authentic leadership.

The relationship was assessed using a quantitative research approach. The Five Facet Mindfulness Questionnaire (FFMQ) was employed to assess mindfulness, and the Four Facet Authentic Leadership Questionnaire (ALQ) was used to assess authentic leadership. The FFMQ, which has social and emotional dimensions, demonstrated relatively high test-retest reliability and discriminant validity. The ALQ, which has moral and ethical dimensions, demonstrated a relatively high sample group and convergent validity. Thus, the main findings of this study suggest that both mindfulness and authentic leadership are performance tools, and both make a significant impact on students' levels of cognition to demonstrate values, actions, and behaviours in everyday life.

Both constructs are acknowledged as essential to engage with people and demonstrate true leadership intentions. The fact that very little is known about the effects of mindfulness on interpersonal interactions and social relationships at work means that mindfulness cannot be the only dependent construct to assess how effective leaders are or need to be. There is now an even greater need for business people and leaders to follow the right guidance to overcome real-life problems. They need to be mindful and learn to manage problems by being authentic in their decisions and actions. This study proposes that both these constructs are strongly related because they have similar fundamental qualities that make leaders more effective.

Key words: authentic leadership, emotional intelligence, leadership behaviour, mindfulness, organisational performance

LIST OF ABBREVIATIONS

ABBREVIATION	MEANING
ALQ	Four Facet Authentic Leadership Questionnaire
FFMQ	Five Facet Mindfulness Questionnaire
IBM	International Business Machines Corporation
KIMS	Kentucky Inventory of Mindfulness Skills
MAAS	Mindfulness Attention Awareness Scale
MBA	Master of Business Administration
MBCT	mindfulness-based cognitive therapy
MBIs	mindfulness-based interventions
MBSR	mindfulness-based stress reduction
MEDA	Microsoft Excel Data Analysis
NWU	North-West University
OC	organisational commitment
OR	ontological realism
PFC	prefrontal cortex
SIY	search inside yourself
SPSS	Statistical Package for the Social Sciences
UK	University of Kentucky
UW	University of Washington
UW	University of Wisconsin-Madison
VAC	variance analysis cycle

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CHAPTER 1
OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The question 'What makes an effective leader?' will undoubtedly elicit a wide range of answers. Many of these answers will touch on leaders setting strategies, leaders who motivate, leaders who create a mission, and, of course, leaders who build a sustainable culture (Goleman, 2017:1). If the same people were asked a slightly different question, such as 'What should a leader do?', the most common answer would be enhancing performance and getting results. The challenge is determining what a leader should do to enhance performance to get the desired results.

Goleman (2017) notes that it is "a mystery of understanding what leaders can and ought to do to spark the best performance from their people". Over the years, the construct *effective leadership* has grown into an entire industry in which leadership experts have made it their calling to test and coach executives for the sole purpose of creating talented businesspeople. These talents are mainly linked to planning, strategies, securing financing, and organisational profit-making (Caza & Jackson, 2011). In modern-day business, these skills are essential but remain elusive in many organisations and companies (Moldoveanu & Narayandas, 2019).

Goleman (2017), in *Leadership that gets results*, notes that the primary reason for the mystery is not a lack of quantitative research but because there is insufficient data to indicate which leadership behaviours affect performance. In many instances, researchers and leadership experts base their views on inference, experience, and instinct, and, sometimes, the advice on which leadership type yields certain results does not consistently yield the desired outcomes (Goleman, 2017:2).

In a study conducted in 2017 by Hay McBer (a consulting firm in Boston, Massachusetts, United States of America), a random sample of 3 871 executives were selected from a database of more than 20 000 executives worldwide, most of the mystery surrounding effective leadership was addressed. The results indicated six distinct leadership styles, each originating from different components of emotional intelligence (Goleman, 2017:3). The study revealed that leaders who deliver the best results do not only rely on only one leadership style. They tend to use many different leadership styles in a given period. These styles were measured individually over a week and were found to have a direct and unique impact on the work environment of a company, division, or team, including on their financial performance.

Arendt *et al*. (2019) argue that very little is known about the effects of mindfulness on interpersonal interactions and social relationships at work and posit that there is value in mindfulness in

workplace settings. To address this gap, the present study will investigate the role of mindfulness in the leader-follower relationship. It is hypothesised that mindfulness is reflected in a specific communication style. In other words, mindfulness in communication is positively related to followers' satisfaction with their leaders.

Concerning the leader-follower relationship, Goleman (2017) proposes that different leadership styles need to be considered to understand how organisations or companies enhance employee performance. How leaders switch between different leadership styles is critical because the ability to do so would not be possible without being mindful. Thus, mindfulness in leadership behaviour is essential for a positive relationship between leaders and followers.

Goleman (2017) identified six leadership styles, namely (1) coercive leaders, who demand immediate compliance, (2) authoritarian leaders, who mobilise people towards a vision, (3) affiliative leaders, who create emotional bonds and harmony, (4) democratic leaders, who build consensus through participation, (5) pacesetting leaders, who expect excellence and self-direction, and (6) coaching leaders, who develop people for the future (Goleman, 2017:5). However, when asked which of these styles is associated with an effective leader, people will name more than one style and, interestingly, also attribute similar traits or attributes to themselves (Goleman, 2017:5). The present study will examine whether there is support for Goleman's (2017) research on effective leadership and its impact in the workplace. The present study's focus will be (1) mindfulness in leadership behaviour and (2) authentic leadership as a leadership style.

Forbes (2016), in *Modes of mindfulness: prophetic critique and integral emergence*, proposes that, as mindfulness evolves and become more mainstream, more arguments around its purpose and use emerge. The present study will address some of these arguments.

The following section provides background to the study, followed by the problem statement and the research questions.

1.2 BACKGROUND

Porter (1988) and McKibbin (1988) note that there is a growing need in organisations for effective interpersonal and communication skills (cited by Aggarwal & Goodell, 2014:1). Goleman (1996) groups these competencies under the term *social and/or emotional intelligence* (Goleman, 1996:44). Aggarwal and Goodell (2014:45) studied attempted to address the gap between what is needed and what is taught in leadership, and note that there is little discussion of developing global leadership skills at an individual level because the focus is not on the attitudes, skills, and knowledge required to improve career development in leadership or on flexible leadership skills, good work ethics, and continued learning (Aggarwal & Goodell, 2014).

Goleman (1996), in *Emotional intelligence, and why it can matter more than IQ*, posits that to measure intelligence requires joint consideration of intellect and emotional equity. The present study will follow a similar approach.

The present study will assess Master of Business Administration (MBA) students' interpersonal and intrapersonal interactions with specific reference to mindfulness and authentic leadership. The aim is to assess the relationship between mindfulness and authentic leadership regarding shared values, actions, and behaviours.

Arendt *et al*. (2019), in *Mindfulness and leadership: communication as a behavioural correlate of leader mindfulness and its effect on follower satisfaction*, posits that mindfulness is positively related to communication in the workplace. According to Langer (2017a), mindfulness is the essence of engagement. It is a process by which people become more aware of context and perspective (Goleman *et al*., 2017a).

There are two challenges to be addressed in this study. The first challenge is to present a clear distinction between management and non-management roles concerning mindfulness and authentic leadership. The second is to present an unbiased view of leadership behaviour, as many leaders are likely to resonate with anyone who leads, is or was at some point also led (Goleman, 2017). These challenges were noted by Aggarwal and Goodell (2014) as some of the major contributors to the gap in leaders acquiring the right interpersonal skills. The authors, however, note that there is a growing interest from organisations and individuals and groups mindfulness in leading.

1.3 PROBLEM STATEMENT

A significant challenge for any organisation is establishing a culture that fosters talent and effective leadership (Moldoveanu & Narayandas, 2019), a challenge that has remained to this day (Forbes, 2016:2). Some studies on business and leadership indicate that mindfulness should form part of the business- and leadership processes, either directly or indirectly (Goleman *et al*., 2017b). However, research on mindfulness and leadership is rare.

Mindfulness is somewhat misunderstood. Business leaders and other individuals simply do not understand what mindfulness is or how it affects leadership in enhanced performance (Goleman *et al*., 2017a). The starting point of the present study will thus be first to understand mindfulness to understand better how mindfulness affects leadership behaviour that positively impacts performance (Goleman *et al*., 2017a).

Pykett *et al*. (2016), in their study *Mindfulness, behaviour change, and decision making: an experimental trial*, found that mindfulness can be an effective practice in gaining insights into the

behavioural sciences and consider how these insights could be applied in the workplace. Goleman and Langer (2017) consider mindfulness a leadership behaviour, as their most recent findings suggest that mindfulness and effective leadership have values, actions, and behaviours in common.

Reb *et al*. (2015) specify that mindfulness has a constructive[1] relationship with authentic leadership, as effective leadership rests on authentic values, actions, and behaviours. Thus, the problem is that when mindfulness is disassociated with effective leadership, mindfulness is not recognised as a leadership trait (Goleman, 2017:6). According to Aggarwal and Goodell (2014), the premise supported in studies of mindfulness in leadership is that one must be mindful in order to be an effective leader.

Another problem noted by Goleman and Langer (2017) is that mindfulness in leadership studies had not yet been translated into modern-day business practices (Goleman *et al*., 2017a). According to Goleman (2017), the reason is not a lack of research but insufficient data to determine which leadership behaviours positively affect performance. However, Langer (2017a) posits that mindfulness is a leadership trait and can also be used as a measure to determine which specific leadership behaviours enhance performance to achieve the desired results in the workplace (Goleman *et al*., 2017a).

The present study will assess the relationship between mindfulness and authentic leadership based on shared values, actions, and behaviours. Two existing measurement instruments will be employed to determine the effects of mindfulness on leadership behaviour. The Five Facet Mindfulness Questionnaire (FFMQ) of Baer, Smith, Hopkins, Krietemeyer and Toney (2008:330) will be used to measure mindfulness, and the (four-facet) Authentic Leadership Questionnaire (ALQ) designed by Avolio, Gardner, and Walumbwa (2007) will be used to measure authentic leadership.

1.4 RESEARCH QUESTIONS

In addressing the research problem, the following primary research question will be answered:

- What is the relationship between mindfulness and authentic leadership perceived by MBA students at a selected higher education institution?

The secondary research questions are:

[1] The construct *mindfulness* is considered to share a relationship with effective leadership, which means that mindfulness is also associated with authentic values, actions, and behaviours. The construct also requires scientific proof to validate this theory as presented in other subsequent analyses. The relationship between mindfulness and authentic leadership is thus considered to be part of this construct, due to similar values, actions, and behaviours.

- What are the descriptive characteristics of the construct of mindfulness as it relates to a workplace context?
- What are the descriptive characteristics of the construct of authentic leadership as it relates to a workplace context?
- How do MBA students perceive mindfulness and authentic leadership?

1.5 RESEARCH OBJECTIVES

This study aims to analyse shared values, actions, and behaviours to determine the effects of mindfulness on leadership behaviour. The supporting research objectives are as follows.

The primary research objective is:

- To assess the relationship between mindfulness and authentic leadership as perceived by MBA students at a selected higher education institution, to determine the effects of mindfulness on leadership behaviour and which leadership behaviours affect performance, based on shared values, actions, and behaviour.

The secondary research objectives are:

- To describe the construct of mindfulness and its descriptive facets as it relates to a workplace context;
- To describe the construct of authentic leadership and its descriptive facets as it relates to a workplace context; and
- To assess how MBA students perceive mindfulness and authentic leadership.

The next section discusses the rationale for the study, followed by the foreseen benefits, subject to the delimitations, which are discussed thereafter.

1.6 RATIONALE FOR THE STUDY

The global rise in opportunities and challenges in the business arena has led to leadership receiving intense research focus (Aggarwal & Goodell, 2014). Mindfulness is a fairly new concept in business- and leadership studies and very few studies have been conducted on a relationship between mindfulness and leadership (Stedham & Skaar, 2019). Connecting mindfulness as a leadership behaviour to authentic leadership as a leadership style may hold benefits for business and leadership.

Many empirical research studies have concluded that mindfulness is multifaceted or multidimensional due to its interconnectedness to the internal and external environment. This assumption is supported by researchers Goleman and Langer, who propose that mindfulness is part of business- and leadership processes, either directly and/or indirectly. According to Goleman, the aim is to understand what leaders can and ought to do to get their people's best performance. Langer, however, sees it as improving engagement with people.

Either way, the question remains whether, in studying mindfulness, the multidimensionality or the interconnectedness of the construct is of greater importance. Recent studies have shown that mindfulness actualises almost all qualities of consciousness associated with emotion and behaviour regulation, interpersonal competency, mental health, and physical well-being. Eminent researchers Bruce Avolio and William Gardner have noted much the same about authentic leadership, considering it multi-factored and not often acknowledged for its interconnectedness to rules, routines, and goals that should guide leadership behaviour.

Thus, the theoretical evidence suggests that mindfulness is a predictor for authentic leadership, as the construct share values, actions, and behaviours associated with effective leadership. This served as the rationale for the present study's pursuit of additional clarification through an integrated evaluation of the operationalisation of mindfulness and authentic leadership. Specifically, the aim is to assess how mindfulness affects leadership behaviour and positively affects performance.

1.7 IMPORTANCE AND BENEFITS OF THE PROPOSED STUDY

Siegel (2013) states that a person does not have a set of beliefs but a set of experiences, and what a person experience is also what the person believes. Mindfulness challenges a common belief in the work setting, where effective leadership plays a fundamental role in the day-to-day business practices of an organisation (Stedham & Skaar, 2019). Emerging leaders, because emerging leaders were taught different disciplines that deemed them with a different set of experiences (Goleman, 2017). For that matter, no single person (leader or not) was brought up the same way.

Therefore, practising a discipline is just as important as learning it, which is why many leaders are likely to resonate with anyone who leads or at some point led (Goleman, 2017:5). According to Matts *et al*. (2019), mindfulness is a valuable leadership skill. Learning mindfulness teaches a leader how to relate, communicate, and engage with people more effectively. Thus, it is a discipline that teaches leaders how to be more empathic (Matts *et al*., 2019).

It is foreseen that, due to mindfulness being a fairly new concept in business- and leadership studies, and because very few studies have been conducted in this domain, further research will narrow a gap in the body of knowledge. This view is supported by (Stedham & Skaar, 2019).

Empirical evidence connecting mindfulness in leadership behaviour to authentic leadership as a leadership style may hold considerable benefits for organisations and open new avenues for future research.

1.8 DELIMITATIONS AND ASSUMPTIONS

There are many different views on what to include or exclude in terms of a particular study, and new factors emerge constantly. In business and leadership studies, one such factor was identified by Goleman *et al.* (2017b), namely the importance of mindfulness, either directly or indirectly, in effective leadership. Forbes (2016), in a study titled *Modes of mindfulness: prophetic critique and integral emergence*, notes that in business, individuals and groups let their beliefs, not their experiences, govern the way they view leadership. One example is a work culture of 'stick to what has worked, where process remain in place purely because that is how things have always been done. This means that there are no shared values, actions, or behaviours. According to Langer (2017a) (Goleman *et al*., 2017a), there is the consideration that mindfulness is the essence of engagement.

Forbes (2016) notes that sharing experiences is far less prevalent in new leadership styles when compared to more traditional ones. The following factors will be considered in the study:

- Mindfulness in leadership behaviour affects performance and results and offers clear guidance to followers.
- The study will also consider recent findings that suggest that mindfulness stems from different components of social and emotional intelligence, such as non-judging of inner experience and non-reactivity to inner experience.
- The study will consider the relationship between mindfulness and authentic leadership based on how individuals perceive themselves as leaders (I, as a leader,…) and how leaders are perceived by their followers or subordinates (My leader…).

The study will focus on mindfulness as the primary construct, as research has shown that mindfulness in leadership behaviour is, in theory, associated with effective leadership, as it enhances employees' organisational commitment (Emuwa & Fields, 2017). Effective leadership is also closely related to authentic values, actions, and behaviours (Reb *et al*., 2015). Therefore, the present study will attempt to assess this relationship to gain insight into how to affect performance for better results because, as stated by Goleman (2017a), "Today's problems cannot be solved with yesterday's solutions." The following considerations noted by Goleman (2017a) in this domain are deemed irrelevant and will not be included:

- mindfulness's in mindful leadership;

- achieving mindfulness's through meditation; and
- mindfulness as a practice in the workplace as applied by Goleman (2017) to different leadership styles (e.g., coercive, authoritarian, affiliative, democratic, pacesetting, and coaching leadership).

This study will use the variables of mindfulness as defined by Ellen Langer (2017a) and Daniel Goleman (2017b), and authentic leadership as defined by William Gardner *et al*. (2011), David Brendel (2016), Emmie Stamell (2016), Laida Agote *et al*. (2016), and Louis Baron (2016). Associations, practices, and applications of mindfulness will be excluded from the scope, such as mindfulness's association with mindful leadership, meditative practices, and practice in the workplace, including in different leadership styles.

The next section describes the constructs that form the focus of the study.

1.9 DEFINITIONS OF KEY TERMS

Some of the earliest definitions of mindfulness were formulated by Kabat-Zinn (1990) and Davidson (2003). Kabat-Zinn (1990) defines mindfulness as the capacity to be in the present moment, the discipline of paying attention, and the ability to gain immediate insight without any judgemental feelings (Kabat-Zinn, 1990:2). According to Vietnamese Buddhist and teacher Thich Nhat Hanh (1999), mindfulness is considered the heart of Buddha's teachings: "For the Buddhist community it means inclusion and love." According to Hyland (2016), mindfulness is simply attention given in the present moment and accepting current circumstances as they appear, without feeling the need to judge or react. According to Langer (2017a), the process of actively noticing fundamental behavioural competencies requires social and emotional understanding.

Authentic leadership is considered a transparent and effective leadership approach (Luthans & Avolio, 2003). According to Gardner and Walumbwa (2007), authentic leadership is focused on the transparency of the leader's integrity and active concern for the viewpoints of followers and their development. Hollis (2018) describes authentic leaders as those who know and understand who they are, and through self-knowledge, they empower themselves and use it to good effect to transform the lives of those they lead.

According to Luthans (2003) and Avolio (2003), it is a leadership style that demonstrates true leadership intentions. Brendel (2016) and Stamell (2016) regard authentic leadership as having the natural capability to understand and know how to develop essential skill sets to coach, manage, report, and communicate more effectively. Thus, it is the ability to understand how to relate, communicate, and engage with people without prior executive coaching knowledge (Brendel & Stamell, 2016).

Authentic leadership is otherwise defined as the pattern of a leader's behaviours that both build upon and facilitate positive psychological capacities to foster positive self-development (Nübold *et al*., 2019). A more modern-day perspective is that authentic leaders are distinguished by four behavioural qualities, namely (1) they know their strengths and weaknesses and are highly aware of their actions (self-awareness), (2) they demonstrate their emotions openly, and are true to themselves and their followers (relational transparency), (3) they eagerly take the viewpoints and perspectives of others into account (balanced processing), and (4) they consistently behave according to their own moral standards and values (internalised moral perspective) (Nübold *et al*., 2019). This more modern definition will be used in the present study.

The next section provides an overview of the methodology of the study to create context. The methodology is discussed in detail in Chapter 3.

1.10 INTRODUCTION TO THE METHODOLOGY

The study will follow a quantitative approach to address the primary research objective by assessing the levels of cognition of MBA students at a selected institute of higher education in South Africa. Both mindfulness and authentic leadership will be measured, each with an appropriate self-administered instrument. The FFMQ (Bear et al., 2008) will be used to measure mindfulness, and the ALQ (Avolio et al., 2008) will be used to measure authentic leadership. The focus will be on mindfulness as a predictor for authentic leadership, as the two constructs represent similar values, actions, and behaviours associated with effective leadership, as the aim of the study is to identify the fundamental qualities that define an effective leader.

The next section provides an overview of each chapter of the paper.

1.11 CHAPTER LAYOUT

The chapter layout of this study follows the recommendations of (Bryman & Bell, 2014) and is shown in Figure 1-1.

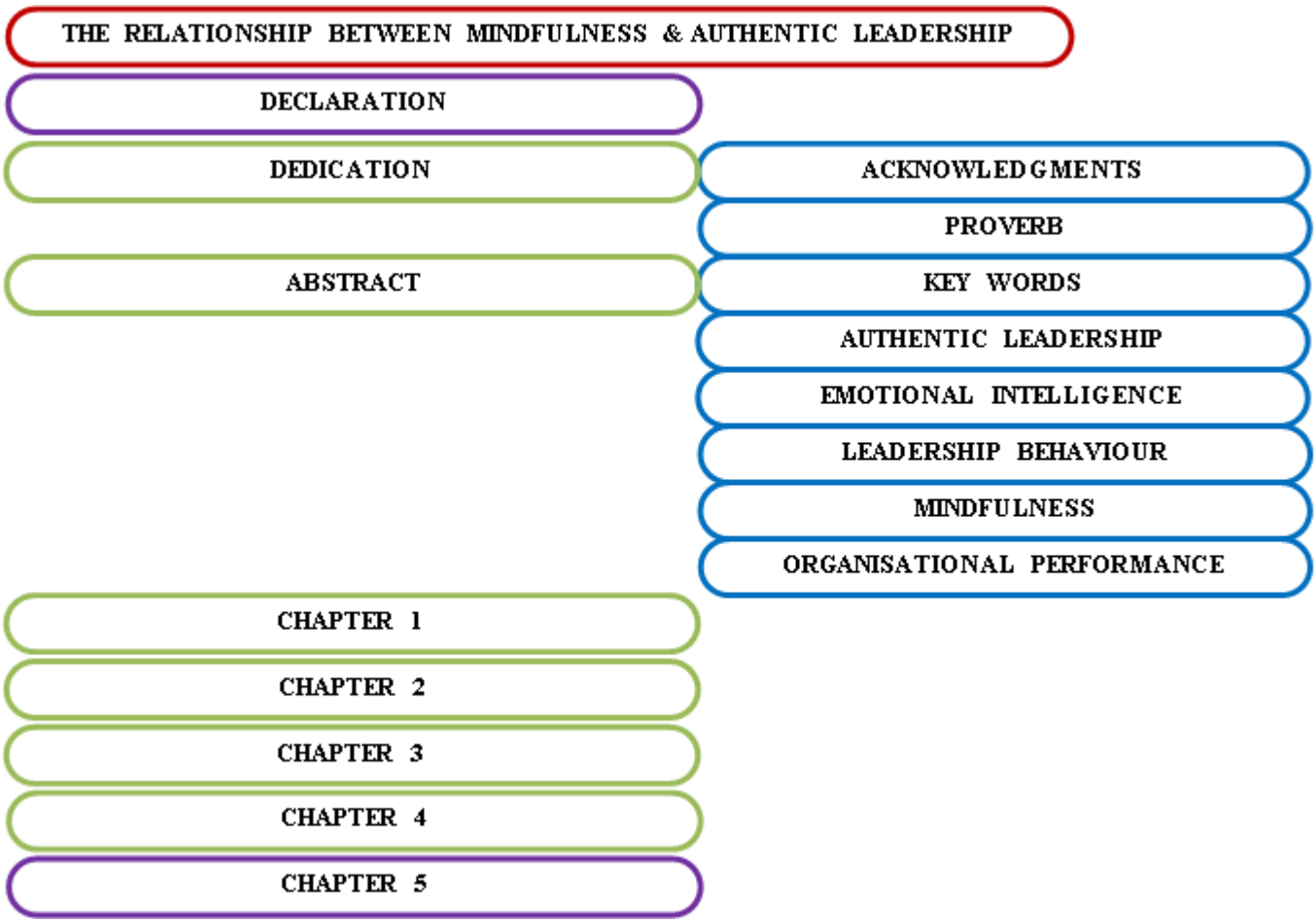

Figure 1–1: Chapter Layout

Source: Based on (Bryman & Bell, 2014)

Chapter 1: Overview of the study

Chapter 1 provided an overview of mindfulness and authentic leadership, as well as their theorised interconnectedness. This was done through an introduction and background, followed by the problem statement, the research questions, and research objectives. The reader was also orientated with regard to the rationale for the study and the importance and benefits of the study, and the study's delimitations and assumptions. The section provided definitions of the key constructs, followed by a brief overview of the methodology and the chapter layout, and concluded with a brief summary of the chapter.

Chapter 2: Literature review of the relationship between mindfulness and authentic leadership

This chapter explores the literature on mindfulness in leadership behaviour and authentic leadership as a leadership style. The chapter discusses the theorised relationship between mindfulness and authentic leadership employing a theoretical conceptual framework of the

constructs, the meaning of mindfulness and authentic leadership, the characteristics or facets of mindfulness, mindfulness in leadership behaviour and the associated benefits, the need for reflection, and the impact of mindfulness in business and leadership.

Chapter 3: Research design and method

This chapter details the research approach and design used, including the research philosophy, population and sampling, data collection and analysis, reliability of the measuring instruments, and the ethical considerations applicable to the study.

Chapter 4: Research results

This chapter reports the statistical analyses conducted on the data gathered using the FFMQ (Baer *et al.*, 2008:330) and the ALQ (Avolio *et al*., 2008). The results are assessed and illustrated using tables and figures. The chapter describes the analyses conducted, namely descriptive statistics, case process summary, reliability statistics, summary item statistics, summary facet statistics, item-total statistics, correlations, gender statistics by facet, management-level statistics by facet, paired sample statistics by facet, and relationship correlations.

Chapter 5: Discussion of findings, recommendations and conclusion

This chapter discusses and interprets the results reported in Chapter 4, and recommendations are made based on these interpretations. Chapter 5 also reconciles the results with the research objective and includes recommendations for future research.

1.12 SUMMARY

For leaders to be truly effective in contemporary times, their talents must not be linked only to planning, strategies, securing financing, and profits. Leaders should also leave a memorable imprint on emerging leaders by demonstrating that mindful behaviour and authenticity in leadership behaviour reflect organisational performance. It is becoming increasingly important that leaders understand how to be mindful and authentic to foster the best performance by their followers. This study proposes that both mindfulness and authentic leadership are performance tools and that both make a significant impact on students levels of cognition to demonstrate these values, actions, and behaviours in everyday life.

The next chapter provides a detailed review of extant literature in the domain under study.

CHAPTER 2
LITERATURE REVIEW OF THE RELATIONSHIP BETWEEN MINDFULNESS AND AUTHENTIC LEADERSHIP

2.1 INTRODUCTION

This chapter explores the literature on mindfulness in leadership behaviour and authentic leadership as a leadership style. The focus is, therefore, on a theoretical assessment of mindfulness as a predictor for authentic leadership. This chapter identifies important fundamental qualities that define an effective leader. This is followed by an assessment of the relationship between mindfulness and authentic leadership, based on how mindfulness affects leadership behaviour and which leadership behaviours enhance employee performance.

2.2 THE THEORETICAL-CONCEPTUAL FRAMEWORK OF THE CONSTRUCTS *MINDFULNESS* AND *AUTHENTIC LEADERSHIP*

Multiple empirical research studies have been conducted in which researchers argued that, in order to determine a relationship between two or more constructs, a study had assessed the different facets or levels of each construct to essentially clarify their relationship with other variables (Schneider *et al*., 1996; Smith *et al*., 2007; Smith *et al*., 2003; Smith & McCarthy, 1995). As the theory on the different facets of mindfulness evolved over the years, it is by evaluating their expansive connection to more contemporary constructs that it has expanded and improved businesses' and individuals' understanding of the specific interpersonal and intrapersonal skills that can be harnessed through the practice of various mindfulness-based exercises, and how these facets are related to psychological adjustments.

In a more recent study, Baer, Smith, Hopkins, Krietemeyer, and Toney (2006a) conducted an exploratory analysis to evaluate five facets of mindfulness, using a large sample (n = 613) of students. The students were instructed to complete a questionnaire based on the different facets of mindfulness described in Table 2-1. The analyses of their study allowed items from different instruments to be combined to form five facets, providing an integrated evaluation with which to operationalise mindfulness.

Table 2-1: Example Items for Mindfulness Facets

Facet	Example Item
Observing	I notice the smells and aromas of things.
Describing	I am good at finding words to describe my feelings.
Acting with awareness	I find myself doing things without paying attention. (R)
Non-judging of inner experience	I think some of my emotions are bad or inappropriate and I should not feel them. (R)
Non-reactivity to inner experience	I perceive my feelings and emotions without having to react to them.

Source: Construct Validity of the FFMQ (Baer *et al*., 2008:330)

NOTE: R = reverse-scored values (higher scores represent higher levels of mindfulness).

The findings suggested that to evaluate the expansive connection and/or impact of mindfulness on more contemporary constructs such as *business* and *leadership behaviour*, an integrated evaluation of mindfulness may be the solution, which is described in summary (Baer *et al*., 2008:330) below:

- *Observing* refers to noticing or attending to internal and external experiences, such as sensations, cognitions, emotions, including sound, touch, sight, smell, and taste.
- *Describing* refers to labelling internal experiences with words.
- *Acting with awareness* refers to attending to one's activities of the moment and can be contrasted with behaving mechanically while attention is focused elsewhere (operating on 'autopilot').
- *Non-judging of inner experience* refers to taking a non-evaluative stance towards thoughts and feelings.
- *Non-reactivity to inner experience* refers to the tendency to allow thoughts and feelings to come and go without getting caught up in or being carried away by them.

The scales for each of these five facets were created by selecting the seven or eight items with the highest score values on their respective facets and the lowest score values on all the other facets. These facets were thus combined to form the 39-item FFMQ (Baer *et al.*, 2008:330). Examples of these facets are shown in Table 2-1, and have demonstrated an integrated evaluation of good internal consistencies of alpha coefficients, ranging from .75 to .91, which further support a

possible relationship between the facets, including other variables that are consistent with more contemporary predictions.

The FFMQ (Baer *et al.*, 2008:330) is beneficial for assessing the effectiveness of mindfulness in overcoming real-life problems and was one of the earliest measures to assess the relationship between mental and physical well-being (Baer *et al*., 2004). The FFMQ (Baer *et al.*, 2008:330) is considered both a self-help and self-scoring measurement. It consists of 39 items that analyse the five facets shown in Table 2-1 to evaluate where the respondents stand in terms of mindfulness and self-awareness (human condition). The FFMQ (Baer *et al.*, 2008:330) therefore measures how we present ourselves as mindful human beings and provides an accurate judgment of our impact on others, which we may have not given enough attention to before, such as our values, actions, and behaviours.

The five facets of the FFMQ (Baer *et al.*, 2008:330) measure constructive experiences of awareness, insight, wisdom, compassion, and equanimity to better understand one's own inner qualities. The score value for each of the five facets presents an estimated cognition of self-awareness and how effective mindfulness-based exercises are or need to be. The FFMQ (Baer *et al.*, 2008:330) contains 39 items related to peoples' thoughts, experiences, and actions in everyday life. As a professor in psychology and researcher in mindfulness at the University of Kentucky, Ruth Baer (2008) conducted numerous studies using the FFMQ (Baer *et al.*, 2008:330) and has contributed significantly in developing the 39-item scale to measure the facets that not only help us understand how to be mindful but also to overcome real-life problems.

Other significant contributions were earlier exploratory analyses to determine a relationship between two or more constructs, namely from the Mindfulness Attention Awareness Scale (MAAS) (Brown & Ryan, 2003b), the Cognitive Affective Mindfulness Scale (CAMS) (Hayes & Feldman, 2004), the Kentucky Inventory of Mindfulness Skills (KIMS) (Baer *et al*., 2004), and the Freiburg Mindfulness Inventory (FMI) (Walach *et al*., 2006).

The 39-item FFMQ (Baer *et al.*, 2008:330) measures five vital facets of mindfulness and captures responses on a five-point Likert scale, including direct and reverse-scored values, given as total scores (see Table 2-1 in Section 2.2). The five facets of mindfulness are measured based on values, actions, and behaviour as mediators of therapeutic change in human behaviour without the need for any extreme interventions (Carmody & Baer, 2008). Another practical version of the FFMQ (Baer *et al.*, 2008:330) is otherwise described as a mindfulness-based intervention that tests whether mindfulness is related to decreased clinical symptoms of depression, anxiety, and stress (Davidson *et al*., 2003; Kabat-Zinn, 1990).

The FFMQ (Baer *et al.*, 2008:330) is a unique method to measure mindfulness based on values, actions, and behaviour as mediators of therapeutic change in personal psychology and/or

psychiatry, because all 39-items also test the effectiveness of other mindfulness-based exercises, such as mindfulness-based cognitive therapy and mindfulness-based stress reduction (Baer *et al*., 2006a). As mentioned earlier, multiple empirical studies have been conducted in which researchers began evaluating the psychometric characteristics of the short and long versions of the scale, the FFMQ-SF and the FFMQ-LF, to determine whether there existed a relationship between contemporary test results and other mindfulness-based interventions (Baer *et al*., 2006a; Neff, 2003).

The following is a brief description of the five facets that the 39-item FFMQ (Baer *et al.*, 2008:331) measures:

- *Observation* refers to evaluating the way we use our sensory awareness based on how we see, feel, and perceive the internal and external world around us and then selecting the right stimuli that require our attention or focus (intellectual and physical presence).

- *Description* refers to evaluating descriptive qualities that focus on the way we label our experiences and express them in words to ourselves and others.

- *Mindful actions* refer to the close relationship that all people share in being more self-aware and then taking calculated actions. It focuses on the movements we choose after attending to the current moment's information, without quick or impulsive judgment. This facet identifies whether we act out of quick judgement or operate on autopilot before responding to a situation.

- *Non-judgemental inner experience* refers to evaluating how we deal with inner criticism, not allowing inner criticism to take a toll on our happiness and positive state of mind. It focuses on harnessing self-acceptance and unconditional empathy for oneself and others.

- *Non-reactivity to inner experience* refers to evaluating how we actively detach from negative thoughts and emotions so that we can accept their existence and choose not to react to them. Non-reactivity to inner experience also makes way for social and emotional resilience and restores mental balance (McManus *et al.*, 2012).

The concept of mindfulness is, however, still regarded as a relatively new concept in both business- and leadership studies, and although it covers a broad spectrum in human intellectual knowledge, there are some evidence from earlier empirical studies that mindfulness does share not only similar values, actions, and behaviours with effective leadership, but also a constructive relationship with authentic leadership because several researchers have suggested that effective leadership is closely related to authentic values, actions, and behaviours (Goleman *et al*., 2017a;

Reb *et al*., 2015). Therefore, unlike mindfulness, authentic leadership is a concept that is best understood by studying the values, actions, and behaviours in the leader-follower relationship.

The leader-follower relationship is one in which emerging leaders tend to learn behavioural competencies that are not always effective in generating positive results in the workplace (Goleman, 2017:3). For emerging leaders to get results, their performance is generally based on communication, interpersonal interactions, and social relationships that are related to planning, strategies, securing financing, and organisational profit-making (Caza & Jackson, 2011). Authentic leadership is considered to be a more transparent and effective leadership approach (Avolio *et al*., 2007; Luthans & Avolio, 2003).

Based on more recent studies, authentic leadership is also identified as a contemporary leadership model or style that focuses on the transparency of the leaders' integrity and active concern for viewpoints of followers and their development (Emuwa & Fields, 2017; Luthans & Avolio, 2003). It is widely recognised that authenticity in leadership is what is needed in today's organisations, where the environment is dramatically changing, where the rules that have guided how we operate are no longer applicable, and where the leaders are required to be transparent regarding their intentions — a seamless link between their values, actions, and behaviours (Luthans & Avolio, 2003).

Authenticity in leadership is described as a concept of self-awareness that is acted out or performed based on rules, routines, and goals that reflect the leader's true intentions (Caza *et al*., 2010). The concept of authenticity is also described as having good intentions and demonstrating it through actions that align with one's values (Leroy *et al*., 2012).

Neider and Schriesheim (2011) note that the theoretical concept of authentic leadership as a leadership style to enhance performance has become the subject of great interest. It is further acknowledged by Avolio and Gardner (2005) as the 'root construct' for developing more effective leaders. According to Qian, Lin, and Zhen-Xiong Chen (2012), it forms the foundation for all contemporary positive leadership theories. However, more recently, several researchers have begun to support this idea because empirical tests have not quite been able to scientifically prove that authentic leadership as a leadership style shares a constructive relationship with transformational, ethical, servant, spiritual, and charismatic leadership (Avolio & Gardner, 2005; Neider & Schriesheim, 2011).

Segal *et al*. (2002) and Baer *et al*. (2006b) consider mindfulness multifaceted due to its interconnectedness to the internal and external environment. Goleman (2017b) posits that mindfulness is part of the business- and leadership process, either directly and/or indirectly, and it serves as additional clarification of an integrated evaluation to operationalise mindfulness and authentic leadership. The early stages of authentic leadership were also considered by Caza *et al*.

(2010) to be multi-factored due to its interconnectedness to the rules, routines, and goals that guide leadership behaviour. However, Peus et al. (2012) contention that an integrated evaluation to operationalise authentic leadership will also have to include moral and ethical values, actions, and behaviours as mediators of therapeutic change in leadership behaviour.

As the instruments used in the present study, the 39-item FFMQ (Baer *et al.*, 2008:330) was designed to include social and emotional dimensions of mindfulness, and the 32-item ALQ (Avolio *et al*., 2008) was also designed to include moral and ethical dimensions of leadership (Roof, 2014:57).

A more recent study in which Avolio, Gardner, and Walumbwa (2007) conducted an exploratory analysis to evaluate mainly four facets of authentic leadership using a large sample (n = 436) of full-time employees. The questionnaire was based on the different facets of authentic leadership described in Table 2-2. The analysis allowed items from different instruments to be combined to form four facets, providing an integrated evaluation to operationalise authentic leadership.

Table 2-2: Example Items for Authentic Leadership Facets

Facet	Example Item
I as a leader…	The subordinate's own level of authenticity.
Transparency	Admit my mistakes openly and honestly.
Moral/Ethical	Make decisions based on my core values.
Balanced processing	Listen carefully to others before insinuating any conclusion.
Self-awareness	Seek feedback to improve my interaction with others.
My leader…	The leader's level of authenticity as perceived by their subordinates.
Transparency	Demonstrates emotions that are in line with his or her feelings.
Moral/Ethical	Demonstrates beliefs that are consistent with his or her actions.
Balanced processing	Considers relevant data before making a decision.
Self-awareness	Shows that he or she understands how specific actions impact others.

Source: Construct Validity of the ALQ (Avolio *et al*., 2007:8)

NOTE: Each factor consists of four facets that are calculated as an average score value, presented as the raw score or scale estimate for each of the four facets (higher scores represent higher levels of authenticity).

The findings suggested that to evaluate the expansive connection and/or impact of authentic leadership on more contemporary constructs such as business and leadership behaviour, a two-

factor integrated evaluation of authentic leadership may be the solution – which is further described in the following summary (Roof, 2014:58):

- *Transparency* refers to leaders truly or genuinely presenting themselves and the relational transparency they share by demonstrating it through their values, actions, and behaviours.

- *Moral/Ethical* refers to a leader's moral perspective reflecting self-regulation and actions based on personal moral standards and whether these are embedded internally before making a decision or taking action.

- *Balanced processing* refers to a leader soliciting and objectively considering alternative views, including other relevant sources of information, before deciding to take action.

- *Self-awareness* refers to leaders understands their role and knowing what their responsibilities are, based on their own strengths and weaknesses and how this is demonstrated through their values, actions, and behaviours.

The scales for each of these four facets were created by selecting the three, four, or five items with the highest score values on their respective facets and the lowest score values on all the other facets to form the 32-item or ALQ (Avolio *et al.*, 2007:8). Examples of these facets are shown in Table 2-2. The facets have demonstrated an integrated evaluation of good internal consistencies, with alpha coefficients ranging from .73 to .92, further supporting a possible relationship between the facets, including other variables consistent with more contemporary predictions.

The ALQ (Avolio *et al*., 2008) is considered to be both a self-help and a self-scoring measurement. It consists of 32 items that analyse the four facets shown in Table 2-2 and evaluate where the respondents stand in terms of living authentically and with integrity — for themselves and those in a leadership position. Therefore, the ALQ (Avolio et al., 2008) measures how we present ourselves as authentic human beings and accurately judge our impact on others, which we do not reflect upon often enough through our authentic values and actions and behaviours. The ALQ (Avolio *et al*., 2008) is particularly useful for assessing the effectiveness of one's own and someone else's leadership qualities in managing real-life problems and is one of the newest measures to assess the relationship between moral and ethical behaviour (Roof, 2014:58).

The four facets of the ALQ (Avolio *et al*., 2008) measure constructive experiences in executive coaching, managing, reporting, and communication to better understand one's own and someone else's leadership qualities. The score value for each of the four facets presents an estimated concept of self-awareness that reflects true leadership intentions and how effective leaders are or need to be. The items of the practical version of the ALQ (Avolio *et al*., 2008) are generally considered to relate to peoples' fundamental competencies in living authentically and with integrity.

As a professor in management and researcher in leadership at the University of Washington, Bruce Avolio (2007) conducted numerous studies based on the ALQ (Avolio *et al*., 2008) and also contributed significantly to the development of the 32-item scale to measure the facets that not only help us understand how to be authentic but also manage real-life problems.

The 32-item ALQ (Avolio *et al*., 2008) measures four vital facets of authentic leadership, capturing responses on a five-point Likert scale with no inclusion of any reverse-scored values given as total scores (see Table 2-2 in Section 2.2). By these four facets, authenticity is measured based on values, actions, and behaviour as mediators of therapeutic change in leadership behaviour, without the need for any extreme interventions (Walumbwa *et al*., 2008:91). Another practical version of the ALQ (Avolio *et al*., 2008) is described as a leadership-based intervention that tests whether authenticity is related to a decrease in immoral and unethical behaviour in the workplace (Avolio & Gardner, 2005; Gardner *et al*., 2005; Roof, 2014; Walumbwa *et al*., 2008).

The ALQ (Avolio *et al*., 2008) is a unique method to measure authenticity based on values, actions, and behaviours as mediators of therapeutic change in social psychology and/or psychiatry, because all 32 items also test the effectiveness of other leadership styles, such as those identified by Goleman (2017), presented as six leadership styles, namely coercive leaders, who demand immediate compliance; authoritarian leaders, who mobilise people towards a vision; affiliative leaders, who create emotional bonds and harmony; democratic leaders, who build consensus through participation; pacesetting leaders, who expect excellence and self-direction; and coaching leaders, who develop people for the future (Goleman, 2017:5). As with mindfulness, multiple empirical research studies have been conducted where researchers also began evaluating the psychometric characteristics of authentic leaders in order to determine a relationship between the results of the contemporary test and more effective leadership models or styles (Agote *et al*., 2016; Craig *et al*., 2015; Gardner *et al*., 2011; Hollis, 2018; Leroy *et al*., 2012).

The 32-item ALQ (Avolio *et al*., 2008) was originally meant to be a two-factor integrated evaluation that specifically assessed the leadership qualities of oneself and someone else, preferably in a position of leadership. It is described as taking a 'helicopter view' of what both parties ("I as a leader…" and "My leader…") are experiencing, either socially or emotionally, when judging the actions or behaviours of another person without questioning their motive. This supports earlier theories regarding why authentic leadership is not only a transparent leadership approach but also a contemporary leadership model to specifically assess the transparency of a leader (Avolio & Gardner, 2005; Gardner *et al*., 2005). The theory of authentic leadership also reflects the following ideology, based on earlier research by Walumbwa *et al*. (2008), which is still supported (Roof, 2014:58):

> *Authenticity in leadership is a pattern of leadership behaviour that draws upon and promotes both positive psychological capacities and a positive ethical climate that foster greater self-awareness, internalised moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development.* (Walumbwa *et al*., 2008:94).

The initial development of the 32-item ALQ (Avolio *et al*., 2008) was set to include the ideology quoted above, which later resulted in a more dynamic description that includes three basic steps that will help any leader to be more transparent when performing leadership duties: (1) be more self-aware in order to affect performance, (2) understand your role better, in order to affect results, and (3) offer clear guidance to subordinates (Walumbwa *et al*., 2008). The ALQ (Avolio *et al*., 2008) is now used to analyse and measure authentic leadership drawn from empirical literature, dissertations, and expert input to include a refinement of the items directly and indirectly associated with an effective leader (Roof, 2014:58). The 32 items of the ALQ (Avolio *et al*., 2008) have proven, at least in theory, that authentic leadership is an essential leadership style in contemporary times. How effective, though, is still unknown. Therefore, the evaluation must undergo more statistical testing to validate the theory (Avolio & Gardner, 2005; Gardner *et al*., 2005; Roof, 2014; Walumbwa *et al*., 2008).

Therefore, the ALQ (Avolio et al., 2008) comprises two sets of 16 items each and is a two-factor integrated evaluation. The 32-items assess four facets, namely (1) *Transparency*, which refers to whether leaders truly and genuinely present themselves, (2) *Moral/Ethical*, which refers to whether leaders' moral perspective reflects self-regulation and whether their actions are based on personal moral standards, (3) *Balanced processing*, which refers to leaders soliciting and objectively considering alternative views, and (4) *Self-awareness*, which refers to whether leaders understand their role and interpret their strengths and weaknesses (Neider & Schriesheim, 2011; Walumbwa *et al*., 2008).

It is essential that leaders understand not only these four facets but also know how to demonstrate them to inspire the best performance from their people in the workplace, as most people are more likely to resonate with a leadership style characterised by transparency and an active concern for viewpoints of followers and their growth and development (Emuwa & Fields, 2017). The fundamental challenge in any model or style of leadership is to acquire the right interpersonal and communication skills to enhance performance in the workplace (Aggarwal & Goodell, 2014; Brendel & Stamell, 2016). The concept of authentic leadership is much better understood by observing modern-day executive coaching and how it is considered to help transform any leader into a more responsible role model who will leave an imprint on those to follow (Brendel & Stamell, 2016; Goleman *et al*., 2017a).

2.3 MEANING OF MINDFULNESS AND AUTHENTIC LEADERSHIP

Some of the earliest definitions of mindfulness were formulated by Kabat-Zinn (1990) and Davidson (2003). According to Kabat-Zinn (1990), the definition of mindfulness presents both a scientific and biological viewpoint. The core meaning of the word mindful derived from words like *meditate* and *medicine* (Kabat-Zinn, 1990:2). Kabat-Zinn (1990) defines mindfulness as the capacity to be in the present moment, the discipline to pay attention in the present moment, and the ability to gain immediate insight without having any judgemental feelings (Kabat-Zinn, 1990:2).

Hyland (2016) documented renowned Vietnamese Buddhist and teacher of mindfulness Thich Nhat Hanh (1999), who noted that mindfulness is considered the heart of Buddha's teachings. "For the Buddhist community, it means inclusion, and love" (Hyland, 2016:2). This simply refers to the attention given in the present moment and accepting current circumstances as they appear without needing to judge or react (Hyland, 2016:2).

Langer (2017a) describes mindfulness as the frame of mind in which individuals or groups of people pay close attention to what is going on around them. In other words, mindfulness, according to Langer (2017a), is the essence of engagement because it is a process of actively noticing fundamental behavioural competencies, which requires social and emotional understanding (Goleman *et al*., 2017a).

In psychology, it is the ability to fine-tune the brain so that the mind is more sensitive to context and perspective (Wissing, 2014). This was demonstrated in Langer's (2017a) 'counter-clockwise' experiment, where men aged 75 years and older were placed in an environment where they could relive their younger selves. They lived in a retrofitted environment resembling the year 1989 for one week. The participants were instructed to engage in social activities that would have been common in the 1980s. The purpose of this study was to investigate whether the brain can be altered so that the mind is more sensitive to the ageing process and how it affects health and life satisfaction. The study revealed that the participants improved their physical and mental health by changing behavioural traits (or attributes) in the brain, so the mind thinks that the body is 20 years younger (Goleman *et al*., 2017a:3).

Goleman *et al*. (2017b) posit that the mind tends to wander off, or, as Langer (2017) states, goes into autopilot because the human brain is programmed to govern human behaviour (Goleman *et al*., 2017b). The human brain is the major receptor, which is why the mind starts operating on autopilot (or wanders off); the mind is not constantly present about us and our behaviour. According to Baer (2006b), the mind is not constantly being present is a typical example of not being self-aware (Baer *et al*., 2006b).

Goleman and Langer (2017) explain that a lack of self-awareness is considered being mindless because attention is given to everything but the present moment (Goleman *et al*., 2017a:3). Therefore, mindfulness is not about fine-tuning the brain but fine-tuning the mind so that the mind guides one's behaviour (Goleman *et al*., 2017a:5). Goleman *et al.* (2017a) posit that the mind is the key to understanding social and emotional intelligence in the workplace.

According to Stedham and Skaar (2019), mindfulness is a broad concept to grasp because the effects of mindfulness on leadership behaviour cover self-awareness and social and emotional awareness. In support of this notion, both Goleman (2017) and Arendt (2019) argue that mindfulness is positively related to social and emotional behaviour in the workplace. Those who are aware of their behaviour are more present, and they tend to affect performance to get results in the workplace. Arendt *et al.* (2019) further state that mindfulness is also positively related to communication in the workplace, and that, when there is no communication, there is also no engagement. According to Langer (2017a), mindfulness is, therefore, the essence of engagement. The effects of mindfulness on leadership behaviour have been shown to reduce stress, enhance creativity, and boost performance (Goleman *et al*., 2017a).

Unlike mindfulness, authentic leadership is a concept that is best understood by studying the values, actions, and behaviours in the leader-follower relationship. According to Goleman (2017), the leader-follower relationship is when emerging leaders tend to learn behavioural competencies that are not always effective in generating positive results in the workplace. For emerging leaders to affect performance to get results, their communication, interpersonal interactions, and social relationships are mainly linked to planning, strategies, securing financing, and organisational profit-making (Caza & Jackson, 2011).

According to Luthans and Avolio (2003) and Gardner and Walumbwa (2007), authentic leadership is a more transparent and effective leadership approach. It is a contemporary leadership model or style that focuses on the transparency of the leaders' integrity and active concern for followers' viewpoints and development (cited by Emuwa & Fields, 2017:296). Luthans and Avolio (2003) posit that authentic leadership is the type of leadership style that is needed in contemporary times, where the environment is dramatically changing, where the rules that have guided how we operate no are longer relevant, and where the leaders need to be transparent regarding their intentions, ensuring a seamless link between their values, actions, and behaviours (Luthans & Avolio, 2003).

In modern-day business practices, it has become more critical that emerging leaders know how to spark the best performance from their people in the workplace (Goleman, 2017). There are many different leadership styles, but most leaders seem reluctant to adopt a leadership style that promotes transparency and an active concern for followers' viewpoints and development (Emuwa

& Fields, 2017). The great challenge for most leaders is to acquire the right interpersonal and communication skills to be more effective (Aggarwal & Goodell, 2014).

Brendel and Stamell (2016), in reporting on their study titled *How mindfulness improves executive coaching*, note that the concept of authentic leadership has the natural capability to understand and know how to develop essential skill sets in order to coach, manage, report, and communicate more effectively. It is the intuitive ability to understand how to relate, communicate, and engage with people without prior executive coaching knowledge (Brendel & Stamell, 2016). By observing modern-day executive coaching, authentic leadership is better understood, as it has been found to develop a sustainable culture where leaders are consistent, trustworthy, confident, dedicated, committed, and stable (Brendel & Stamell, 2016:3). Brendel and Stamell (2016) posit that integrating modern-day executive coaching with mindful behaviour may be the answer to developing more responsible role models.

The next section discusses the characteristics of mindfulness.

2.4 CHARACTERISTICS OR FACETS OF MINDFULNESS

To understand the construct *mindfulness*, one has to look at its various characteristics or facets. The literature indicates that mindfulness is not about 'doing one's own thing'; it is about the bigger picture. It is considered multifaceted and interconnected, and the small things give meaning to mindfulness. This is discussed in detail in the sections to follow.

2.4.1 Mindfulness is not about doing your own thing

As a professor in psychology at Harvard University, Ellen Langer (2017) has been studying mindfulness since the 1980s and found mindful behaviour quite beneficial in many of her experiments (Goleman *et al*., 2017a). The results from most of her studies soon led to new approaches in business and leadership, such that the Langer Mindfulness Institute was established (Goleman *et al*., 2017a:25). Langer's (2017a) work, *Emotional intelligence: mindfulness*, indicates that becoming or being more mindful does not only lead to improved performance, it leads to much more.

In an experimental study of a group of symphony musicians, she noticed that most of them got bored playing the same piece repeatedly. At the same time, they also valued their job, as they regarded to be of high status (Goleman *et al*., 2017a:5). In the experiment, the participants were divided into two groups. The participants in one group were instructed to replicate a previous performance they had particularly enjoyed, while the participants in the other group were instructed to perform a new piece and improvise in subtle ways. The goal of the experiment was to record each participant's performance and then determine which group performed better — those who

were instructed to replicate, which is mindless, or those who were instructed to innovate, which requires mindfulness. The recordings of the experiment were played back to people who knew nothing about the study, and almost everyone preferred the innovative pieces.

The study concluded that the innovative pieces were considered to have been more mindfully played, even though the improvisation was very subtle (Goleman *et al*., 2017a:6). Langer (2017) notes that if everyone is allowed to do his or her own thing, chaos will reign. However, if everyone is instructed to be fully present and work within the same context, superior performance is achievable (Goleman *et al*., 2017a:6).

2.4.2 Mindfulness is about the bigger picture

The concept of mindfulness covers a broad spectrum of human intellectual knowledge that seems fundamental in business and leadership. It is a subtle knowledge that is considered to make a big difference in peoples' values, actions, and behaviours (Goleman, 2017). According to Cheng and Fleischmann (2010), being mindful is more than an idea; it is an expression of 'a life well lived'. In other words, mindfulness is not only a part of life but a way of life because it is an enduring ethos that becomes part of the human values and principles that not only influence our decisions in life and affect the lives of others. In support of this notion, Waterman (2005) states that research on mindfulness and well-being has spotlighted the effects of living authentically and with integrity. It is about being aware of our own deeply held values, convictions, and morals and functioning well within society.

Baer (2006b) and Langer (2017) studied the benefits of mindful behaviour in business and leadership and amounted to more than improved performance. Baer (2006b) notes that earlier descriptions of mindfulness originated from Eastern spiritual teachings that focus on the most fundamental qualities of life and how to self-reflect on these qualities to increase one's awareness, insight, wisdom, compassion, and equanimity. It is a skill that can be developed over time through the practice of meditation, a mindfulness-based exercise that has been found to reduce psychological symptoms (Davidson, (2003) and improve mental health and well-being (Baer *et al*., 2006b:27).

As a professor in psychology and psychiatry at the University of Wisconsin-Madison, Richard Davidson (2003) conducted numerous studies to analyse the effects of meditation on the human brain, including variations in immune responses. From those studies, which mainly were conducted at The Centre for Healthy Minds, Davidson *et al.* (2003) concluded that if mindfulness is considered a skill and meditation is the practice to enhance that skill. Both Davidson (2003) and Kabat-Zinn (2003) explain that the human brain consists of neural circuits and that each neural circuit exhibits plasticity. When these circuits are exercised regularly, the brain adapts human behaviour, which can then help people to be more resilient, optimistic, self-aware, and generous

(Davidson *et al*., 2003). These four benefits are not only significant in mindful behaviour; they are also viewed as four disciplines to help individuals and communities become more mindful. According to Davidson (2003), these four disciplines are the keys to improving mental and physical well-being in societies because research has shown that these disciplines keep evolving.

Langer (2017a) cautions that becoming or being mindful is not easy. Individuals are required to challenge themselves to understand who they are and who they really want to be. It is like any other discipline in life. One cannot master mindfulness without sacrifice, and sacrifice is not easy (Goleman *et al*., 2017a). Ryff and Singer (2008) consider this a fundamental life lesson and support the notion by stating, "Know thyself and become what you are." Understanding oneself means finding direction, and knowing oneself is to find meaning (Wissing, 2014:45). The idea that mindfulness is a discipline that requires hard work to first understand oneself in order to become mindful is supported by Goleman et al. (2017a), whom state:

> *If mindfulness is considered the essence of engagement, then engagement is the essence of hard work because engaging with people is hard work, not because it is a skill but because it is a discipline that one needs to understand, learn, and experience.*

It is, therefore, difficult, but not impossible to attain mindfulness, but it is difficult to master. In short, it is attained by living authentically and with integrity (Waterman *et al.*, 2005).

The next sections discuss the multifaceted and interconnected nature of mindfulness.

2.4.3 Mindfulness is multifaceted

The view that mindfulness is multifaceted is based on empirical studies that conceptualised mindfulness as having six elements, three related to what one does when becoming or being mindful (observing, describing, and participating) and three related to how one practises it (non-judgementally, non-reactivity, and effectively) (Baer *et al*., 2006b:28). Segal *et al*. (2002) summarise the nature of mindfulness by stating:

> *In mindfulness practice, the focus of a person's attention is opened to admit whatever enters experience, while at the same time, a stance of kindly curiosity allows the person to investigate whatever appears without falling prey to automatic judgement or reactivity.*

The notion that mindfulness is multifaceted or multidimensional is supported by Brown and Ryan (2004), who conceptualise mindfulness as a multifaceted construct that focuses simultaneously on three disciplines: acceptance, attention, and awareness. Not only attention and awareness occur in the present moment, but these facets are also accompanied by acceptance of current circumstances as they appear, without needing to judge or react (Hyland, 2016:2). According to

Langer (2017a), achieving mindfulness requires continued efforts to keep improving oneself through these disciplines, without necessarily focusing on improving one's performance.

2.4.4 The interconnectedness of mindfulness

Studying social and emotional intelligence, values, actions, and behaviours related to mindful behaviour becomes more apparent in business practices and leadership behaviour (Goleman & Langer, (2017). These values, actions, and behaviours manifest in everyday life and are developed in relationships with family, friends, and co-workers (Baer *et al*., 2008:330). Engaging with people is hard work; it is a discipline that needs to be understood, learnt, and experienced (Goleman *et al*., 2017a:33).

Communication, interpersonal interactions, and social relationships are not only part of an organisation's business culture, and they are essential for success (Arendt *et al*., 2019). Forbes (2016) calls for more research on the experiences of organisations, individuals, and groups in practising mindfulness to engage more effectively. Forbes (2016) notes that engaging with others is not just about understanding oneself and, therefore, suddenly becoming a better listener or mediator. One also has to accumulate shared knowledge and interpersonal and intrapersonal experiences (Forbes, 2016:3).

Mindful behaviour holds values, actions, and behaviours associated with effective leadership (Goleman *et al*., 2017a). According to Langer (2017), it is a subtle knowledge that makes significant changes to peoples' values, actions, and behaviours (Goleman, 2017). Being present and paying attention in the present moment interconnects mind and behaviour (Kabat-Zinn, 1990:4).

Langer (2017a) posits that mindfulness enhances creativity and individuals being proactive in taking advantage of opportunities. Langer *et al*. (2017a) add:

> *Chaos in the business environment is not the result of change, but by not being able to adapt to change. The word change is only a perception, but now businesses, people, and groups can use mindfulness to navigate through the chaos that makes it hard to be socially and/or emotionally aware. Something can only go wrong when mindfulness is utilised as a production tool rather than a performance tool.*

Waterman (2005), Baer (2006b), Aggarwal (2014), Goodell (2014), and Forbes (2016) agree that paying attention is a simple concept to explain but not so easy to teach because to understand, learn, and experience why other people do not pay attention requires engagement. According to Goleman (2017), it means taking the time to get to know people, understand them, learn from

them, and share experiences. Segal *et al*. (2002) note that mindfulness is not about becoming or being a 'people person' about pleasing people, it is about 'being human'.

From the above, it is clear that paying attention is the most important competency to achieve mindfulness. It is also the most challenging to learn because, according to Goleman (2017a), it is challenging for a person to teach another person how to pay attention. According to Langer (2017a), mindfulness can only teach someone how to quiet the mind in order to pay attention, not how to keep things still in order to maintain control

According to Segal *et al*. (2002), one must pay attention in order to be aware because mindfulness does not actually teach someone how to pay attention in order to be more socially and/or emotionally aware, but one can understand a person's behaviour better by paying attention to their words and actions (Segal *et al*., 2002:323).

Paying attention is the main competency in becoming mindful; when this practice is understood, learnt, and experienced, the senses are rewired to remember more of what was done (Davidson *et al*., 2003). The idea that senses can be rewired ties with what Siegel (2013) states on having a set of experiences and not a set of beliefs (Siegel, 2013:11). According to Forbes (2016), more attention should be given to the experiences that businesses, individuals, and groups share with mindfulness to engage more effectively, as people tend to allow their beliefs, not their experiences, to govern the way they view a business culture.

2.4.5 Small things give meaning to mindfulness

Brown, Ryan, and Creswell (2007) describe mindfulness as receptive attention to and awareness of present events and experiences. Langer (2017a), however, describes mindfulness as a flexible mindset, where one's mind is sensitive to context and perspective and open to novelty. Brown (2007) describes mindfulness as a receptive mindset that experiences reality as it is, rather than reacting to it or being biased.

Brown *et al*. (2007) note that mindfulness is not only about engaging with people. Engaging with events permits more flexibility in our conscious awareness, which affects psychological and behavioural responses. Brown and Ryan (2007) stress the importance of paying attention to enhance one's self-awareness and not fall victim to autonomous behaviour. Brown and Ryan (2007) note, however, that there are consequences. Mindfulness allows for more available choices of what to do with what our consciousness brings to awareness, such as the choice of promoting self-determination, an example of autonomous behaviour. The option to act autonomously (autopilot) will always exist because mindfulness embodies the knowledge of one's own free will to decide whether to be socially and/or emotionally aware (Goleman, 1996:10).

The benefits are, however, far greater (Baer, 2006b; Langer, 2017). The more mindful we become, the more healthy, adaptive, and value-consistent our behaviour is. Langer (2017a) further notes that many people find themselves trapped in a rigid mindset that is entirely oblivious to context and perspective, which manifests in their behaviour. The problem is that these individuals' behaviour is governed — not guided — by rule or routine (Wissing, 2014).

Brown *et al*. (2007) identified key characteristics of mindfulness, based on earlier research by Kabat-Zinn (1990), which are as follows:

- *Clarity of awareness* refers to a clear awareness of one's thoughts, emotions, sensations, actions, and surroundings as these exist at any given moment. It is the ability to have insight into one's own subjective behaviours and experiences within a specific situation.

- *Non-conceptual, non-discriminatory awareness* refers to processing that does not compare, categorise, or evaluate, but instead noticing in a non-judging and accepting way what is taking place around us.

- *Flexibility of awareness and attention* refers to the ability to not only gain a larger perspective on what is taking place but also to focus attention on situational details based on context and perspective. It requires openness and the ability to see things as if for the first time.

- *Empirical stance toward reality* refers to the ability to not jump to conclusions, implying a delay in judgement until more information is available.

Most people do not like change and prefer to have things a certain way without realising how it might affect the behaviour and feelings of others (Brown & Ryan, 2007). Thus, the mind is not used to change, which is why the senses that act as receptors for the human brain need rewiring so that the mind can remember more of what was done (Davidson *et al.*, 2003). According to Davidson (2003), Baer (2006b), and Goleman and Langer (2017), mindfulness is not taught; it is learnt through repetition, and repeating the small things (known as subtle knowledge) gives greater meaning to being mindful.

What mindfulness is not is a single exposure to one's own values, actions, and behaviours. Langer (2017) states that when a person is mindless, it is because he or she is unintentionally locked into a single experience of own values, actions, and behaviours that are not questioned because others might not like it (Wissing, 2014:61). Langer (2017) further explains that mindfulness requires that we give up old ways we learnt to perceive the world and states, "mindfulness helps us to notice patterns in people's values, actions, and behaviours, to understand better the decision-making process" (Wissing, 2014:61). It is normal to make the wrong decision sometimes, but instead of worrying whether the right decision was made, those who are mindful

have an increased understanding and awareness of making a wrong decision right (Wissing, 2014:61).

2.5 LEADING WITH MINDFULNESS

To examine the extent to which each dimension of authentic leadership is related to employees' organisational commitment and perform an assessment of leadership effectiveness, Emuwa and Fields (2017) studied the moderating effects of contingent reward leadership behaviour. The study was done to investigate top-level corporate scandals in Nigeria by testing the dimensions of authentic leadership against employee outcomes. The study revealed that the current globalised economy had expanded the need for more applicable leadership models (Emuwa & Fields, 2017:296). According to Luthans, Avolio, Gardner, and Walumbwa (2007), there is renewed interest in more transparent and positive leadership approaches.

Luthans and Avolio (2003) and Gardner (2007) support the notion that authentic leadership is a more transparent and effective leadership approach. It is a contemporary leadership model or style that focuses on the transparency of the leader's integrity and active concern for viewpoints of followers and their development (cited by Emuwa & Fields, 2017:296).

Based on the findings mentioned above, it is clear why mindfulness in leadership behaviour was considered significant for the present study. There is not enough data to indicate which leadership behaviours affect performance (Goleman, 2017:2). In theory, mindfulness in leadership behaviour is associated with effective leadership due to an increased need to achieve organisational commitment by employees (Emuwa & Fields, 2017). This relationship is also closely related to authentic values, actions, and behaviours (Reb *et al*., 2015).

The present study focused on this relationship as a means to affect performance in order to get results. Three distinct factors are crucial to understanding its impact in the current workplace environment, namely (1) it can help leaders (or managers) to be more self-aware in order to affect performance, (2) it can help leaders (or managers) to understand their role better in order to affect results, and (3) it can help leaders (or managers) to offer clear guidance to followers in the workplace (Goleman, 2017:5-6). Furthermore, recent findings suggest that mindfulness also stems from different social and emotional intelligence components, supporting the notion of its impact on the different leadership styles. According to Goleman (1996), leaders who positively impact performance and results are considered to be more present and aware of the subtle cues in social and emotional behaviour.

Langer's (2017) association of emotional intelligence with modern-day business practices offers a unique insight into how important mindfulness is in organisations. Langer (2017a) defines

mindfulness as “the process of actively noticing new things, and because it is a process that makes you more sensitive to context and perspective, it is regarded as the essence of engagement.”

People tend to separate mindfulness from emotional intelligence; they see it as an energy-consuming practice and assume that mindfulness is only for stressful and exhausting situations. The opposite is true. Mindfulness in leadership behaviour should be viewed as an energy-begetting practice that can help leaders to positively impact performance and, ultimately, results (Goleman *et al*., 2017a:4). Most businesses, people, and groups seek stability, and for them, this means keeping things still. However, keeping things still to maintain control is not viable because today’s workplace is volatile (Goleman *et al*., 2017a). By letting go of control, an individual begins to reflect on and understand how to be self-aware (Dass, 2010:5). Furthermore, having learnt to do something so well that it becomes second nature is already a warning sign, as actions become mindless (Goleman *et al*., 2017a:5).

Rules do not make businesses, people, and groups reflect on effective leadership behaviours. Less transparent rules make it less likely that businesses, people, and groups will work effectively and work together in the same setting. When businesses, people, and groups are mindful, rules, routines, and goals tend to guide effective leadership behaviours and not govern them (Goleman *et al*., 2017a:5).

2.6 MINDFULNESS IN LEADERSHIP BEHAVIOUR

The first step to becoming a mindful leader is to notice when you are unintentionally locked into your thoughts and feelings — that certain behaviours follow a pattern. This starts with rigid and/or repetitive thinking (Goleman *et al.*, 2017a; Goleman *et al.*, 2017b). For example, when mistakes are made over and over, the story in your mind becomes a rerun of a past experience. It is like a broken record that plays in your day-to-day activities, to a point where the mind is no longer constantly present with you and your behaviour (Goleman *et al*., 2017a). It is most noticeable in people’s attitudes towards certain colleagues. It is quite common in scenarios where one person views the other person as incompetent and will not allow him or her to speak, and it becomes even more obvious when there are feelings of resentment and/or anger at play (Goleman *et al*., 2017a; Steinhouse, 2017).

The idea is not to make a similar experience worse by inflicting what you believe. The root cause of the problem is usually the business environment and culture, coupled with the patterns in one’s own thoughts and feelings. Ensure understanding of oneself is the first step in the right direction (Goleman *et al*., 2017a; Woods & West, 2010). It is important to realise that you are in a rut before change can be initiated. By recognising patterns, mindfulness forces you to be honest with

yourself so that you can understand how to respond or react without judging yourself or others (Goleman *et al*., 2017a; Goleman *et al*., 2017b).

After noticing that you are unintentionally locked into your thoughts and feelings, the second step is to pay attention to the thoughts and feelings that crowd your mind. Becoming a mindful leader means that these thoughts and feelings need to be explored, which will require hard work because practising mindful behaviour is just as challenging as learning it (Goleman *et al*., 2017a). A strategy that may help is to view situations more objectively in a process called 'labelling thoughts and emotions' (Goleman *et al*., 2017a; Goleman *et al*., 2017b). For example, when you are not doing enough at work or at home, the thought then becomes your common belief that you are not doing enough at work or at home. It is also the case where a co-worker is perceived to be wrong most of the time, which angers other co-workers. It becomes labelling thought — that my co-worker is wrong it is the reason why I am feeling so angry (Goleman *et al*., 2017a; Goleman *et al*., 2017b). By labelling thoughts that cause some kind of emotional response, one gets to see a different perspective, or an opposite side, where thoughts and emotions are labelled, but by both sides. This helicopter view clarifies what both sides are experiencing when thoughts trigger emotions and when emotions trigger thoughts (Goleman *et al*., 2017a; Woods & West, 2010). It is referred to as a *transient data source*; mindful behaviour is considered to not only enhance biological changes in the brain but that it promotes well-being because the changes are occurring at a cellular level (Davidson *et al*., 2003; Goleman *et al*., 2017a; Kabat-Zinn, 1990; Woods & West, 2010). The idea is to slow down and be open to constructive criticism so that thoughts and emotions are mainly directed towards improving oneself and to expand one's awareness, insight, wisdom, compassion, and equanimity (Baer *et al*., 2006b; Goleman *et al*., 2017a).

After labelling the thoughts and feelings that crowd your mind, the third step is to accept them and not try to control them. This is also hard to do, if not the hardest of the steps. It is a critical step towards being a mindful leader; once it is mastered (understood, learnt, and experienced), you understand who you are and who you really want to be (Goleman *et al*., 2017a). The opposite of control is thus acceptance and not acting on every thought or resigning yourself to negativity, and to respond to your ideas and emotions with an open and honest attitude by paying attention to them and letting yourself experience them (Goleman *et al*., 2017a; Goleman *et al*., 2017b).

This requires taking a step back and quieting your mind by, for example, doing a rhythmic breathing exercise and then reassessing the situation to see what needs to be done. It may not necessarily make you feel good, but it should bring relief in the present moment. In fact, you may not understand your behavioural response at first, but taking a step back helps you realise what made you so upset in the first place (Goleman *et al*., 2017a).

It is quite common that people lack compassion for others because they lack compassion for themselves. To be compassionate with yourself is something that cannot be taught; it is learnt by experiencing thoughts and feelings of sympathy and/or empathy in situations that require it the most (Goleman *et al*., 2017a; Goleman *et al*., 2017b; Reb *et al*., 2015; Steinhouse, 2017). For example, a person who acknowledges his or her feelings of frustration and anger, rather than taking them out on others, are more effective in situations that require performance (Goleman *et al*., 2017a). Therefore, instead of shouting at subordinates, accept, take a step back, quiet the mind, re-evaluate, and raise the energetic qualities of co-workers or colleagues to focus on what is more important in pressing situations (Goleman *et al*., 2017a; Goleman *et al*., 2017b). Dealing with the situation will require clear communication, decisive actions, and teamwork — the essence of engagement (Goleman *et al*., 2017a; Steinhouse, 2017).

The fourth and final step towards becoming a mindful leader is to unhook yourself from self-imposed thoughts and emotions that restrict you from making clear or direct decisions. It starts with making a conscious decision to act or behave in a way that aligns with your values (Goleman *et al*., 2017a; Goleman *et al*., 2017b). The idea is not to expand your choices because this may lead to a constant yearning to keep things still to maintain control. It is about understanding and knowing how not to make self-destructive decisions that will affect performance detrimentally (Goleman *et al*., 2017a). The aim is to encourage leaders to focus on their intentions, not the outcome of their decisions. For example, a person who is known to be an impulsive decision-maker may only want to make decisions to further his or her collective purpose in the short term, but not the purpose of the organisation in the long term (Marques & Dhiman, 2017; Reb *et al*., 2015; Steinhouse, 2017). It may also guide emerging leaders in the opposite direction, away from the values and principles of living authentically and with integrity (Goleman *et al*., 2017a; Wissing, 2014). It is, therefore, important to ask yourself whether the life you most want to live is a true reflection of the leader you most want to be because that is how you will be remembered (Reb *et al*., 2015).

As the mind is sometimes referred to as a body of water, and that our thinking causes resistance in the water, our values and principles could then be seen as our lifeboat, and the boat can only sink when there are self-imposed thoughts and emotions such as greed, anger, and ignorance. It is by acting on thoughts and emotions and not on values or principles that an imbalance is created in people's intentions. Thus far, the consequences are more significant when greed is more important than generosity, or when anger becomes a habit, rather than compassion, or when ignorance governs the decision-making process more than wisdom (Lama, 2017). It is, however, impossible to block out every self-imposed thought and emotion. However, to be truly effective is to be aware of your inner experiences and not get caught up in them because mindful leaders

understand and know how to utilise their internal qualities and follow through on commitments that are aligned with their values (Goleman *et al*., 2017a; Goleman *et al*., 2017b).

2.7 BENEFITS OF MINDFULNESS

Another significant benefit of mindfulness is that it helps people find a healthy balance in mind, body, and behaviour (Pykett *et al.*, 2016). According to Goleman and Langer (2017a), mindfulness is never separate from how people think, feel, and behave. In other words, mind, body, and behaviour are integral to mindfulness because all three show how a person chooses to react and whether or not their intentions are good. Finding balance in mind, body, and behaviour enables a business, individual, or group to anticipate unknown dangers and be more proactive in taking the necessary actions that serve a collective purpose rather than an individual's self-interest. This notion is supported by Watts (2003), who states:

> *When one is balanced in life, that of the mind, physical well-being, and how one chooses to behave, demonstrates a level of contentment in which a person begins to realise that not everything revolves around oneself, as a matter of fact it's not about you.* (Watts, 2003:29).

This is commonly referred to by Buddhist as reaching a state of equanimity, and, according to Thich Nhat Hanh (1999), it is where one can balance one's thoughts, emotions, and behaviour and understand better when not to overthink or overreact in a manner that makes one less evaluative towards other people. David and Congleton (2017a) add that a mindful leader moves people forward by guiding them towards opportunities for growth and self-development, not by controlling them for the leader's own benefit.

A modern-day leader focuses more on balancing interpersonal values, actions, and behaviours to simplify the decision-making process and not dwell on regret if a critical decision turns out to be wrong. Therefore, the challenge for modern-day leaders is to learn how to process feelings of procrastination and regret through mindfulness. The added benefit from reaching a state of equanimity is the ability to reflect without seeking attachment (Goleman *et al*., 2017a:7). This is discussed in the next section.

2.8 NEED FOR REFLECTION

Keltner (2017a) considers mindfulness a superordinate variable in leadership studies, especially when determining which leadership styles are more effective. Keltner (2017a), who studied the 'power paradox' in leadership behaviour, found power to be more destructive than the need to control people. The 19th-century historian and politician known as Lord Acton (1887) may have been right in stating:

> *Power tends to corrupt, and absolute power corrupts absolutely. Great men are almost always bad men, even when they exercise influence but not authority, or when they exercise authority but no tendency to be more assertive by means of control.*

Many people gain power through traits and actions that advance the interests of others, such as empathy, collaboration, openness, fairness, and sharing (Goleman *et al*., 2017a:73). However, as they experience being in a position of privilege, control increases more through power, and all the other qualities that helped them gain power through advancing the interests of others begin to fade. The problem is not necessarily the amount of power, but powerful people not understanding how to respect the most fundamental qualities that help assert power more responsibly. Those who do not understand are advised to focus more on recognising patterns, labelling thoughts and emotions, accepting thoughts and emotions, and acting on values. Such individuals need to pay attention to the fundamental qualities that inspired them to serve a collective purpose. They need to reflect on their own experiences when they were not in a position of power but were guided towards opportunities for growth and self-development (Goleman *et al*., 2017a:74).

According to Buddhist teachings, "Buddha can only show you the way, but it is up to you to become your own master. If change begins from within where the heart is utterly intimate and utterly shared, a culture will follow" (Lama, 2017:3). Reflection is important, and, according to Kabat-Zinn (1990), it begins with being present and being disciplined in paying attention in the present moment, to connect with mind and behaviour (Kabat-Zinn, 1990:4). According to Dass (2010), it is more about letting go of control and then be disciplined to reflect on the experiences from whence the behaviour was governed; behaviour should be guided, not governed by rules or routine.

Reflection (also called *introspection*) enables you to understand better that what has been keeping you from reaching a state of equanimity, as well as to become more self-aware, which could, for example, be an attachment to power (Dass, 2010:5). Goleman, Langer, and Keltner (2017a) note those in positions of power who do not understand how to respect the fundamental qualities that would help them assert power more responsibly are more likely to engage in rude, selfish, and unethical behaviour. Keltner (2017a) studied unethical behaviour among employees in 27 countries and found that wealthy individuals are more likely to consider it acceptable to engage in unethical behaviour such as bribery and tax evasion. Their position of power makes them feel entitled to do so, which stems from the fact that wealth tends to make people want to control their decisions, even when their decisions are attached to their desire for more power (Goleman *et al*., 2017a:75).

Keltner and Miller (2017a) studied self-serving behaviour among chief executive officers (CEOs) in Canada who hold an MBA and found that they are more likely to engage in self-serving behaviour

than those without an MBA. This was because those who held an MBA felt entitled to pursue personal wealth more than growth or self-development, which is a way to control personal compensation but will lead to a decline in the value of any organisation or company if attached to pursuing only personal wealth. Miller (2017a) warns that it is vital that those who have the power not allow their heart to be corrupted because the consequences could be dire.

From the above, it is clear that to become mindful requires reflection, not on what was done using control, but what was not done through power (Walkinshaw, 2017:2). According to Keltner and Miller (2017a), the abuse of power ultimately tarnishes executives' reputation and undermines any opportunities for the influence they might have had. Wissing (2014) and Goleman, Langer, and Keltner (2017a) add that it creates stress and anxiety among these individuals' colleagues, diminishing rigour and creativity in a group and dragging down team members' willingness to engage and to perform.

2.9 REFLECTION IN LEADERSHIP BEHAVIOUR

Stepping into a senior role means a growing need to be attentive to the behaviour that accompanies the newfound privileges of power. This is part of taking a helicopter view of the thoughts and emotions that trigger behaviour (Goleman *et al*., 2017a:77). Therefore, the modern-day leader is required to reflect on their own experiences to guide better-emerging leaders who are not yet in a position of power towards the right opportunities for growth and self-development. This is achievable when leaders are able to recognise their own patterns, label their own thoughts and emotions, accept their own thoughts and emotions, and act on values that serve a collective purpose.

According to Langer, Keltner, and Miller (2017a), power puts leaders into a manic state of mind, where they often fall victim to expansive behaviours that are triggered by elevated or irritable feelings of intense energy, extreme hunger for reward, limitless influence, and an insusceptibility to taking risks. Brown and Ryan (2007) note that, in situations like these, mindfulness allows for more choices of what to do with what consciousness brings to awareness, such as promoting self-determination, an example of autonomous behaviour because mindfulness is utilised as a production tool and not a performance tool. Unfortunately, this leads to rash decision-making, which seems to cause rude and unethical actions (Goleman *et al*., 2017a:77).

Studies in neuroscience by Davidson (2003) indicated that simply reflecting on those thoughts and emotions that trigger behaviour, for example, to convince oneself to rule the world through controlling people, engages the prefrontal cortex, which helps to prevent the worst impulses from being acted out. Thus, when leaders begin to label their own thoughts and emotions, they are less likely to make irrational decisions, behave rudely, or engage in unethical behaviours. Instead, they

become inspired to serve a collective purpose. When leaders begin to recognise their own patterns of frustration due to subordinates not performing as they should, they are also less likely to respond in an adversarial or confrontational manner (Goleman *et al*., 2017b).

The most effective way to become more self-aware is to practise mindful behaviour in everyday life by paying attention to one's own words and actions when engaging or interacting with family, friends, and co-workers (Baer *et al*., 2008:330). Kabat-Zinn (2003) and Davidson *et al*. (2003:13) recommend various mindfulness-based exercises, such as mindfulness meditation, breath awareness meditation, body scan meditation, Zen meditation, and transcendental meditation. Mindfulness-based exercises are now taught in business training programmes at companies such as Google, Facebook, Aetna, General Mills, Ford, and Goldman Sachs (Goleman *et al*., 2017a:78). Any mindfulness-based exercise aims not to teach leaders how to reflect on the thoughts and emotions that govern their behaviour but on how to be more attentive to their behaviour that accompanies their newly gained privileges of power.

To assist in evaluating one's behaviour, (Goleman *et al.*, 2017a:79) answering the following questions:

- Do you swear at the office?
- Do you interrupt people?
- Do you forget colleagues' names?
- Do you check your phone when others are talking?
- Have you ever taken sole credit for a group effort?
- Have you told a joke or story that embarrassed or humiliated someone else?

If the answer is "yes" to most of the questions, it is a warning sign of either problematic or toxic behaviour, not necessarily governed by power or control, but by ignorance, because what may seem innocuous to the mindless may not be viewed the same by the mindful.

2.10 MINDFUL INTENTIONS IN LEADERSHIP BEHAVIOUR

The simplest method to understand someone's values, actions, and behaviour is to study their intentions and how these are exhibited — either serving a collective purpose or the individual's own self-interest. Mindless intentions could have dire consequences if acted upon. Mindful intentions are not the opposite of every bad intention but are characterised by being meant to serve a collective purpose (Watts, 2003:71).

To demonstrate mindful intentions requires being connected to how people think, feel, and behave (Goleman & Langer, 2017a). Steinhouse (2017) refers to mindfulness as an internal attitude

towards a motive yet to be actioned. It is considered part of making a conscious decision to actively engage in the present moment and not projecting intentions based on past experiences or spending too much time thinking about the future. It is fundamentally important for Buddhism that Buddha's teachings', mainly through '*Setting in Motion the Wheel of the Dharma*[2]', is not just about understanding the human mind but also educate the people on the human condition. It means that to understand Buddha's teachings fully is not only about attaining a *blissful mind*; it is also about teaching the *human aspects* of Buddha himself. According to Buddhist teachings, it is important to condition the human mind to focus on the right motive to deal with matters of the heart (Watts, 2003:71). Thus, the relationship between business and leadership also seems to share a connection with *mindful intentions* that are not often taught in *training programs*. It is only assumed to be part of the relationship between showing intent and taking action but not really knowing how it affects business and leadership performance. It is currently a very important shortfall because each decision is set with danger if the decision's motive is not pure (Lama, 2017:10). One example is when the rules, routines, and goals are meant to affect performance, but for the wrong reasons, most notably when mindfulness is utilised as a production tool (Brown & Ryan, 2007). The intent demonstrated may appear to be mindful, but it will produce unwanted results (Steinhouse, 2017:63).

Watts (2003) identified two internal processes that cause intentions to be mindful, namely (1) a motive that offers clear direction and a motive that carry meaning (Watts, 2003:72). Therefore, good intent must be associated with the right motivation so that when acted upon, rules, routines, and goals positively impact performance and the values, actions, and behaviours exhibited in business and leadership. In this regard, Watts (2003) notes:

> *The demonstration of mindful intent is both a concept and a process. It is a concept because one needs to be intellectually present and understand how to pay close attention to true and authentic intentions. It is also a process because one needs to be physically present and know how to show or demonstrate the right motive to engage and not project — because the process is not meant to make someone look weak.*

Goleman and Langer (2017a) and Steinhouse (2017) stress that leaders should act on the values that serve a collective purpose. Furthermore, Luthans and Avolio (2003) state that leaders should act truthfully and authentically on the values that serve the collective purpose.

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[2] In Buddhism, the 'Setting in motion the wheel of the Dharma' is meant to teach Buddhism as a religion and a philosophy. It focuses on one's role in the cosmic universe, based on natural law and reasoning that are applied to condition the human mind, body, and behaviour, as taught by Buddha himself. In Buddhism, the word *Dharma* or *Dhamma* means "*phenomena*", and it refers to the notion that only your own understanding can save you from suffering.

Mindful intent is not a one-time event but has to be constantly demonstrated in everyday life through the influence exerted for the right reasons. Leaders need to be transparent regarding their intentions when exerting their influence (Luthans & Avolio, 2003). The seamless link between values, actions, and behaviour is not an exception but a rule in any mindfulness practice.

2.11 IMPACT OF MINDFULNESS IN BUSINESS AND LEADERSHIP

Goleman, Langer, and Brendel (2017a) note that, while there are risks attached to mindfulness, business and leadership performance's positive impacts outweigh the dangers. This positive impact is often overlooked when people reach a significant milestone or accomplish a personal achievement that defines success in life based on talent, ability, and competence (Goleman *et al*., 2017a:109). According to Brendel (2017a), these talented individuals have an appetite for success but experience difficulty at some stage in their life to maintain a certain level of success without risking their physical and/or mental health. The trade-off is often pursuing more personal success at the expense of their values, actions, and behaviour, which is considered mindless.

Matts *et al*. (2019) posit that mindfulness can be used as a performance tool in any business- or leadership arena to foster a thoughtful leadership culture that enhances company or organisational productivity and complies with the strategic decisions that impact performance. It is now a new trend in modern-day leadership training programmes and is widely being accepted by executive coaches, researchers, and companies such as Aetna, Intel, McKinsey, Genentech, and General Mills. Matts *et al*. (2019) found it quite common in companies that are leaders in innovation, creativity, and problem-solving.

Major companies are now making more collaborative efforts to partner with experts such as neuroscientists and mindfulness-based stress reduction practitioners in implementing better employee training programmes. The importance of mindfulness is now also recognised by technology companies that seek ways to improve innovation, creativity, and communication in the workplace.

One well-known pioneer in applying mindfulness as a performance tool in the business- and leadership arena is Chad-Meng Tan (2019), who introduced a programme called *Search Inside Yourself* at Google to harness better creativity and innovation (Matts *et al*., 2019:1). Other technology companies have since implemented the programme in hopes of achieving similar results. However, many technology companies face a challenge in showing that they have a management team that is open to the idea of linking mindfulness to innovation, creativity, and communication in the workplace (Tan, 2019).

According to Goleman, Langer, Brendel, and Hammond (2017a), improved innovativeness is one of the primary reasons for implementing mindfulness practices in the workplace. Langer and

Hammond (2017) conducted a study to connect mindfulness with innovation. They instructed the participants to come up with new uses for products that had failed. One group was given mindless information on why the product had failed in its intended use, while the other group was given mindful information that bore substance by reflecting the product's properties. The participants in the second group tended to use the product in more creative ways, which suggest that innovation can be more effective if instructions are clear and direct — even when the information is considered mindless but shared with substance (Goleman *et al*., 2017a:8).

Also, it was found that the participants' intellectual knowledge in both groups expanded during interactions, which, according to Langer (2017a), is the essence of engagement and, according to Hammond (2017), nearly always traced back to communication. The study thus showed that mindfulness could indeed affect performance in the workplace, but it has to be applied correctly, and leaders have to demonstrate good intent and the right motive, reflected in their actions.

Goleman (2017a) notes that many leaders consider what is more important when performing leadership duties, charisma or mindfulness. Goleman and Langer (2017a) conducted a recent study focused on analysing how magazine salespeople presented themselves during a sales pitch, specifically first impressions, product and sales knowledge, options offered, and alternatives suggested. The study used a control group of participants; one group was given mindless instructions: to act on false pretences and provide information dishonestly, while the other group was given mindful instructions: to act authentically and provide information truthfully. The study revealed that the participants in the second group, those who were instructed to act authentically and provide information truthfully, were more liked by the clients and sold more magazines (Goleman *et al*., 2017a:10). The results also showed that some participants in the second group, who were instructed to follow a routine and do mindfulness-based exercises, could present themselves more confidently and engage more effectively with the clients.

Langer (2017a) posits that mindfulness enables a leader to navigate the chaos in the business environment, making it hard to be socially and emotionally aware (Goleman *et al*., 2017a:20). It is also important to remember that, where there is conflict, there is also stress, and businesses, people, and groups should not look at conflict as a function of events but a function of the events' viewed (Goleman *et al*., 2017a:13).

New evidence has begun to emerge that challenges researchers on how far the impact of mindfulness extends and whether it stems from different components of social and emotional intelligence (Goleman, 1996; Goleman, 2017; Goleman *et al*., 2013; Goleman *et al*., 2017a; Goleman *et al*., 2017b). However, Goleman (2017) maintains that the framework of mindfulness is widely acknowledged as an unbiased performance tool that can be employed to enhance social and emotional competencies in the workplace, which forms part of what Langer (2017) refers to as

subtle knowledge to affect performance positively. In linking social and emotional intelligence to mindfulness, psychologists at Harvard University found that mindful leaders typically hold a critical mass of six or more competencies in either social or emotional intelligence and are regarded as far more effective than their peers who lack such competencies (Goleman, 2017:7).

Furthermore, psychologists at Harvard University analysed the performance of division heads at a well-known food and beverage company. They found that among those leaders who had a critical mass of six or more competencies in emotional intelligence, around 87% received the top three bonuses based on their business performance, and their divisions outperformed yearly revenue targets by 15% to 20% on average (Goleman, 2017:7).

From the above, it is clear that mindful leaders understand who they are and how to delegate their power to influence responsibly, without extensive use of authoritarianism, as it impedes employees' freedom to be innovative, to have a sense of responsibility to the organisation, to have a sense of direction in taking risks, to set high-performance standards for themselves, to have clarity about their role and contribution in the performance of the company or organisation, and to have a high level of commitment to serving a collective purpose (Goleman, 2017; Steinhouse, 2017; Woods & West, 2010).

2.12 SUMMARY

To evaluate the expansive connection and/or impact of mindfulness and authentic leadership on more contemporary constructs such as business and leadership behaviour will require an integrated evaluation to operationalise mindfulness and authentic leadership, in order to assess how mindfulness affects leadership behaviour, as well as which leadership behaviours have a positive effect on performance. Mindfulness and authentic leadership are considered to be strongly related, as the constructs share values, actions, and behaviours associated with effective leadership. In the present study, both mindfulness and authentic leadership were expected to significantly impact the leaders' levels of cognition to demonstrate values, actions, and behaviours that are fundamental to what makes a leader more effective. Mindfulness as a predictor for authentic leadership involves social and emotional awareness and the moral and ethical standards that are fundamental to engaging with people and demonstrating true leadership intentions.

This concluded the review of extant literature in this domain. The next chapter discusses the methodology used in the study.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter focuses on the research methodology followed in conducting the study, including the research philosophy, approach, design, the research instruments, the population and sampling technique, and data collection and analysis.

3.2 RESEARCH PHILOSOPHY

Ontological Realism is at the heart of this research study, as it is an inquiry into the nature of things where much of what is real about *mindfulness* and *authentic leadership* exist but occurs independently from a person's awareness and knowledge. The inquiry is that people do engage with mindful behaviour and authenticity in leadership behaviour on a daily basis but are not aware that they do because many people have not given enough attention. The problem for most people is not that they do not pay attention but that they lack the discipline to be present to pay attention. Many people lack the capacity to be in the present moment due to repetitive absent-minded behaviour. Therefore, most of what we know about mindful behaviour is largely treated as an aftermath where people perceive their own capacity to be present and pay attention.

Most of what we know about authenticity in leadership behaviour is largely treated as a comparison where a person perceives their own and someone else's leadership qualities. One possibility is that a leader is considered more effective when leaving a memorable imprint on emerging leaders to demonstrate mindful behaviour and authenticity in leadership behaviour.

3.3 RESEARCH APPROACH

The study followed a quantitative approach, whereby primary numeric data were gathered to assess the relationship between two constructs, namely *mindfulness* and *authentic leadership.* Both these constructs and their descriptive facets were the main focus of this study. The study is mainly related to a workplace context, how mindfulness affects leadership behaviour, and which precise leadership behaviours affect performance, as perceived by MBA students at a selected higher education institution, the North-West University Business School.

3.4 RESEARCH DESIGN

The study was exploratory, and the research design that was followed in this study is described as a *Variance Analysis Cycle* (Seal *et al*., 2019:481), shown in Figure 3-1. A survey was performed to target 190 registered MBA students to complete two self-administered questionnaires through an

online service, SurveyMonkey®, which allowed participation through various electronic applications and devices. This approach best suited this study given two reasons. The students work full-time and have to study as well, and during a global pandemic, COVID-19 created a challenge to reach the respondents and gather sufficient data.

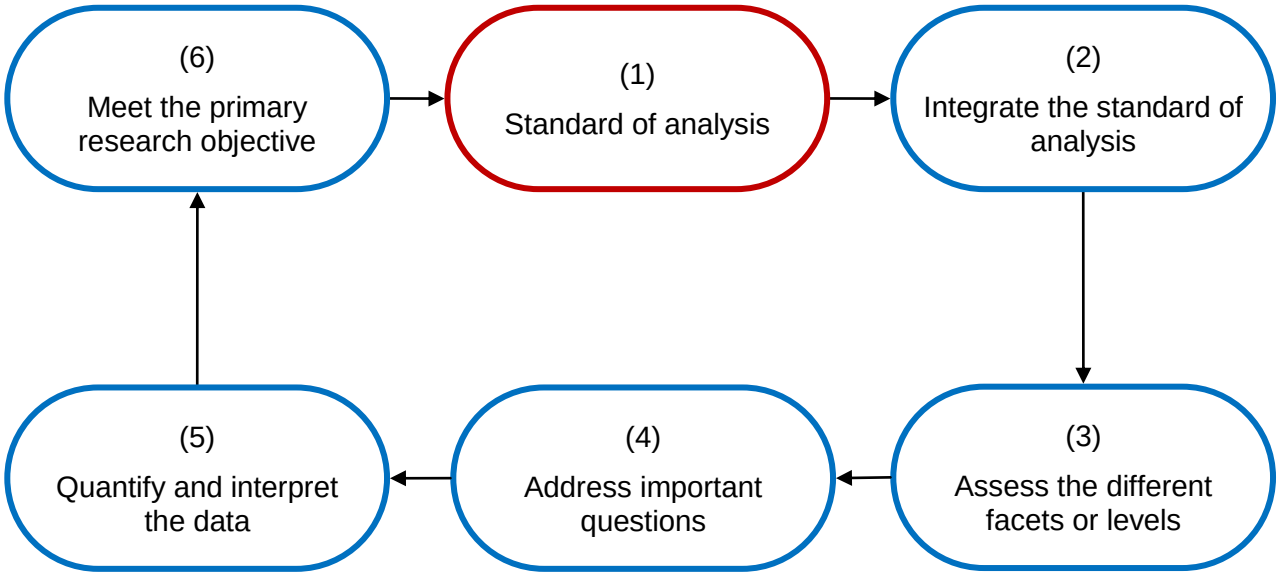

Figure 3–1: The Research Design

Source: The Variance Analysis Cycle (or VAC) (Seal *et al.*, 2019:481)

Besides the fact that mindfulness is considered a fairly new concept in business and leadership studies (Goleman *et al.*, 2017a; Stedham & Skaar, 2019). It was also acknowledged by Goleman (2017) that the reason why mindfulness studies have not yet materialised into the realm of leadership – is due to a lack of data to indicate which specific leadership behaviours affect performance (Goleman, 2017). There are thus few exploratory analyses conducted to assess the effects of mindfulness on leadership behaviour and/or its impact on performance in the workplace (Goleman, 2017).

3.5 POPULATION AND SAMPLE

The population comprised all first- and second-year registered for an MBA at a higher education institution. The sample was drawn from these two cohorts of students registered in 2020 at North-West University Business School, which is located in South Africa, and included students who were (a) employed or (b) unemployed and who were (c) in management and (d) non-management roles (see figure below). The study sought the responses of this particular population because they were considered likely to engage with leaders in the workplace, currently or in the future. The sample was, therefore, semi-specified and ungeneralised (Bryman & Bell, 2014).

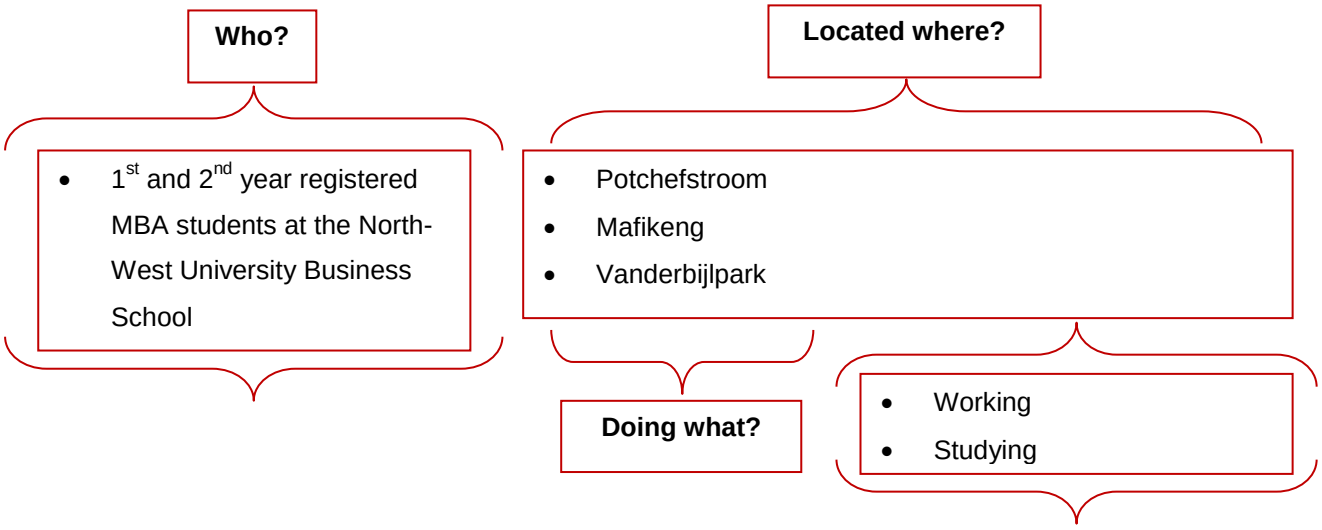

Figure 3–2: Population & Sample

Source: Research Methodology (Bryman & Bell, 2014)

From a 190 registered MBA students census, the study attained a sample of *n* = 41 students. The aim of this study was also to support Langer's (2017) research on mindfulness and its effects on leadership behaviour in the workplace, including Goleman's (2017) research on effective leadership in the workplace (Goleman, 2017; Goleman *et al.*, 2017a).

3.6 DATA COLLECTION

Two existing data collection instruments were used: *Mindfulness* (FFMQ of Baer *et al*., 2008) and one for *Authentic Leadership* (ALQ of Avolio *et al*., 2008). The 39-item FFMQ (Baer *et al.*, 2008:330) was readily available, but the use of the 32-item ALQ (Avolio *et al*., 2008) required permission. Excerpts from both instruments are presented in Annexure D, together with additional confirmation of their validity, including the scoring method.

The FFMQ (Baer *et al*., 2008) contains no factors for integrated evaluation of mindfulness. It has a total of 39 items, grouped into five facets that are estimated as follows (Baer *et al.*, 2006a):

Observing: 1, 6, 11, 15, 20, 26, 31, 36

Describing: 2, 7, 12R, 16R, 22R, 27, 32, 37

Acting with awareness: 5R, 8R, 13R, 18R, 23R, 28R, 34R, 38R

Non-judging of inner experience: 3R, 10R, 14R, 17R, 25R, 30R, 35R, 39R

Non-reactivity to inner experience: 4, 9, 19, 21, 24, 29, 33

Reverse-scored values were estimated at each item marked with an (R) to calculate the total score value for each facet and to obtain estimated scale values where high score values represent higher

levels of mindfulness. The value scores were therefore reversed (1 to 5, 2 to 4, 4 to 2, and 5 to 1) for all the items marked with an (R). The 39-item FFMQ (Baer *et al.*, 2008:330) has demonstrated an integrated evaluation of good internal consistencies, with alpha coefficients ranging from .75 to .91, which further supports a possible relationship between the facets, including other variables that are consistent with more contemporary predictions.

The 32-item ALQ (Avolio *et al*., 2008) comprises two factors (two-factor integrated evaluation of authentic leadership), with two sets of 16 items each, and four facets that are estimated as follows (Avolio *et al.*, 2007):

Transparency: 1, 2, 3, 4, 5

Moral/Ethical: 6, 7, 8, 9

Balanced Processing: 10, 11, 12

Self-awareness: 13, 14, 15, 16

No reverse-scored values were estimated at any item; rather, the average score of each facet is presented as the total score, where high score values represent higher levels of authenticity. The instrument consists of two factors ("I as a leader…" and "My leader…") that demonstrated estimated scale values as average scores for each of the four facets. The 32-item ALQ (Avolio *et al*., 2008) has demonstrated an integrated evaluation of good internal consistencies, with alpha coefficients ranging from .73 to .92, which further supports a possible relationship between the facets, including other variables that are consistent with more contemporary predictions. It has also demonstrated estimates of internal consistencies of alphas or Cronbach alphas at levels of .87 for *Transparency*, .76 for *Moral/Ethical*, .81 for *Balanced processing*, and .92 for *Self-awareness* (Roof, 2014; Walumbwa *et al.*, 2008).

The two factors of the ALQ (Avolio *et al*., 2008) assessed (1) how the respondents perceived themselves as leaders ("I as a leader…"), and (2) how leaders were perceived by their followers or subordinates (e.g., "My leader…"). The framework of the two-factor integrated evaluation of authentic leadership, presented in Table 2-2, has demonstrated estimates of alphas or Cronbach alphas ranging from .71 to .93 for the first factor ("I as a leader…") and .66 to .82 for the second factor ("My leader…").

The FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) are recognised self-assessment questionnaires (see Annexure D), and responses are captured on a five-point Likert scale, including direct and reverse-scored items.

FFMQ	ALQ
1. Never or very rarely true	1. Not at all
2. Rarely true	2. Once in a while
3. Sometimes true	3. Sometimes
4. Often true	4. Fairly often
5. Very often or always true	5. Frequently, if not always

Both data-collection instruments were designed as a self-assessment questionnaire to enable self-help and self-scoring (Avolio *et al*., 2008; Baer *et al.*, 2008:330). Many subsequent analyses were measuring instruments in which to assess mindfulness and/or leadership were readily available for use. The FFMQ to assess mindfulness was readily available. The ALQ, however that was used to assess authentic leadership, was not readily available and required permission.

The present study aimed to realise a sample of at least 190 students at the North-West University Business School (from the Potchefstroom, Mafikeng, and Vanderbijlpark campuses) who were (a) employed or (b) unemployed, and who were in (c) management and (d) non-management roles. The study, unfortunately, attained a sample of n = 41 students due to the current COVID-19 pandemic.

3.7 DATA ANALYSIS

The data analysis conducted on mindfulness (FFMQ) and authentic leadership (ALQ) was integrated into one exploratory study and distributed through online services to simplify the data collection process. It was the most preferred method to reach the respondents and gather a sufficient amount of data from a census of 190 MBA students. The students were given the opportunity to self-complete the FFMQ and ALQ in their own time, using more than one device to access the survey platform due to several COVID-19 regulations and restrictions.

The data analysis process used two existing data collection instruments. The FFMQ that was designed by Baer et al. (2008) to include social and emotional dimensions of mindfulness, and the ALQ that was designed by Avolio et al. (2008) to include moral and ethical dimensions of leadership. Both instruments are considered self-assessment questionnaires to enable self-help and self-scoring when assessing mindfulness and authenticity in everyday life.

Once the responses had been captured on the SurveyMonkey® software platform, the data were processed, coded, analysed, and validated using IBM SPSS Version 26. Further descriptive analyses and inferential statistics were done using Microsoft Excel Data Analysis for factor

analyses and correlations to answer the research questions and address the primary research objective. Tables, figures, and graphs were also used in this study for a complete analysis of the FFMQ and ALQ as perceived by the MBA students.

3.8 RELIABILITY OF THE MEASURING INSTRUMENTS

The FFMQ (Baer *et al.*, 2008:330), used to measure mindfulness, is also used to analyse conceptually driven modes of thought, where experiences and/or events filter through cognitive appraisals, evaluations, memories, beliefs, and other forms of cognitive manipulation (Baer *et al.*, 2006a; Brown & Ryan, 2003a). The 39-item FFMQ (Baer *et al.*, 2008:330) has yielded some useful psychometric results in cases where undergraduates, communities, and small samples were evaluated (Brown & Ryan, 2003a).

Carlson and Brown (2005) assessed the mindfulness of cancer patients using the FFMQ (Baer *et al.*, 2008:330) and reported alpha coefficients ranging from .80 to .90 on the scale structure, which supported conceptual modes of thought (Carlson & Brown, 2005). The findings proved to be quite significant because the FFMQ (Baer *et al.*, 2008:330), which supposedly includes social and emotional dimensions, has demonstrated relatively high test and retest reliability and discriminant validity (Baer *et al.*, 2006a; Baer *et al.*, 2006b). The FFMQ (Baer *et al.*, 2008:330) is therefore not only considered to be multifaceted but also interconnected because it can be used as a performance tool to actualise almost all qualities of consciousness that involve emotion and behaviour regulation, interpersonal competence, mental health, and physical well-being (Baer *et al.*, 2006a; Baer *et al.*, 2006b; Brown & Ryan, 2003a).

However, the 32-item ALQ (Avolio et al., 2008) has not demonstrated similar psychometric results in cases where undergraduates, communities, and small sample groups were evaluated. Nonetheless, according to Avolio, Gardner, and Walumbwa, who assessed authentic leadership using a large sample (n = 436) of full-time employees, reported internal consistencies of alphas or Cronbach alphas ranging from .71 to .93 for the first factor (“I as a leader…”) and .66 to .82 for the second factor (“My leader…”). The findings also proved to be quite significant because the ALQ (Avolio *et al*., 2008), which supposedly includes moral and ethical dimensions, demonstrated a relatively high sample group and convergent validity (Roof, 2014; Walumbwa *et al.*, 2008). The 32-item ALQ (Avolio *et al*., 2008) is therefore not only considered multi-factored but also associated with performance because it can be used to manage rules, routines, and goals that help guide leadership behaviour.

3.9 ETHICAL CONSIDERATIONS

The 39-item FFMQ (Baer *et al.*, 2008:330) was readily available, and no permission was required for its use. However, the 32-item ALQ (Avolio et al., 2008) was not readily available, and special

permission had to be obtained from Mind Garden, a web page, which grants permission only for academic research purposes.

Permission to conduct the study was obtained from the Faculty of Economic and Management Sciences Research Ethics Committee, and the researcher ensured that the ethical principles and guidelines of North-West University were upheld throughout the study. The North-West University Gatekeepers Committee also gave the approval to use the SurveyMonkey® software platform to distribute the questionnaires.

Respondents were presented with an informed consent form that informed them of the aim of the study, assured them that participation was voluntary and anonymous and that the research would adhere to the ethical principles and guidelines of North-West University.

3.10 SUMMARY

This chapter described the methodology employed to gather primary numeric data to analyse the constructs under study. Two existing instruments were used to gather responses to assess the effects of mindfulness on leadership behaviour and determine which leadership behaviours affect performance. The study assessed both these constructs and their descriptive facets as these relate to a workplace context, as perceived by MBA students at North-West University Business School.

An important issue that may have had some influence on responses and affected the assessment is that some respondents may have been familiar with the concept of mindfulness and may have associated certain traits or attributes (conceptual modes of behaviour) with a mindful leader as opposed to an authentic leader before completing the 32-item ALQ (Avolio *et al*., 2008). If the respondents had assumed that authenticity is an inherent trait or attribute in leadership before completing the ALQ (Avolio *et al*., 2008), they have already associated specific values, actions, and behaviours with a mindful leader. The same applies to an authentic leader. The possibility of a sampling error having occurred is, however, very small (Bryman & Bell, 2014).

This chapter described the methodology followed in conducting the study. Chapter 4 reports the results of the statistical analyses.

CHAPTER 4
RESEARCH RESULTS AND FINDINGS

4.1 INTRODUCTION

This reports the results of the statistical analyses performed on the data gathered through the FFMQ (Baer *et al.*, 2008:330) and the ALQ (Avolio *et al*., 2008).

4.2 DESCRIPTIVE STATISTICS

A sample of *n* = 41 students was obtained; 34 (*n*) completed the FFMQ (Baer *et al.*, 2008:330). Concerning the ALQ (Avolio *et al*., 2008), 32 (*n*) completed "I as a leader", and 31 (*n*) completed "My leader". The five-point scale used to assess the FFMQ (Baer *et al.*, 2008:330) remained unchanged. The four-point scale that is generally used in the ALQ (Avolio *et al*., 2008) was changed to a five-point scale.

Table 4-1 shows the results of the descriptive statistics. The study attained valid results for the following numeric data.

From an estimated population size of 190 registered MBA students, a sample of *n* = 41 students was realised. From the sample, 31 (*n*) students completed the survey. The gender distribution was 60.98% men and 34.15% women. Respondents aged 35 to 54 made up 63.42% of the sample. The other age ranges were 25 to 34 (21.95%) and 55 to 64 (14.63%).

A total of 63.41% of students occupied management or leadership, while 63.41% did not. Concerning the management level, the majority were in middle management (29.27%), 19.51% were senior managers, 12.20% were supervisors, and 7.32% were directors. The valid and cumulative percent further support the results in Table 4-1 but are not conclusive enough for all numeric data due to a small sample of *n* = 41 students.

Table 4-1: Table Descriptive Statistics of demographic characteristics of respondents

Descriptive Statistics

Frequency Table

			Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Valid	Female	14	34.15	34.15	34.15
		Male	25	60.98	60.98	95.12
		Prefer not to say	2	4.88	4.88	100.00
		Total	41	100.00	100.00	
Age	Valid	25-34	9	21.95	21.95	21.95
		35-44	13	31.71	31.71	53.66
		45-54	13	31.71	31.71	85.37
		55-64	6	14.63	14.63	100.00
		Total	41	100.00	100.00	
MBA student at NWU	Valid	No	3	7.32	7.32	7.32
		Yes	38	92.68	92.68	100.00
		Total	41	100.00	100.00	
Employed	Valid	No	1	2.44	2.44	2.44
		Yes	40	97.56	97.56	100.00
		Total	41	100.00	100.00	
Management	Valid	No	15	36.59	36.59	36.59
		Yes	26	63.41	63.41	100.00
		Total	41	100.00	100.00	
Management level	Valid	Director	3	7.32	7.32	7.32
		Senior Management	8	19.51	19.51	26.83
		Middle Management	12	29.27	29.27	56.10
		Supervisor	5	12.20	12.20	68.29
		N/A	13	31.71	31.71	100.00
		Total	41	100.00	100.00	
Economic Sector	Valid	Agriculture, forestry, fishing	3	7.32	7.32	7.32
		Construction	1	2.44	2.44	9.76
		Education	9	21.95	21.95	31.71
		Electric, gas, steam & air conditioning supply	1	2.44	2.44	34.15
		Financial & insurance activities	1	2.44	2.44	36.59
		Human health & social work activities	1	2.44	2.44	39.02
		Information & communication	2	4.88	4.88	43.90
		Mining & quarrying	5	12.20	12.20	56.10
		N/A	1	2.44	2.44	58.54
		Other	8	19.51	19.51	78.05
		Professional, scientific & technical activities (legal / consultancies / engineering / R&D / veterinary)	3	7.32	7.32	85.37
		Public administration & Defense, Social sciences	4	9.76	9.76	95.12
		Wholesale & Retail trade	2	4.88	4.88	100.00

4.2.1 Mindfulness — FFMQ Frequency Table by Item

The results in this section focus on the mean of the FFMQ (Baer *et al.*, 2008:330) numeric data by item related to mindfulness. The descriptive statistics shown in Table 4-2 indicate the FFMQ (Baer *et al.*, 2008:330) results by item. The results shown are the sample (*n*), the minimum scale score, the maximum scale score, the mean, and the standard deviation for each item.

Table 4-2: Mindfulness — FFMQ Frequency Table by Item

Descriptive Statistics						
FFMQ Frequency Table by Item						
Item №	**Item**	**N**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
1	When I'm walking, I deliberately notice the sensations of my body moving.	34	1	5	3.18	1.17
2	I'm good at finding words to describe my feelings.	34	2	5	4.09	0.93
3R	I criticize myself for having irrational or inappropriate emotions.	34	1	5	2.35	1.23
4	I perceive my feelings and emotions without having to react to them.	34	1	5	3.44	0.93
5R	When I do things, my mind wanders off and I'm easily distracted.	34	1	5	3.50	1.16
6	When I take a shower or bath, I stay alert to the sensations of water on my body.	34	1	5	3.41	1.21
7	I can easily put my beliefs, opinions, and expectations into words.	34	1	5	3.88	1.01
8R	I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.	34	1	5	3.88	1.17
9	I watch my feelings without getting lost in them.	34	1	5	3.59	0.99
10R	I tell myself I shouldn't be feeling the way I'm feeling.	34	1	5	2.74	1.11
11	I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.	34	1	5	3.00	1.39
12R	It's hard for me to find the words to describe what I'm thinking.	34	2	5	3.91	0.97
13R	I am easily distracted.	34	1	5	3.41	1.21
14R	I believe some of my thoughts are abnormal or bad and I shouldn't think that way.	34	1	5	3.53	1.16
15	I pay attention to sensations, such as the wind in my hair or sun on my face.	34	1	5	3.32	1.30
16R	I have trouble thinking of the right words to express how I feel about things.	34	1	5	3.62	1.21
17R	I make judgments about whether my thoughts are good or bad.	34	1	5	2.15	1.13
18R	I find it difficult to stay focused on what's happening in the present.	34	1	5	3.62	1.10
19	When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.	34	1	5	3.44	0.99
20	I pay attention to sounds, such as clocks ticking, birds chirping,	34	1	5	3.65	1.23
21	In difficult situations, I can pause without immediately reacting.	34	1	5	3.56	1.26
22R	When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.	34	2	5	3.56	0.89
23R	It seems I am "running on automatic" without much awareness of what I'm doing.	34	2	5	3.50	0.93
24	When I have distressing thoughts or images, I feel calm soon after.	34	1	5	2.79	1.15

Descriptive Statistics						
FFMQ Frequency Table by Item						
Item №	**Item**	**N**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
25R	I tell myself that I shouldn't be thinking the way I'm thinking.	34	1	5	2.85	1.16
26	I notice the smells and aromas of things.	34	1	5	3.68	1.17
27	Even when I'm feeling terribly upset, I can find a way to put it into words.	34	1	5	3.65	1.07
28R	I rush through activities without being really attentive to them.	34	1	5	3.56	0.99
29	When I have distressing thoughts or images I am able just to notice them without reacting.	34	1	5	3.12	1.04
30R	I think some of my emotions are bad or inappropriate and I shouldn't feel them.	34	1	5	3.18	1.17
31	I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.	34	1	5	3.68	1.12
32	My natural tendency is to put my experiences into words.	34	1	5	3.62	1.21
33	When I have distressing thoughts or images, I just notice them and let them go.	34	1	5	3.21	1.04
34R	I do jobs or tasks automatically without being aware of what I'm doing.	34	1	5	3.76	0.99
35R	When I have distressing thoughts or images, I judge myself as good or bad, depending on what the thought/image is about.	34	1	5	2.68	1.17
36	I pay attention to how my emotions affect my thoughts and behavior.	34	1	5	3.35	1.12
37	I can usually describe how I feel at the moment in considerable detail.	34	1	5	3.44	1.08
38R	I find myself doing things without paying attention.	34	1	5	3.50	1.16
39R	I disapprove of myself when I have irrational ideas.	34	1	5	2.47	1.05

The following traits or attributes had a significant high mean value, indicating a higher level of *mindfulness*.

- It is easy for the students to find words to describe what they are thinking.
- The students notice the smells and aromas of things.
- The students notice visual elements in art or nature, such as colours, shapes, textures, or patterns of light and shadow.
- The students do not operate on autopilot and are aware of what they are doing.
- The students are aware of their feelings without getting lost in them.
- The students do not have trouble thinking of the right words to express how they feel about things.
- It is not difficult for the students to stay focused on what is happening in the present.
- The students pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
- The students can pause in difficult situations and react immediately.
- When the students feel certain sensations in their body, it is easy for them to find the right words and to describe the feeling.
- When the students feel terribly upset, it is easy for them to find the right words to describe how they feel.
- The students are attentive to their activities, and they do not rush through them.

- It is a natural tendency of the students to put their experiences into words.

The following traits or attributes have a significant low mean value, which indicates a lower level of *mindfulness*.

- The students criticise themselves often for having irrational or inappropriate emotions.
- The students constantly tell themselves to not feel a certain way.
- The students often judge themselves on whether their thoughts are good or bad.
- When the students have distressing thoughts or images, they do not feel calm soon after.
- The students constantly tell themselves to not think a certain way.
- When the students are confronted with distressing thoughts or images, they judge themselves on what the thought/image is about and whether it is good or bad.
- The students disapprove of themselves when they have irrational ideas.

These results indicate that MBA students, in general, possess mindfulness; however, the emotional side of mindfulness seems a challenge, as they are uncertain about how to manage emotions in general. This indicates the possibility of not being able to control emotions effectively, which is part of emotional intelligence. This needs further exploration, which was not within the scope of this study. Wang and Kong (2014) found that emotional intelligence plays an essential beneficial role in mindfulness, which is supported by the present study.

4.2.2 Authentic Leadership — ALQ Frequency Table "I as a leader" by Item

The descriptive statistics shown in Table 4-3 indicate the ALQ (Avolio *et al*., 2008) results for “I as a leader” by item. The results indicate the sample (*n*) of students, the minimum scale score, the maximum scale score, the mean, and the standard deviation for each item. The results focus on the mean of the ALQ (Avolio *et al*., 2008) numeric data by item, related to the students’ levels of *authenticity*.

Table 4-3: Authentic Leadership — ALQ Frequency Table "I as a leader" by Item

ALQ Frequency Table "I as a leader" by Item						
Item №	Item	N	Minimum	Maximum	Mean	Std. Deviation
1	Say exactly what I mean.	32	2	5	4.06	0.95
2	Admit mistakes when they are made.	32	3	5	4.50	0.72
3	Encourage everyone to speak their mind.	32	2	5	4.50	0.67
4	Tell you the hard truth.	32	2	5	3.84	0.99
5	Display emotions exactly in line with feelings.	32	1	5	3.28	1.08
6	Demonstrate beliefs that are consistent with actions.	32	2	5	4.00	1.02
7	Make decisions based on my core values.	32	2	5	4.47	0.72
8	Ask you to take positions that support your core values.	32	2	5	4.06	1.01
9	Make difficult decisions based on high standards of ethical conduct.	32	2	5	4.31	0.90
10	Solicit views that challenge my deeply held positions.	32	1	5	3.59	1.07
11	Analyze relevant data before coming to a decision.	32	1	5	4.16	1.08
12	Listen carefully to different points of view before coming to conclusions.	32	1	5	4.16	1.14
13	Seek feedback to improve interactions with others.	32	1	5	4.19	1.03
14	Accurately describe how others view my capabilities.	32	1	5	3.66	1.00
15	Know when it is time to reevaluate my position on important issues.	32	1	5	3.97	1.09
16	Show I understand how specific actions impact others.	32	1	5	3.78	1.16

Note: ALQ was assesed on a 1 to 5 point scale

For the 16 items where the students perceived themselves as a leader, the data show that the following traits or attributes had a significantly high mean value, which indicates a higher level of *authenticity*.

- The students are able to admit mistakes when they are made.
- The students are able to encourage others to speak their mind.
- The students are very capable of making decisions based on their core values.

The following traits or attributes had a significantly low mean value, indicating a lower level of *authenticity*.

- The students have trouble displaying emotions exactly in line with their feelings.
- The students find it difficult to solicit views that challenge their deeply held positions.
- It is a challenge for the students to describe how others view their capabilities.

4.2.3 ALQ Frequency Table "My leader" by Item

The descriptive statistics shown in Table 4-4 indicate the ALQ (Avolio *et al*., 2008) results for “My leader” by item. The results indicate the sample (*n*) of students, the minimum scale score, the maximum scale score, the mean, and the standard deviation for each item. The results focus on the mean of the ALQ (Avolio *et al*., 2008) numeric data by item related to the leaders’ levels of *authenticity*.

Table 4-4: ALQ Frequency Table "My leader" by Item

ALQ Frequency Table "My leader" by Item						
Item №	Item	N	Minimum	Maximum	Mean	Std. Deviation
1	Say exactly what I mean.	31	2	5	3.65	0.91
2	Admit mistakes when they are made.	31	1	5	3.32	1.30
3	Encourage everyone to speak their mind.	31	1	5	3.71	1.13
4	Tell you the hard truth.	31	1	5	3.65	1.17
5	Display emotions exactly in line with feelings.	31	1	5	3.48	1.09
6	Demonstrate beliefs that are consistent with actions.	31	1	5	3.81	1.01
7	Make decisions based on my core values.	31	1	5	3.74	1.15
8	Ask you to take positions that support your core values.	31	1	5	3.42	1.23
9	Make difficult decisions based on high standards of ethical conduct.	31	1	5	3.65	1.20
10	Solicit views that challenge my deeply held positions.	31	1	5	3.19	1.17
11	Analyze relevant data before coming to a decision.	31	1	5	3.71	1.24
12	Listen carefully to different points of view before coming to conclusions.	31	1	5	3.55	1.29
13	Seek feedback to improve interactions with others.	31	1	5	3.26	1.41
14	Accurately describe how others view my capabilities.	31	1	5	3.10	1.25
15	Know when it is time to reevaluate my position on important issues.	31	1	5	3.39	1.20
16	Show I understand how specific actions impact others.	31	1	5	3.52	1.09

Note: ALQ was assesed on a 1 to 5 point scale

From the 16 items where the leaders were perceived by the students, the results showed that the following traits or attributes had a significantly high mean value, which indicates a higher level of *authenticity*.

- The leaders are able to encourage others to speak their mind.
- The leaders demonstrate beliefs that are consistent with their actions.
- The leaders make decisions based on their core values.
- The leaders are able to analyse relevant data before coming to a decision.

The results showed that the following traits or attributes had a significantly low mean value, which indicates a lower level of *authenticity*.

- The leaders do not admit mistakes when they are made.
- The leaders do not ask their followers or subordinates to take positions that support their core values.
- The leaders find it difficult to solicit views that challenge their deeply held positions.
- The leaders do not seek feedback to improve interactions with others.
- It is a challenge for leaders to describe how others view their capabilities.
- The leaders are mindless regarding when to re-evaluate their position on important issues.

These results indicate that the students see themselves as authentic; however, their leaders are perceived to be less authentic. This indicates that should these students become leaders; they will probably be more effective in leading others and leave a memorable imprint on those to follow. It may be assumed that the knowledge and experience gained from their MBA study course play a significant difference in their views. This, however, was not tested and should be considered for further studies.

4.3 VALIDATION OF THE INSTRUMENTS — STATISTICAL CASE PROCESS SUMMARY

The numeric data of the FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) for "I as a leader" and "My leader" are indicated in a case processing summary shown in Table 4-5. Based on the sample of 41 (*n*) students, the FFMQ (Baer *et al.*, 2008:330) yielded 34 (*n*) valid results, the ALQ (Avolio *et al*., 2008) "I as a leader" yielded 32 (*n*) valid results, and the ALQ (Avolio *et al*., 2008) "My leader" yielded 31 (*n*) valid results. This case process indicates only the response rate and completed questionnaires.

Table 4-5: Statistical Case Process Summary

Statistical Case Process Summary

		N	%
FFMQ			
Cases	Valid	34	82.9
	Excluded[a]	7	17.1
	Total	41	100.0
ALQ "I as a leader"			
Cases	Valid	32	78.0
	Excluded[a]	9	22.0
	Total	41	100.0
ALQ "My leader"			
Cases	Valid	31	75.6
	Excluded[a]	10	24.4
	Total	41	100.0

a. Listwise deletion based on all variables in the procedure.

4.4 RELIABILITY STATISTICS

The reliability statistics shown in Table 4-6 indicate the internal consistencies of the FFMQ (Baer *et al.*, 2008:330) and the ALQ (Avolio *et al*., 2008) by facet. The results indicate the Cronbach alpha, the Cronbach alpha based on standardised items, and the number of items for each facet. The results highlight the Cronbach alpha of the FFMQ (Baer *et al.*, 2008:330) numeric data by facet related to the students' ability and cognition to be mindful in everyday life. The results also

highlight the Cronbach alpha of the ALQ (Avolio *et al*., 2008) numeric data by facet related to the students and their leaders' ability and cognition to be authentic in everyday life.

The Cronbach alpha reliability coefficient ranged between 0 and 1. The closer it is to 1.0, the greater the internal consistency of the items in the scale. According to Kline (2000), the generally accepted value that is considered reliable in measuring ability is ρT ≥ 0.7; for measuring cognition such as intelligence, it is ρT ≥ 0.8. Kline and Field (2009) note that, when measuring psychological constructs, a ρT < 0.7 can occur and can be realistically expected because of the diversity of the constructs being measured.

Table 4-6: Reliability Statistics

Reliability Statistics

Facet	Cronbach's Alpha*	Cronbach's Alpha Based on Standardised Items	N of Items
FFMQ			
Observing	0.73	0.73	8
Describing	0.85	0.85	8
Acting with awareness	0.87	0.87	8
Non-judging of inner experience	0.80	0.80	8
Non-reactivity to inner experience	0.78	0.78	7
ALQ "I as a leader"			
Transparency	0.67	0.68	5
Moral/Ethical	0.89	0.89	4
Balanced Processing	0.76	0.76	3
Self-Awareness	0.90	0.90	4
ALQ "My leader"			
Transparency	0.67	0.68	5
Moral/Ethical	0.94	0.94	4
Balanced Processing	0.80	0.80	3
Self-Awareness	0.87	0.88	4

***** ρT ≥ .9 - Excellent, ≥ .8 - Good, ≥ .7 - Acceptable, ≥ .6 - Questionable, ≥ .5 - Poor, and ≤ .5 - Unacceptable

From the five facets of *mindfulness,* the data show good internal consistencies concerning the following: students find the right words to describe how they feel, show awareness, do not operate on autopilot, and not judge or criticise their own thoughts and emotions. The data further showed acceptable internal consistencies for the following: students are observant and present and are non-reactive to their own negative thoughts and emotions. Thus, the students perceive themselves as having the ability and cognition to describe themselves, act with awareness, and be non-judgmental of their own inner experience.

Concerning the four facets of *authentic leadership* where the students perceive themselves as a leader, the data showed excellent internal consistencies for the following: students are self-aware of their actions or behaviours that impact others, and students self-regulate their actions or behaviour based on ethical and personal moral standards. The data further showed acceptable internal consistencies for students soliciting and objectively considering alternative views. The data showed questionable internal consistencies for students presenting themselves truthfully. The students, therefore, perceive themselves to have the ability and the cognition to be moral or ethical and self-aware.

For the four facets of *authentic leadership,* where the students perceive the leaders, the data showed excellent internal consistencies for leaders that self-regulate their actions or behaviour based on ethical and personal moral standards. The data further showed good internal consistencies for the following: leaders are self-aware of their actions or behaviour that impacts others, and leaders solicit or objectively consider alternative views. The data show questionable internal consistencies for leaders presenting themselves truthfully. The leaders are thus expected to have the ability and the cognition to be moral or ethical, self-aware, and balanced in recognising the viewpoints of others.

4.5 SUMMARY ITEM STATISTICS

The summary item statistics shown in Table 4-7 indicate the inter-item correlations of the FFMQ (Baer *et al.*, 2008:330) and the ALQ (Avolio *et al*., 2008) by facet. The results indicate the mean, the smallest value, the largest value, the range, the array of min/max, the variance, and the number of items for each facet. The results highlight the mean of the FFMQ (Baer *et al.*, 2008:330) numeric data by facet related to the students' levels of mindfulness. The results also highlight the mean of the ALQ (Avolio *et al*., 2008) numeric data by facet related to the students and their leaders' levels of authenticity.

The inter-item correlations for the FFMQ (Baer *et al.*, 2008:330) and the ALQ (Avolio *et al*., 2008) in Table 4-7 show the descriptive results based on the sum of all the items and how these correlate for each facet, and whether the items are well discriminated. Inter-item correlation is a method to measure internal consistencies and reliability. It helps to measure if individual items or questions yield consistent and appropriate results. The mean of the inter-item correlations is the *r* in the $y = rk / [1 + (k -1) r]$ formula, where *k* is the number of items (or questions) considered.

Table 4-7: Summary Item Statistics

Summary Item Statistics							
Inter-Item Correlations							
Facet	**Mean***	**Minimum**	**Maximum**	**Range**	**Maximum / Minimum**	**Variance**	**N of Items**
FFMQ							
Observing	0.25	-0.12	0.63	0.75	-5.36	0.040	8
Describing	0.42	0.06	0.68	0.63	11.84	0.026	8
Acting with awareness	0.45	0.14	0.73	0.60	5.33	0.020	8
Non-judging of inner experience	0.34	0.01	0.79	0.78	57.74	0.024	8
Non-reactivity to inner experience	0.34	0.06	0.60	0.54	9.93	0.019	7
ALQ "I as a leader"							
Transparency	0.30	0.06	0.51	0.44	8.15	0.017	5
Moral/Ethical	0.68	0.57	0.79	0.23	1.40	0.007	4
Balanced Processing	0.51	0.34	0.74	0.40	2.15	0.034	3
Self-Awareness	0.70	0.66	0.75	0.09	1.14	0.001	4
ALQ "My leader"							
Transparency	0.30	-0.21	0.75	0.95	-3.59	0.073	5
Moral/Ethical	0.80	0.71	0.90	0.19	1.27	0.006	4
Balanced Processing	0.57	0.48	0.73	0.25	1.53	0.015	3
Self-Awareness	0.64	0.56	0.82	0.26	1.46	0.008	4

* < 0.15 not well correlated, > 0.50 well correlated, 0.15 to 0.50 ideal range

The data showed that the items for all five facets of *mindfulness* were ideally correlated. The mean for all five facets of *mindfulness* is within the ideal range of 0.15 to 0.50. The data further showed that where students perceive themselves as a leader and where leaders are perceived by the students, they were well correlated to three facets of *authentic leadership*. The means for *Moral/Ethical*, *Balanced processing*, and *Self-awareness* were > 0.50 for both factors because the items indicated good discrimination. The items for *Transparency* fell within the ideal range.

4.6 SUMMARY FACET STATISTICS

The summary facet statistics shown in Table 4-8 indicate the most important statistics of the FFMQ (Baer *et al.*, 2008:330) and the ALQ (Avolio *et al*., 2008) by facet. The results indicate the Cronbach alpha, the minimum score, the maximum score, the mean, and the standard deviation for each facet. The results focus on the following numeric data:

- Cronbach's alpha (ρT) of the FFMQ (Baer *et al.*, 2008:330) by facet relates to the students' ability and cognition to be *mindful* in everyday life.
- The mean of the FFMQ (Baer *et al.*, 2008:330) by facet relates to the students' levels of *mindfulness*.
- Cronbach's alpha (ρT) of the ALQ (Avolio *et al*., 2008) by facet relates to the students and their leaders' ability and cognition to be *authentic* in everyday life.
- The mean of the ALQ (Avolio *et al*., 2008) by facet relates to the students and their leaders' levels of *authenticity*.

Table 4-8: Summary Facet Statistics

Summary Facet Statistics						
Facet		**Cronbach's Alpha***	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
FFMQ						
Observing		0.73	16	40	27.26	5.71
Describing		0.85	19	39	29.76	5.88
Acting with awareness		0.87	16	40	28.74	6.28
Non-judging of inner experience		0.80	12	35	21.94	5.93
Non-reactivity to inner experience		0.78	9	31	23.15	4.88
ALQ						
Transparency	I as a leader	0.67	2.60	5.00	4.04	0.59
	My leader	0.67	2.00	5.00	3.56	0.74
Moral/Ethical	I as a leader	0.89	2.25	5.00	4.21	0.80
	My leader	0.94	1.25	5.00	3.65	1.06
Balanced Processing	I as a leader	0.76	2.00	5.00	3.97	0.90
	My leader	0.80	1.00	5.00	3.48	1.04
Self-Awareness	I as a leader	0.90	1.25	5.00	3.90	0.94
	My leader	0.87	1.50	5.00	3.31	1.06

Note: ALQ was assesed on a 1 to 5 point scale

***** ρT ≥ .9 - Excellent, ≥ .8 - Good, ≥ .7 - Acceptable, ≥ .6 - Questionable, ≥ .5 - Poor, and ≤ .5 - Unacceptable

The data in Table 4-8 show that (1) *Acting with awareness*, (2) *Describing*, and (3) *Non-judging of inner experience* had good internal consistencies and reliability. The data show that ρT ≥ 0.8 for these three facets of *mindfulness*. The data otherwise showed that (1) *Describing*, (2) *Acting with awareness*, and (3) *Observing* had higher levels of *mindfulness* because they show significant higher mean values. The data further show a great or significant difference in (1) *Non-reactivity to inner experience* and (2) *Non-judging of inner experience*. The mean values for these two facets are significantly lower that indicate lower levels of *mindfulness*. It is important to note that the data also show that (1) *Non-reactivity to inner experience* and (2) *Observing* had acceptable internal consistencies and reliability. The difference is not greatly significant but is important to report for a more complete assessment of the FFMQ (Baer *et al.*, 2008:330) numeric data by facet.

The data in Table 4-8 show that (1) *Moral/Ethical* and (2) *Self-awareness* had good and excellent internal consistencies and reliability. The students perceived themselves as a leader compared to how they perceive the leaders; the students consider themselves more moral or ethical and more self-aware. For these two facets of *authentic leadership,* the mean values were significantly higher for “I as a leader”, indicating higher levels of *authenticity*. The data further showed that *Balanced processing* had acceptable and good internal consistencies and reliability. The students perceive themself as a leader compared to how the students perceive the leaders; the students consider themselves more balanced in recognising the viewpoints or concerns of others. For this facet of *authentic leadership,* the mean value was significantly higher for “I as a leader”, indicating a higher level of *authenticity*. The data otherwise showed that *Transparency* had questionable internal consistency and reliability. The students perceive themself as a leader compared to how the students perceive the leaders, and the students consider themselves to be more transparent or truthful in their values, actions, and behaviour.

4.7 ITEM-TOTAL STATISTICS

The item-total statistics shown in Table 4-9 indicate the FFMQ (Baer *et al.*, 2008:330) results by item. The results shown here indicate the difference in the data output when an item is excluded from the FFMQ (Baer *et al.*, 2008:330) analysis. The results focus on the difference in the mean of the FFMQ (Baer *et al.*, 2008:330) numeric data when items with a Cronbach alpha greater than the whole scale's current alpha are excluded. Item-total statistics is a method to measure and improve the reliability of the measuring instrument (Field, 2009; Kline, 2000).

Table 4-9: Item-Total Statistics FFMQ

Item-Total Statistics							
FFMQ							
Facet	Item №	Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Observing	1	When I'm walking, I deliberately notice the sensations of my body moving.	24.09	27.36	0.32	0.45	0.72
	6	When I take a shower or bath, I stay alert to the sensations of water on my body.	23.85	25.70	0.45	0.57	0.70
	11	I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.	24.26	27.23	0.24	0.39	0.74
	15	I pay attention to sensations, such as the wind in my hair or sun on my face.	23.94	22.42	0.69	0.67	0.64
	20	I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.	23.62	26.91	0.33	0.44	0.72
	26	I notice the smells and aromas of things.	23.59	24.55	0.58	0.56	0.67
	31	I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.	23.59	27.52	0.33	0.38	0.72
	36	I pay attention to how my emotions affect my thoughts and behavior.	23.91	25.90	0.48	0.54	0.69
Describing	2	I'm good at finding words to describe my feelings.	25.68	29.50	0.42	0.45	0.85
	7	I can easily put my beliefs, opinions, and expectations into words.	25.88	25.99	0.74	0.63	0.82
	12R	It's hard for me to find the words to describe what I'm thinking.	25.85	26.74	0.70	0.63	0.82
	16R	I have trouble thinking of the right words to express how I feel about things.	26.15	25.52	0.63	0.65	0.83
	22R	When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.	26.21	28.23	0.59	0.51	0.83
	27	Even when I'm feeling terribly upset, I can find a way to put it into words.	26.12	26.35	0.65	0.65	0.83
	32	My natural tendency is to put my experiences into words.	26.15	27.10	0.48	0.61	0.85
	37	I can usually describe how I feel at the moment in considerable detail.	26.32	27.07	0.57	0.46	0.84

Item-Total Statistics

FFMQ

Facet	Item №	Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Acting with awareness	5R	When I do things, my mind wanders off and I'm easily distracted.	25.24	30.49	0.60	0.64	0.85
	8R	I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.	24.85	29.34	0.69	0.69	0.84
	13R	I am easily distracted.	25.32	27.80	0.80	0.80	0.83
	18R	I find it difficult to stay focused on what's happening in the present.	25.12	32.96	0.42	0.35	0.87
	23R	It seems I am "running on automatic" without much awareness of what I'm doing.	25.24	32.67	0.56	0.45	0.86
	28R	I rush through activities without being really attentive to them.	25.18	31.30	0.65	0.56	0.85
	34R	I do jobs or tasks automatically without being aware of what I'm doing.	24.97	31.61	0.62	0.49	0.85
	38R	I find myself doing things without paying attention.	25.24	30.25	0.62	0.54	0.85
Non-judging of inner experience	3R	I criticize myself for having irrational or inappropriate emotions.	19.59	28.61	0.39	0.31	0.80
	10R	I tell myself I shouldn't be feeling the way I'm feeling.	19.21	26.29	0.68	0.69	0.75
	14R	I believe some of my thoughts are abnormal or bad and I shouldn't think that way.	18.41	29.28	0.36	0.37	0.80
	17R	I make judgments about whether my thoughts are good or bad.	19.79	29.32	0.38	0.22	0.80
	25R	I tell myself that I shouldn't be thinking the way I'm thinking.	19.09	26.63	0.61	0.69	0.76
	30R	I think some of my emotions are bad or inappropriate and I shouldn't feel them.	18.76	26.43	0.62	0.50	0.76
	35R	When I have distressing thoughts or images, I judge myself as good or bad, depending on what the thought/image is about.	19.26	28.26	0.45	0.29	0.79
	39R	I disapprove of myself when I have irrational ideas.	19.47	26.98	0.65	0.47	0.76
Non-reactivity to inner experience	4	I perceive my feelings and emotions without having to react to them.	19.71	20.34	0.31	0.31	0.79
	9	I watch my feelings without getting lost in them.	19.56	17.77	0.61	0.49	0.73
	19	When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.	19.71	18.21	0.55	0.48	0.75
	21	In difficult situations, I can pause without immediately reacting.	19.59	16.13	0.60	0.54	0.73
	24	When I have distressing thoughts or images, I feel calm soon after.	20.35	17.81	0.48	0.31	0.76
	29	When I have distressing thoughts or images I am able just to notice them without reacting.	20.03	17.97	0.54	0.32	0.75
	33	When I have distressing thoughts or images, I just notice them and let them go.	19.94	18.78	0.44	0.34	0.77

The data show that if Item 11 with a ρT > 0.73 were to be excluded from the FFMQ (Baer *et al.*, 2008:330) analysis, the mean for the scale would drop from 27.26 to 24.26, essentially lowering the students' levels of *mindfulness* for *Observing*. If Item 4 with a ρT > 0.78 were to be excluded, the mean for the scale would drop from 23.15 to 19.71, essentially lowering the students' levels of *mindfulness* for *Non-reactivity to inner experience*. Thus, it would not improve the reliability if Items 11 and 4 were to be excluded /or deleted from the analysis. The difference is marginal but not significant enough to report because the measuring instrument's theoretical construct's reliability is consistent enough. It is, however, important to report for a complete assessment of the FFMQ (Baer *et al.*, 2008:330) numeric data by item.

The item-total statistics shown in Table 4-10 indicate the ALQ (Avolio *et al*., 2008) results for "I as a leader" by item. The results shown here indicate what the difference would be in the data output when an item (or question) is excluded from the ALQ (Avolio *et al*., 2008) analysis for "I as a leader". The results focus on the mean of the ALQ (Avolio *et al*., 2008) numeric data when items with a Cronbach alpha greater than the current alpha of the whole scale are excluded.

Table 4-10: Item-Total Statistics ALQ — "I as a leader"

Item-Total Statistics							
ALQ "I as a leader"							
Facet	Item №	Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Transparency	1	Say exactly what I mean.	16.13	5.08	0.62	0.41	0.51
	2	Admit mistakes when they are made.	15.69	6.93	0.31	0.15	0.66
	3	Encourage everyone to speak their mind.	15.69	6.61	0.45	0.30	0.61
	4	Tell you the hard truth.	16.34	5.46	0.47	0.23	0.59
	5	Display emotions exactly in line with feelings.	16.91	5.77	0.32	0.17	0.68
Moral/Ethical	6	Demonstrate beliefs that are consistent with actions.	12.84	5.56	0.75	0.58	0.87
	7	Make decisions based on my core values.	12.38	7.08	0.68	0.52	0.89
	8	Ask you to take positions that support your core values.	12.78	5.21	0.86	0.75	0.82
	9	Make difficult decisions based on high standards of ethical conduct.	12.53	5.93	0.79	0.67	0.85
Balanced Processing	10	Solicit views that challenge my deeply held positions.	8.31	4.29	0.42	0.20	0.85
	11	Analyze relevant data before coming to a decision.	7.75	3.29	0.73	0.59	0.51
	12	Listen carefully to different points of view before coming to conclusions.	7.75	3.35	0.64	0.55	0.62
Self-Awareness	13	Seek feedback to improve interactions with others.	11.41	8.51	0.77	0.61	0.88
	14	Accurately describe how others view my capabilities.	11.94	8.58	0.78	0.62	0.87
	15	Know when it is time to reevaluate my position on important issues.	11.63	8.05	0.80	0.65	0.87
	16	Show I understand how specific actions impact others.	11.81	7.83	0.77	0.62	0.88

The data show that if Item 5 with a ρT > 0.67 were to be excluded from the ALQ (Avolio *et al*., 2008) analysis for "I as a leader", the mean for the scale would be 16.91, essentially increasing the students' levels of *authenticity* in terms of *Transparency*. If Item 10 with a ρT > 0.76 were to be excluded, the mean for the scale would be 8.31, essentially increasing the students' levels of *authenticity* in terms of *Balanced processing*. Thus, it would not improve the reliability if Items 5 and 10 were to be excluded or deleted from the analysis. The difference is marginal but not significant enough to report because the reliability of the measuring instrument's theoretical construct is consistent enough. It is, however, essential to report for a more complete assessment of the ALQ (Avolio *et al*., 2008) numeric data for "I as a leader" by item.

The item-total statistics shown in Table 4-11 indicate the ALQ (Avolio *et al*., 2008) results for "My leader" by item. The results shown here indicate what the difference would be in the data output when an item is excluded from the ALQ (Avolio *et al*., 2008) analysis for "My leader". The results highlight the mean of the ALQ (Avolio *et al*., 2008) numeric data when items with a Cronbach alpha greater than the current alpha of the whole scale are excluded.

Table 4-11: Item-Total Statistics ALQ — "My leader"

Item-Total Statistics							
ALQ "My leader"							
Facet	Item №	Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Transparency	1	Say exactly what I mean.	14.16	9.27	0.63	0.44	0.54
	2	Admit mistakes when they are made.	14.48	8.99	0.38	0.60	0.64
	3	Encourage everyone to speak their mind.	14.10	8.29	0.62	0.63	0.51
	4	Tell you the hard truth.	14.16	8.81	0.50	0.37	0.58
	5	Display emotions exactly in line with feelings.	14.32	11.89	0.07	0.21	0.75
Moral/Ethical	6	Demonstrate beliefs that are consistent with actions.	10.81	11.76	0.76	0.57	0.95
	7	Make decisions based on my core values.	10.87	10.05	0.91	0.85	0.91
	8	Ask you to take positions that support your core values.	11.19	9.76	0.88	0.79	0.92
	9	Make difficult decisions based on high standards of ethical conduct.	10.97	9.83	0.90	0.83	0.91
Balanced Processing	10	Solicit views that challenge my deeply held positions.	7.26	5.53	0.53	0.28	0.84
	11	Analyze relevant data before coming to a decision.	6.74	4.53	0.70	0.55	0.67
	12	Listen carefully to different points of view before coming to conclusions.	6.90	4.29	0.72	0.56	0.64
Self-Awareness	13	Seek feedback to improve interactions with others.	10.00	9.87	0.68	0.47	0.86
	14	Accurately describe how others view my capabilities.	10.16	9.94	0.82	0.72	0.80
	15	Know when it is time to reevaluate my position on important issues.	9.87	10.45	0.78	0.68	0.82
	16	Show I understand how specific actions impact others.	9.74	11.80	0.66	0.44	0.86

The data show that if Item 5 with a $\rho T > 0.67$ were to be excluded from the ALQ (Avolio *et al*., 2008) analysis for "My leader", the mean for the scale would be 14.32, making no significant impact on the leaders' levels of *authenticity* in terms of *Transparency*. If Item 6 with a $\rho T > 0.94$ were to be excluded, the mean for the scale would be 10.81, making no significant impact on the leaders' levels of *authenticity* in terms of *Moral/Ethical*. If Item 10 with a $\rho T > 0.80$ were to be excluded, the mean for the scale would be 7.26, making no significant impact on the leaders' levels of *authenticity* in terms of *Balanced processing*. Thus, it would not improve the reliability if Items 5, 6, and 10 were to be excluded or deleted from the analysis. The difference is very marginal and not significant enough to report because the reliability of the measuring instrument's theoretical construct seems consistent. It is, however, essential to report for a complete assessment of the ALQ (Avolio *et al*., 2008) numeric data for "My leader" by item.

4.8 CORRELATIONS

The correlations in Table 4-12 indicate the relationship analyses of FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) by facet. The results shown here indicate each facet relationship with (1) age and (2) management level. The results focus on the correlation coefficients of the FFMQ (Baer *et al.*, 2008:330) and the ALQ (Avolio *et al*., 2008) by facet and how closely related these are to the students' (1) age and (2) management level. The correlation analysis in Table 4-12 highlights the students' (1) age and (2) management level because these have geographical order and are meaningful in practice.

Table 4-12: Correlations by Facet FFMQ

Correlations by Facet

FFMQ			
Facet		**Age**	**Management level**
Observing	Correlation Coefficient	-0.117	0.098
	Sig. (2-tailed)	0.511	0.580
	N	34	34
Describing	Correlation Coefficient	0.005	0.283
	Sig. (2-tailed)	0.977	0.105
	N	34	34
Acting with awareness	Correlation Coefficient	0.093	0.213
	Sig. (2-tailed)	0.602	0.226
	N	34	34
Non-judging of inner experience	Correlation Coefficient	0.318	0.233
	Sig. (2-tailed)	0.067	0.185
	N	34	34
Non-reactivity to inner experience	Correlation Coefficient	0.278	.489**
	Sig. (2-tailed)	0.111	0.003
	N	34	34

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The data show a correlation coefficient (α) of .489 between *Non-reactivity to inner experience* and *Management level*. There is thus a strong relationship between the two variables. The significance level is .003, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Non-reactivity to inner experience increases*, *Management*

level increases. Thus, on average, actively detaching from negative thoughts and emotions is closely related to management and/or leadership responsibilities (α = .489; *p* = .003).

Table 4-13: Correlations by Facet ALQ

Correlations by Facet

ALQ				
Facet			**Age**	**Management level**
Transparency	I as a leader	Correlation Coefficient	-0.006	0.062
		Sig. (2-tailed)	0.972	0.737
		N	32	32
	My leader	Correlation Coefficient	-0.320	0.113
		Sig. (2-tailed)	0.079	0.543
		N	31	31
Moral/Ethical	I as a leader	Correlation Coefficient	-0.010	.357*
		Sig. (2-tailed)	0.957	0.045
		N	32	32
	My leader	Correlation Coefficient	-0.183	0.138
		Sig. (2-tailed)	0.323	0.458
		N	31	31
Balanced Processing	I as a leader	Correlation Coefficient	0.140	0.198
		Sig. (2-tailed)	0.445	0.278
		N	32	32
	My leader	Correlation Coefficient	-0.121	0.128
		Sig. (2-tailed)	0.517	0.494
		N	31	31
Self-Awareness	I as a leader	Correlation Coefficient	0.127	.397*
		Sig. (2-tailed)	0.490	0.024
		N	32	32
	My leader	Correlation Coefficient	-0.154	-0.010
		Sig. (2-tailed)	0.408	0.957
		N	31	31

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The data showed a correlation coefficient (α) of .357 between *Moral/Ethical* and *Management level* for "I as a leader". There is thus a strong relationship between the two variables. The significance level is .045, which means the relationship is significant. It is, therefore, likely that there is a strong but significant relationship between the two variables. The sign is also positive, which means that, as *Moral/Ethical increases*, the *Management level* increases. Thus, on average, self-regulating

actions or behaviour based on ethical and personal moral standards is closely related to management and/or leadership responsibilities (α = .357; *p* = .045).

The data showed a correlation coefficient of .397 between *Self-awareness* and *Management level* for "I as a leader". There is thus a strong relationship between the two variables. The significance level is .024, which means the relationship is significant. It is, therefore, likely that there is a strong but significant relationship between the two variables. The sign is also positive, which means that as *Self-awareness increases*, *Management level* increases. Thus, on average, to be self-aware of one's actions or behaviour that impacts others is closely related to management and/or leadership responsibilities (α = .397; *p* = .024).

4.9 GENDER STATISTICS BY FACET

The gender statistics shown in Table 4-14 indicate the practical significance in gender differences of the FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) by facet. The results shown here indicate the gender difference for each facet based on (1) the sample (*n*) of students, (2) the mean, (3) the standard deviation, (4) the t-test *p*-value, and (5) the effect size. The results focus on the mean, *p*-value, and effect size of FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) by facet and how practically different these are between female and male students. The analysis shown in Table 4-14 thus depended on the effect size or Cohen's d-value and whether the effect was small (d = 0.2), medium (d = 0.5), or large (d = 0.8). This is a simpler method of measuring and interpreting the practical significance of the differences between two populations or samples (Ellis & Steyn, 2003; Steyn, 2000; Steyn, 2002).

Table 4-14: Gender Statistics by Facet FFMQ

Gender Statistics by Facet						
FFMQ						
Gender		N	Mean	Std. Deviation	t-test p-value	Effect size (Cohen's d-value)*
Observing	Female	10	29.20	4.16	0.15	0.5
	Male	23	26.48	6.28		
Describing	Female	10	27.70	4.72	0.19	-0.5
	Male	23	30.39	6.22		
Acting with awareness	Female	10	27.50	4.72	0.46	-0.2
	Male	23	29.04	6.93		
Non-judging of inner experience	Female	10	19.60	4.77	0.12	-0.6
	Male	23	22.87	6.32		
Non-reactivity to inner experience	Female	10	21.10	6.51	0.19	-0.6
	Male	23	24.17	3.87		

***** d = 0.2 small, 0.5 medium, 0.8 large

For the *p*-value to show a meaningful difference, it must be smaller than 0.05. There is thus not a meaningful difference between female and male students. The data, however, show that there is a practical significance in gender difference for *Observing*. The effect size is 0.5, which means the ability to observe and be present is significantly different between female and male students. Therefore, the mean for Observing shows that female students are more observant than male students and notice little changes in the internal and external environment easily. The data further show that male students are more mindful of finding the right words to describe how they feel, show awareness and not operate on autopilot, not judge or criticise their own thoughts and emotions, and detach from negative thoughts and emotions actively.

Table 4-15: Gender Statistics by Facet ALQ

Gender Statistics by Facet

			ALQ				
Gender			**N**	**Mean**	**Std. Deviation**	**t-test p-value**	**Effect size (Cohen's d-value)***
Transparency	I as a leader	Female	9	3.91	0.66	0.49	-0.3
		Male	22	4.09	0.58		
	My leader	Female	9	3.24	0.87	0.20	-0.6
		Male	21	3.69	0.67		
Moral/Ethical	I as a leader	Female	9	4.11	0.83	0.75	-0.1
		Male	22	4.22	0.80		
	My leader	Female	9	3.39	1.06	0.45	-0.3
		Male	21	3.71	1.07		
Balanced Processing	I as a leader	Female	9	3.85	1.02	0.65	-0.2
		Male	22	4.03	0.89		
	My leader	Female	9	3.07	1.01	0.18	-0.6
		Male	21	3.65	1.06		
Self-Awareness	I as a leader	Female	9	3.69	0.99	0.46	-0.3
		Male	22	3.99	0.95		
	My leader	Female	9	3.03	1.11	0.38	-0.4
		Male	21	3.43	1.06		

***** d = 0.2 small, 0.5 medium, 0.8 large

For the *p*-value to show a meaningful difference, it must be smaller than 0.05. There is thus not a meaningful difference between female and male students. However, the data show no practical significance in gender difference for any facet of *authentic leadership*, which means that the effect size for all four facets is too small to indicate how practically different the female and male students are. However, the mean for each facet shows that male students and managers or leaders are generally more authentic, but the difference is marginal. It is indicated, though, for a more complete assessment.

4.10 MANAGEMENT LEVEL STATISTICS BY FACET

The management level statistics shown in Table 4-16 indicate the practical significance in management differences of the FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) by facet. The results shown here indicate the difference in management for each facet based on (1) the sample (*n*) of students, (2) the mean, (3) the standard deviation, (4) standard error mean, (5) the t-test *p*-value, and (6) the effect size – as perceived by the MBA students. The results focus on the mean, *p*-value, and effect size of FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) by facet and how practically different they are between managers and non-managers. The analysis in Table 4-16 thus depended on the effect size or Cohen's d-value and whether the effect was small (d = 0.2), medium (d = 0.5), or large (d = 0.8).

Table 4-16: Management Level Statistics by Facet FFMQ

Management Level Statistics by Facet

FFMQ

Management level		N	Mean	Std. Deviation	Std. Error Mean	t-test p-value	Effect size (Cohen's d-value)*
Observing	Yes	23	27.30	6.09	1.26902	0.95	0.0
	No	11	27.18	5.12	1.54224		
Describing	Yes	23	30.30	5.69	1.18694	0.47	0.3
	No	11	28.64	6.39	1.92719		
Acting with awareness	Yes	23	29.35	6.55	1.36675	0.40	0.3
	No	11	27.45	5.75	1.73396		
Non-judging of inner experience	Yes	23	23.00	5.57	1.16096	0.16	0.6
	No	11	19.73	6.33	1.90736		
Non-reactivity to inner experience	Yes	23	24.52	3.70	0.77222	0.05	0.9
	No	11	20.27	5.92	1.78423		

***** d = 0.2 small, 0.5 medium, 0.8 large

For the *p*-value to show a meaningful difference, it must be smaller than 0.05. There is thus not a meaningful difference between managers and non-managers except for *Non-reactivity to inner experience*. The data, however, further show that there is a practical significance in management difference for *Non-judging of inner experience* and *Non-reactivity to inner experience*. The effect size is 0.6 for *Non-judging* and 0.9 for *Non-reactivity*. It means that the ability not to judge or criticise one's own thoughts and emotions and actively detach from negative thoughts and emotions is significantly different between managers and non-managers. The mean in the case of *Non-judging* indicates that managers are more mindful in dealing with inner criticism and are better at harnessing self-acceptance. The mean in the case of *Non-reactivity* shows that managers are more mindful in detaching from negative thoughts and emotions and are mentally balanced.

The data also show that managers are generally more mindful in noticing changes in the internal and external environment, finding the right words, showing awareness, not judging or criticising

their thoughts and emotions, and detaching from negative thoughts and emotions. It is marginal but is indicated though for a more complete assessment.

Table 4-17: Management Level Statistics by Facet ALQ

Management Level Statistics by Facet

ALQ								
Management level			N	Mean	Std. Deviation	Std. Error Mean	t-test p-value	Effect size (Cohen's d-value)*
Transparency	I as a leader	Yes	22	4.09	0.59	0.12671	0.45	0.3
		No	10	3.92	0.58	0.18427		
	My leader	Yes	22	3.52	0.72	0.15383	0.64	-0.2
		No	9	3.67	0.81	0.27080		
Moral/Ethical	I as a leader	Yes	22	4.36	0.75	0.16009	0.13	0.6
		No	10	3.88	0.84	0.26418		
	My leader	Yes	22	3.53	1.16	0.24689	0.26	-0.4
		No	9	3.94	0.76	0.25269		
Balanced Processing	I as a leader	Yes	22	4.03	0.88	0.18727	0.60	0.2
		No	10	3.83	0.98	0.31131		
	My leader	Yes	22	3.36	1.18	0.25189	0.19	-0.4
		No	9	3.78	0.53	0.17568		
Self-Awareness	I as a leader	Yes	22	4.08	0.74	0.15810	0.19	0.6
		No	10	3.50	1.23	0.38909		
	My leader	Yes	22	3.14	1.10	0.23478	0.11	-0.6
		No	9	3.75	0.85	0.28260		

***** d = 0.2 small, 0.5 medium, 0.8 large

For the *p*-value to show a meaningful difference, it must be smaller than 0.05. There is thus not a meaningful difference between managers and non-managers. The data, however, show that there is a practical significance in management difference for *Moral/Ethical* and *Self-awareness* for "I as a leader". The effect size is 0.6 for *Moral/Ethical* and *Self-awareness*. It means that self-regulating actions or behaviour based on ethical and personal moral standards and being self-aware of one's actions or behaviour that impacts others is significantly different between managers and non-managers. The mean for *Moral/Ethical* shows that managers self-regulate their actions or behaviour based on ethical and personal moral standards and are more self-aware of their actions or behaviour that impact others. For all the other facets of *Authentic Leadership*, the effect size is too small, and the mean too marginal to report but is nevertheless indicated for a more complete assessment.

4.11 PAIRED SAMPLE STATISTICS BY FACET

The paired sample statistics shown in Table 4-18 indicate the practical significance in factor differences of ALQ (Avolio *et al*., 2008) by facet. The results shown here indicate the factor difference for each facet based on (1) the mean, (2) the sample (*n*) of students, (3) the standard deviation, (4) the paired t-test *p*-value, and (5) the effect size. The results focus on the mean, *p*-

value, and effect size of the ALQ (Avolio *et al*., 2008) by facet and how practically different they are where students perceive themself as a leader and where they perceive the leaders. The analysis in Table 4-18 thus depended on the effect size or Cohen's d-value and whether the effect was small (d = 0.2), medium (d = 0.5), or large (d = 0.8).

Table 4-18: Paired Sample Statistics by Facet

Paired Sample Statistics by Facet

		ALQ				
Facet		**Mean**	**N**	**Std. Deviation**	**Paired t-test p-value**	**Effect size (Cohen's d-value)***
Transparency	I as a leader	4.05	31	0.59	0.014	0.47
	My leader	3.56	31	0.74		
Moral/Ethical	I as a leader	4.23	31	0.80	0.013	0.47
	My leader	3.65	31	1.06		
Balanced Processing	I as a leader	3.99	31	0.91	0.036	0.39
	My leader	3.48	31	1.04		
Self-Awareness	I as a leader	3.98	31	0.82	0.011	0.49
	My leader	3.31	31	1.06		

* d = 0.2 small, 0.5 medium, 0.8 large

For the *p*-value to show a meaningful difference, it must be smaller than 0.05. Thus, there is a meaningful difference between how students perceive themself as a leader and how they perceive them. The data also show a practical significance in how the students rate their own leadership qualities and those of their leaders. The effect size is medium for all four facets of *Authentic Leadership*. It means that the ability to be truthful, self-regulate actions and behaviour, consider alternative views, and be self-aware is significantly different between "I as a leader" and "My leader". The data further show that the mean in each facet is marginally higher where students rate their own leadership qualities (I as a leader…).

4.12 RELATIONSHIP CORRELATIONS AND FINDINGS

The following results indicate the relationship analyses between the FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) by facet and the relevance of the relationship. The results thus indicate each facet relationship weighed individually and against one another. The results focus on the correlation coefficients of the FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) by facet and how closely related they are. The correlation analyses in Tables 4-19 and 4-20 focus on individual relevance, whereas Table 4-21 focuses on general relevance.

4.12.1 Relationship Correlations by Facet FFMQ

The correlations in Table 4-19 indicate the relationship analyses of the FFMQ (Baer *et al.*, 2008:330) by facet. The results shown here indicate each facet relationship weighed individually. The results focus on the correlation coefficients of the FFMQ (Baer *et al.*, 2008:330) by facet and how closely related they are.

Table 4-19: Relationship Correlations by Facet FFMQ

Relationship Correlations

FFMQ Correlations by Facet

Facet		Observing	Describing	Acting with awareness	Non-judging of inner experience	Non-reactivity to inner experience
Observing	Correlation Coefficient	1.00	.349*	.508**	-0.060	0.333
	Sig. (2-tailed)		0.043	0.002	0.736	0.054
	N	34	34	34	34	34
Describing	Correlation Coefficient	.349*	1.00	.859**	0.093	.659**
	Sig. (2-tailed)	0.043		0.000	0.599	0.000
	N	34	34	34	34	34
Acting with awareness	Correlation Coefficient	.508**	.859**	1.00	0.273	.595**
	Sig. (2-tailed)	0.002	0.000		0.118	0.000
	N	34	34	34	34	34
Non-judging of inner experience	Correlation Coefficient	-0.060	0.093	0.273	1.00	0.297
	Sig. (2-tailed)	0.736	0.599	0.118		0.088
	N	34	34	34	34	34
Non-reactivity to inner experience	Correlation Coefficient	0.333	.659**	.595**	0.297	1.00
	Sig. (2-tailed)	0.054	0.000	0.000	0.088	
	N	34	34	34	34	34

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The data show a correlation coefficient (α) of .349 between *Observing* and *Describing*. There is thus a strong relationship between the two variables. The significance level is .043, which means the relationship is significant. It is, therefore, likely that there is a strong but moderately significant relationship between the two variables. The sign is also positive, which means that as *Observing* increases, *Describing* increases. Thus, on average, observing changes in the internal and external environment is closely related to finding or using the right words to describe how one feels (α = .349; *p* = .043).

The data show a correlation coefficient (α) of .508 between *Observing* and *Acting with awareness*. There is thus a strong relationship between the two variables. The significance level is .002, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Observing increases*, *Acting with awareness* increases. Thus, on average, observing changes in the internal and external environment is closely related to awareness and not operating on autopilot (α = .508; *p* = .002).

The data show a correlation coefficient (α) of .859 between *Describing* and *Acting with awareness*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Describing increases*, *Acting with awareness increases*. Thus, on average, finding or using the right words to describe how one feels is closely related to awareness and not operating on autopilot (α = .859; *p* = .000).

The data show a correlation coefficient (α) of .659 between *Describing* and *Non-reactivity to inner experience*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as Describing increases, *Non-reactivity* increases. Thus, on average, finding or using the right words to describe how one feels is closely related to detaching from negative thoughts and emotions (α = .659; *p* = .000).

The data show a correlation coefficient (α) of .595 between *Acting with awareness* and *Non-reactivity to inner experience*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Acting with awareness increases*, *Non-reactivity* increases. Thus, on average, being aware and not operating on autopilot is closely related to detaching from negative thoughts and emotions (α = .595; *p* = .000).

4.12.2 Relationship Correlations by Facet ALQ

The correlations in Table 4-20 indicate the relationship analyses of the ALQ (Avolio *et al*., 2008) by facet. The results indicate each facet relationship weighed individually. The results focus on the correlation coefficients (α) of the ALQ (Avolio *et al*., 2008) by facet and how closely related they are.

Table 4-20: Relationship Correlations by Facet ALQ

Relationship Correlations										
ALQ Correlations by Facet										
Facet			Transparency		Moral/Ethical		Balanced Processing		Self-Awareness	
			I as a leader	My leader	I as a leader	My leader	I as a leader	My leader	I as a leader	My leader
Transparency	I as a leader	Correlation Coefficient	1.000	-0.090	.454**	-0.232	.637**	-0.039	.561**	-0.113
		Sig. (2-tailed)		0.630	0.009	0.210	0.000	0.837	0.001	0.546
		N	32	31	32	31	32	31	32	31
	My leader	Correlation Coefficient	-0.090	1.000	0.085	.742**	0.000	.759**	0.092	.728**
		Sig. (2-tailed)	0.630		0.651	0.000	0.999	0.000	0.622	0.000
		N	31	31	31	31	31	31	31	31
Moral/Ethical	I as a leader	Correlation Coefficient	.454**	0.085	1.000	0.251	.599**	0.163	.584**	-0.098
		Sig. (2-tailed)	0.009	0.651		0.172	0.000	0.381	0.000	0.598
		N	32	31	32	31	32	31	32	31
	My leader	Correlation Coefficient	-0.232	.742**	0.251	1.000	-0.053	.781**	-0.012	.713**
		Sig. (2-tailed)	0.210	0.000	0.172		0.776	0.000	0.949	0.000
		N	31	31	31	31	31	31	31	31
Balanced Processing	I as a leader	Correlation Coefficient	.637**	0.000	.599**	-0.053	1.000	0.118	.816**	-0.059
		Sig. (2-tailed)	0.000	0.999	0.000	0.776		0.526	0.000	0.752
		N	32	31	32	31	32	31	32	31
	My leader	Correlation Coefficient	-0.039	.759**	0.163	.781**	0.118	1.000	0.165	.832**
		Sig. (2-tailed)	0.837	0.000	0.381	0.000	0.526		0.374	0.000
		N	31	31	31	31	31	31	31	31
Self-Awareness	I as a leader	Correlation Coefficient	.561**	0.092	.584**	-0.012	.816**	0.165	1.000	-0.059
		Sig. (2-tailed)	0.001	0.622	0.000	0.949	0.000	0.374		0.754
		N	32	31	32	31	32	31	32	31
	My leader	Correlation Coefficient	-0.113	.728**	-0.098	.713**	-0.059	.832**	-0.059	1.000
		Sig. (2-tailed)	0.546	0.000	0.598	0.000	0.752	0.000	0.754	
		N	31	31	31	31	31	31	31	31

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

I as a leader…

The data show a correlation coefficient (α) of .454 between *Transparency* and *Moral/Ethical*. There is thus a strong relationship between the two variables. The significance level is .009, which means the relationship is highly significant. Therefore, it is likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Transparency increases*, *Moral/Ethical* increases. Thus, on average, to be truthful is closely related to actions and behaviour that are ethical and/or morally good or acceptable based on good values (α = .454; *p* = .009).

The data show a correlation coefficient (α) of .637 between *Transparency* and *Balanced processing*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Transparency* increases, *Balanced processing* increases. Thus, to be truthful on average, it is closely related to soliciting and objectively considering alternative views or perspectives (α = .637; *p* = .000).

The data show a correlation coefficient (α) of .561 between *Transparency* and *Self-awareness*. There is thus a strong relationship between the two variables. The significance level is .001, which means the relationship is highly significant. It is, therefore, likely that there is a strong and a highly significant relationship between the two variables. The sign is also positive, which means that, as *Transparency increases*, *Self-awareness* increases. Thus, on average, being truthful is closely related to one's self-awareness and how their own actions or behaviour impact others (α = .561; *p* = .001).

The data show a correlation coefficient (α) of .599 between *Moral/Ethical* and *Balanced Processing*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that *Balanced processing* increases as *Moral/Ethical* increases. Thus, on average, to show actions and behaviour that are ethical and/or morally good is closely related to soliciting and objectively considering alternative views or perspectives (α = .599; *p* = .000).

The data show a correlation coefficient (α) of .584 between *Moral/Ethical* and *Self-awareness*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Moral/Ethical* increases, *Self-awareness* increases. Thus, on average, to show actions and behaviour that are ethical and/or morally good is closely related to one's self-awareness and how own actions or behaviours impact others (α = .584; *p* = .000).

The data show a correlation coefficient (α) of .816 between *Balanced processing* and *Self-awareness*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Balanced processing increases*, *Self-awareness increases*. Thus, on average, soliciting and objectively considering alternative views or perspectives is closely related to one's self-awareness and how one's own actions or behaviours impact others (α = .816; *p* = .000).

My leader…

The data show a correlation coefficient (α) of .742 between *Transparency* and *Moral/Ethical*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Transparency* increases, *Moral/Ethical* increases. Thus, on average, to be truthful in leadership is closely related to actions and behaviour that are ethical and/or morally good or acceptable based on good values (α = .742; *p* = .000).

The data show a correlation coefficient (α) of .759 between *Transparency and Balanced processing*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Transparency* increases, *Balanced processing* increases. Thus, on average, to be truthful in leadership is closely related to soliciting and objectively considering alternative views or perspectives (α = .759; *p* = .000).

The data show a correlation coefficient (α) of .728 between *Transparency* and *Self-awareness*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Transparency* increases, *Self-awareness* increases. Thus, on average, being truthful in leadership is closely related to one's self-awareness and how one's own actions or behaviours impact others (α = .728; *p* = .000).

The data show a correlation coefficient (α) of .781 between *Moral/Ethical* and *Balanced processing*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that *Balanced processing* increases as *Moral/Ethical* increases. Thus, on average, to show actions and behaviour in leadership that are ethical and/or morally good is closely related to soliciting and objectively considering alternative views or perspectives (α = .781; *p* = .000).

The data show a correlation coefficient (α) of .713 between *Moral/Ethical* and *Self-awareness*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Moral/Ethical* increases, *Self-awareness* increases. Thus, on average, to show actions and behaviour in leadership that are ethical and/or morally good is closely related to one's self-awareness and how own actions or behaviours impact others (α = .713; *p* = .000).

The data show a correlation coefficient (α) of .832 between *Balanced processing* and *Self-awareness*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. Therefore, there is likely a strong and highly significant relationship between the two variables in the population and the sample. The sign is also positive, which means that as *Balanced processing* increases, *Self-awareness* increases. So on average, soliciting and objectively considering alternative views /or perspectives in leadership is closely related to one's self-awareness and how their own actions or behaviour impact others (α = .832; *p* = .000).

4.12.3 Mindfulness relation to authentic leadership — FFMQ & ALQ Correlations by Facet

The results in Table 4-21 indicate the relationship analyses between the FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) by facet and the general relevance of the relationship. The results indicate each facet relationship weighed against one another. The results focus on the correlation coefficients of the FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) by facet and how closely related they are.

Table 4-21: FFMQ & ALQ Correlations by Facet

Relationship Correlations							
FFMQ & ALQ Correlations by Facet							
Facet			Observing	Describing	Acting with awareness	Non-judging of inner experience	Non-reactivity to inner experience
Transparency	I as a leader	Correlation Coefficient	.375*	.413*	.396*	-0.198	0.318
		Sig. (2-tailed)	0.034	0.019	0.025	0.277	0.076
		N	32	32	32	32	32
	My leader	Correlation Coefficient	-0.009	0.024	0.005	-0.190	-0.149
		Sig. (2-tailed)	0.962	0.897	0.977	0.306	0.423
		N	31	31	31	31	31
Moral/Ethical	I as a leader	Correlation Coefficient	.391*	.642**	.657**	0.123	.393*
		Sig. (2-tailed)	0.027	0.000	0.000	0.502	0.026
		N	32	32	32	32	32
	My leader	Correlation Coefficient	-0.037	0.165	0.159	0.013	-0.144
		Sig. (2-tailed)	0.841	0.374	0.392	0.947	0.438
		N	31	31	31	31	31
Balanced Processing	I as a leader	Correlation Coefficient	0.309	.445*	0.336	-0.126	.423*
		Sig. (2-tailed)	0.085	0.011	0.060	0.491	0.016
		N	32	32	32	32	32
	My leader	Correlation Coefficient	0.033	0.084	0.072	0.038	-0.118
		Sig. (2-tailed)	0.860	0.652	0.700	0.838	0.527
		N	31	31	31	31	31
Self-Awareness	I as a leader	Correlation Coefficient	0.314	.571**	.428*	-0.174	.473**
		Sig. (2-tailed)	0.080	0.001	0.014	0.341	0.006
		N	32	32	32	32	32
	My leader	Correlation Coefficient	0.066	-0.108	-0.023	-0.024	-0.266
		Sig. (2-tailed)	0.723	0.562	0.900	0.896	0.149
		N	31	31	31	31	31

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The correlation analyses in Table 4-21 indicate general relevance in mindfulness and how students rate their own leadership qualities. There are thus 12 relevant correlations where *Mindfulness* and *Authentic Leadership* are closely related to one another and are as follows:

The data show a correlation coefficient (α) of .375 between *Observing* and *Transparency*. There is thus a strong relationship between the two variables. The significance level is .034, which means the relationship is significant. It is, therefore, likely that there is a strong but significant relationship between the two variables. The sign is also positive, which means that, as *Observing* increases, *Transparency* increases. Thus, on average, to be observant of changes in the internal and external environment is closely related to leadership that is truthful and/or trustworthy and less selfish (α = .375; *p* = .034).

The data show a correlation coefficient (α) of .391 between *Observing* and *Moral/Ethical*. There is thus a strong relationship between the two variables. The significance level is .027, which means the relationship is significant. It is, therefore, likely that there is a strong but significant relationship between the two variables. The sign is also positive, which means that, as *Observing* increases, *Moral/Ethical* increases. Thus, on average, observing changes in the internal and external environment is closely related to ethical and/or morally good leadership or that follows good principles (α = .391; *p* = .027).

The data show a correlation coefficient (α) of .413 between *Describing* and *Transparency*. There is thus a strong relationship between the two variables. The significance level is .019, which means the relationship is significant. It is, therefore, likely that there is a strong but significant relationship between the two variables. The sign is also positive, which means that, as *Describing* increases, *Transparency* increases. Thus, on average, finding or use the right words to describe how one feels is closely related to leadership that is truthful and/or trustworthy and less selfish (α = .413; *p* = .019).

The data show a correlation coefficient (α) of .642 between *Describing* and *Moral/Ethical*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Describing* increases, *Moral/Ethical* increases. Thus, on average, finding or using the right words to describe how one feels is closely related to ethical and/or morally good leadership or follows good principles (α = .642; *p* = .000).

The data show a correlation coefficient (α) of .445 between *Describing* and *Balanced processing*. There is thus a strong relationship between the two variables. The significance level is .011, which means the relationship is significant. It is, therefore, likely that there is a strong and significant relationship between the two variables. The sign is also positive, which means that, as *Describing* increases, *Balanced processing* increases. Thus, on average, finding or use the right words to describe how one feels is closely related to leadership that is more objective towards alternative viewpoints or perspectives (α = .445; *p* = .011).

The data show a correlation coefficient (α) of .571 between *Describing* and *Self-awareness*. There is thus a strong relationship between the two variables. The significance level is .001, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Describing* increases, *Self-awareness increases*. Thus, on average, finding or use the right words to describe how one feels is closely related to leadership that inspires followers to be mindful of their actions and behaviour (α = .571; *p* = .001).

The data show a correlation coefficient (α) of .396 between *Acting with awareness* and *Transparency*. There is thus a strong relationship between the two variables. The significance level is .025, which means the relationship is significant. It is, therefore, likely that there is a strong and significant relationship between the two variables. The sign is also positive, which means that, as *Acting with awareness* increases, *Transparency* increases. Thus, on average, to be aware and not operate on autopilot is closely related to leadership that is truthful and/or trustworthy and less selfish (α = .396; *p* = .025).

The data show a correlation coefficient (α) of .657 between *Acting with awareness* and *Moral/Ethical*. There is thus a strong relationship between the two variables. The significance level is .000, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Acting with awareness* increases, *Moral/Ethical* increases. Thus, on average, being aware and not operating on autopilot is closely related to ethical and/or morally good leadership or that follows good principles (α = .657; *p* = .000).

The data show a correlation coefficient (α) of .428 between *Acting with awareness* and *Self-awareness*. There is thus a strong relationship between the two variables. The significance level is .014, which means the relationship is significant. It is, therefore, likely that there is a strong but significant relationship between the two variables. The sign is also positive, which means that, as *Acting with awareness* increases, *Self-awareness* increases. Thus, on average, being aware and not operating on autopilot is closely related to leadership that inspires its followers to be mindful of their actions and behaviour (α = .428; *p* = .014).

The data show a correlation coefficient (α) of .393 between *Non-reactivity to inner experience* and *Moral/Ethical*. There is thus a strong relationship between the two variables. The significance level is .026, which means the relationship is significant. It is, therefore, likely that there is a strong but significant relationship between the two variables. The sign is also positive, which means that, as *Non-reactivity to inner experience* increases, *Moral/Ethical increases*. Thus, on average, detaching from negative thoughts and emotions is closely related to ethical and/or morally good leadership, or that follows good principles (α = .393; *p* = .026).

The data show a correlation coefficient (α) of .423 between *Non-reactivity to inner experience* and *Balanced processing*. There is thus a strong relationship between the two variables. The significance level is .016, which means the relationship is significant. It is, therefore, likely that there is a strong but significant relationship between the two variables. The sign is also positive, which means that *Balanced processing* increases as *Non-reactivity to inner experience* increases. Thus, on average, to detach from negative thoughts and emotions is closely related to leadership that is more objective towards alternative viewpoints or perspectives (α = .423; *p* = .016).

The data show a correlation coefficient (α) of .473 between *Non-reactivity to inner experience* and Self-awareness. There is thus a strong relationship between the two variables. The significance level is .006, which means the relationship is highly significant. It is, therefore, likely that there is a strong and highly significant relationship between the two variables. The sign is also positive, which means that, as *Non-reactivity to inner experience* increases, *Self-awareness* increases. Thus, on average, detaching from negative thoughts and emotions is closely related to leadership that inspires its followers to be mindful of their actions and behaviour (α = .473; *p* = .006).

What has been found from these results is that the two constructs, *mindfulness* and *authentic leadership* are interrelated, which means there is an interdependency. This further confirms the importance of mindfulness in being an authentic leader, as supported by Nübold, Van Quaquebeke, and Hülsheger (2020). Based on Kabat-Zinn's (1990) perspective, mindfulness presents not only a scientific but also a biological viewpoint. It is about having the capacity to be in the present moment and be disciplined to pay attention at that moment, without judgmental feelings. To be present and to pay attention at that moment interconnects mind and behaviour, and when it is done repeatedly, the neural circuits of the brain tend to rewire itself and adapt to more authentic behaviour. According to Davidson (2003), it is the best way possible to be more resilient, optimistic, self-aware, and generous. It is further noted by Aggarwal and Goodell (2014) to be a fundamental requirement to encourage better leadership because a person must be mindful in order to lead more effectively.

4.13 SUMMARY

A total of 41 (*n*) students partook in the survey. Most were primarily male, aged between 35 and 54 years, and occupied a leadership role. A total of 13 items were identified where the students are more mindful and 7 items where they are less mindful. There were also 3 items that identified where the students are more and less authentic, 4 items where the leaders are more authentic, and 6 items where the leaders are less authentic. From a sample of *n* = 41 students, 34 (*n*) was validated for the FFMQ (Baer *et al.*, 2008:330), 32 (*n*) for ALQ (Avolio *et al*., 2008) "I as a leader", and 31 (*n*) validated for ALQ (Avolio *et al*., 2008) "My leader".

The reliability statistics revealed that FFMQ (Baer *et al.*, 2008:330) had mostly good internal consistencies for *Describing*, *Acting with awareness*, and *Non-judging of inner experience*. However, the ALQ (Avolio et al., 2008) revealed excellent internal consistencies for *Moral/Ethical* and *Self-awareness* for the first factor, "I as a leader". In contrast, the ALQ (Avolio *et al*., 2008) also revealed excellent internal consistencies for *Moral/Ethical* for the second factor, "My leader, as well as good internal consistencies for *Balanced processing* and *Self-awareness*. The inter-item correlations all fell within the ideal range of 0.15 to 0.50 for the FFMQ (Baer *et al.*, 2008:330),

whereas for the ALQ (Avolio *et al*., 2008), *Moral/Ethical*, *Balanced processing*, and *Self-awareness* were > 0.50 for both factors.

For the FFMQ (Baer *et al.*, 2008:330), *Acting with awareness*, *Describing*, and *Non-judging of inner experience* showed a $\rho T \geq 0.8$; however, as for the ALQ (Avolio *et al*., 2008), *Moral/Ethical* and *Self-awareness* showed a $\rho T \geq 0.8$ in both factors, which revealed how the students perceive themselves as leaders, compared to how the students perceive leaders. The students consider themselves to be more moral or ethical and more self-aware.

In terms of correlations by facet for the FFMQ (Baer *et al.*, 2008:330), *Non-reactivity to inner experience* showed a strong and highly significant relationship with *Management level*. For the first factor of the ALQ (Avolio *et al*., 2008), "I as a leader", *Moral/Ethical* and *Self-awareness* showed a strong and significant relationship with *Management level*. It revealed that self-regulating actions or behaviour based on ethical and personal moral standards, and being aware of one's actions or behaviours that impacts others are closely related to management and/or leadership responsibilities.

In terms of the practical significance of gender differences, the FFMQ (Baer *et al.*, 2008:330) revealed that female students are more observant than male students and that male students are more effective in *Describing*, *Acting with awareness*, *Non-judging of inner experience*, *Non-reactivity to inner experience*. For the ALQ (Avolio *et al*., 2008), the effect size was too small for all four facets to indicate a practical significance in gender differences, but it can be concluded that male students and managers or leaders are generally more authentic in all four facets of *Authentic Leadership*. Concerning the correlations to assess the relationship between the FFMQ (Baer *et al.*, 2008:330) and the ALQ (Avolio *et al*., 2008) and how closely related each facet is, 12 relevant correlations were identified where *mindfulness* and *authentic leadership* are closely related to one another.

This concludes the reporting on the results of the statistical analyses. The next chapter concludes the dissertation with a description of the study's limitations, recommendations, and suggestions for future research.

CHAPTER 5
RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

This chapter discusses the research results that were reported in Chapter 4, together with recommendations based on the results, followed by suggested avenues for future research. The chapter commences with a discussion of the results as these relate to the research questions.

5.2 IN ANSWERING THE RESEARCH QUESTIONS

The primary research question was:

- What is the relationship between mindfulness and authentic leadership perceived by MBA students at a selected higher education institution?

The results showed that mindfulness and authentic leadership are not only close but also fundamentally related. Both represent traits or attributes that reflect deeply held values and principles and actions and behaviours. Both play a fundamental role in decisions, especially those of groups and communities. They are rooted in our relationships with family, friends, and co-workers and are demonstrated by engaging with people. More important is that they are interconnected to almost every quality of conceptual thought and behaviour that makes us human. It is an enduring principle that makes societies function well because they share these qualities to serve a collective purpose and ensure that societies are not governed by one person's or group's convictions or moral standards.

The secondary research questions were:

- What are the descriptive characteristics of the construct of mindfulness as it relates to a workplace context?

- What are the descriptive characteristics of the construct of authentic leadership as it relates to a workplace context?

- How do MBA students perceive mindfulness and authentic leadership?

The results also showed that mindfulness and authentic leadership are performance tools that are needed in contemporary times, but they have to be applied correctly to impact performance positively. Specific steps can be followed to impact performance, which is also regarded as a way to become more mindful. These steps are: (1) recognising your patterns, (2) labelling your thoughts and emotions, (3) accepting your thoughts and emotions, and (4) acting on your values or

principles. In more contemporary business and leadership activities, we are naturally guided to overcome real-life problems by being mindful and managing the same problems by being authentic in our decisions and actions. Mindfulness and authentic leadership will never be two separate constructs or concepts because they have similar significant fundamental qualities that are commonly associated with communication, and when there is no communication, there is also no accurate transfer of the right interpersonal skill sets to be effective.

The FFMQ (Baer *et al.*, 2008:330) was used to assess the students' levels of mindfulness and demonstrated high test reliability based on the students' inner qualities that relate to *Observing*, *Describing*, *Acting with awareness*, *Non-judging of inner experience*, and *Non-reactivity to inner experience*. The results showed that sensory awareness to observe the internal and external environment is closely related to paying attention, that expressing oneself is closely related to engaging and/or communicating, that being self-aware is closely related to taking calculated actions with good intent and the right motive, that self-acceptance and empathy for oneself are closely related to a positive state of mind, and that reacting to negative thoughts and emotions but not being bound to them is closely related to building social and emotional resilience.

The ALQ (Avolio *et al*., 2008), used to assess the students' levels of authenticity, demonstrated high test reliability based on the students' inner and outer qualities related to *Transparency*, *Moral/Ethical*, *Balanced processing*, and *Self-awareness*. The results of the ALQ (Avolio *et al*., 2008) showed that admitting to mistakes and encouraging others to speak their mind is closely related to being transparent and demonstrating intentions that align with one's values, actions, and behaviour; that self-regulation is closely related to personal moral standards to make ethical and unselfish decisions; that asserting power more responsibly is closely related to demonstrating active concern for others; and that understanding one's role and responsibilities are closely related to performance.

5.3 LIMITATIONS OF THE STUDY

A significant limitation noted in this study is that the relationship between business and leadership is very much considered to share a connection with mindful intentions but is not often taught in training programs. It is only assumed to be part of the relationship between showing intent and taking action but not really knowing how it affects business and leadership performance. It is a concern because leadership depends on good decision-making, and when decisions are made based on the wrong motive, the margin increases in making costly errors. For example, knowing which rules, routines, and goals positively impact performance and/or knowing how to exhibit the right values, actions, and behaviours in business and leadership.

Another important limitation identified is the inclusion of mindfulness in this relationship. Many mainstream researchers still consider it only to be a theoretical construct, but according to Baer (2008), if that is the case, why do people feel an overwhelming need to be less judgmental towards each other given their unique personalities. This is important because being or becoming more mindful does not necessarily make you less judgmental unless demonstrated through good intent and the right motive that reflect their actions. It is as a result of this very plausible to say that by including mindfulness, it is one of the best self-enabling tools in leadership, according to Baer, Smith, Hopkins, Krietemeyer, and Toney (2006a) – considering how far the theory has come concerning the values, actions, and behaviour that support the fact that people do engage with mindfulness daily, but are not aware that they do. The problem is that it requires a person to be present to pay attention, which is said to manifest in our relationships with our families, friends, and co-workers.

5.4 MANAGERIAL IMPLICATION AND RECOMMENDATIONS

The fact that very little is known about the effects of mindfulness on interpersonal interactions and social relationships at work means that mindfulness cannot be the only dependent construct with which to assess how effective mindfulness-based exercises are or need to be. It needs to be supported by another construct that assesses performance in leadership to gain more insight into the relationship between mindfulness and leadership behaviour that the majority consider to be more effective in developing better outcomes for a business, individual, or group. This study is also no guarantee that mindfulness alone will solve every conflict in the workplace or one's own life; however, what mindfulness offers is adaptability to change and the discipline to navigate the chaos that makes it hard to be socially and emotionally aware in everyday life. It, therefore, means that mindfulness in leadership behaviour will need to be tested further to fully comprehend its impact on performance and leadership in the workplace.

The FFMQ (Baer *et al.*, 2008:330) and ALQ (Avolio *et al*., 2008) are unique data collection instruments and should not be altered in any way to improve their reliability, especially when assessing item-total statistics, because it may result in an inaccurate validation of the data. The FFMQ (Baer *et al.*, 2008:330) was designed to include social and emotional dimensions of mindfulness and was used in the current study to assess the students' current social and emotional condition. The ALQ (Avolio *et al*., 2008) was designed to include moral and ethical dimensions of authentic leadership and was used in the current study to assess the students' current moral and ethical standards. There is the possibility that, in the future, authenticity may play an important role in understanding or learning more about the interpersonal interactions and social relationships at work that also affect performance. It is currently an under-researched topic. Authentic leadership cannot be the only dependent construct with which to assess how effective leaders are or need to be, but it is currently the best measure of true leadership intensions.

5.5 CONCLUSION

This study's evaluation of mindfulness and authentic leadership shows that mindfulness functions as a predictor for authentic leadership. The results indicated that traits or attributes commonly associated with mindfulness are directly and indirectly related to what defines an authentic leader and generally considered authentic behaviour. It is widely accepted that very little is known about the effects of mindfulness on interpersonal interactions and social relationships at work because much of what is known about mindfulness and authentic leadership exists but occurs independently from a person's awareness and knowledge. People engage with mindfulness and authentic leadership daily, but many are not aware that they do because they have not paid attention to the rules, routines, and goals that are meant to guide our behaviour in everyday life. Therefore, both constructs define the way we live our lives and whether we live authentically and with integrity. The results showed that mindfulness and authentic leadership are not about inference, experience, or instinct but about how we conduct ourselves and perform our day-to-day activities.

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ANNEXURE A: ETHICAL APPROVAL LETTER

The Ethical Approval Letter is presented below. Double-click on the published document to view details.

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

Private Bag X6001, Potchefstroom
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Tel: 018 299-1111/2222
Web: http://www.nwu.ac.za

Economic and Management Sciences Research
Ethics Committee (EMS-REC)

29 May 2020

Prof Yvonne du Plessis
Per e-mail
Dear Prof du Plessis,

EMS-REC FEEDBACK: 29052020
Student: Laubscher, N (20551584)(NWU-00696-20-A4)
Applicant: Prof Yvonne du Plessis - MBA

Your ethics application on, *Leading with mindfulness: The relationship between mindfulness and authentic leadership,* which served on the EMS-REC meeting of 29 May 2020, refers.

Outcome:

Approved as a minimal risk study. A number NWU-00696-20-A4 is given for one year of ethics clearance.

Due to the Covid-19 lock down ethics clearance for applications that involve data collection or any form of contact with participants are subject to the restrictions imposed by the South African government.

Kind regards,

Prof Mark Rathbone
Chairperson: Economic and Management Sciences Research Ethics Committee (EMS-REC)

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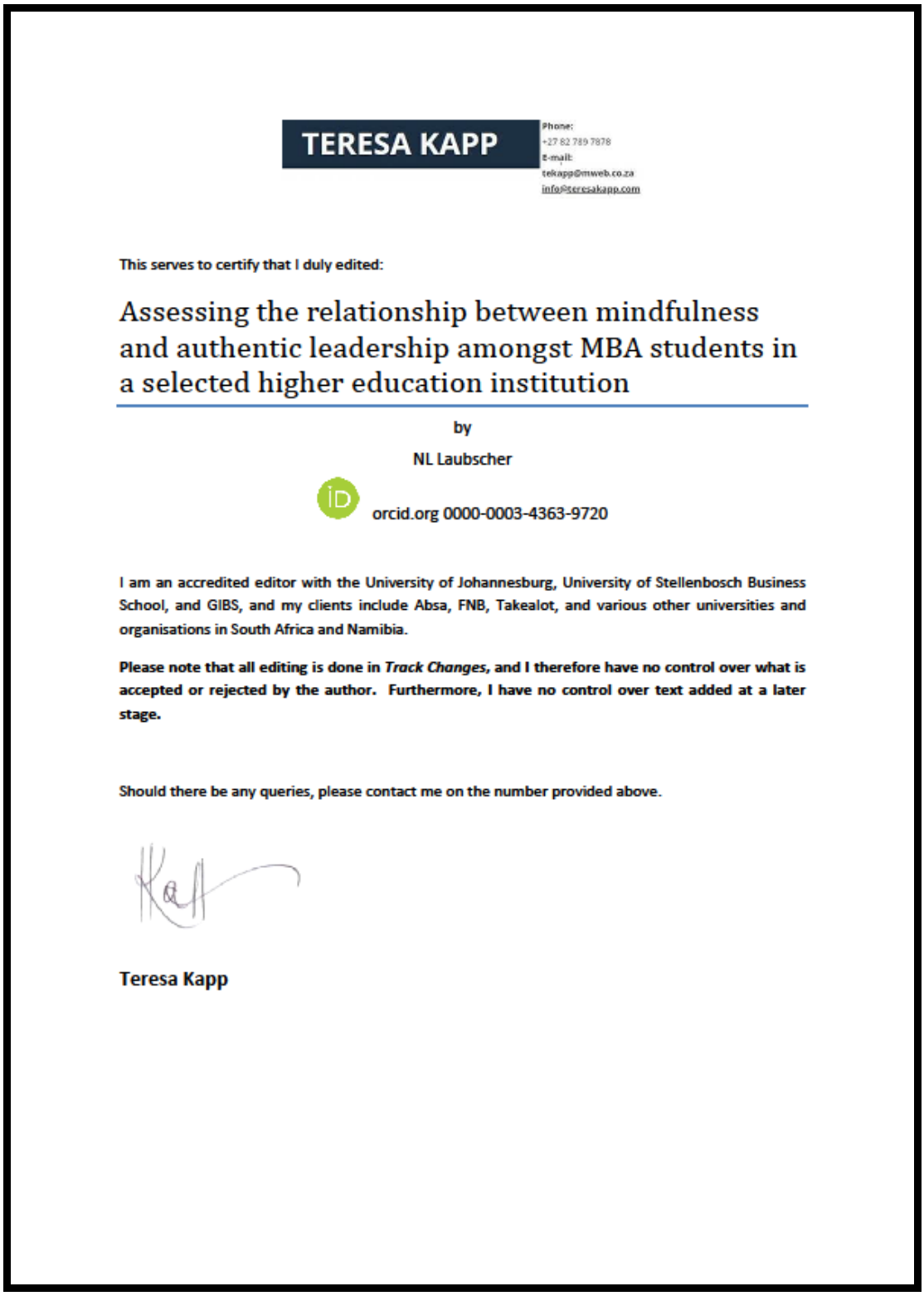
ANNEXURE B: LANGUAGE EDITOR LETTER

The Language Editor Letter is presented below. Double-click on the published document to view details.



TERESA KAPP

Phone:
+27 82 789 7878
E-mail:
tekapp@mweb.co.za
info@teresakapp.com

This serves to certify that I duly edited:

Assessing the relationship between mindfulness and authentic leadership amongst MBA students in a selected higher education institution

by

NL Laubscher

orcid.org 0000-0003-4363-9720

I am an accredited editor with the University of Johannesburg, University of Stellenbosch Business School, and GIBS, and my clients include Absa, FNB, Takealot, and various other universities and organisations in South Africa and Namibia.

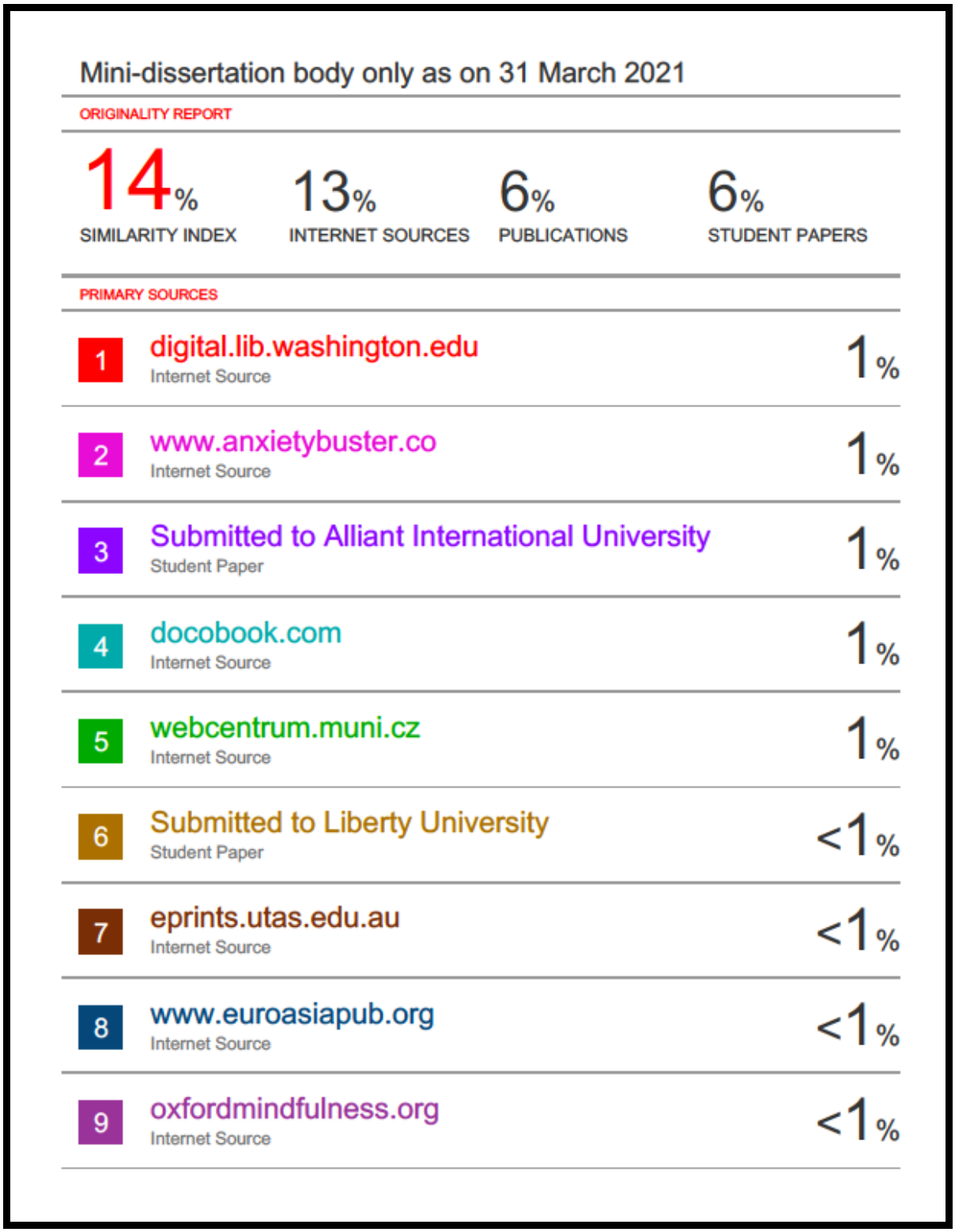
Please note that all editing is done in *Track Changes*, and I therefore have no control over what is accepted or rejected by the author. Furthermore, I have no control over text added at a later stage.

Should there be any queries, please contact me on the number provided above.

Teresa Kapp

ANNEXURE C: TURNITIN SUMMARY

The Turnitin Summary is presented below. Double-click on the published document to view details.



Mini-dissertation body only as on 31 March 2021

ORIGINALITY REPORT

14%	13%	6%	6%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

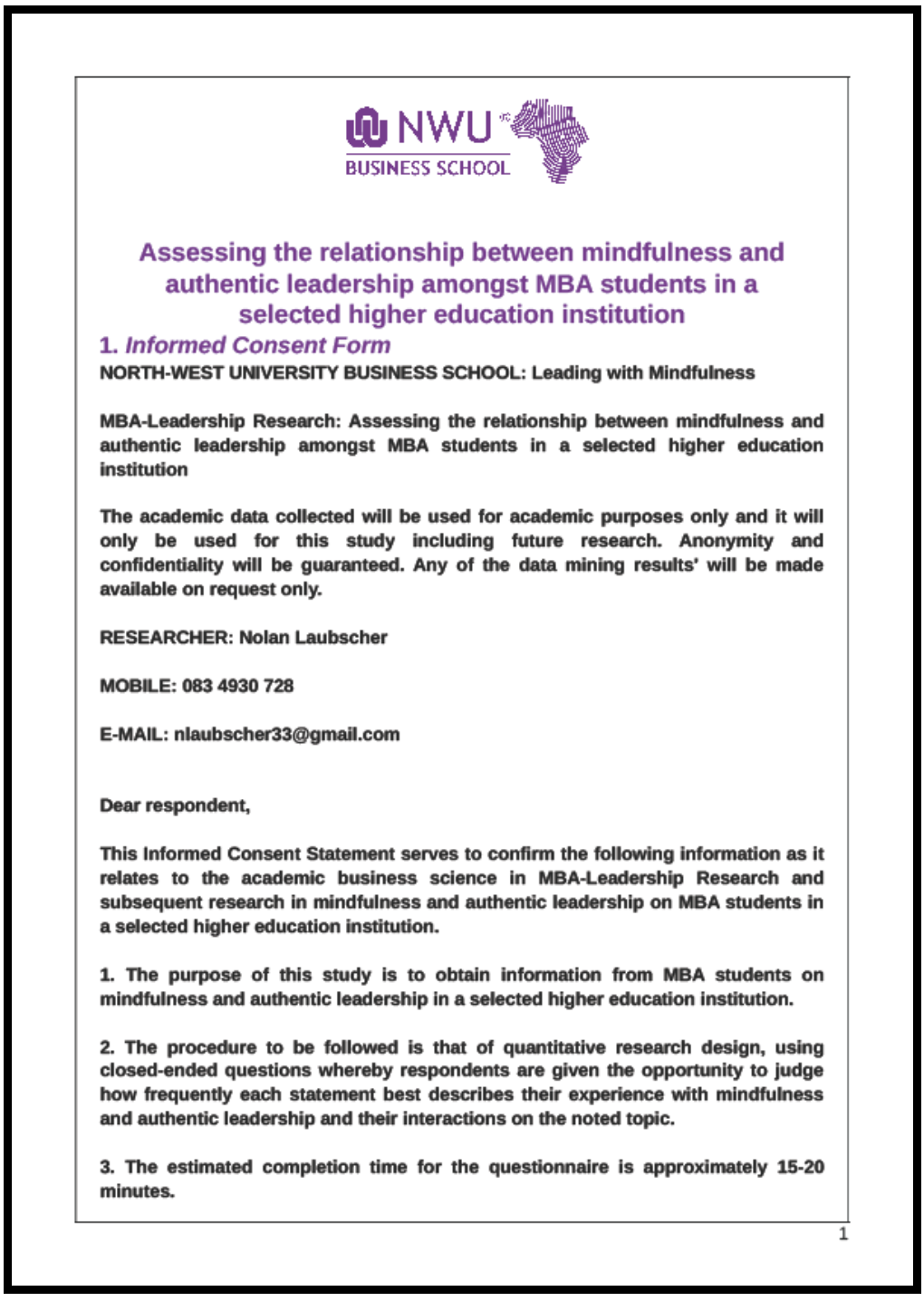
PRIMARY SOURCES

1	digital.lib.washington.edu Internet Source	1%
2	www.anxietybuster.co Internet Source	1%
3	Submitted to Alliant International University Student Paper	1%
4	docobook.com Internet Source	1%
5	webcentrum.muni.cz Internet Source	1%
6	Submitted to Liberty University Student Paper	<1%
7	eprints.utas.edu.au Internet Source	<1%
8	www.euroasiapub.org Internet Source	<1%
9	oxfordmindfulness.org Internet Source	<1%

ANNEXURE D: INFORMED CONSENT FORM & RESEARCH QUESTIONNAIRE

The Informed Consent Form and research questionnaire are presented below. Double-click on the icon to view details.

ICF.pdf



NWU BUSINESS SCHOOL

Assessing the relationship between mindfulness and authentic leadership amongst MBA students in a selected higher education institution

1. *Informed Consent Form*

NORTH-WEST UNIVERSITY BUSINESS SCHOOL: Leading with Mindfulness

MBA-Leadership Research: Assessing the relationship between mindfulness and authentic leadership amongst MBA students in a selected higher education institution

The academic data collected will be used for academic purposes only and it will only be used for this study including future research. Anonymity and confidentiality will be guaranteed. Any of the data mining results' will be made available on request only.

RESEARCHER: Nolan Laubscher

MOBILE: 083 4930 728

E-MAIL: nlaubscher33@gmail.com

Dear respondent,

This Informed Consent Statement serves to confirm the following information as it relates to the academic business science in MBA-Leadership Research and subsequent research in mindfulness and authentic leadership on MBA students in a selected higher education institution.

1. The purpose of this study is to obtain information from MBA students on mindfulness and authentic leadership in a selected higher education institution.

2. The procedure to be followed is that of quantitative research design, using closed-ended questions whereby respondents are given the opportunity to judge how frequently each statement best describes their experience with mindfulness and authentic leadership and their interactions on the noted topic.

3. The estimated completion time for the questionnaire is approximately 15-20 minutes.

1

ANNEXURE E: DATA APPROVAL LETTER

The Data Approval Letter is presented below. Double-click on the published document to view details.

Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: http://www.nwu.ac.za

Statistical Consultation Services
Tel: +27 18 285 2016
Fax: +27 0 87 231 5294
Email: suria.ellis@nwu.ac.za

24 March 2021

Re: Dissertation, Mr NL Laubscher, student number 20551584

We hereby confirm that the Statistical Consultation Services of the North-West University analysed the data of the above-mentioned student and assisted with the interpretation of the results. However, any opinion, findings or recommendations contained in this document are those of the author, and the Statistical Consultation Services of the NWU (Potchefstroom Campus) do not accept responsibility for the statistical correctness of the data reported.

Kind regards

SM Ellis

Prof SM Ellis (Pr. Sci. Nat.)
Associate Professor: Statistical Consultation Services

1