Gordon Institute of Business Science
University of Pretoria

The influence of female agentic and communal leadership on work engagement

Robyn Jayne Dunlop
18370617

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

11 November 2019

Abstract

In South Africa there is an underrepresentation of females in senior leadership positions. This is partly due to perceptions of incongruence between females and leadership. Along with this, the levels of work engagement amongst employees working in South Africa are extremely low. Both challenges result in negative and costly consequences. Therefore, the aim of this research is to identify the influence that female leaders have on work engagement, focussing on agentic and communal leadership styles, to contribute to the discourse of both challenges.

A quantitative methodology was employed to collect the data. The Utrecht Work Engagement scale was used to capture the respondent's work engagement levels, and the Agency-Communion-Inventory scale to capture the employees' perceptions of their managers' leadership style. The relationships between the variables were analysed through multiple regression analysis.

Females exhibiting a communal style and those exhibiting an agentic style both influenced work engagement. The agentic style influenced vigour, dedication and absorption, whereas the communal style influenced only vigour and dedication, but had a far stronger association with them. These results encourage management to promote females, with both agentic and communal leadership styles, into senior positions allowing organisations to benefit from higher female representation, including improved work engagement.

Keywords

Communal leadership, agentic leadership, work engagement, female leadership

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

_____

Robyn Dunlop

11 November 2019

Table of Contents

List of Figures

List of Tables

1. Chapter 1: Research problem and purpose

1.1. Research problem

1.1.1. Gender inequalities within leadership positions

Globally, women continue to be underrepresented in the workplace, with only 24% of senior management roles being held by women (Griffiths, Roberts, & Price, 2019; Hoobler, Masterson, Nkomo, & Michel, 2018). This underrepresentation has often been explained due to society undervaluing women's ability to lead effectively, with leadership continuing to be associated with men (Griffiths, Roberts, & Price, 2019), which is aligned to the Role Congruity Theory (RCT) introduced by Eagly and Karau in 2002.

Their theory speaks to the societal roles attached to the different genders, whereby men are traditionally seen as the "breadwinners" whilst women fill the role of "home makers" (Paustian-Underdahl, Walker, & Woehr, 2014). These gender norms have led to society viewing men as natural leaders due to their masculine nature, thus when a woman embodies a leadership role, especially in higher levels of an organisation, they are seen to be violating these gender norms (Rosette & Tost, 2010; Rosette, Koval, Ma, & Livingston, 2016).

In keeping with the gender roles associated with the RCT there are two types of leadership styles that are aligned to gender, namely a masculine leadership style called agentic leadership, and feminine leadership style called communal leadership. Agentic leadership tends to be described as efficient, goal-oriented, assertive, status-driven with a strong focus on self (Abele & Wojciszke, 2014; Abele & Wojciszke, 2007; Rosette & Tost, 2010). It is most commonly associated with male leaders and has been customarily viewed as the traditional leadership style, in line with the RCT assertion that men are viewed as natural leaders.

Communal leadership is defined as a feminine leadership style that is embodied mostly by women leaders. It encompasses feminine traits such as kindness, collaboration and sympathy toward others (Rosette et al., 2016). A communal leader places focus on the importance of relationships, open communication and their impact on organisational change (Abele & Wojciszke, 2014). Communal leadership

has been frequently associated with female leaders due to the feminine traits expressed by communal leaders (Abele, 2003; Griffiths, Roberts, & Price, 2019, Rosette, Mueller, & Lebel, 2015).

RCT addresses a phenomenon whereby women are viewed to be incongruent with leadership due to their feminine nature, and this undervaluing of female leaders could be feeding the fire of gender inequality (Paustian-Underdahl, Walker, & Woehr, 2014).

The question to ask is why should business care if gender inequality exists? According to Wu and Cheng (2016), male dominated industries are reported to be impacted by gender-biased discrimination and sexual harassment; the hostility created in these environments leads to increased human resource management costs.

Further to this, according to Castrillon (2019), employees tend to be more engaged when managed by a female. Engaged employees are a benefit to a company because the greater their level of engagement the higher their performance and retention (Kim, Kolb, & Kim, 2012). Therefore, disengaged employees would result in diminished work performance and increased turnover thus leading to higher costs for the business (Geldenhuys, Laba, & Venter, 2014).

Moodley, Holt, Leke and Desvaux (2016) conducted an analysis on women in leadership in Africa. Their study found that companies with at least a quarter of their boards occupied by women performed 20% better, from a financial perspective, compared to those with lower levels of female representation, further supporting the view that gender inequality can cost businesses money.

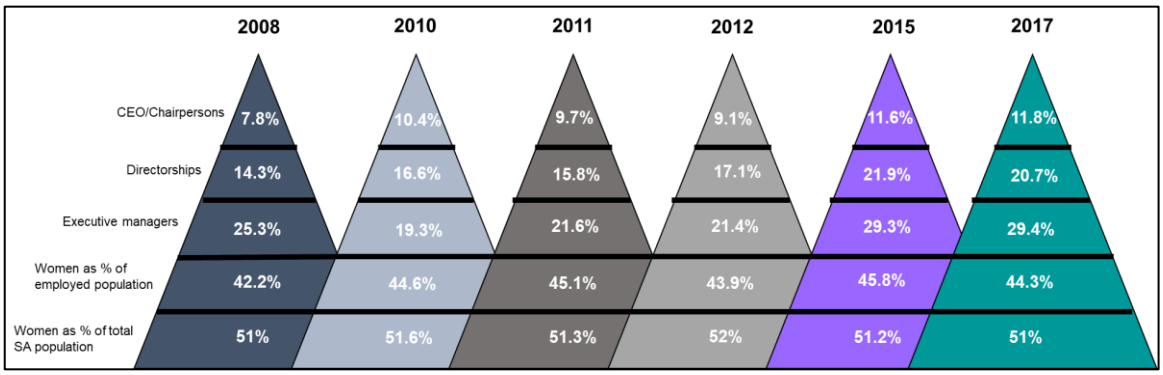
The World Economic Forum (2018) argues that economies cannot afford to miss out on vital contributions from half the population, and in the case of a country like South Africa, this is over half the population. The South African population is comprised of 51% female and 49% male, yet only 44% of skilled roles in the job market are occupied by women (Stats SA, 2017). Further to this, in South Africa only 29% of senior, decision-making roles are occupied by women (Grant Thornton, 2018a). This percentage has grown from 26% in 2014; however, this growth may be misleading because although the percentage of businesses with at least one female in a senior

role has increased, the proportion of women in senior roles has in fact declined (Grant Thornton, 2018a).

Of all the businesses in South Africa, 20% continue to have zero female representation in senior positions. This suggests that gender inclusivity within leadership roles is still being treated as a regulatory exercise (Grant Thornton, 2018b) rather than being viewed as a necessary shift toward a gender-balanced workforce.

The challenging economic times that South Africa is experiencing require strong and influential business leaders to steer the country toward opportunity and growth (University of Stellenbosch Business School, 2017). Yet vital leadership talent is being lost through gender inequality in the workplace. Businesses lose 18% of women leaders before they reach senior management (University of Stellenbosch Business School, 2017) and the higher up in the hierarchy one climbs the lower the representation of females, as can be seen in Figure 1 (Business Women's Association of South Africa [BWASA], 2017).

Figure 1: Comparative census pyramid representing the drop off in female leaders through the hierarchy



(BWASA, 2017, p. 11)

The financial benefits related to more females working within senior leadership roles (Moodley, Holt, Leke, & Desvaux, 2016) indicates that South Africa is missing out on much needed growth opportunities. Therefore, there is a need to strive for gender equality within South Africa and thus this country is the locus of this current study.

As discussed, gender equality within senior leadership roles could lead to decreased human resources costs and increased productivity through increased engagement

of employees (Castrillon, 2019; Moodley, Holt, Leke, & Desvaux, 2016; Wu & Cheng, 2016). By addressing the underrepresentation of women in senior leadership roles businesses could discover the opportunities for much needed growth through gender-balanced cultures and engaged employees.

1.1.2. Engagement

In recent years organisations have focused more on human capital, due to the expectation of higher output from fewer employees (Schaufeli, 2013). This results in organisations requiring their employees to psychologically invest in their work. For example, in order for employees to manage organisational change they must build their ability to adapt, and employees are expected to become resilient due to the increasing mental and emotional demands placed on them at work. The increased focus on employees' psychological capabilities thrust engagement into the spotlight (Schaufeli, 2013).

Schaufeli (2013) spoke to two types of engagement, namely work engagement and employee engagement. He explained the differences between the two constructs, stating that work engagement refers to an employee's engagement with their work, and work alone, whereas employee engagement can also include an employee's relationship with their organisation.

He does however observe that in most cases these two constructs are used interchangeably, a statement supported by a number of articles whereby the terms are either used interchangeably or the constructs are defined in the same way (de Oliveria & da Costa Roch, 2017; Kim, Kolb, & Kim, 2012; Lee & Ok, 2016; Strom, Sears, & Kelly, 2014; Wollard & Schuck, 2011). Schaufeli (2013) states that although the two terms are often used interchangeably the construct of work engagement is more specific and therefore the construct of work engagement will be utilised for the purpose of this study.

1.1.3. Work engagement

Work engagement is described as having a high level of energy when it comes to one's work, as well as being able to cope with the demands and stresses of one's

job. Schaufeli and Bakker (2004) identified three sub-constructs of work engagement, namely vigour, dedication and absorption, which are discussed in more detail in section 2.5 below. They created a scale to measure work engagement called the Utrecht Work Engagement Scale (UWES). An employee's level of work engagement is an important ingredient for achieving competitive advantage. Through a structured literature review of 265 abstracts it was found by Wollard and Shuck (2011) that an employee's manager has an impact on their work engagement and thus one could hypothesise that the gender of the manager and the leadership style they embody could also impact their level of engagement with their work.

Wójcik-Karpacz (2018) stated that work engagement has positive associations with an employee's efficacy of their work effort, as well as improved company results through increased productivity and financial success. Therefore, a company should continually look for ways to maximise the levels of their employee's work engagement.

However, globally, it has been found that the levels of work engagement are generally low (Gallup, 2013; Towers Watson, 2012). Research shows that 70% of employees in the United States of America (USA) feel disengaged from their work, costing the country an estimated $450 to $500 billion per year due to lost productivity (Gallup, 2013). Engagement levels in South Africa are far worse, with a mere 9% of South African's reported to be actively engaged (SABPP, 2014).

A lack of work engagement becomes problematic as disengaged employees are costly to organisations through lost productivity, increased turnover, absenteeism and decreased productivity. Disengaged employees are more likely to steal from their company, perpetuate negativity amongst their work colleagues and ultimately create a negative experience for customers (Gallup, 2013; Towers Watson, 2012; Coetzer & Rothmann, 2007). Therefore, organisations should invest in understanding how to promote work engagement so as to avoid the negative consequences brought about by disengaged employees.

1.1.4. Work engagement and leadership

Studies have found that work engagement is managed and promoted through a number of tools including perceived organisational support, coaching and leadership,

specifically transformational leadership (Kim, Kolb, & Kim, 2012; Strom, Sears, & Kelly, 2014).

Transformational leadership inspires and stimulates employees to work toward a collective goal ahead of their own self-interests (Strom, Sears, & Kelly, 2014). A transformational leader employs a relational approach with their employees, which fosters trust amongst employees toward the leader and the common goal (Wolfram & Gratton, 2014).

Transformational leadership has been associated with, not only effective leadership, but with female leaders in general (Strom, Sears, & Kelly, 2014; Griffiths, Roberts, & Price, 2019). An association between transformational leadership and work engagement has been identified in a number of preceding studies (Hawkes, Biggs, & Hegerty, 2017; Kim, Kolb, & Kelly, 2012; Strom, Sears & Kelly). The traits of transformational leadership and that of communal leadership have been likened to one another therefore an association between the two leadership styles has been established (Griffiths, Roberts, & Price, 2019; Paustian-Underdahl, Walker, & Woehr, 2014; Rosette & Tost, 2010; Rosette et al., 2016), yet existing literature appears to not have investigated the potential relationship between communal leadership and work engagement. This, along with the existing association between communal leadership and female leaders provides an opportunity for this study to approach work engagement and leadership from a different angle whilst also attempting to contribute to the discourse of female leadership.

1.1.5. The female leadership disadvantage

Men are viewed as natural leaders and thus traditionally leadership has been associated with a masculine leadership style (Ergle, 2015; Krawczyk, 2017). Research has shown that both men and women believe that a masculine leadership style, in the workplace, is more effective and preferred over feminine leadership styles. Leaders exhibiting feminine leadership styles, be it a male or female leader, are often perceived to be incompetent. This nurturing leadership style, also known as communal leadership, is admired, but only in leaders holding subordinate positions (Sreenivasan & Weinberger, 2018).

Eagly and Karau's (2002) seminal work on role congruity theory (RGT) explains that there is a perception that female qualities within leadership (communal leadership) are incongruent with the qualities needed to be an effective leader. The theory goes on to say that the perception of qualities revered for effective leadership would consist of agentic qualities (Griffiths, Roberts, & Price, 2019). This current study investigates whether female leaders, with an agentic or communal style of leadership, have a place in senior leadership positions, thus contributing to the body of knowledge on female leadership.

Men tend to embody the agentic leadership style and are therefore perceived to be more effective leaders (Krawczyk, 2017). This has driven women to adopt an agentic approach to leadership. However, when a woman leads in a masculine way, they are viewed as ruthless and aggressive; yet if women attempt to lead using a feminine or communal style of leadership, they are deemed too soft or weak for a leadership role (Krawczyk, 2017) and this leaves female leaders in an ambivalent situation.

Along with this, when women take on a leadership position within an organisation, it has been found that higher expectations are placed on them as leaders, and their choices are scrutinised more compared to their male counterparts (Hoobler et al., 2018). Therefore, although recent research (Hoobler et al., 2018; Paustian-Underdahl, Walker, & Woehr, 2014) has praised women for superior leadership skills, a lack of confidence in female leaders still remains (Eagly, 2007; Hernandez Bark, Escartin, Schuh, & van Dick, 2016; Wolfram & Gratton, 2015).

1.1.6. Benefits of female leadership

The reasons that business should care about gender equality goes beyond the fairness aspect of equal opportunities for both genders. Feminine or communal leadership traits have been found to bring about a number of benefits that should not be ignored (Paustian-Underdahl, Walker, & Woehr, 2014; Rosette, Mueller, & Lebel, 2015). The communal leadership style is being increasingly likened to effective leadership, and due to this, communal leadership began to gain traction as a perceived advantage as opposed to the previous view of communal leadership being detrimental to success (Rosette & Tost, 2010; Rosette, Mueller, & Lebel, 2015).

Many studies have highlighted the positive association between the representation of females in leadership positions and overall organisational performance. These studies show that organisations which best manage their workforce gender diversity will outperform competitors that do not prioritise gender diversity (Hoobler et al., 2018). The skills that women in general bring to a board are distinctive and invaluable and often lead to improved board performance, which in turn results in improved organisational value. These skills include an ability to solve complex problems, innovate, practise accountability and provide a vision to those they lead (Griffiths, Roberts, & Price, 2019; Isidro & Sobral, 2014).

Research shows that communal leadership may be effective in the modern economy, as collaboration, equality and improved communication are required to ensure success (Paustian-Underdahl, Walker, & Woehr, 2014). This research was supported by Griffiths, Roberts and Price (2019) who found, through a large-scale analysis, that employees have started to value feminine leadership styles over the traditional masculine leadership styles. Further to this, Gerzema and D'antonio (2017) found that millennials respond better to and favour a feminine leadership style. These millennials are the future leaders, and the fact that they tend to favour a feminine over a masculine leadership style highlights the need to identify the positive influence communal leadership can have.

However, even with recent studies praising female leaders, and more specifically, feminine or communal leadership, research continues to find that the stereotypical view of leadership, and traditional gender roles, still maintain a powerful level of influence. Individuals continue to equate effective leadership with agentic leadership, and still associate leadership roles with masculinity (Eagly, 2007; Griffiths, Roberts, & Price, 2019; Krawczyk, 2017).

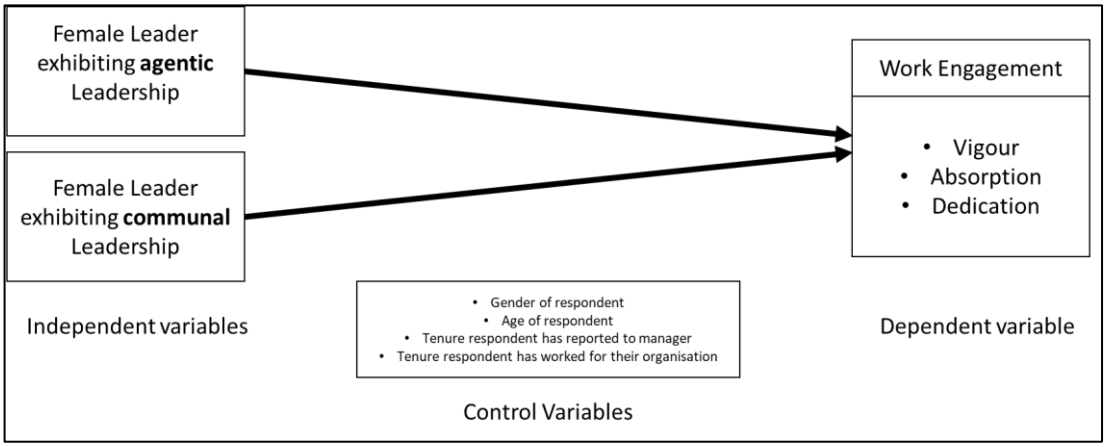
In conclusion, two critical problems have been identified, that of the underrepresentation of females in leadership roles, as well as low levels of work engagement, within organisations in South Africa. In addition to this, literature examining the association between communal or agentic leadership and work engagement was not found in existing literature, therefore highlighting a gap that this study aims to address.

1.2. Research purpose

The gap identified in the literature speaks to determining if female leaders, exhibiting communal or agentic leadership traits can have an influence on their employees' level of work engagement. The gap arises from the dire need to improve the low levels of work engagement amongst South African employees, (which currently sits at a dismal 9% (SABPP, 2014)), as well as to lift the percentage of female representation in leadership positions.

Further to identifying if an association exists between the constructs, this study aims to identify which leadership style (agentic or communal) has a stronger association with work engagement when exhibited by a female manager. This will be done by testing the relationship between the leadership styles (agentic vs communal) exhibited by female leaders, and the constructs of work engagement (vigour, absorption and dedication). Once these relationships have been determined, the results will be compared to determine if, for female leaders, agentic or communal leadership is more effective in promoting work engagement. Control variables, namely the gender and age of the respondent, and timespan the respondent has reported to their manager and worked at their organisation were considered in this current study. Refer to Figure 2 for a visual representation of the research purpose.

Figure 2: Visual representation of research purpose



1.3. Contribution to theory

Research shows that masculine, agentic leadership remains associated with top leadership positions, specifically with male leaders (Paustian-Underdahl, Walker, & Woehr, 2014; Rosette & Tost, 2010, Rosette et al., 2016, Schock, Gruber, Scherndl, & Otner, 2019). However, more recent research suggests that female leaders and feminine, communal leadership are becoming increasingly valued due to their association with transformational and effective leadership (Rosette & Tost, 2010; Paustian-Underdahl, Walker, & Woehr, 2014; Griffiths, Roberts, & Price, 2019). However, even with growing research supporting females exhibiting communal leadership there is still an overarching influence supporting the traditional perspective that men make better leaders than women. Female leaders find themselves in a difficult situation, whereby exhibiting a feminine or communal leadership style leads to their being perceived as being too weak or soft to lead, yet if they exhibit agentic traits while leading, this tends to be received in a negative way by employees.

The aim of this study is to identify the level of influence of female leaders, exhibiting agentic leadership, compared to female leaders exhibiting communal leadership, on work engagement. Kim, Kolb and Kim (2012) stated that considering the benefits that work engagement can bring to an organisation, therefore it was a construct that warranted further research. This study will attempt to identify whether female communal leaders or female agentic leaders have a stronger association with work engagement, with the intention of promoting and managing work engagement more effectively, leading to organisations profiting from the benefits associated with the construct.

The benefits associated with work engagement include increased involvement and proactiveness of employees (de Oliveira & da Costa Rocha, 2017), as well as increased job satisfaction, and decreased turnover and absenteeism (Kim, Kolb, & Kim, 2012; Strom, Sears, & Kelly, 2014; Geldenhuys, Laba, & Venter, 2014). A lack of work engagement within an organisation is a costly problem, therefore the desire to identify the antecedents required to influence this construct is vital. Further, this study aims to address the existing gap in the literature around communal and agentic leadership and their association with work engagement.

1.4. Contribution to business

Two separate business problems have been identified; that of gender inequalities in the workplace, as well as the staggeringly low levels of work engagement in South Africa. A lack of work engagement within an organisation is a costly situation, therefore the desire to identify how best to manage this construct is vital. With the understanding that leadership is an antecedent of work engagement, this paper aims to enhance the existing literature by identifying whether female leaders, with either an agentic or communal leadership style, have a positive association with work engagement.

This study aims to enrich the discourse with regards to women in leadership and the potential role they could play in promoting work engagement. With the support of existing research this study will attempt to enhance the dialogue.

2. Chapter 2: Literature review

2.1. Introduction

Chapter one identified and discussed two critical challenges, namely the need to address the low levels of work engagement within organisations as well as the high levels of gender inequality amongst leadership positions in South Africa. The leadership styles discussed were those of agentic and communal leadership, also referred to as masculine and feminine leadership. The research purpose centred around understanding the influence that female leaders, exhibiting an agentic or communal leadership style, would have on work engagement.

Chapter 2 provides a review of the relevant literature on the three constructs of the research study, namely work engagement, and agentic and communal leadership, on which the hypotheses in chapter 3 have been based.

2.2. Identified constructs

The gap identified in the literature, which spoke to identifying if female leaders exhibiting communal or agentic leadership traits can have an influence on their employees' level of work engagement, identifies the three core constructs of this study, namely female agentic leadership, female communal leadership and work engagement. Work engagement was broken down into three sub-constructs, namely vigour, absorption and dedication, according to the definition of work engagement by Schaufeli and Bakker (2004). The literature review attempts to uncover and explain the existing theory of these constructs.

2.3. Female leadership and gender equality

In 1994, in South Africa, several anti-discriminatory laws were promulgated to address equal opportunities in the workplace. One of the goals of these laws was to bring more women into the workforce. However, in the last 20 years only an 8% improvement in gender equality was observed and at that rate gender equality in the workplace would only be achieved in 50 years (Sinden, 2017). One of the reasons

driving the need for gender equality in the workplace had arisen from the fact that impactful decision-making within organisations requires the ability to approach decisions from different perspectives. Different perspectives are believed to be brought about through individuals with different genders, cultures, backgrounds and experiences (Hills, 2015), yet the quest to achieve gender equality within senior leadership continues. This was seen in the low penetration of females in senior leadership roles, which was only 29% at the end of 2017 (Grant Thornton, 2018a).

2.3.1. Gender Equality

Gender inequality continues to persist even though it was found that women performed as well as their male counterparts and had the same aspirations for leadership positions as men (Kossek, Su, & Wu, 2017). The definition of gender equality is the balanced participation and representation of both genders in the workplace (Wu & Cheng, 2016).

Kossek, Su and Wu (2017) found that women were segregated both horizontally (functionally) and vertically (hierarchically) within the workplace and the traditional preference for an agentic leadership style continued to hinder a female's career progression. They also stated that women performing as well as their male colleagues were less likely to be promoted, receive the same pay or receive recognition compared to their male counterparts.

In chapter one the question was asked as to why business should care about gender equality in leadership positions. Gender inequality repercussions go far beyond those related to ethics and a sense of fairness. Organisations that suffered from gender inequality were found to have increased levels of hostility and tended to nurture negative masculine cultures, including that of discouraging the appearance of vulnerability and emotion (Fine & Sojo, 2019). These types of masculine cultures were associated with decreased levels of cooperation and work-life balance. Whereas gender balanced organisations were associated with increased levels of hospitality and professionalism, leading to increased efficiency, productivity and motivation among staff (Fine & Sojo, 2019; Wu & Cheng, 2016).

A higher level of female representation within senior management was proven to positively impact the results of an organisation. Organisations which best managed their workforce gender diversity outperformed their competitors who did not prioritise gender diversity. The skills that women brought to a board were distinctive and invaluable and often led to improved board performance, which resulted in improved organisational value (Hoobler et al., 2018; Isidro & Sobral, 2014). Although the evidence around the benefits of gender equality continued to grow, the fight for gender equality remained.

Hoobler et al. (2018) completed a meta-analysis of 78 different studies that focused on the direct effects of women representation in leadership. Through their analysis they found a number of theories that were utilised to explain and support the business case for female leaders in organisations. With regards to gender-supportive climates, and from the perspective of the unique characteristics a woman can bring to an organisation, a number of theories emerged as supporting the business case for women leaders. Refer to Table 1 for the theories Hoobler et al. (2018) uncovered.

Isidro and Sobral (2015) conducted a study that found female leaders on boards to have an indirect impact of the growth of an organisation's value. In their study they made reference to theories that spoke to the relationship between female leaders and an organisation's value, namely the agency theory and resource dependence theory (as per the Hobbler et al. (2018) meta-analysis), and finally, human capital theory. Refer to Table 1 for the theories and subsequent arguments that draw an association between female leaders and improved organisational performance (Hoobler et al., 2018; Isidro & Sobral, 2015).

Table 1: Theories used to support the business case for women leaders

Theory	**Argument from studies**
Critical mass theory	Women bring unique abilities and viewpoints to an organisation should the number of female leaders reach critical mass (Kanter, 1977).

Social identity theory	Introducing women into a group changes the dynamics, allowing for open communication and differing perspectives (Tajfel & Turner, 1979).
Upper echelons theory	Gender diversity in top management impacts strategic decision making, often due to the unique insights and contributions from the female leaders (Hambrick & Mason, 1984).
Agency theory	Female leaders can be viewed as outsiders, and their unique contribution can assist with decision making (Jensen & Meckling, 1976). Women tend to improve a board's level of monitoring which decreases the chances of fund misallocation, thus improving shareholder value (Isidro & Sobral, 2015; Jensen & Meckling, 1976).
Legitimacy theory	The presence of female leaders can increase an organisation's legitimacy to the stakeholders (Suchman, 1995).
Resource dependence theory	Female leaders decrease the dependency an organisation has on external resources (Pfeffer, 1972). Diverse boards have more resources from a cognitive perspective, and this can lead to increased organisational performance (Isidro & Sobral, 2015; Pfeffer, 1972).
Resource-based view of competitive advantage	As resources, female leaders increase the company's competitive advantage (Barney, 1991).
Human capital theory	Diverse and unique human capital can result in increased organisational performance (Isidro & Sobral, 2015).

This study leans on social identify theory, whereby women change the dynamics within a group due to their differing perspectives; the resource-based view of competitive advantage, which argues that female leaders increase a company's competitive advantage; and the upper echelons theory, which states that gender diversity in top management decisions assists with strategic decision making. These theories view female leadership as an advantage, thus opening the following discussion around the advantage of female leadership.

2.3.2. Female leadership advantage

In more modern and contemporary organisations, it was found that women leaders can perform better than their male counterparts, and that feminine qualities such as equality, collaboration and empowerment were becoming more revered (Paustian-Underdahl, Walker, & Woehr, 2016; Rosette & Tost, 2010, Rosette et al., 2016).

A study conducted by Griffiths, Roberts and Price (2019) found that individuals tended to rank masculine attributes as less important than feminine attributes when they discussed preferred leadership traits. Support for traditional, masculine leadership was beginning to diminish as organisations and individuals began to value more feminine, communal traits in their leaders. These traits included collaboration, open communication, equality and flexibility, to name a few. Not only did people prefer communal attributes, but these attributes were also associated with improved firm performance (Griffiths, Roberts, & Price, 2019; Hoobler et al., 2018).

As women have begun to succeed in leadership roles, and as employees have increasingly valued feminine leadership styles, the gender stereotypes attached to leadership have started to dissipate (Paustian-Underdahl, Walker, & Woehr, 2014; Griffiths, Roberts, & Price, 2019). This, along with the fact that the leaders of tomorrow responded better to feminine leadership indicated that the future of leadership may indeed have room and a need for female leaders (Gerzema & D'antonio, 2017).

Having said that, within the discourse around female leadership, negativity continues to maintain a foothold with reference to female leadership disadvantage.

2.3.3. Female leadership disadvantage

Despite the growing evidence that supported female leaders, it appeared that with only 29% of senior leadership roles belonging to women (Grant Thornton, 2018a) there was still a large amount of work to be done. Reasons for the slow growth of gender equality in leadership could be explained by a number of theories and phenomena, that included role congruity theory, the backlash effect, the glass ceiling, the glass cliff, the labyrinth of female leadership and the paradox of female leadership.

Eagly and Karau (2002) introduced role congruity theory (RCT) in their article titled *Role congruity theory of prejudice toward female leaders,* and since the introduction of their seminal work a number of studies have made reference to the theory. RCT argues that senior leadership positions were traditionally masculine in nature and therefore men were seen to be more effective leaders in these positions (Griffiths, Roberts, & Price, 2019; Paustian-Underdahl, Walker, & Woehr, 2014; Schock, Gruber, Scherndl, & Ortner, 2019). The congruency spoken of in the theory was achieved through the alignment of the male gender role and the expectations of leadership. This theory also highlighted that incongruence existed when women exhibited agentic characteristics as these traits were not aligned to the traditional female gender role (Rosette & Tost, 2010). A quote by Kim Campbell, a previous prime minister of Canada, reflected the idea of traditional leadership roles and RCT clearly.

> I don't have a traditionally female way of speaking…. I'm quite assertive. If I didn't speak the way I do, I wouldn't have been seen as a leader. But my way of speaking may have grated on people who were not used to hearing it from a woman. It was the right way for a leader to speak, but it wasn't the right way for a woman to speak. It goes against type. (Eagly & Carli, 2007, p. 65-66)

The incongruence experienced when leaders violate gender norms could lead to the backlash effect. This refers to the phenomenon that a woman exhibiting an agentic leadership style tends to be viewed in a negative light due to role incongruence (Eagly & Carli, 2007; Zheng, Kark, & Meister, 2018). Furthermore, due to the perceived role violation, women in leadership positions seemed to be evaluated more harshly than their male counterparts (Rosette, Mueller, & Lebel, 2015).

Further to RCT and the backlash effect, another phenomenon, known as the glass ceiling, has been known to impact women's growth into leadership positions. The idea of a glass ceiling has been current for over three decades, and referred to an inconspicuous yet powerful barrier that prevented women from progressing through the hierarchy of an organisation. This theory stated that women were delegated to specific functions within a business, which usually excluded positions within senior leadership (Wu & Cheng, 2016).

Kulich, Iacoviello and Lorenzi-Cioldi (2018) state that although the glass ceiling is still present the increase in female representation in leadership through the years has shifted the leadership conversation toward a phenomenon call the glass cliff. The theory of the glass cliff was introduced by Ryan and Haslam (2005) where they argued that if females are promoted into leadership positions, they tend to be placed in leadership roles within precarious situations, thus placing the female leader on a "glass cliff". This theory states that female leaders were more likely to be chosen to lead a company is times of crisis or poor performance. Being placed on a glass cliff can be a challenging for the leader because if that female leader is unable to turn the already poor situation around their reputation as an effective leader would be tarnished (Ryan & Haslam, 2005).

However, Carli & Eagly (2016) did not subscribe to the ideas of a glass ceiling or a glass cliff as they did not believe they correctly represented the complexity women were faced with in the workplace. They preferred the idea of a labyrinth as they believed this better explained the obstacle-filled journey that women were required to take to progress in their careers. Whether one subscribed to the idea of the glass ceiling, cliff or labyrinth, it was clear that the journey a female took toward leadership was a difficult one.

Another interesting phenomenon noted in the literature is the paradox of female leadership. This theory referred to female leadership being lauded for its superior effectiveness, while there were still contradicting views that placed men as natural leaders and diminished female leadership styles as weak and soft. Female leaders were admired for their high-calibre leadership style, yet they continued to be met with a stereotypical view that only men were viewed as natural leaders. This paradox resulted in less women holding impactful leadership positions (Eagly, 2007; Krawczyk, 2017).

Being female was often viewed as a disadvantage with regards to leadership. This could be seen through comments made by male directors stating that hiring a female leader is an unnecessary risk (Eagly, 2007). Therefore, even though evidence that supported female leadership continued to grow, it appeared that misguided perceptions and stereotypes, favouring men as leaders, continued to have a larger influence (Griffiths, Roberts, & Price, 2019)

The literature supports the view that transformational leadership, which is associated with communal leadership (Griffiths, Roberts, & Price, 2019; Paustian-Underdahl, Walker, & Woehr, 2014; Rosette et al., 2016), can promote work engagement (Hawkes, Biggs, & Hegerty, 2017; Kim, Kolb, & Kelly, 2012; Strom, Sears, & Kelly). However, these phenomena open the discussion as to whether communal leadership would be welcomed in the workplace and if this were not the case, would this hamper the leader's ability to promote work engagement.

Along with this the agentic leadership style continues to dominate in the workplace (Griffiths, Roberts, & Price, 2019) and one wonders if an association exists between the low levels of work engagement and the high levels of agentic leadership in the workplace. Or perhaps if there is an association between the low levels of work engagement and the low levels of female representation in senior leadership positions. One is thus driven to question whether female leaders exhibiting agentic or communal leadership can promote work engagement.

2.4. Gendered leadership styles

With the aim of addressing gender inequality in leadership positions in the workplace, the interplay between leadership and gender was considered. Transactional, transformational, androgynous, agentic and communal leadership are leadership styles with an association with gender and were therefore discussed.

2.4.1. Transactional and transformational leadership

The concepts of transactional and transformational leadership originated from James MacGregor Burns in 1978. He argued that transforming leadership is where a leader and a follower work together to improve the employee's motivation and morale, while transactional leadership refers to a give-and-take relationship between the follower and the leader (Bass, 1985). The theory was expanded upon by Bass (1985) who

amended the name from transforming to transformational leadership and he discussed the underlying psychological factors of the leadership styles.

In more recent work transactional and transformational leadership spoke to leadership styles that involved the leader proactively intervening in an attempt to avert problems from arising, yet these styles utilise different approaches to do so (Sungara Silva & Mendis, 2017).

Transactional leadership refers to a leadership style focused on a rational exchange between the leader and the follower to satisfy mutual self-interest. A manager who exhibits transactional leadership places a large amount of focus on a reward and punishment system with their followers. This leadership style was criticised for focusing on satisfying an employee's lower order needs, and was therefore not necessarily associated with long-term benefits (Sungara Silva & Mendis, 2017)

From a gender perspective this leadership style was often equated with a traditional leadership style and the attributes of a transactional leader were often associated with those of agentic leadership (Sugiyama, Cavanagh, van Esch, Bilimoria, & Brown, 2016; Wolfram & Gratton, 2014).

On the opposite end of the scale there was transformational leadership that utilized the leader's ability to interact with, understand, inspire and stimulate employees to strive for a common goal. This leadership style celebrated collaboration and placed specific focus on communication and ethical decision-making, which led to effective organisational change. Transformational leadership was thus associated with effective leadership and therefore became a focus in the leadership space (Strom, Sears, & Kelly, 2014; Griffiths, Roberts, & Price, 2019).

Although transformational leadership has been celebrated as effective, it has gathered criticism over the years. Lee (2014) stated that the definition of transformational leadership could be ambiguous thus making the skill set difficult to transfer. He went on to say that followers of transformational leaders tended to follow them blindly which left room for autocratic behaviour by such leaders.

Transformational leadership was believed to encompass both agentic and communal characteristics thus presenting an association between transformational leadership and androgynous leadership. Within the discourse of leadership, a debate remained between those who aligned transformational leadership with communal leadership, and those who aligned transformational leadership with androgynous leadership

(Griffiths, Roberts, & Price, 2019; Wolfram & Gratton, 2014). However, it was found to be better aligned with communal characteristics when Griffiths, Roberts and Price (2019) found that individuals rated female leaders higher than their male counterparts when it came to transformational leadership (Griffiths, Roberts, & Price, 2019). Due to the traits of a transformational leader being likened to those of communal leadership, as well as the shift toward transformational leadership in the work place, the prejudice toward female leaders, especially those exhibiting communal traits, should have begun to diminish (Rosette, Mueller, & Lebel, 2015). However, this did not seem to be the case according to Griffiths, Roberts and Price (2019) who argued that agentic leadership continued to sustain its influential hold within organisations.

2.4.2. Androgynous leadership

Eagly and Carli (2007) identified a leadership style called androgynous leadership which referred to a blend of both masculine (agentic) and feminine (communal) leadership styles. They argued that leaders who utilised an androgynous approach were viewed as more effective.

Female leaders tended to have higher expectations placed on them in contrast to their male leader counterparts. They were often expected to prove an agentic capability to be seen as an effective leader (Hoobler et al., 2018; Wolfram & Gratton, 2014) which could have led to female managers exhibiting an androgynous leadership style. Zheng, Kark and Meister (2018) supported this, stating that leaders needed to have the ability to blend both agentic and communal leadership to allow them to conform to the leader role. They argued that should a female leader take on agentic leadership characteristics she would be met with a backlash, unless she tempered her agentic traits with communal traits so as to be congruent with gender norms. This phenomenon refers to the backlash effect that was discussed further in section 2.3.3.

Research conducted by Wolfram and Gratton (2014) found that androgynous female leaders had positive impacts on group performance in the workplace as well as on intellectual stimulation. However, their research also found the same for masculine female managers as well as feminine female managers. They went on to state that female managers might be disadvantaged should they lack the gender-typical

attributes within their leadership style. Therefore, although literature has reported that an androgynous leadership style can be effective, Wolfram and Gratton (2014) found that the same could be said for a communal leadership style exhibited by female managers.

Should an individual be forced to embody a leadership style that is incongruent with their own identity it could lead to an identity conflict. Identity conflict has been linked to an increase in stress levels and decreased levels of satisfaction in one's life. These outcomes could result in ineffective leadership (Karelaia & Guillén, 2014). Further to this, Zheng, Kark and Meister (2018) argued that female leaders experience tension when it came to balancing between the two leadership styles as they are not always compatible. The trade-off between the two can bring about high levels of stress and anxiety,

Although the androgynous leadership style is potentially appropriate for differing contexts, female leaders were advised to approach this style with a level of caution, so as not to drive themselves into an identity crisis of sorts or place themselves in a highly stressful situation due to managing the trade-off between the two styles. If an individual was leading from a place of authenticity, they were more likely to be an effective leader (Ladkin & Taylor, 2010).

2.4.3. Agentic leadership and communal leadership

In 1966 David Bakan introduced the terms "agency" and "communion" into the world of psychology through his book titled *The duality of human existence*. He described them as fundamental modes in which humans exist. He defined agency as isolated and self-focused with a drive to succeed, whereas, he defined communion as a sense of togetherness, a focus on others and the desire to cooperate and collaborate (Abele & Wojciszke, 2014).

Although transactional, transformational and androgynous leadership have an association with gender, with transactional likened to agentic, androgynous to both agentic and communal, and transformational to communal and androgynous, it is the agentic and communal leadership styles that explicitly explored the gender narrative due to their direct association with the male and female genders respectively.

Although Bakan coined the terms agency and communion, a psychologist in 1946, Solomon Asch, identified and spoke of traits, such as warmth and honesty (communal traits) and traits such as intelligence and efficiency (agentic traits) (Abele & Wojciszke, 2014). These traits were expanded upon by Trapnell and Paulhus (2012, p. 52) when they described agentic leadership by equating it to “wealth, pleasure, power, influence, competence, achievement, ambition, excitement, status, autonomy and superiority”. They equated communal leadership with “forgiveness, trust, humility, altruism, loyalty, politeness, harmony, honesty, compassion, civility, equality and tradition” (Trapnell & Paulhus, 2012, p. 52).

A major difference between communal and agentic leadership was that communal leaders were focused on the wellbeing and development of others, whereas agentic leaders tended to be more concerned and focused on themselves, and this was sometimes referred to as “other-profitability” vs “self-profitability” respectively (Abele & Wojciszke, 2007, p. 752). Communion arose from the desire to integrate oneself into a larger society and therefore manifested itself through characteristics and behaviours such as friendliness, trustworthiness, interdependence, inspiration and networking (Abele & Wojciszke, 2007; Ergle, 2015).

2.4.3.1. Association with gender

In traditional social roles, men were associated with the “breadwinner” role whereas women were related to the “home maker” role (Paustian-Underdahl, Walker, & Woehr, 2014). Due to these traditional social roles, men had been associated with agency and agentic traits, whereas women were associated with communion and communal traits (Hernandez Bark et al., 2016).

When communal traits were brought into the workplace they manifested in collaboration, cooperation and the ability to build effective relationships. Communal leadership focused on flatter organisational structures with a more democratic approach (Rosette & Tost, 2010).

However, top leadership positions in organisations have been typically associated with agentic, masculine characteristics (Rosette & Tost, 2010; Rosette et al., 2016). Research showed that the higher the position the higher the expectations for masculine and agentic behaviours (Paustian-Underdahl, Walker, & Woehr, 2014).

Agentic leaders exhibited the ability to delegate, manage upwards, problem solve and take charge of situations (Ergle, 2015).

As discussed earlier in chapter two, the RCT placed men as natural leaders as they traditionally had a stronger association with agentic leadership, which was viewed as the traditional leadership style (Eagly & Carli, 2007). If a female attempted to lead in an agentic manner, they were typically met with resistance, because a female leader who embodied a masculine leadership style was violating the norms and roles associated with their gender. With females being typically associated with feminine or communal leadership, and the traditional associations between leadership and agentic leadership, it placed female leaders in a difficult situation. Especially because communal leadership was often viewed as a soft and weak leadership style (Eagly & Carli, 2007).

Both men and women continued to sustain the outdated gender-based stereotypes of agentic and communal leadership. Although these stereotypes had been challenged (Gerzema & D'antonio, 2017; Griffiths, Roberts, & Price, 2019; Hoobler et al., 2018; Paustian-Underdahl, Walker, & Woehr, 2014; Rosette & Tost 2010), research revealed that these gender-based stereotypes continued to hold a substantial level of influence in the workplace (Griffiths, Roberts, & Price, 2019; Ergle, 2015).

Although agentic traits have been traditionally associated with men and communal traits with women, these leadership styles are not necessarily gender-specific. However, for the purposes of this current study only female leadership exhibiting agentic and communal traits, are examined. Agentic and communal leadership were chosen for this study due to their explicit association with gender. The focus on female leaders stems from the level of gender inequality in business in South Africa. As stated in chapter one only 29% of senior, decision-making roles are held by women, and 20% of businesses continue to have zero female representation (Grant Thornton, 2018a; Grant Thornton, 2018b). Therefore, there is a need to contribute to the discourse on female leadership in South Africa, with the objective of continuing the discussions around gender inequality in the workplace. Along with this Zheng, Kark and Meister (2018) argued that an increase in female leaders leads to a growing association between females and leadership, thus diminishing the perceived incongruence between the two.

The scale utilised in this current study for the respondent to identify their manager's leadership style was created by Abele, Hauke, Peters, Louvet, Szymkow and Duan (2016) called the Agency-Communion-Inventory (AC-IN) scale. Their scale measured the agentic and communal leadership traits exhibited by a leader. This scale was chosen because it has been validated across a number of different cultures and contexts which was important (Abele et al., 2016). The Agency Communal Value scale (ACV) was also considered but was rejected for two reasons: the scale included the construct of values, which was not a construct in this study, and contained 24 questions (Trapnell & Paulhus, 2012). The AC-IN scale focused solely on the agentic and communal construct which was a better fit for this study and it contained 20 questions, thus shortening the time a respondent would need to spend answering the questionnaire.

2.4.3.2. Associations with other leadership styles

A number of leadership styles were discussed due to their association with gender. Agentic and communal leadership were chosen for this study due to their explicit association with gender. The other leadership styles discussed were all linked, in some way, with the main leadership constructs of this current study.

Androgynous leadership was a style that combined both agentic and communal leadership traits (Griffiths, Roberts, & Price, 2019). Male leaders were associated with agentic and traditional leadership and traditional leadership was associated with transactional leadership. Thus, one could deduce that an association between agentic and transactional leadership could exist (Suranga Silva & Mendis, 2017). Female leaders were associated with communal leadership and this feminine leadership style was associated with transformational leadership (Griffiths, Roberts, & Price, 2019).

In South Africa, with female representation within leadership at a very low 29% (Grant Thornton, 2018a) it was evident that further research was needed to provide further evidence to support the promotion of female leaders.

Refer to Table 2 for a comparison of the different gendered leadership styles.

Table 2: Gendered leadership styles

Leadership Style	Contributing Literature	Attributes	Critiques
• **Agentic**	• Abele et al. (2016) • Abele and Wojciszke (2007) • Abele and Wojciszke (2014) • Ergle (2015) • Fine and Sojo (2019) • Gerzema and D'antonio (2017) • Griffiths, Roberts and Price (2019) • Hernandez Bark et al. (2016)	• Traditional and dominant leadership style • Associated with top leadership • Associated with self-profitability • Masculine leadership style	• Toxic masculine cultures lead to decreased cooperation, work-life balance conflict and decrease in mental and physical health (Fine & Sojo, 2019). • Sought-after leadership traits associated with women (communal). Masculine traits viewed as less important (Griffiths, Roberts, & Price, 2019)
• **Communal**	• Hoobler et al. (2018) • Paustian-Underdahl, Walker and Woehr (2014) • Rosette, Mueller and Lebel (2015) • Rosette and Tost (2010) • Rosette et al. (2016) • Trapnell and Paulhus (2012) •	• Effective relationship-building • Focus on others, collaboration and cooperation • Associated with other-profitability • Feminine leadership style	• Historically viewed as weak style of leadership in both male and female leaders (Krawczyk, 2017) • Communal leadership traits exhibited by male leaders viewed as less effective due to incongruence with gender norms (RCT) (Eagly & Karua, 2002). • Communal leadership viewed as weak and soft due to the incongruence with traditional, masculine leadership (Eagly & Carli, 2007).
Androgynous	• Eagly and Carli (2007) • Hoobler et al. (2018) • Karelaia and Guillén (2014) • Korabik and Ayman (1989) • Wolfram and Gratton (2014)	• Combination of both agentic and communal traits • Associated with effective leadership	• Requires balancing act between two leadership styles, which could lead to decreased authenticity and potential identify conflict (Karelaia & Guillén, 2014; Zheng, Kark, & Meister 2018).
Transactional	• Sugiyama et al. (2016); • Sungara Silva and Mendis (2017) • Wolfram and Gratton (2014)	• Proactive leader • Rational exchange • Focus on reward and punishment • Traditional leadership style, thus associated with agentic leadership	• Only satisfies lower order needs of employees (Sungara Silva & Mendis, 2017).
Transformational	• Avolio and Gardner, (2005); • Avolio, Gardner, Walumbwa, Luthans and May, (2004) • Griffiths, Roberts and Price (2019) • Lee (2014) • Strom, Sears and Kelly (2014)	• Proactive leader • Relational exchange • Associated with effective leadership • Motivate followers toward common goal • Associated with both androgynous and communal leadership.	• Definition is ambiguous, and therefore the style can be difficult to teach (Lee, 2014). • Followers tend to trust leader blindly and this can lead to autocratic behaviour from leader (Lee, 2014).

2.5. Work engagement

In chapter one, the construct employee engagement was discussed. Schaufeli (2013) made reference to both employee and work engagement and acknowledged their differences. He argued that employee engagement involves employees' relationships with both their work and their organisation, whereas work engagement referred to the employee's engagement with their work only. Although he acknowledged their differences, he also acknowledged that the terms are often used interchangeably, a statement that has been supported by a number of articles (de Oliveria & da Costa Roch, 2017; Kim, Kolb, & Kim, 2012; Lee and Ok, 2016; Strom, Sears, & Kelly, 2014; Wollard & Schuck, 2011). This study chose to focus on work engagement due to its being a more specific construct (Schaufeli, 2013).

William Kahn was one of the first people to introduce the construct of work engagement in a 1990 study. He described engagement as a physical, cognitive and emotional connection with one's work (Kahn, 1990). Maslach and Leiter (1997) added to this definition by equating work engagement to the positive side of a scale and burnout as the negative side of that same scale. They stated that if burnout was placed on the negative pole and related to exhaustion, decreased efficiency and increased cynicism, then work engagement would be placed on the positive side of the pole and referred to increased involvement, energy levels and efficiency toward one's work.

Rothbard (2001) offered up a definition of work engagement that focused on two sub-constructs, namely an employee's attention and their level of absorption. However, more recently, the definition of work engagement had been expanded upon by Schaufeli and Bakker (2004) to encompass an energetic and effective state of mind. They broke the construct down into three sub-constructs, namely vigour, dedication and absorption (Schaufeli & Bakker, 2004). For the purpose of this study the well utilised definition of engagement and its three sub-constructs by Schaufeli and Bakker (2004) was used (Geldenhuys, Laba & Venter, 2004; Kim, Kolb, & Kelly, 2014; Strom, Sears, & Kelly, 2014).

Like the question asked around why business should care about female leadership, the same should be posed around work engagement. This came down to the large number of benefits that have been associated to high levels of work engagement. These included increasing an employee's emotional attachment to their job which

subsequently led to increased involvement, proactiveness and responsibility toward their deliverables (de Oliveira & da Costa Rocha, 2017). Further research studies also found that increased work engagement led to increased job satisfaction, and decreased turnover and absenteeism (Kim, Kolb, & Kim, 2012; Strom, Sears, & Kelly, 2014; Geldenhuys, Laba, & Venter, 2014).

Schaufeli and Bakker (2004) went on to identify and name the three sub-constructs of work engagement, namely vigour, dedication and absorption. These three constructs were expanded upon from Kahn's original definition of work engagement, whereby vigour was related to a physical connection, dedication to an emotional connection and absorption to a cognitive connection (Kahn, 1990; Geldenhuys, Laba, & Venter, 2014).

2.5.1. Subconstructs of work engagement

A number of approaches to work engagement have been documented over the years with specific reference to Kahn's (1990) work on a needs satisfying approach that views engagement from a physical, cognitive and emotional connection to ones work; Maslach and Leiter's (1997) burn-out antithesis approach that views work engagement and burnout as opposites of one another; and more recently the work by Schaufeli, Salanova, González-Romá and Bakker (2002) that views work engagement and burnout as two separate concepts rather than antitheses of one another.

Kahn (1990) and Schaufeli et al. (2002) both viewed work engagement as a psychological state of mind and both agreed on three aspects to work engagement. Kahn's description of a physical connection with one's work was renamed vigour by Schaufeli et al. (2002), whereas Kahn's descriptions of an emotional connection and a cognitive connection to one's work were renamed to dedication and absorption by Schaufeli et al. (2002), respectively. The concepts of vigour, dedication and absorption have since become widely accepted to represent the elements of work engagement (Schaufeli, 2013).

In order to measure these three sub-constructs Schaufeli and Bakker (2004) created a scale called the Utrecht Work Engagement Scale (UWES). For the purpose of this current study, the shortened version of the Utrecht scale was utilised, the UWES-9.

This scale measures the three sub-constructs with three items per sub-construct. These three subconstructs will be discussed in more detail in the sub-sections that follow.

2.5.1.1. Vigour

Vigour refers to the physical connection an employee has with their job (Geldenhuys, Laba, & Venter, 2014). According to Schaufeli and Bakker (2004) vigour was defined as the opposite of exhaustion as it referred to an employee exhibiting energy and resilience toward their work. Vigour referred to an employee's level of energy and stamina, their ability to face and work through challenges, and their willingness to exert effort toward their work (Geldenhuys, Laba, & Venter, 2014). When an employee showed vigour toward their work it led to an increase in life and job satisfaction, an improvement in their mental and physical health and an enhancement of their own job performance and subsequently that of the organisation (Shirom, 2007).

Vigour was driven by a number of antecedents which included intrinsic and organisational factors. From an intrinsic perspective, an employee's own level of charisma and expertise had an influence on vigour. From an organisational perspective the power of an employee's work position, their ability to control resources and their opportunity to work independently all had an impact on the employees' level of vigour. The final two antecedents related to the employee's manager in the form of rewards and their manager's leadership style. Shirom (2007) made reference to rewards being used to drive vigour with employees, which is a tactic that has been utilised by transactional leaders (Sungara Silva & Mendis, 2017); yet they also state that should an employee's manager lead with a transformational leadership style, this would also have been a driver of vigour.

The association between vigour and transformational leadership allows one to infer that an association between that of communal leadership and vigour exists, due to the association between communal and transformational leadership (Rosette & Tost, 2010). However, the antecedent of rewards driving vigour was related to a tactic used by transactional leaders who have relied on reward and punishment to drive their employees (Sungara Silva & Mendis, 2017). There was an association between the traits of a transactional leader and that of an agentic leader, due to their common

leadership traits, thus one could infer that agentic leadership could potentially influence vigour in employees too (Sugiyama et al., 2016; Wolfram & Gratton, 2014). Therefore, this study measures the influence that both female agentic and communal leadership styles have on an employee's level of vigour toward their work.

Vigour was measured by ascertaining an employee's level of energy, stamina and enthusiasm toward their work. These factors were measured using three items on the UWES-9 scale. These three items are listed below:

- I feel happy when I am working intensely
- I am immersed in my work
- I get carried away when I'm working

(Schaufeli & Bakker, 2004, p. 48)

2.5.1.2. Dedication

Moving onto the emotional connection to work, known as dedication (Geldenhuys, Laba, & Venter, 2014): is referred to an employee's pride for their job, the meaningfulness of their work and the enthusiasm they had toward the organisation (Strom, Sears, & Kelly, 2014). Fostering dedication with employees was vital for optimal organisational performance because dedicated employees strongly identified, and are psychologically involved, with their work and thus performed better than employees who were not dedicated to their work (Geldenhuys, Laba, & Venter, 2014).

Hall (2014) spoke to ways in which a leader could drive dedication amongst their employees, and these included the leader being open and transparent with employees, having the ability to relate to and connect with them on a personal level, ensuring employees felt appreciated and valued, and setting appropriate expectations. If one equated these desired traits with the traits of a communal leader one could identify similarities between the two. Communal leadership, one of the main constructs of this study, related to a leadership style that embraces collaboration, a sense of togetherness, a focus on others, honesty, compassion and equality (Abele & Wojciszke, 2014; Trapnell & Paulhus, 2012). It would thus appear that an association could exist between fostering dedication within employees and that of communal leadership.

Although a potential association between communal leadership and dedication could exist, Hall (2014) also made reference to the importance of a leader setting appropriate expectations with employees to drive dedication. This trait could be likened to that of agentic leadership due to the similarity with agentic traits such as efficiency, achievement and ambition (Abele & Wojciszke, 2014; Trapnell & Paulhus, 2012; Wolfram & Gratton, 2014). The potential associations identified with both agentic and communal leadership supported the need to quantify these associations through this research.

To measure dedication, the UWES-9 scale referred to three items associated to an employee's enthusiasm and pride in their job as well as feeling inspired and challenged while at work (Schaufeli & Bakker, 2004). These three items are listed below:

- I am enthusiastic about my job
- My job inspires me
- I am proud on the work that I do

(Schaufeli & Bakker, 2004, p. 48)

2.5.1.3. Absorption

The final construct of work engagement referred to the cognitive connection an employee had with their job, was also known as absorption (Geldenhuys, Laba, & Venter, 2014). Absorption referred to a happy state of mind where an employee became completely engrossed and immersed in their work, to the point where they could struggle to disengage from it (Strom, Sears, & Kelly, 2014).

Coetzee and Veldman (2016) believed that an employee's level of absorption is dependent on a number of factors including their manager's behaviour and credibility, positive relationships with those around them, the trustworthiness of their manager, the care shown to them and the individual's desire to achieve as well as their need for autonomy. Some of these antecedents could be linked to agentic and communal leadership traits.

From a communal perspective the individual's desire for a trustworthy manager, who cares for them, as well as their desire for positive relationships, could be aligned to those traits exhibited within a communal leadership style. Whereas the individual's

desire to achieve and their need for autonomy could be likened to that of the agentic leadership style. Therefore, this research aimed to identify the association that both agentic and communal leadership had with absorption, and thus work engagement.

There are three items on the UWES-9 scale that were created to measure the construct of absorption. These items are listed below:

- I feel happy when I am working intensely
- I am immersed in my work
- I get carried away when I'm working

(Schaufeli & Bakker, 2004, p. 48)

Wollard and Shuck (2011) viewed the three sub constructs (vigour, dedication and absorption) as individual antecedents to work engagement, thus the antecedents of the sub-constructs would ultimately be antecedents for work engagement in totality. Refer to Table 3 for the antecedents to the three sub-constructs and work engagement as well as their link to communal and agentic leadership.

2.5.2. Antecedents of work engagement

After discussing the individual antecedents of each sub-construct, a list was collated with all antecedents of work engagement. Thereafter this list was divided into antecedents related to the employee and their manager.

Employee

- An employee's own levels of charisma can impact their level of work engagement (Shirom, 2007)
- An employee's level of work engagement is impacted by the number of positive relationships they have in the workplace (Hall, 2014).
- The desire of an employee to be autonomous and to achieve their goals impacts their level of work engagement (Coetzee & Veldman, 2016)
- The power of the employees' position and their ability to control resources can influence their level of work engagement (Shirom, 2007)

Manager

- A manager utilising rewards to drive behaviour can improve an employee's level of work engagement (Shirom, 2007).
- A manager with a transformational leadership style can positively impact an employee's level of work engagement (Shirom, 2007)
- Open and transparent managers who are able to relate, connect, value and appreciate to their employees tend to promote their employee's levels of work engagement (Coetzee & Veldman, 2016; Hall, 2014)
- Managers with the ability to set appropriate expectations may be able to manage their employee's levels of work engagement (Hall, 2014)
- The trustworthiness of the manager, their behaviour and their credibility have an impact on an employee's level of work engagement (Coetzee & Veldman, 2016).

The majority of the antecedents are related to the employee's manager, thus it made sense to analyse the antecedents related to the employee's manager. Most of these antecedents spoke to the way the manager chose to lead their employees thus the manager's leadership style became of interest. These points, along with the desire to add to the discourse of female leadership, drove the desire to focus on the antecedent of the employee's female managers leadership style.

Table 3: Sub-constructs of work engagement

Construct	Sub-construct	Definition	Contributing literature	Antecedents	Outcomes	Association with Agentic and Communal leadership
Work Engagement	**Vigour**	The physical connection to the job. Refers to employee's level of energy, stamina, willingness to exert effort and their ability to tackle challenges	• Coetzee and Veldman (2016) • de Oliveira and da Costa Rocha (2017) • Geldenhuys, Laba and Venter (2014) • Lee and Ok (2016) • Schaufeli and Bakker (2004) • Shirom (2007) • Strom, Sears and Kelly (2014) • Wollard and Shuck (2011)	• Employee's level of charisma • Employee's level of expertise • Power of employee's position • Ability to control resources • Rewards • Manager's transformational leadership style (Shirom, 2007)	• Increases employee's emotional attachment to work • Increases employee's involvement, proactiveness and responsibility toward their work • Increased job satisfaction and productivity • Decreased turnover and absenteeism	• Transformational leadership associated with both vigour and communal leadership; therefore, one could argue that an association between communal leadership and vigour could exist. • Transactional leadership was associated with agentic leadership, and transactional leaders utilised rewards and punishment to drive employees. Therefore, one could infer that an association between agentic leadership and vigour could exist.
	Dedication	The emotional connection to the job. An employee's level of pride for their job, the meaningfulness of their work and the enthusiasm they have toward the organisation.		• Leaders ability to be open and transparent with employee • Employee feels valued and appreciated • Leader sets appropriate expectations (Hall, 2014)		• The ability to be open and transparent, and leaders showing appreciation and ensuring employees feel valued were traits of a communal leader. Therefore, one could infer that a potential association could exist between dedication and communal leadership. • Leaders drove dedication by setting expectations, which could be associated with the agentic leader traits of efficiency and achievement, therefore one could infer that a

					(de Oliveira & da Costa Rocha, 2017; Gelnderhuys, Laba & Venter, 2014; Kim, Kolb, & Kim, 2012; Strom, Sears, & Kelly, 2014; Wu & Cheng, 2016)	potential association exists between dedication and agentic leadership.
	Absorption	The cognitive connection to the job. A happy mindset where an employee is completely immersed and engrossed in their work, to the point where they struggle to disengage.		• Manager's behaviour and credibility • Positive relationships • Trustworthiness of manager • Employees feel cared for • Employees desire to achieve • Employee's need for autonomy (Coetzee & Veldman, 2016)		• Trustworthiness, caring and positive relationships were associated with communal leadership; therefore, one could infer that a potential association existed between communal leadership and absorption. • The employees desire to achieve and be autonomous were aligned to agentic traits thus one could infer that a potential association exists between agentic leadership and absorption.

2.5.3. Dangers of mismanaging work engagement

Wolff (2019) asked if organisations truly understood the antecedents of work engagement, because they continued to struggle to improve engagement amongst employees. He stated that work engagement was achieved when a leadership team's actions aligned to the employees' psychological needs. Leaders had the ability to nurture and build an environment where employees felt valued and motivated, which could drive work engagement, yet they also possessed the power to create unhealthy environments, causing employees to become disengaged (King & Drake, 2018).

Should work engagement not be managed correctly, this placed an organisation in an extremely costly situation. When employees are not engaged with their work, it had been found to increase employee turnover, absenteeism and decrease overall productivity. These impacts are estimated to cost the USA between $450 to $500 billion dollars per year (Gallup, 2013). The work engagement levels within the USA were far higher than the work engagement levels within South Africa, at around 30%, compared to a dismal 9% amongst South African employees (SABPP, 2014). Hence there was a dire need to understand how to effectively manage and promote work engagement in South Africa.

Wolff (2019) identified how an organisation could improve their employees' levels of work engagement and these included a manager's ability to promote and develop their employees' strengths, their ability to ensure employees felt recognised, as well as their ability to listen and consider their employees' input. His list of antecedents to work engagement had one thing in common and that was the leadership ability of the manager. This aligns with the antecedents identified by Shirom (2007), Hall (2014) and Coeztee and Veldman (2016), further affirming the important role that leadership plays in developing work engagement.

2.5.4. Work engagement and leadership

Hawkes, Biggs and Hergety (2017) found that transformational leadership was positively associated with work engagement. This finding supported the many studies that came before it which argued that transformational leadership was an important ingredient when it came to managing work engagement (Avolio, Gardner,

Walumbwa, Luthans, & May, 2004; Gardner, Cogliser, Davis, & Dickens, 2011; Kim, Kolb, & Kim, 2012; Strom, Sears, & Kelly, 2014). By acknowledging the association between leadership and work engagement, it was clear that leadership should be explored further to better understand how best to drive work engagement.

Understanding the type of leadership necessary to drive work engagement was imperative. Transformational leadership had been identified as an effective leadership style to promote work engagement and had an existing association with communal leadership (Rosette & Tost, 2010; Rosette et al., 2016). Communal leadership was typically associated with female leaders, therefore female managers exhibiting a communal leadership style were associated with transformational leadership.

In their analysis of transformational leadership, Griffiths, Roberts and Price (2019) supported this association when they found that female leaders were rated higher, than male leaders. They also found that the leadership traits deemed most desirable were associated with women, whereas the leadership attributes of least importance were associated with male leaders. This was supported by Offermann and Coats (2018) who found that women were found to be more strongly associated with desirable transformational leadership traits, compared to their male counterparts. Thus, female communal leaders had an association with transformational leadership and therefore one could infer a potential association between female communal leaders and work engagement, which the current study aimed to test.

Although the antecedents of the three sub-constructs spoke to transformational and communal characteristics, there were a few that were better aligned with transactional or agentic leadership. It was therefore worthwhile researching the association between work engagement and both female communal and agentic leadership, and ultimately determining the best leadership style to drive work engagement based on the strength of the above associations.

2.6. Demographic Variables

The literature includes a number of findings in reference to demographic variables. These include an individual's age, gender and the tenure an employee has worked at an organisation. Markey (2014) found that the longer an employee is with a

company the less engaged they become. With direct reference to the employees' work engagement and their manager. According to Harter and Adkins (2015) an employees engagement levels can be influenced by their manager by up to 70%. They found that two distinct actions fed into the influence of the manager, specifically communication from the manager as well as having the ability to set clear and distinct goals. Communication tends to fall into the realm of communal leadership whereas setting clear goals and expectations tends to fall into the realm of agentic leadership, therefore it would appear that both agentic and communal leadership styles could influence an employee's levels of work engagement.

From the perspective of age and engagement Schaufeli and Bakker (2004) found a correlation between age and work engagement, showing that as an employee ages they tend to be more engaged. This was supported by Kim and Kang (2016) who stated that as an employee aged, the more engaged they were likely to become.

There are mixed views in literature when it comes to gender and work engagement. Reissova, Simsova and Hasova (2017) found no significant differences between men and women when it came to engagement, whereas Schaufeli and Bakker (2004) found that men scored higher on the sub-constructs of dedication and absorption compared to women, while there was no significant difference when it came to the sub-construct vigour. They did however feel that these differences lacked practical significance due to their being so small.

2.7. Chapter conclusion

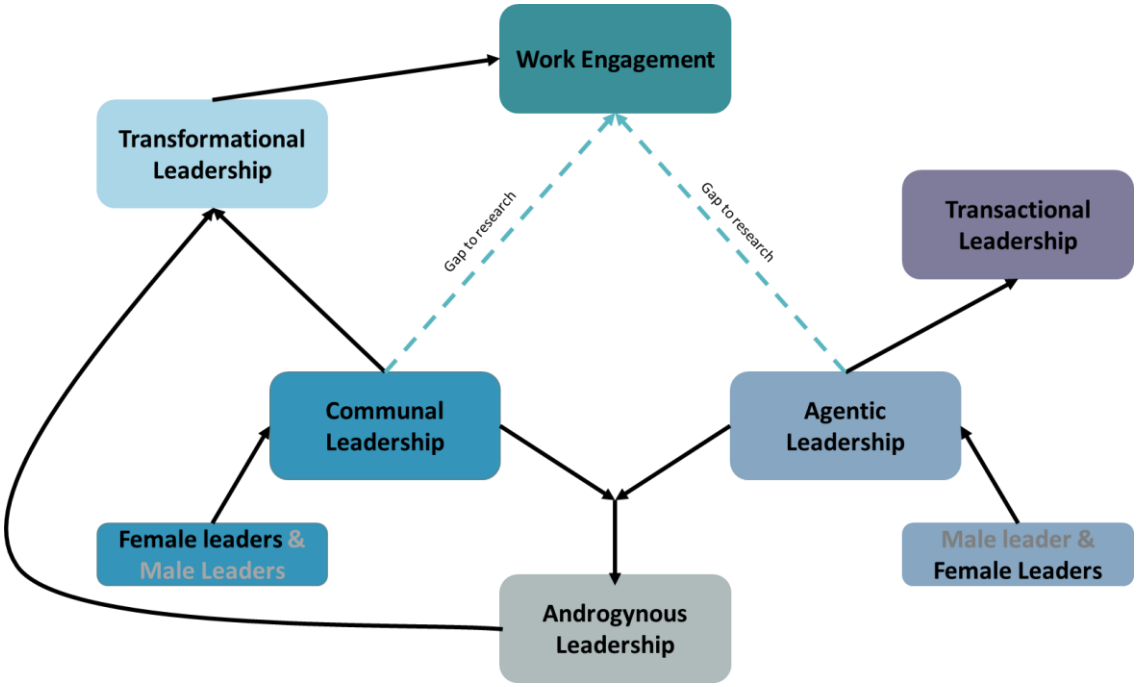
This chapter introduced the constructs of this research study, namely female agentic and communal leadership as well as work engagement. Traditional viewpoints placed agentic leadership as the most appropriate leadership style for top leadership positions within organisations if exhibited by a male leader. Female leaders exhibiting agentic traits were perceived negatively. Over the years, however, feminine or communal leadership has gained traction and has been associated with a successful style of leadership, namely transformational leadership. Despite this, even with the mounting evidence that supported the effectiveness of communal leadership, the gender stereotypes around men being more natural and effective leaders continued

to prevail, and this was seen through the low levels of female representation in senior leadership positions in organisations in South Africa.

The final construct, work engagement, was introduced. The importance of addressing this construct was highlighted through the number of benefits that work engagement brought, which included improved employee performance and increased retention of staff. The need to find ways to drive work engagement was further supported by the extremely low levels of work engagement amongst employees working in South Africa. Work engagement has been associated with transformational leadership, and transformational leadership with communal leadership. Therefore, it could be hypothesised that communal leadership could be an effective tool in managing work engagement. Having said that, all three sub-constructs of work engagement had at least one antecedent related to agentic leadership, for example being driven by rewards or needing clear expectations set out by their manager. Therefore, it could also be hypothesized that female leaders who exhibited agentic characteristics might be effective in managing work engagement too. However, the existing literature suggested a stronger association between female communal leadership and work engagement, compared to female agentic leadership and work engagement, thus bringing about the third hypothesis discussed in chapter 3.

The aim of this research was to identify if female leaders exhibiting communal leadership traits, had a more significant influence on work engagement, compared to female leaders exhibiting an agentic leadership style. As the evidence in favour of female leaders grew, and as organisations moved away from the traditional view of leadership (agentic), the prejudice experienced by women in the workplace, should have decreased. This should in turn have driven female leaders into impactful leadership positions, bringing with them a number of benefits discussed in this chapter, one of which could be improved work engagement levels amongst their employees (Fine & Sojo, 2019). This however has not come to fruition as can be seen by the continued low level of female representation in senior leadership positions.

Figure 3: Current literature model



The current literature model in Figure 3 depicts the associations identified in current literature through the solid black lines. The dotted lines refer to the gap in the literature, namely the association between female communal and agentic leadership with work engagement. Male leaders were greyed out as they not in the scope of this current study.

3. Chapter 3: Research Objectives and Hypotheses

3.1. Introduction

The objective of this research was to identify whether female leaders exhibiting agentic leadership and communal leadership have an influence on work engagement and should the associations exist, to establish the most effective leadership style between the two to manage and promote work engagement.

Work engagement was selected as a focus for this research due to the associated benefits of this construct, including increased emotional attachment to one's work, increased involvement, proactiveness and responsibility toward one's work and decreased turnover and absenteeism. The awareness of these beneficial outcomes as well as the low levels of work engagement amongst employees in South Africa (SABPP, 2014), drove the need to understand how best to promote work engagement. The existing literature identified leadership as an antecedent to work engagement, thus this research chose to focus on leadership and more specifically female leadership.

Female leadership was chosen as a focus for this research due to the high levels of gender inequality in businesses in South Africa. The aim of this research is to contribute to the discourse of female leadership (Grant Thornton, 2018a; Grant Thornton, 2018b). The higher the number of female leaders, the better the chance of growing an association between females and leadership, thus diminishing the perceived incongruence as discussed in Role Congruity Theory (Eagly & Karau, 2002; see also Zheng, Kark, & Meister, 2018). Further to this, higher female representation in senior leadership positions has been seen to manifest into a number of benefits, including an improvement in organisational value (Griffiths, Roberts, & Price, 2019; Hoobler et al., 2018; Isidro & Sobral, 2014). Agentic and communal leadership were selected due to their explicit association with gender, which aligned with the objective of focusing on female leadership.

Figure 4:Visual representation of research objectives

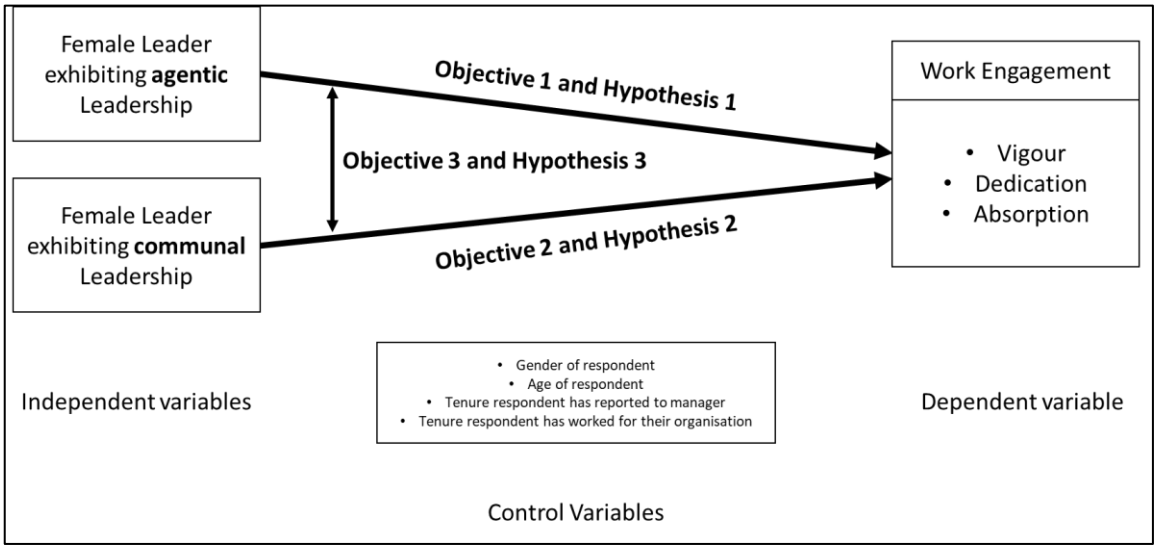


Figure 4 highlights the objectives that this research attempted to resolve. The arrows represent the relationships between the constructs that were tested. For the purpose of this research, three objectives, and subsequently three hypotheses were analysed to identify the associations between female communal and agentic leadership with work engagement

3.1.1. Control Variables

This study took several control variables into account, including the gender of the respondent, the age of the respondent, the tenure of reporting to their current manager, and their tenure at their current organisation.

3.1.2. Research Objectives

- Objective 1 was to identify the level of influence female leaders exhibiting agentic leadership had on work engagement.
- Objective 2 was to identify the level of influence female leaders exhibiting communal leadership had on work engagement.
- Objective 3 was to identify which leadership style had a stronger association with work engagement.

3.1.2.1. Objective 1 and hypothesis 1

Due to there being three sub-constructs within work engagement, there were three sub-hypotheses to solve for objective 1. Refer to Figure 5.

Figure 5: Objective 1 and Hypothesis 1

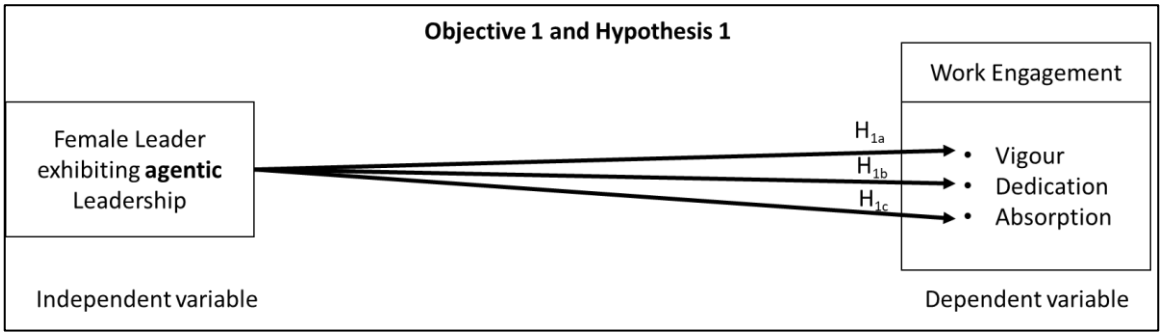


Figure 5 depicts objective one and the subsequent hypotheses, namely H1a, H1b and H1c, as stated in the section that follows.

Hypothesis H1

H_0: No relationship exists between female leaders exhibiting agentic leadership and their employee's work engagement.

H_1: A relationship exists between female leaders exhibiting agentic leadership and their employee's work engagement ($H_{1a:}$ Vigour; $H_{1b:}$ Dedication, $H_{1c:}$ Absorption).

3.1.2.2. Objective 2 and hypothesis 2

Due to there being three sub-constructs within work engagement there were three sub-hypotheses to solve for objective 2. Refer to Figure 6

.

Figure 6: Objective 2 and Hypothesis 2

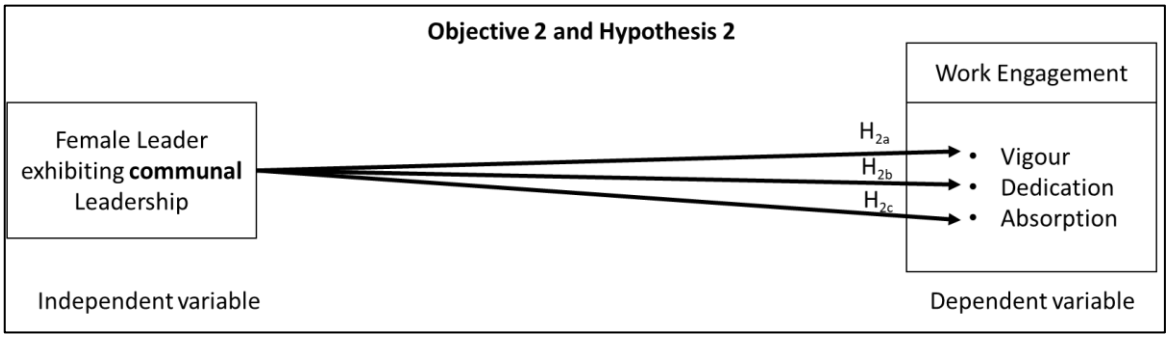


Figure 6 illustrates objective 2 and the subsequent hypotheses, namely H2a, H2b and H2c, as explained in the section that follows.

Hypothesis H2

H_0: No relationship exists between female leaders exhibiting communal leadership and their employee's work engagement.

H_2: A relationship exists between a female leader exhibiting communal leadership and their employee's work engagement ($H_{2a:}$ Vigour; $H_{2b:}$ Dedication, $H_{2c:}$ Absorption).

3.1.2.3. Objective 3 and hypothesis 3

Due to there being three sub-constructs within work engagement, there will be three sub-hypotheses to solve for objective 3. Refer to Figure 7.

Figure 7: Objective 3 and Hypothesis 3

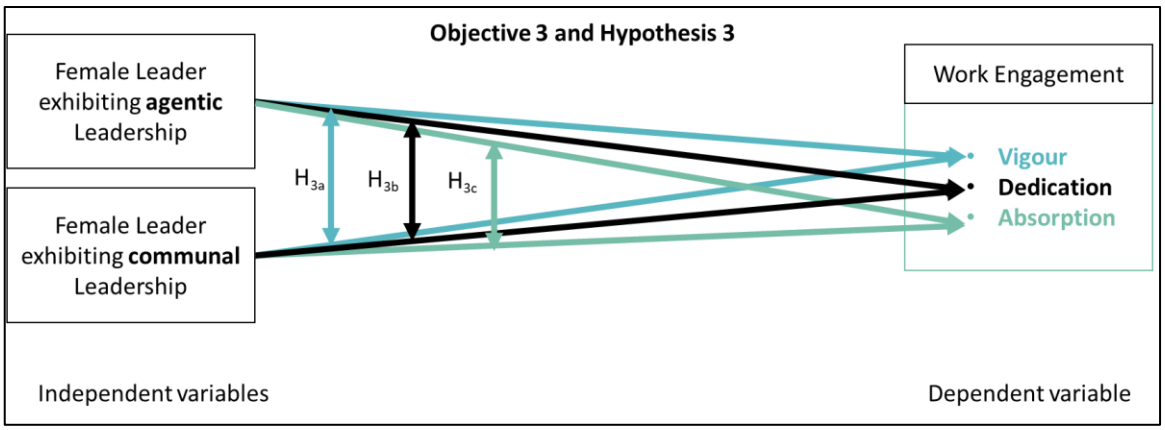


Figure 7 shows objective 3 and the subsequent hypotheses, namely H3a, H3b and H3c, as explained in the section that follows.

Hypothesis H3

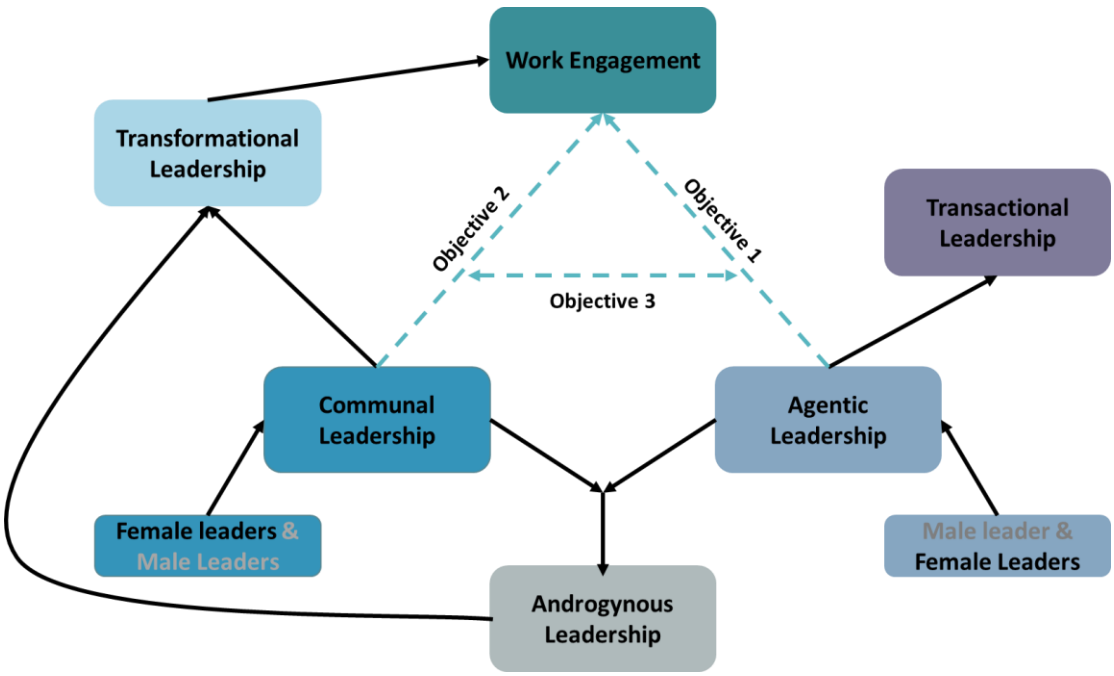
H_0: A female leader exhibiting communal leadership does not have a stronger association with work engagement, compared to a female leader exhibiting agentic leadership.

H_3: A female leader exhibiting communal leadership does have a stronger association with work engagement, compared to a female leader exhibiting agentic leadership. ($H_{3a:}$ Vigour; $H_{3b:}$ Dedication, $H_{3c:}$ Absorption)

3.2. Conceptual framework

The image below represents the conceptual framework that was created through analysing the existing literature.

Figure 8: Conceptual framework based on existing literature



The conceptual framework based on existing literature seen in Figure 8 illustrates the gap in the literature which is addressed through the three research objectives.

Figure 9: Theoretical framework

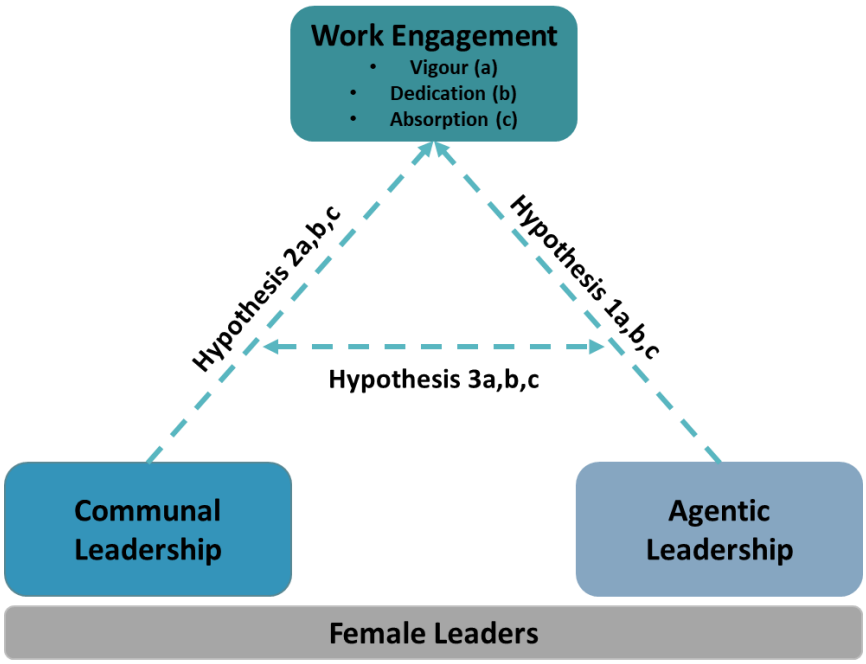


Figure 9 illustrates the gap in the literature that this research aimed to resolve. The objectives were addressed through three hypotheses, with three sub-hypotheses each.

3.3. Conclusion

Three hypotheses, with three sub-hypotheses each, were identified to analyse the relationship between female leaders exhibiting communal and agentic leadership and work engagement. A conceptual framework was developed from existing literature and the objectives and hypotheses were introduced to the framework. The next chapter of this paper will address the chosen methodology for this research study.

4. Chapter 4: Research methodology

4.1. Research design

The philosophy or paradigm chosen for this study was that of positivism. Positivism centres on the idea that true knowledge can only be derived from science. This philosophy states that the social world is best investigated through a framework of different methods, techniques and procedures used in natural sciences (Chilisa & Kawulich, 2012). This philosophy was chosen due to the greater degree of objectivity or certainty it offers by virtue of the statistical measures employed. It was selected as this study aimed to identify whether female leaders exhibiting agentic or communal leadership traits would have an influence on work engagement, with the aim of identifying which leadership style (agentic vs communal) had a stronger association with work engagement.

This study followed an explanatory research design as it attempted to identify which leadership style had a stronger association with work engagement. Explanatory research moves beyond a descriptive approach, as it moves away from describing a phenomenon to attempting to explain the phenomenon (Saunders & Lewis, 2018).

A deductive research method was chosen for this study as it sets out to explain casual relationships between the variables, in this case between female leaders exhibiting agentic leadership or communal leadership, and work engagement. A deductive approach refers to starting the research in a general manner and moving towards specifics. Deductive research has a top-down approach, working with an existing theory, creating hypotheses and gathering data to add to the existing research (Soiferman, 2010). This study utilised the deductive approach as it started with existing theory around agentic and communal leadership and work engagement. Using the existing literature, a number of hypotheses were created. These hypotheses were tested using the data collected (Saunders & Lewis, 2018). A deductive approach is often paired with quantitative methodology because this methodology uses scientific principles to measure one's reality (Soiferman, 2010).

A mono-method was selected as all data for this study was gathered by a single method, namely an online questionnaire (Saunders & Lewis, 2018). Structured online self-completed questionnaires were utilised to allow for a maximum reach of participants. Online questionnaires allow for a cost-effective method of collecting

representative data. The questionnaire was made up of standardised questions which were sent out electronically via email and social media platforms, namely Facebook and LinkedIn (Saunders & Lewis, 2018). The online questionnaire assisted in getting as many responses as possible, to create a sample that could best represent the population of all employees working in South Africa for a female manager in a senior position or above.

A pilot questionnaire was sent to a small sample group of 22 individuals in order to test for any problems or weaknesses, and to allow for any necessary editing prior to formally sending the questionnaire out (Kothari, 2004, p. 101). The respondents matched the research target population of individuals working in South Africa, reporting to a female manager in a senior position or above. The feedback received led to changes that included the correction of spelling mistakes, the removal of a duplicate question and the removal of images, as they had confused the respondents (Kothari, 2004). The respondents completed the pilot questionnaire in an average of 4 minutes.

To align with the mono-method quantitative approach chosen, a cross-sectional time horizon was chosen. A questionnaire was sent out once to gather and collect information from a set of respondents. Another reason for selecting a cross-sectional time horizon was time constraints (Saunders & Lewis, 2018).

A monomethod utilises only one type of methodology, which this case was quantitative (Azorin & Cameron, 2010). A quantitative enquiry mode is usually selected when the researcher aims to confirm hypotheses related to a certain phenomenon (CIRT, n.d.). The hypotheses for this study are found in section 3.1.2.

To support this, several studies were examined and those with a similar structure and purpose to this study tended to utilise a quantitative enquiry mode, including a study conducted in Australia around workforce diversity management (Davis, Frovola, & Callahan, 2016). For these reasons a quantitative enquiry mode was selected.

4.2. Population and unit of analysis

A population, in research terms, refers to the complete set of the members within a group (Saunders & Lewis, 2018). This research study asked the question around which leadership style a female leader should exhibit in order to have an effective, positive influence on work engagement. Therefore, the population for this research was all employees working in South Africa, reporting to a female manager with a specific focus on employees working in South Africa.

The reason for focusing on employees reporting to female senior managers and above, was the literature stating that agentic leadership was favoured for top leadership positions in an organisation (Abele, 2003; Ergle, 2015, Paustian-Underdahl, Walker, & Woehr, 2014; Rosette & Tost, 2010; Rosette et al., 2016), and that this had a direct impact on the number of females in senior leadership roles. As individuals move through the ranks of employment the level of female representation begins to decline the higher up one climbs (refer to Figure 1).

This research aimed to identify if female leaders exhibiting a communal and agentic leadership style have an impact on work engagement. The unit of analysis was the individual employees working in South Africa, reporting to a female manager in a senior position or above.

4.3. Sampling method and size

The sampling method that was utilised was purposive, non-probability sampling. Non-probability sampling is selected when a complete list of the total population is not readily available (Saunders & Lewis, 2018). It would be extremely difficult, perhaps impossible, to gather a list of all employees working in South Africa reporting to a female manager in a senior position or above. Therefore, non-probability sampling was selected.

Purposive sampling was chosen because the online questionnaire began with screening questions to ensure that the correct type of individuals could be identified as appropriate respondents to ensure the sample was representative. The researcher created the screening questions to determine whether an individual would

be representative, and therefore the representation was subjective (Barreiro & Albandoz, 2001).

The online questionnaire, which was chosen to allow for the high number of responses needed, was sent out to relevant groups and individuals, who then choose whether to respond or not. This is called volunteer sampling (Saunders & Lewis, 2018). Those individuals were requested to send the questionnaire on to other individuals who matched the sample i.e. other individuals working in South Africa reporting to female managers in a senior position or above and this is referred to as snowball sampling (Saunders & Lewis, 2018). In line with the purposive sampling method chosen, all individuals who responded to the questionnaire answered three screening questions to ensure they were representative. The screening questions included whether the respondent worked in South Africa and reported to a female manager in a senior position or above.

When calculating the appropriate sample size Wilson, VanVoorhuis and Morgan (2007) state that for regression analysis, such as this study, a minimum of 50 participants would be required. They further recommend that there should be at least 30 participants per variable. With three variables in this study the sample size according to this should consist of at least 90 participants. To approach the sample size from a conservative perspective a target sample size of 150 respondents was chosen.

4.4. Data collection process

The questionnaire was set up using an online survey tool called Survey Monkey. Prior to sending out the questionnaire a pilot questionnaire was sent to 22 respondents, as discussed in section 4.1, page 59. Once the pilot was concluded and the appropriate changes were made to the questionnaire, a link to the final questionnaire was distributed via social platforms, such as LinkedIn, Facebook, email and WhatsApp. The link was distributed to the author's personal networks, with a request for the respondents to forward the link to their personal networks and connections, in line with snowball sampling, as discussed in section 4.3. The questionnaire contained screening questions to ensure the correct individuals participated in the questionnaire, as well as other relevant information, such as the

topic and purpose of the research (Saunders & Lewis, 2018). The researcher sent reminders via the same channels, of the closing date, to ensure as many responses as possible.

A week after releasing the questionnaire an error was picked up. There should have been three screening questions but only two had been included and due to this the 100 responses that had already been collected had to be discarded and the questionnaire was updated and sent out again.

Each respondent was presented with a cover page explaining what the purpose of the research was and that the research was entirely voluntary. They were advised that they could exit at any point with no consequences. The cover page stated that should the individual choose to continue they were providing the researcher with permission to use the data from their responses. Along with this, the respondents were advised that the data would remain completely anonymous and confidential, as all data was collected and reported without identifiers. The cover letter finished by thanking all potential respondents for their time and effort in assisting with this study. Refer to Appendix 1 for the online questionnaire. The online questionnaire took an average of 7 minutes to complete and was live for a period of three weeks.

4.5. Data coding

Prior to entering the responses in the statistical software, the data was coded numerically. A codebook was created as can be seen in Appendix 2. The demographic items were coded as nominal data. Likert scales were used for both the AC-IN scale and the UWES-9 scale, and the response were coded as scale (interval) data.

There were 15% of responses that were partially complete, leaving over 50% of the questionnaire unanswered. According to Hair, Black, Babin and Anderson (2010) variables with less than 15% missing data can be deleted, especially if the data missing relates to the dependent variable; in this case all missing data belonged to the dependent variable of work engagement. This was because all of questions that were not completed belonged to the scale measuring work engagement. Thus the 23 partially completed responses were deleted.

4.6. Measurement instrument

The online questionnaire consisted of two tried and tested scales. The questionnaire was completed by the respondents who evaluated their managers' leadership style, through the AC-IN scale (Abele et al., 2016), and their own level of work engagement through the UWES-9 (Schaufeli & Bakker, 2004). Both scales utilised Likert scales to record the responses. The AC-IN scale, which measured the respondent's managers leadership style (agentic vs communal) utilised a 5-point Likert scale whereas the UWES-9, which measured the respondent's level of work engagement, utilised a 7-point Likert scale (Abele et al., 2016; Schaufeli & Bakker, 2004).

The screening questions made up the first three questions, followed by two demographic questions on gender and age. The next two questions related to the respondent's tenure with their manager and organisation. The AC-IN scale had 20 questions, followed by nine questions from the UWES-9, which came to a total of 36 questions in the questionnaire.

4.6.1. Agentic and communal leadership scale

Agentic and communal leadership are styles of leadership that are explicitly associated to gender. The agentic leadership style is most commonly associated with male leaders and this type of leadership tends to be described as efficient, goal-oriented, assertive and status driven with a strong focus on self (Abele & Wojciszke, 2014; Abele & Wojciszke, 2007; Rosette & Tost, 2010, Rosette et al., 2016).

Communal leadership has been frequently associated with female leaders and encompasses feminine traits such as kindness, collaboration and sympathy toward others (Rosette et al., 2016). A communal leader places focus on the importance of relationships, open communication and their impact on organisational change (Abele & Wojciszke, 2014).

The AC-IN scale was utilised in this study and contained 20 questions. These questions were placed on a 5-point Likert scale and asked respondents to indicate how the characteristics applied to their manager. The items included how friendly or competent they found their manager. This scale was chosen because it focused solely on the agentic and communal constructs and there were fewer questions on this scale compared to the alternative, as discussed in Chapter 2: Literature review.

Below are sample items from the questionnaire for the agentic and communal leadership constructs.

Agentic Leadership construct sample items:

Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Have leadership qualities	Somewhat have leadership qualities	Neither	Somewhat have no leadership abilities	Have no leadership abilities at all

Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very capable	Somewhat capable	Neither	Somewhat little capable	Little capable

(Abele et al., 2016)

Communal Leadership construct sample items:

Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very just	Somewhat just	Neither	Somewhat not just	Not very just

Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very considerate	Somewhat considerate	Neither	Somewhat inconsiderate	Very inconsiderate

(Abele et al., 2016)

4.6.2. Work engagement scale

Work engagement refers to an energetic mindset that is broken down into three sub-constructs, namely vigour, dedication and absorption (Schaufeli & Bakker, 2004). Vigour is related to a physical connection, dedication to an emotional connection and

absorption to a cognitive connection, to one's work (Kahn, 1990; Geldenhuys, Laba, & Venter, 2014).

Work engagement brings several benefits including increased emotional attachment to the job which subsequently leads to increased involvement, proactiveness and responsibility toward deliverables (de Oliveira & da Costa Rocha, 2017). Further research studies also found that increased work engagement leads to increased job satisfaction, decreased turnover and absenteeism (Kim, Kolb, & Kim, 2012; Strom, Sears, & Kelly, 2014; Geldenhuys, Laba, & Venter, 2014).

This study used the condensed version of the Utrecht Work Engagement Scale (UWES) created by Schaufeli and Bakker (2004), namely the UWES-9. The UWES-9 uses a 7-point Likert scale and asks respondents to rate their level of work engagement through nine questions. This scale was chosen as it is a widely accepted scale that measures the construct of work engagement.

Below are sample items from the questionnaire for the work engagement construct (Schaufeli & Bakker, 2004, p.48).

At my work, I feel bursting with energy

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

At my job, I feel strong and vigorous

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

4.7. Data Analysis

During the data analysis of this study several tests were run, which included Cronbach's alpha to test for reliability, Pearson's 2-tailed correlation, confirmatory

factor analysis and exploratory factor analysis to test for validity, and finally multiple regression to test the three hypotheses.

4.7.1. Validity and Reliability

In order to ensure the quality of the research, the reliability and validity of the scales were tested for. Validity refers to whether the method of data collection does in fact measure the variable it was meant to measure. Reliability refers to whether the same results would be obtained, should the study be conducted again (Hair et al., 2010).

Validity consists of internal and external validity where internal validity speaks to whether a study can be replicated, and if the same results would be obtained and external validity refers to whether the study is transferable to other groups (Mohajan, 2017). Further to these, three types of validity are identified, namely content validity, construct validity and criterion validity. Content validity refers to the instrument measuring the entirety of a construct. Construct validity refers to whether the instrument has measured what it was intended to measure, and finally criterion validity speaks to the relatability of the instrument to other instruments measuring similar constructs (Heale & Twycross, 2015).

The type of validity that was tested for in this study was construct validity, which is made up of convergent validity and discriminant validity. Convergent validity is a type of construct validity that tests whether two measures that are intended to measure the same construct are doing so. Conversely, discriminant validity ensures that measures that should be unrelated are indeed unrelated. It was necessary to test for both types of validity to ensure excellent construct validity (Heale & Twycross, 2015).

To determine validity of the chosen scales, confirmatory factor analysis (CFA), exploratory factor analysis (EFA) and a Pearson 2-tailed correlation were used. The Pearson 2-tailed correlation was utilised to test for construct validity, CFA was utilised to test for convergent validity and EFA was utilised to test for convergent and discriminant validity. The Pearson's 2-tailed correlation was run on each construct. If an item had a significant correlation (i.e. a p-value of less than 0.05) then the item, or question, was valid (Swank & Mullen, 2017).

In order to run a CFA an SPSS plug-in called AMOS, was required. SPSS is IBM's commercial statistical package. For a CFA to confirm convergent validity, the average variance explained (AVE) must be greater than 0.5 (Awang, 2015). The AVE was greater than 0.5 for each construct, therefore convergent validity was confirmed by the CFA.

The model fit was also examined using the Confirmatory Fit Index (CFI), root mean square error of approximation (RMSEA), and the chi-square divided by the degrees of freedom (Chisq/df), as these are commonly used indices when testing for model fit; it is recommended to use at least one index per category of model fit (Awang, 2015). CFI belongs to the category called incremental fit, RMSEA belongs to the category called absolute fit and the Chisq/df belongs to the category called parsimonious fit (Awang, 2015).

The threshold for these indices, as well as the results of the three constructs can be found in Table 4, Table 12 and Table 18 in chapter 5. Due to poor model fit, an EFA was run to test for discriminant and convergent validity (Beavers, Lounsbury, Richards, Huck, Skolits, & Esquivel, 2013).

The concept behind EFA is to work through the data and decrease the number of variables at play. All items on the scales were tested and those that scored highly through the EFA were deemed valid and were kept in the scale (Costello & Osborne, 2005). Prior to conducting the EFA, the data was tested using the Kaiser Meyer Olkin (KMO) and the Bartlett's Test of Sphericity to ensure the data was suited for factor analysis. The KMO result was greater than 0.6 and the results from the Bartlett's Test of Sphericity was statistically significant (Wen, Quacoe, Quacoe, Appiah, & Ada Danso, 2019), therefore the data was suited for factor analysis.

Principle component analysis was used with an eigenvalue of one (Hair et al., 2010). The agentic leadership construct loaded on two factors, which were renamed agentic-capacity and agentic-aware. The communal leadership and work engagement constructs loaded on one factor each. The factor loadings of the variables, found in the component matrices, must be above 0.4. Should a factor loading fall below 0.4 that variable would need to be removed and the EFA would

need to be run again (Hair et al., 2010). The factor loadings for all variables were above 0.4 for all three constructs, therefore all variables were included.

Another EFA was run (Appendix 12) were all items from the three constructs were included to check if the items loaded onto the same constructs as the individual EFA's (Table 7, Table 15 and Table 21). There was misalignment with the initial EFA's and the original study where the AC-IN scale was created (Abele et al., 2016) regards to a single item (Pressure(A)) and therefore a decision was made to remove this item. The details of these results and decisions are discussed in section 5.5.4.

Reliability refers to whether the same results would be obtained, should the study be conducted again (Saunders & Lewis, 2018). Heale and Twycross (2015) explain that reliability consists of attributes including homogeneity, stability and equivalence. They state that homogeneity refers to all the items on the scale measuring one construct. Stability refers to the ability for the study to be redone and to achieve the same results. Finally, equivalence refers to the instrument being used across different users and different forms and still remain consistent. The Cronbach's alpha was utilised to test the reliability, and if the questions measured the same construct. The Cronbach's alpha coefficient was above 0.7, therefore this implies reliability (Hair et al., 2010).

Following the removal of the item related to pressure a further reliability test was conducted on agentic-confidence to confirm the reliability of this construct post the removal of the item. The Cronbach's alpha was found to less than 0.7 for the updated agentic-confidence construct was therefore found to be unreliable. The agentic-confidence construct was thus excluded from the regression analysis as discussed in section 5.5.4. All of the validity and reliability results are discussed in detail in chapter 5.

Respondents were advised that the anonymity and confidentiality of the responses were of the utmost importance. The anonymity and confidentiality of the results could lead to more honest responses from the respondents, and therefore all data was reported without identifiers.

4.7.2. Multiple Regression

Multiple linear regression was utilised to determine the association that the two independent variables (agentic and communal leadership) had with the dependent variable (work engagement). When utilising a multiple regression to test an association between interdependent and dependent variables, there are several key assumptions that must first be met (Hair et al., 2010). The assumptions of multiple regression are linearity, multicollinearity, normality and homoscedasticity.

4.7.2.1. Assumptions of multiple regression

Linearity would be assessed through the creation of a normal probability scatter plot to identify the degree of linearity between the variables. This check allows the researcher to identify whether the relationship is positive or negative, to identify the strength of the relationships and if there are any outliers (Saunders & Lewis, 2018). The normal probability scatterplot, that can be found in Appendix 3, illustrates a positive linear relationship existed, and that the scatterplot follows a straight-line relationship (Hair et al., 2010) therefore the linearity assumption was met.

Assumption number two refers to multicollinearity. This would happen if the agentic and communal leadership styles (independent variables) are highly correlated to each other. If this were to happen it would show that the multiple regression model would not be reliable (Saunders & Lewis, 2018). There should be little to no multicollinearity between the independent variables. Hair et al. (2010) state that a tolerance value greater than 0.10 and a VIF value less than 10 would mean that no multicollinearity is present between the independent variables. The tolerance value and VIF were within the threshold for each construct, and therefore this assumption was met, as seen in Table 26 in Chapter 5.

Normality refers to the variables being normally distributed (Hair et al., 2010). Appendix 3 depicts the histogram that illustrates bell-shaped curved graph implying normality; thus, this assumption was met. Furthermore, skewness and kurtosis were also examined and are presented in chapter 5.

The final assumption is that of homoscedasticity. This refers to the data values being scattered to a similar extent (Hair et al., 2010). The scatterplots in Appendix 3 shows that the assumption of homoscedasticity was met.

There were three hypotheses that were tested, with three sub-hypotheses per hypothesis to test for the sub-constructs of work engagement, vigour, dedication and absorption. These hypotheses were tested through multiple regression.

This study made use of a hierarchical multiple regression, at a 95% confidence interval, to examine the three hypotheses. A significance level of 0.05 was used, which means that a relationship is viewed as significant should the p-value fall below 0.05. Multiple regression was chosen because this test predicts a dependent variable (work engagement) based on more than one independent variable (agentic leadership and communal leadership); further, this test would assist in identifying the prediction capabilities of the independent variables on the dependent variable (Wegner, 2017).

Hypothesis one examined the relationship between the agentic leadership of an employee's female manager and the level of work engagement of that employee. Hypothesis two examined the relationship between the communal leadership of an employee's female manager and the level of work engagement of that employee. The final hypothesis examined which leadership style of the female managers had a greater association with the employee's level of work engagement.

4.8. Limitations of the methodology

This research study has a number of limitations including having only measured a sample of the population. This may have led to limited levels of representation. Due to time constraints it was conducted as a cross-sectional study, and this could result in a snapshot of the respondents' perceptions, which means the results could differ over time if the study were to be redone in the future.

Due to the nature of a cross-sectional survey all data was collected from the same respondents at the same time. This could have led to Common Method Bias (CMB) and therefore a Harman's single test was utilised to test for this (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). A Harman's single factor test was run with all

the constructs, with a single factor extracting 45.124% of total variance. Because this is below 50% a threat of CMB does not exist (Eichhorn, 2014).

Non-probability sampling was utilised and due to this, sections of the population did not have the opportunity to partake in the study. Further to this, snowball sampling was used to increase the number of respondents. This sampling technique could have led to individuals sharing the questionnaire with other individuals who are very similar to them, thus leading to similar results.

Although a number of reminders to complete the questionnaire were sent out via the same channels used to send the questionnaire, there was inevitably a group of individuals who failed to respond. Due to the lost information from these non-respondents a possible bias exists called a non-response bias. This bias was not tested for and is thus a limitation for this study (Sheikh & Mattingly, 1981).

4.9. Conclusion

The chapter detailed the methodology deployed. Questionnaires were used to collect data on female managers' leadership styles, according to their employees, and those employees' levels of work engagement. Validity of the scale was tested using a Pearson's 2-tailed correlation, CFA and EFA. Prior to running the factor analysis, the KMO and Bartlett's test of sphericity were run to ensure that factor analysis was feasible. The reliability of the scales was tested using Cronbach's alpha. Finally, multiple regression analysis was chosen to test the three hypotheses. The following chapter provides the results of the data analysis conducted.

5. Chapter 5: Results

5.1. Introduction

This chapter presents quantitative results based on the methodology set out in chapter 4. The intention of this study was to identify the relationships between female agentic and communal leadership with that of work engagement. The descriptive results are presented per construct and finally the three hypotheses are tested.

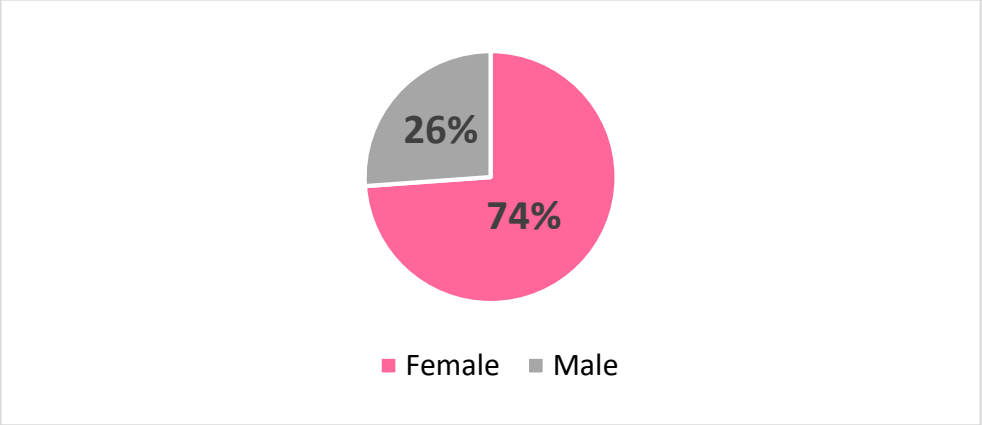
5.2. Data editing and response

A total of 224 questionnaires were answered during the period of data collection. Of those responses 170 passed the three screening questions, regarding if they lived in South Africa and if they reported to a female manager in a senior position or above. Out of those 170 responses there were 23 that were partially complete, leaving over 50% of the questionnaire unanswered. These responses were removed from the dataset. The remaining 153 responses were complete, valid and usable. The completed response rate was 68%.

5.3. Sample description

Prior to the scale specific questions being asked there were a few demographic and general information questions asked, namely the respondent's gender, age, tenure they had worked at their organisation and their tenure with their current manager.

Figure 10: Gender distribution of sample



The figure above (Figure 10) shows that 74% of respondents were female, with males accounting for 26% of the sample.

Figure 11: Age distribution of sample

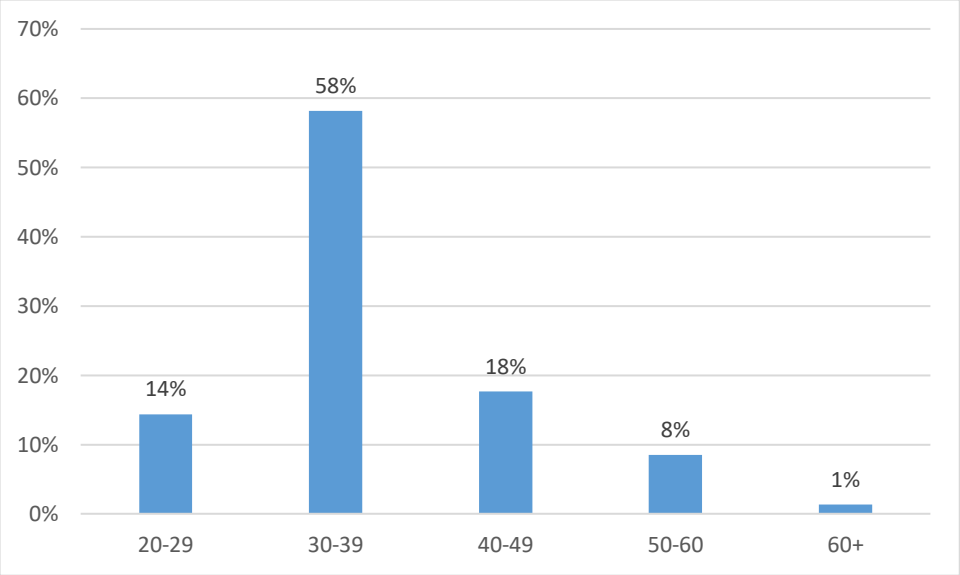
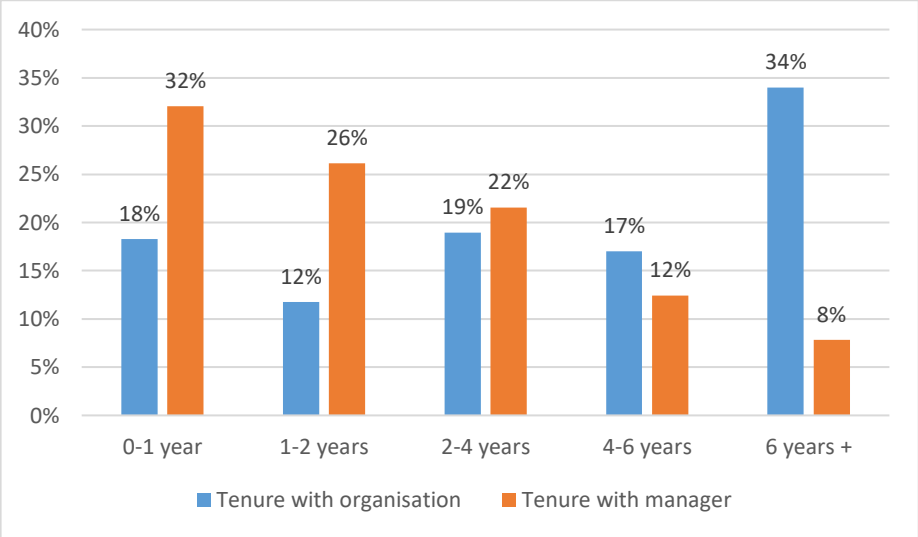


Figure 11 represents the ages of the sample, with 14% within the 20-29 year-old age bracket, 58% in the 30-39 year-old age bracket, 18% in the 40-49 year-old age bracket, 8% in the 50-60 year-old age bracket and finally 1% in the 60 plus age group. The graphs illustrate that 72% of the respondents were younger than 40 years old.

The respondents were then asked how long they had worked at their current organisation and how long they had reported to their current manager.

Figure 12: Respondents tenure with the organisation and their manager



With regards to the respondent's tenure with their organisation, Figure 12 displays that 18% of individuals worked for their organisation for less than one year, 12% for one to two years, 19% for two to four years, 17% for four to six years and at 34%, the majority of respondents, had worked for their organisations for over 6 years. A total of 70% of respondents had worked for their organisation for more than two years.

From the perspective of the respondent's tenure with their manager, Figure 12 illustrates that the majority, at 32%, had reported to their manager for less than a year, 26% for one to two years, 22% for two to four years, 12% for four to six years and 8% of the respondents for over six years. A total of 80% of respondents had reported to their manager for 4 years or less.

5.4. Agentic and communal leadership

5.4.1. Validity of the AC-IN scale – Agentic leadership construct

As discussed in chapter 4, validity refers to whether the method of data collection measures the variable it intended to measure (Saunders & Lewis, 2018). A Pearson's correlation was utilised to test for Construct validity. Convergent validity was tested through a CFA and EFA, and discriminant validity was also tested through EFA. Validity for each construct was measured separately.

A Pearson's correlation was run for the first construct, agentic leadership, and most items were found to be valid due to their p-value being less than 0.05. The item testing for assertiveness was explained through the items testing for capability, pressure, competence and efficiency, due to their p-values being above 0.05 and therefore the item referring to assertiveness was removed, and the correlation was run again. The item referring to assertiveness was subsequently removed from all tests. Once the correlation was run again all remaining items were found to be valid. Thus, construct validity was confirmed. Refer to Appendix 4 for the agentic leadership Pearson's correlation outputs version 1 (with assertiveness item) and version 2 (without assertiveness item).

A CFA was run to test for convergent validity. When testing for convergent validity using a CFA, the AVE must be greater than 0.5. For the agentic leadership construct, the AVE was calculated at 0.536. Refer to Appendix 7 for the CFA for the agentic leadership construct. Prior to convergent validity being confirmed, the model fit of the CFA was examined through three indices, namely, CFI, RMSEA and Chisq/df. Refer to Table 4 for the thresholds of the indices and the indices of the agentic leadership construct.

Table 4: Model fit indices for agentic leadership

Model Fit Category	Index	Threshold	Agentic Leadership
Absolute fit	RMSEA	<0.08	**0.147**
Incremental fit	CFI	>0.90	**0.892**
Parsimonious fit	Chisq/df	<3.0	**4.29**

*Chi-square = 115.5970; df = 27

Table 4 displays that the threshold for the RMSEA index is below 0.08, whereas the agentic leadership construct RMSEA was 0.147, far above the threshold. The CFI threshold was above 0.90, but the agentic leadership construct had a CFI of 0.892, which fell below the threshold. Finally, the Chisq/df index threshold was below 3.0 and the agentic leadership construct CFI was 4.29, which lay above the threshold. For the agentic leadership construct, the indices did not meet the thresholds therefore there was poor model fit and an EFA had to be run.

Prior to conducting the EFA, in order to determine the feasibility for a factor analysis, the KMO (Kaiser-Meyer-Olkin) index and the Bartlett's Test of Sphericity were run. For factor analysis to be feasible the KMO result should be greater than 0.6 and the results from the Bartlett's Test of Sphericity should be statistically significant as discussed in chapter 4.

Table 5: KMO and Bartlett's Test of Sphericity for agentic leadership

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.903
Bartlett's Test of Sphericity	Approx. Chi-Square	839.349
	df	36
	Sig.	.000

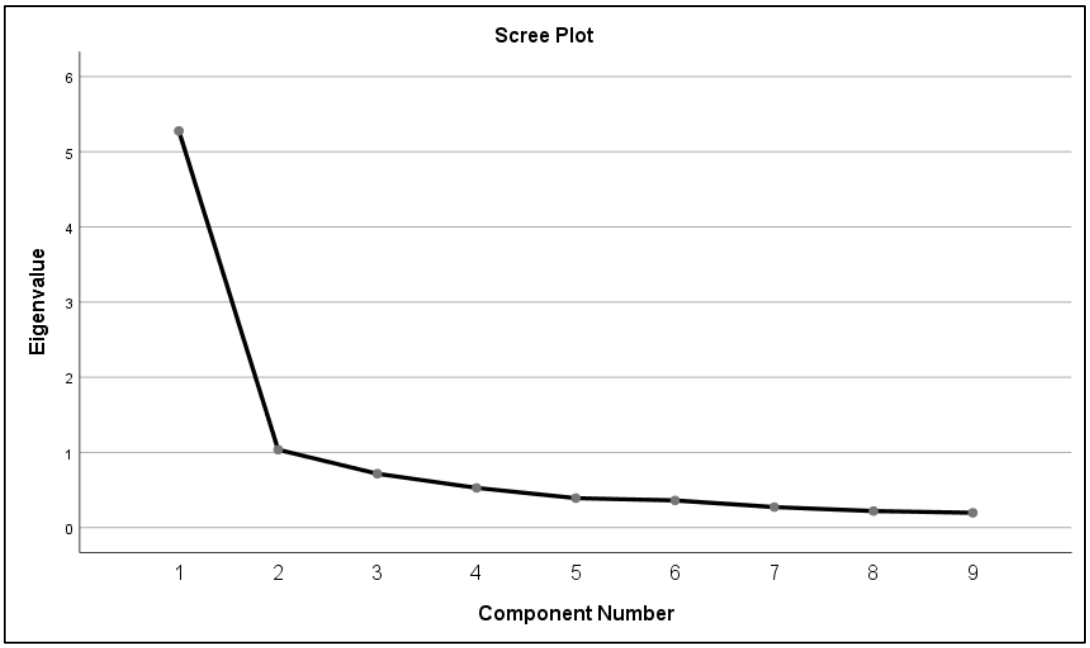
Table 5 displays a KMO result of 0.903 and the Bartlett's Test of Sphericity as significant thus factor analysis was applicable for the agentic leadership construct.

Table 6: Total variance explained agentic leadership

	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	5.277	58.629	58.629
2	1.036	11.511	**70.140**
3	.716	7.957	78.097
4	.528	5.870	83.967
5	.391	4.349	88.316
6	.361	4.016	92.332
7	.273	3.028	95.360
8	.221	2.451	97.811
9	.197	2.189	100.000

Table 6 portrays the principle component analysis (PCA) that indicates how each component explains the total variance. It can be seen that component one and two account for 70.14% of the total variance with an eigenvalue of 1.0.

Figure 13: Scree plot of eigenvalues for all agentic leadership factors



The scree plot (Figure 13) depicts two components above the eigenvalue of 1.0. Given the data, two components were extracted as they represent the common variance experienced by the 9 variables.

Table 7: Rotated component matrix agentic leadership

Rotated Component Matrix		
	Component	
	1	2
ResilienceA	**.615**	.373
LeadershipQualA	.464	**.716**
SelfConfidenceA	.097	**.791**
CleverA	**.883**	.124
PressureA	.290	**.781**
CompetenceA	**.812**	.293
SmartA	**.850**	.242
EfficiencyA	**.609**	.500
CapabilityA	**.839**	.304

Table 7 represents the rotated component matrix, which depicts that all 9 items had factor loadings of over 0.4 therefore they were all included in the scale; thus, discriminant validity was met.

In this study the items related to resilience, intelligence (CleverA and SmartA), competence, efficiency and capability all loaded on component 1, whereas the rest of the items loaded on component 2. The AC-IN scale created by Abele et al. (2016) split the agentic leadership construct into two separate constructs, namely agency-competence, which included the items related to being capable (CapabilityA), competent (CompetenceA), clever (CleverA), efficient (EfficiencyA) and smart (SmartA); and agency-assertiveness, which included never giving up easily (ResilienceA), leadership qualities (LeadershipQualA), being very assertive (the variable that was removed after Pearson's correlation), standing up well under pressure (PressureA), and self-confidence (SelfConfidenceA).

This study found that the agentic leadership construct was also represented through two components, but the items loaded slightly differently. The difference was that the item referring to resilience loaded on component one and not component two, therefore the components were renamed. The reasoning behind the new factor names came from analysing the items that loaded on each component. Component 1 was made up of character attributes such as never giving up (resilience); capability, competence, being intelligent (clever and smart) and efficient. These character attributes talk to the capacity of the leader, therefore this component was renamed agentic-capacity.

Component 2 was made up of qualities that require a high level of confidence such as leadership qualities, self-confidence and the ability to handle pressure, and therefore this component was renamed to agentic-confidence.

Table 8: Two components representing the agentic leadership construct

Rotated Component Matrix		
	Component	
	Agentic-capacity	**Agentic-confidence**
ResilienceA	**.615**	.373
LeadershipQualA	.464	**.716**
SelfConfidenceA	.097	**.791**
CleverA	**.883**	.124
PressureA	.290	**.781**
CompetenceA	**.812**	.293
SmartA	**.850**	.242
EfficiencyA	**.609**	.500
CapabilityA	**.839**	.304

Table 8 illustrates the variables loaded on the two components, agentic-capacity and agentic-confidence. The highest factor loadings were over 0.4 and all items were kept in the scale, therefore discriminant validity was met. However, the construct of agentic-confidence had only three items loaded onto it. It could be argued that there are too few items to support a construct and therefore the decision to remove the agentic-confidence construct from the regressions was considered. The researcher, with the support of her supervisor, chose to run a further EFA to test this and this discussion and decision can be found on page 86.

5.4.2. Reliability of the AC-IN scale – Agentic leadership construct

The reliability of the scale needed to be determined prior to the multiple regression being run. If a scale is determined to be reliable it means that the same results would be obtained should the study be conducted again (Saunders & Lewis, 2018). In order to determine reliability, the Cronbach's alpha was utilised.

Table 9: Cronbach's alpha for independent variable agentic leadership

Reliability Statistics		
Cronbach's alpha	Cronbach's alpha based on Standardized Items	N of Items
.901	.909	9

The Cronbach's alpha coefficient for the agentic leadership construct was 0.901 which is above 0.7 and therefore implies reliability, as shown in Table 9. Further to this reliability test, due to two components being extracted during the PCA a Cronbach's alpha was carried out on both agentic-capacity and agentic-confidence as seen in Table 10 and Table 11.

Table 10: Cronbach's alpha for agentic-capacity

Reliability Statistics (Agentic-capacity)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.903	.910	6

Table 11: Cronbach's alpha for agentic-confidence

Reliability Statistics (Agentic-confidence)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.766	.764	3

Table 10 and Table 11 show that both agentic-capacity and agentic-confidence have Cronbach alpha's above 0.7 therefore reliability is implied for both.

5.4.3. Validity of the AC-IN scale – Communal leadership construct

A Pearson's correlation was run for the second construct, communal leadership, and all items were found to be valid due to their p-value's being less than 0.05. Refer to Appendix 5 for the communal leadership Pearson's correlation output.

A CFA was run to test for convergent validity. When testing for convergent validity using a CFA, the AVE must be greater than 0.5. For the communal leadership construct the AVE was calculated at 0.649. Refer to Appendix 8 for the CFA for this construct. Prior to convergent validity being confirmed, the model fit of the CFA was

examined through three indices, namely, CFI, RMSEA and Chisq/df. Refer to Table 12 for the thresholds of the indices and the indices of the communal leadership construct.

Table 12: Model fit indices for communal leadership

Model Fit Category	Index	Threshold	Communal Leadership
Absolute fit	RMSEA	<0.08	**0.159**
Incremental fit	CFI	>0.90	**0.909**
Parsimonious fit	Chisq/df*	<3.0	**4.85**

*Chi-square = 131.078; df = 27

Table 12 displays that the threshold for the RMSEA index is below 0.08, whereas the RMSEA for the communal leadership construct was 0.159, far above the threshold. The CFI threshold is above 0.90 and the communal leadership construct had a CFI of 0.909, which was within the threshold. Finally, the Chisq/df index threshold is below 3.0 and the communal leadership construct CFI was 4.85, which was above the threshold. For the communal leadership construct the indices did not meet two out of the three thresholds therefore there was poor model fit and an EFA had to be run.

The KMO (Kaiser-Meyer-Olkin) index and the Bartlett's Test of Sphericity were utilised again to determine the feasibility of the factor analysis. For factor analysis to be feasible the KMO result should be greater than 0.6 and the results from the Bartlett's Test of Sphericity should be statistically significant (Wen, Quacoe, Quacoe, Appiah, & Ada Danso, 2019).

Table 13: KMO and Bartlett's Test of Sphericity for communal leadership

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.934
Bartlett's Test of Sphericity	Approx. Chi-Square	1145.723
	df	36
	Sig.	.000

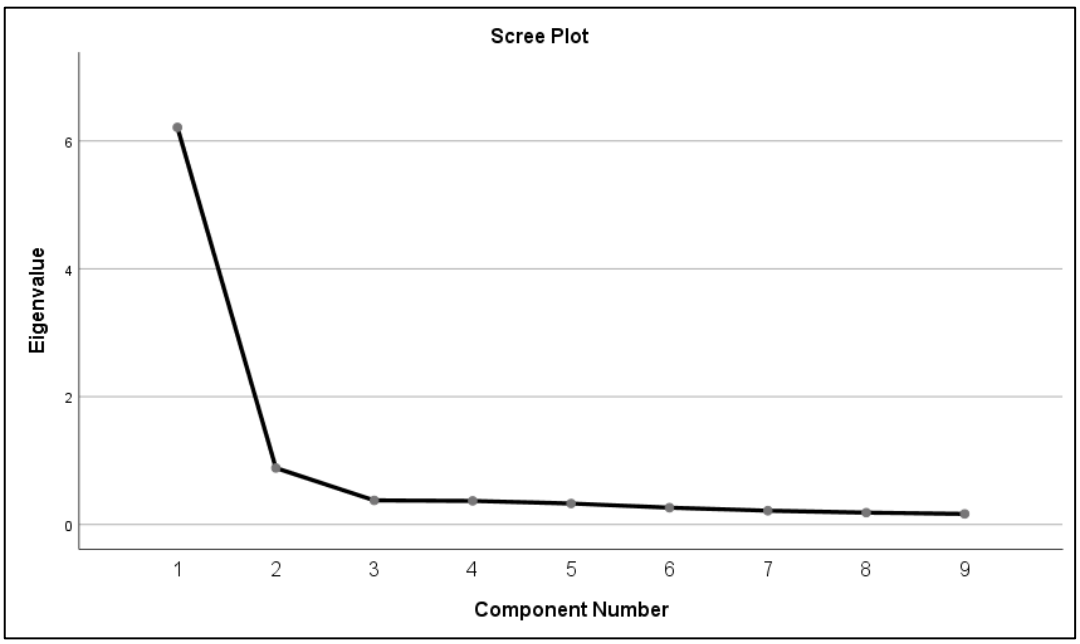
As shown in Table 13, the KMO result was greater than 0.6 and the results from the Bartlett's Test of Sphericity was statistically significant thus factor analysis was applicable for the communal leadership construct.

Table 14: Total variance explained communal leadership

	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	6.211	69.016	**69.016**
2	.884	9.821	78.838
3	.377	4.189	83.027
4	.369	4.099	87.126
5	.328	3.646	90.772
6	.263	2.924	93.696
7	.216	2.402	96.098
8	.185	2.057	98.155
9	.166	1.845	100.000

Table 14 portrays the PCA that indicates how each component explains the total variance. It can be seen that component one accounts for 69.016% of the total variance with an eigenvalue of 1.0.

Figure 14: Scree plot of eigenvalues for all communal leadership factors



The scree plot (Figure 14) depicts one component above the eigenvalue of 1.0. Given the data, one component was extracted as it represents the common variance experienced by the nine variables.

Table 15: Component matrix communal leadership

Component Matrix	
	Component 1
FriendlinessC	.824
JustC	.775
TrustworthinessC	.789
CaringC	.912
RelationsC	.856
EmpathicC	.860
FairnessC	.812
ConsiderationC	.856
AffectionC	.784

Table 15 represents the component matrix, which depicts that all nine items had factor loadings of over 0.4 which resulted in all items being kept in the scale, therefore discriminant validity was met. Due to only one component being extracted the matrix could not be rotated.

5.4.4. Reliability of the AC-IN scale – Communal leadership construct

The reliability of the scale needed to be determined prior to the multiple regression being run. If a scale is determined to be reliable it means that the same results would be obtained, should the study be conducted again (Saunders & Lewis, 2018). In order to determine reliability, the Cronbach's alpha was utilised to test the reliability of the scale, and whether the questions were measuring the same construct.

Table 16: Cronbach's alpha for independent variable communal leadership

Reliability Statistics		
Cronbach's alpha	Cronbach's alpha based on Standardized Items	N of Items
.943	.943	9

The Cronbach's alpha coefficient for the communal leadership construct was 0.943 which is above 0.7 and therefore implies reliability, shown in Table 16.

5.4.5. Descriptive statistics of the agentic and communal leadership constructs

The descriptive statistics for the AC-IN scale can be seen in Table 17. Respondents were asked to score their managers characteristics on a 5-point Likert scale, with the questions relating to either an agentic characteristic or a communal characteristic.

Table 17: Descriptive statistics of the AC-IN scale

	Agentic-capacity	Agentic-confidence	Communal Leadership
N	153	153	153
Mean	4,22	4.24	3,92
Std Dev	1.04	1.04	1,18
Skewness	0,196	0,196	0,196
Kurtosis	0,39	0,39	0,39

The mean score of the agentic-capacity leadership questions was 4.22 and 4.24 for agentic-confidence leadership, whereas the mean score for communal leadership questions was 3.92. This indicates that the majority of respondents scored their leaders as having more of an agentic leadership style as opposed to a communal style.

The standard deviation for the answers relating to an agentic characteristic was 1.04 which indicates a small degree of dispersion, whereas the standard deviation for the communal leadership data was 1.18 which indicates a larger degree of dispersion in

the data. With regards to the normality of the data, the skewness was at 0.196 which represents fairly symmetrical data, and the kurtosis was 0.39 indicating that the dataset has a normal distribution. Refer to Appendix 10 for the item level descriptive statistics for agentic leadership (agentic-capacity and agentic-confidence), and communal leadership.

5.5. Work engagement

5.5.1. Validity of the Utrecht work engagement scale

A Pearson's correlation was run for the third construct, work engagement, and all items were found to be valid due to their p-value being less than 0.05. Refer to Appendix 6 for the work engagement Pearson's correlation output.

A CFA was run to test for convergent validity. When testing for convergent validity using a CFA the AVE must be greater than 0.5. For the work engagement construct the AVE was calculated at 0.629. Refer to Appendix 9 for the CFA for the work engagement construct. Prior to convergent validity being confirmed the model fit of the CFA was examined through three indices, namely, CFI, RMSEA and Chisq/df. Refer to Table 18 for the thresholds of the indices and the indices of the work engagement construct.

Table 18: Model fit indices for work engagement

Model Fit Category	Index	Threshold	Work Engagement
Absolute fit	RMSEA	<0.08	**0.152**
Incremental fit	CFI	>0.90	**0.914**
Parsimonious fit	Chisq/df	<3.0	**4.52**

*Chi-square = 121.994; df = 27

Table 18 shows that the threshold for the RMSEA index is below 0.08, whereas the work engagement construct RMSEA was 0.152, far above the threshold. The CFI threshold is above 0.90 and the work engagement construct had a CFI of 0.914, which was within the threshold. Finally, the Chisq/df index threshold is below 3.0 and

the work engagement construct CFI was 4.51, which was above the threshold. For the work engagement construct the indices did not meet two out of the three thresholds, therefore there was poor model fit and an EFA had to be run.

The KMO (Kaiser-Meyer-Olkin) index and the Bartlett's Test of Sphericity were run again with the aim to achieve a KMO result greater than 0.6 and a statistically significant results from the Bartlett's Test of Sphericity.

Table 19: Cronbach's alpha for dependent variable work engagement

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.918
Bartlett's Test of Sphericity	Approx. Chi-Square	1040.131
	df	28
	Sig.	.000

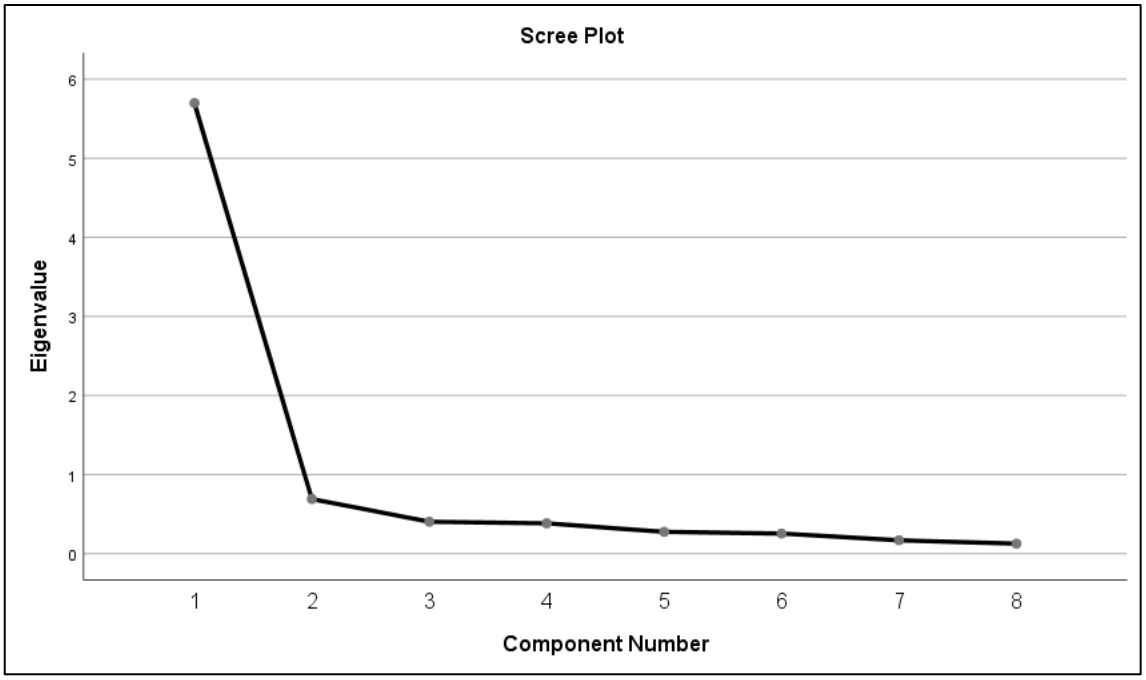
Table 19 depicts a KMO result greater than 0.6 and that the results from the Bartlett's Test of Sphericity were statistically significant thus factor analysis was applicable for the work engagement construct.

Table 20: Total variance explained work engagement

	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	5.697	71.217	**71.217**
2	.691	8.641	79.857
3	.403	5.043	84.900
4	.383	4.789	89.689
5	.276	3.447	93.136
6	.254	3.177	96.313
`7	.169	2.113	98.426
8	.126	1.574	100.000

Table 20 portrays the PCA that indicates how each component explains the total variance. Component one accounts for 71.217% of the total variance with an eigenvalue of 1.0.

Figure 15: Scree plot of eigenvalues for all communal leadership factors



The scree plot (Figure 15) depicts one component above the eigenvalue of 1.0. Given the data, one component was extracted as it represents the common variance experienced by the 9 variables.

Table 21: Component matrix work engagement

Component Matrix	
	Component 1
VI1	.791
VI2	.855
VI3	.910
DE1	.895
DE2	.891
DE3	.811
AB1	.787
AB2	.800

Table 21 represents the component matrix, which depicts that all nine items had factor loadings of over 0.4 and were therefore included in the scale, therefore discriminant validity was met. Due to only one component being extracted the matrix could not be rotated.

5.5.2. Reliability of the Utrecht work engagement scale

The reliability of the scale needed to be determined prior to the multiple regression being run. If a scale is determined to be reliable it means that the same results would be obtained, should the study be conducted again (Saunders & Lewis, 2018). In order to determine reliability, the Cronbach's alpha was utilised to test the reliability of the scale, and whether the questions were measuring the same construct.

Table 22: Cronbach's alpha for dependent variable work engagement

Reliability Statistics		
Cronbach's alpha	Cronbach's alpha Based on Standardized Items	N of Items
.936	.937	9

Table 22 displays that the Cronbach's alpha coefficient for the work engagement construct was 0.936 which is above 0.7 and therefore implies reliability.

5.5.3. Descriptive statistics of work engagement

The descriptive statistics for the Utrecht Work Engagement scale (UWES) can be seen in Table 23. Respondents were asked to score how they felt about their work on a 7-point Likert scale. Three questions related to vigour, three to dedication and three to absorption. The Likert scale had negative responses on the left side of the scale (1) whereas the positive responses were on the right side of the scale (7).

Table 23: Descriptive statistics of the UWES-9 scale

	Vigour	Dedication	Absorption
N	153	153	153
Mean	5.05	5.11	5.56
Std Dev	1,38	1.48	1.32
Skewness	0,196	0,196	0,196
Kurtosis	0,39	0,39	0,39

The table above, Table 23, illustrates that the mean score of the UWES was 5.24. This indicates a high level of work engagement represented across the three subconstructs. The standard deviation for vigour, dedication and absorption was 1.38, 1.48 and 1.32 respectively, which indicates a large degree of dispersion. With regards to the normality of the data, the skewness was at 0.196 which indicates fairly symmetrical data, and the kurtosis was 0.39, indicating that the dataset has a normal distribution. Refer to Appendix 11 for the item level descriptive statistics for work engagement.

5.5.4. The revision of the agentic construct

To be thorough, the researcher ran an EFA with all items from all constructs included in a single EFA, using a varimax rotation. The results can be found in Appendix 12. This table indicates an alignment with the other EFA's run (Table 8, Table 15, Table 21) showing that four clear factors emerge, which could equate to the communal, agentic-capacity, agentic-confidence and work engagement constructs. The factors loaded in the same way as the other EFA's apart from a single item. This item was the item related to the leader having the ability to handle pressure (PressureA).

In the previous EFA, as seen in Table 8, this item had loaded on the agentic-confidence construct whereas for this EFA (Appendix 12) the item loaded on the communal construct. This result is contradictory to the original scale created by Abele et al. (2016) where the pressure item had loaded onto the agentic construct. Due to the inconsistencies with the original scale the researcher, under the recommendation from her supervisor, made the decision to exclude the item (PressureA) from the regression analysis. Due to this the researcher ran another reliability test on the agentic-confidence constructs with the item, related to pressure, removed.

Table 24: Updated reliability of agentic-confidence

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.633	.643	2

The Cronbach's alpha coefficient for agentic-confidence, as seen in Table 24 is 0.633 which is now below the threshold of 0.7 therefore this scale is no longer reliable after the removal of the item related to pressure.

Further to this, as seen in this EFA (Appendix 12) the agentic-confidence construct had only two items load onto it. Hinkin, Tracey and Enz (1997) argue that in order to obtain reliability, a construct should be supported by four or five items, which agentic-confidence was not. The low number of items loaded onto this construct along with the low Cronbach's alpha coefficient, supported the researcher's decision to remove agentic-confidence from the regression analysis. The remaining construct of agentic-capacity was represented by a number of items clearly aligned to agentic leadership with a high level of reliability, thus agentic-capacity was renamed agentic leadership and utilised in the regression analysis.

5.6. Multiple regression

Prior to running a multiple regression, the assumptions were analysed and met. They were discussed in chapter 4 and can also be seen in Appendix 3. Following this, hierarchical multiple regressions were run per dependent variable or sub-construct of work engagement (vigour, dedication and absorption).

The first regression was run on the dependent variable of vigour. The control variables were entered into model one; model two included the communal leadership construct and model three included the agentic leadership construct. The results from the vigour multiple regression are displayed in Table 25 and Table 26.

Table 25: Model Summary of multiple regression – Vigour

Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.113[a]	.013	-.014	1.27228	.013	.481	4	148	.750
2	.591[b]	.350	.328	1.03604	.337	76.191	1	147	.000
3	.632[c]	.399	.374	.99948	.049	11.951	1	146	.001

The R square and the R Square change in Table 25 indicate that as the independent variables were added to the regression, the model explained the dependent variable better. These results illustrate that 39.9% of the variance of vigour is explained by the model.

Table 26: Coefficients of Vigour

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5.312	.226		23.459	.000		
	Gender	-.281	.236	-.098	-1.188	.237	.981	1.019
	Age	.062	.245	.022	.252	.801	.882	1.134
	TenureManager	-.070	.298	-.022	-.233	.816	.736	1.359
	TenureOrg	-.122	.241	-.048	-.507	.613	.732	1.366
2	(Constant)	2.218	.400		5.552	.000		
	Gender	-.139	.193	-.049	-.721	.472	.974	1.026
	Age	.036	.200	.013	.181	.856	.882	1.134
	TenureManager	-.313	.245	-.100	-1.279	.203	.726	1.377
	TenureOrg	.042	.197	.017	.214	.831	.725	1.379
	CommunalMean	.756	.087	.587	8.729	.000	.978	1.022
3	(Constant)	.841	.554		1.518	.131		
	Gender	-.149	.186	-.052	-.802	.424	.974	1.027
	Age	.056	.193	.020	.293	.770	.881	1.135
	TenureManager	-.375	.237	-.120	-1.584	.115	.722	1.385
	TenureOrg	.017	.190	.007	.090	.929	.724	1.381
	CommunalMean	.573	.099	.445	5.793	.000	.698	1.433
	AgenticMean	.471	.136	.265	3.457	.001	.700	1.428

a. Dependent Variable: VigorMean

The results of Table 26 are discussed in the sections 5.6.1, 5.6.4 and 5.6.7.

The second regression was run on the dependent variable of dedication. The results from the dedication multiple regression are displayed in Table 27 and Table 28.

Table 27: Model summary of multiple regression – Dedication

Model Summary[e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.169[a]	0,028	0,002	1,33136	0,028	1,082	4	148	0,368
2	.552[b]	0,305	0,281	1,12982	0,277	58,509	1	147	0,000
3	.605[c]	0,366	0,340	1,08246	0,061	14,146	1	146	0,000

The R square and the R Square change in Table 27 indicate that as the independent variables were added to the regression, the model explained the dependent variable better. These results illustrate that the model explains 0.366 or 36.6% of the variance in the sub-construct of dedication.

Table 28: Coefficients of dedication

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5.381	.237		22.707	.000		
	Gender	-.365	.247	-.121	-1.474	.143	.981	1.019
	Age	.316	.257	.106	1.232	.220	.882	1.134
	TenureManager	-.329	.312	-.099	-1.053	.294	.736	1.359
	TenureOrg	-.041	.252	-.015	-.162	.871	.732	1.366
2	(Constant)	2.424	.436		5.564	.000		
	Gender	-.229	.211	-.076	-1.089	.278	.974	1.026
	Age	.292	.218	.098	1.339	.183	.882	1.134
	TenureManager	-.561	.267	-.170	-2.104	.037	.726	1.377
	TenureOrg	.116	.215	.044	.540	.590	.725	1.379

	CommunalMean	.723	.094	.532	7.649	.000	.978	1.022
3	(Constant)	.802	.600		1.336	.184		
	Gender	-.241	.202	-.080	-1.196	.234	.974	1.027
	Age	.316	.209	.106	1.511	.133	.881	1.135
	TenureManager	-.634	.256	-.192	-2.475	.014	.722	1.385
	TenureOrg	.086	.206	.033	.420	.675	.724	1.381
	CommunalMean	.507	.107	.373	4.731	.000	.698	1.433
	AgenticMean	.555	.147	.296	3.761	.000	.700	1.428

The results of Table 28 are discussed in the sections 5.6.2, 5.6.5 and 5.6.8.

The third and final regression was run on the dependent variable of absorption. The results from the absorption multiple regression are displayed in Table 29 and Table 30.

Table 29: Model Summary of multiple regression – Absorption

Model Summary[e]

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.163[a]	0,027	0,000	1,14117	0,027	1,011	4	148	0,404
2	.380[b]	0,145	0,116	1,07332	0,118	20,304	1	147	0,000
3	.508[c]	0,258	0,228	1,00288	0,114	22,374	1	146	0,000

The R square and the R Square change in Table 29 indicate that as the independent variables were added to the regression, the model explained the dependent variable better. These results illustrate that the model explains 0.258 or 25.8% of the variance in the sub-construct of absorption.

Table 30: Coefficients of absorption

Coefficients[a]								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	5.594	.203		27.539	.000		
	Gender	-.103	.212	-.040	-.484	.629	.981	1.019
	Age	.435	.220	.171	1.977	.050	.882	1.134
	TenureManager	-.086	.268	-.030	-.320	.750	.736	1.359
	TenureOrg	-.126	.216	-.056	-.586	.559	.732	1.366
2	(Constant)	3.939	.414		9.516	.000		
	Gender	-.027	.200	-.010	-.135	.893	.974	1.026
	Age	.421	.207	.165	2.036	.044	.882	1.134
	TenureManager	-.216	.253	-.076	-.851	.396	.726	1.377
	TenureOrg	-.039	.204	-.017	-.190	.850	.725	1.379
	CommunalMean	.404	.090	.347	4.506	.000	.978	1.022
3	(Constant)	2.049	.556		3.683	.000		
	Gender	-.041	.187	-.016	-.219	.827	.974	1.027
	Age	.449	.194	.176	2.321	.022	.881	1.135
	TenureManager	-.301	.237	-.106	-1.267	.207	.722	1.385
	TenureOrg	-.073	.191	-.032	-.383	.702	.724	1.381
	CommunalMean	.153	.099	.132	1.542	.125	.698	1.433
	AgenticMean	.646	.137	.403	4.730	.000	.700	1.428

The results of Table 30 are discussed in the sections 5.6.3, 5.6.6 and 5.6.9.

5.6.1. Hypothesis 1a

The purpose of objective 1 was to identify the level of influence that female leaders exhibiting agentic leadership had on work engagement. The results in Table 26 illustrate that a significant relationship did not exist between the control variables and the dependent variable of vigour.

The null hypothesis for hypothesis 1a is that no relationship exists between female leaders exhibiting agentic leadership and vigour ($H_0$1a). The alternative hypothesis for hypothesis 1a would be that a relationship exists between female leaders exhibiting agentic leadership and vigour ($H_1$1a).Table 26 shows that the independent variable of agentic leadership has a significant relationship with vigour ($p < 0.05$) and Table 25 shows that the independent variable of agentic leadership explains 4.9% of the variance of the dependent variable of vigour. Therefore, at a 95% confidence level, the statistical analysis rejects the null hypothesis, and thus a relationship exists between female leaders exhibiting agentic-capacity leadership and vigour.

5.6.2. Hypothesis 1b

The results in Table 28 illustrate that one of the control variables, the tenure the employee has reported to their manager, does have a statistically significant relationship with the dependent variable of dedication ($p < 0.05$).

The null hypothesis for hypothesis 1b is that no relationship exists between female leaders exhibiting agentic leadership and dedication ($H_0$1b). The alternative hypothesis for hypothesis 1b is that a relationship exists between female leaders exhibiting agentic leadership and dedication ($H_1$1b).

Table 28 shows that the independent variable of agentic has a significant relationship with dedication ($p < 0.05$) and Table 27 shows that the independent variable , agentic, explains 6.1% of the variance of the dependent variable of dedication. Therefore, at a 95% confidence level, the statistical analysis rejects the null hypothesis, and thus a relationship exists between female leaders exhibiting agentic-confidence leadership and dedication.

5.6.3. Hypothesis 1c

The results in Table 30 illustrate that one of the control variables, age, does have a statistically significant relationship with the dependent variable of absorption ($p < 0.05$).

The null hypothesis for hypothesis 1c would be that no relationship exists between female leaders exhibiting agentic leadership and absorption ($H_0$1c). The alternative hypothesis for hypothesis 1c is that a relationship exists between female leaders exhibiting agentic leadership and absorption ($H_1$1b).

Table 30 shows that the independent variable of agentic leadership has a significant relationship with absorption ($p < 0.05$) while Table 29 shows that the independent variable, agentic leadership explains 11.4% of the variance of the dependent variable of absorption. Therefore, at a 95% confidence level, the statistical analysis rejects the null hypothesis, and thus a relationship exists between female leaders exhibiting agentic leadership and absorption.

5.6.4. Hypothesis 2a

The purpose of objective 2 was to identify the level of influence that female leaders exhibiting communal leadership had on work engagement.

The null hypothesis for hypothesis 2a is that no relationship exists between female leaders exhibiting communal leadership and vigour ($H_0$2a). The alternative hypothesis would be that a relationship exists between female leaders exhibiting communal leadership and vigour ($H_1$2a).

Table 26 shows that the independent variable of communal leadership has a significant relationship with vigour ($p < 0.05$). Table 25 shows that the independent variable explains 33.7% of the variance of the dependent variable of vigour. Therefore, at a 95% confidence level, the statistical analysis rejects the null hypothesis, and thus a relationship exists between female leaders exhibiting communal leadership and vigour.

5.6.5. Hypothesis 2b

The null hypothesis for hypothesis 2b is that no relationship exists between female leaders exhibiting communal leadership and dedication ($H_0$2b). The alternative hypothesis for hypothesis 2b is that a relationship exists between female leaders exhibiting communal leadership and dedication ($H_1$2a).

Table 28 shows that the independent variable of communal leadership has a significant relationship with dedication ($p < 0.05$) and Table 27 that the independent variable explains 27.7% of the variance of the dependent variable of vigour. Therefore, at a 95% confidence level, the statistical analysis rejects the null hypothesis, and thus a relationship exists between female leaders exhibiting communal leadership and dedication.

5.6.6. Hypothesis 2c

The null hypothesis for hypothesis 2c is that no relationship exists between female leaders exhibiting communal leadership and absorption ($H_0$2c). The alternative hypothesis for hypothesis 2c is that a relationship exists between female leaders exhibiting communal leadership and absorption ($H_1$2c).

As seen in Table 30 the independent variable of communal leadership has no significant relationship with absorption ($p > 0.05$). Therefore, at a 95% confidence level, the statistical analysis accepts the null hypothesis, and thus no relationship exists between female leaders exhibiting communal leadership and absorption.

5.6.7. Hypothesis 3a

The purpose of objective 3 was to identify which leadership style had a stronger association with work engagement.

The null hypothesis for hypothesis 3a is that a female leader, exhibiting communal leadership, does not have a stronger association with vigour, compared to a female leader exhibiting agentic leadership ($H_0$3a). The alternative hypothesis for hypothesis 3a is that a female leader exhibiting communal leadership does have a stronger association with vigour, compared to a female leader exhibiting agentic leadership ($H_1$3a).

The construct of vigour had a statistically significant relationship with agentic leadership and communal leadership. The R square change values in Table 25 showed that agentic leadership explained 4.9% of the variance of vigour, however communal leadership explained 33.7% of the variance of vigour. Therefore, at a 95% confidence level, the statistical analysis rejects the null hypothesis, and thus a female

leader exhibiting communal leadership does have a stronger association with vigour, compared to a female leader exhibiting agentic leadership.

5.6.8. Hypothesis 3b

The null hypothesis for hypothesis 3b is that a female leader, exhibiting communal leadership, does not have a stronger association with dedication, than a female leader, exhibiting agentic leadership ($H_0$3b). The alternative hypothesis for hypothesis 3b is that a female leader exhibiting communal leadership does have a stronger association with dedication, compared to a female leader exhibiting agentic leadership ($H_1$3b).

The construct of dedication had a statistically significant relationship with agentic leadership and communal leadership. The R square change values in Table 27 showed that agentic leadership explained 6.1% of the variance of dedication, whereas communal leadership explained 27.7% of the variance of dedication. Therefore, at a 95% confidence level, the statistical analysis rejects the null hypothesis, and thus a female leader exhibiting communal leadership does have a stronger association with dedication, compared to a female leader exhibiting agentic leadership.

5.6.9. Hypothesis 3c

The null hypothesis for hypothesis 3c is that a female leader, exhibiting communal leadership, does not have a stronger association with absorption, than a female leader, exhibiting agentic leadership ($H_0$3c). The alternative hypothesis for hypothesis 3c is that a female leader exhibiting communal leadership does have a stronger association with absorption, than a female leader exhibiting agentic leadership ($H_1$3c).

The construct of absorption had a statistically significant relationship with agentic leadership. Absorption had no significant relationship with communal leadership. Therefore, at a 95% confidence level, the statistical analysis accepts the null hypothesis, and thus a female leader exhibiting communal leadership does not have

a stronger association with absorption, compared a female leader exhibiting agentic leadership.

5.7. Conclusion

Chapter 5 provided the validity and reliability results for the constructs. The assumptions of multiple regression were confirmed to have been met. A hierarchical multiple regression was run per hypothesis. The results of the regressions for Hypothesis 1, 2 and 3 are summarised in Table 31. Chapter 6 discusses the results in relation to the existing literature.

Table 31: Summary of the hypotheses results

Hypothesis	Significant relationship with DV	Variance of DV explained	Reject null hypothesis
1a	Yes	4.9%	Yes
1b	Yes	6.1%	Yes
1c	Yes	11.4%	Yes
2a	Yes	33.7%	Yes
2b	Yes	27.7%	Yes
2c	No	n/a	No
3a	n/a		Yes
3b			Yes
3c			No

DV= dependent variable

6. Chapter 6: Discussion of results

6.1. Introduction

This chapter will discuss the research findings and compare them to the literature reviewed in chapter two. This study aimed to determine the influence of female agentic and communal leadership (independent variables) on work engagement (dependent variables). This chapter also includes an overview of demographic variables, descriptive statistics and the three constructs. Finally, each research objective and hypothesis are discussed.

6.2. Overview of demographics

A total of 224 questionnaires were answered by respondents, with 170 passing the three screening questions regarding if they lived in South Africa and if they reported to a female manager in a senior position or above. Of those respondents living in South Africa, 30 reported to a male manager and 9 reported to a junior manager. Of the 170 responses that passed the screening questions there were 23 that were partially complete, leaving over 50% of the questionnaire unanswered. By removing these partially complete responses from the dataset, a total of 153 responses remained and were used in the statistical tests. The completion rate was 68%.

The demographic information collected was the respondents age, gender, the number of years they had worked for their organisation and reported to their current manager. These variables were considered control variables and were thus included in the multiple regression analysis. They were regarded as control variables due to findings linking these variables to work engagement (Harter & Adkins, 2015; Kim & Kang, 2016; Markey, 2014; Reissova, Simsova & Hasova, 2017; Schaufeli & Bakker, 2004).

6.2.1. Age

A total of 72% of the respondents were younger than 40 years old, as shown in Figure 11 in chapter 5. The skewness toward younger respondents could be due to the researcher being younger than 40 herself and thus her personal networks skewed

toward being under 40 years. The researcher had collected data by distributing the questionnaire to her personal network thus the skew toward younger respondents could be accounted for by this.

Although the variable of age was not found to be a statistically significant predictor of vigour and dedication it was found to be statistically significant for absorption, with a positive correlation coefficient seen in Table 26, Table 28 and Table 30 in chapter 5. This means that the older employees get the more absorbed they become in their work. This is similar to the findings of Schaufeli and Bakker (2004) and Kim and Kang (2016) who also found that the older people get the more engaged they become in their work (Schaufeli & Bakker, 2004). Perhaps, in part, this could be due to older employees holding more senior and cognitively demanding roles compared to their younger counterparts.

6.2.2. Gender

Figure 10 in chapter five shows that 74% of respondents were female, with males accounting for 26% of the sample. The skewness toward female respondents could be due to the researcher being female and thus her personal networks skewed toward being female. The researcher had collected data by distributing the questionnaire to her personal network thus the skew toward female respondents could be accounted for by this.

As noted above gender did not have a significant relationship work engagement, as seen in Table 26, Table 28 and Table 30 in chapter 5. This supported the findings by Reissova, Simsova and Hasova (2017) who found no significant differences between men and women when it came to engagement. Further to this Schaufeli and Bakker (2004) who found the between men and women to be statistically significant; felt the difference was too small to be practically significant.

6.2.3. Tenure with organisation

Figure 12 in chapter 5 illustrates that majority of respondents had worked for their organisations for over 6 years. The demographic variable of tenure of employment

did not have a significant relationship with work engagement as seen in Table 26, Table 28 and Table 30 in chapter 5, which is not aligned to Markey (2014), who stated that the longer an employee works for a company, the less engaged they become.

6.2.4. Tenure with manager

The majority of respondents, at 32%, had reported to their manager for less than a year as seen in Figure 12 in chapter 5. This meant that although employees had only reported to their current managers for a brief period, those same employees had worked at their organisation for many years (the majority for over 6 years). Perhaps this indicates a high level of manager turnover within the sample.

The variable of a respondent's tenure with their current manager was not statistically significant for vigour or absorption but was found to be statistically significant for the dedication with a negative correlation coefficient as seen in Table 26, Table 28 and Table 30 in chapter 5. Therefore, the longer an employee works for their manager the less dedicated they become.

This aligns with Markey (2014) who spoke about employees becoming less engaged the longer they worked for an organisation. Harter and Adkins (2015) explained that the influence that a manager has on their employee's levels of work engagement accounts for 70% of the variance of their work engagement. Therefore, the managers influence may have also caused the decrease in the employee's levels of dedication.

6.3. Overview of constructs

6.3.1. Agentic leadership

The agentic leadership construct was examined using the AC-IN scale (Abele et al., 2016). The analysis of this construct can be seen in section 5.4. in chapter 5.

Construct validity was tested for using a Pearson's correlation (Swank & Mullen, 2017). The item related to assertiveness was found to be highly correlated with three

other items and was therefore removed from the scale. The correlation was run again and the remaining nine items were found to valid and thus were kept in the scale.

A CFA was run to test for convergent validity but there was poor model fit and therefore an EFA was run (Beaver et al., 2013). The remaining nine items had high loadings and were thus kept in the scale. When a PCA was run during the EFA, the agentic leadership construct loaded on two factors. Another EFA was run with all items included and the item related to pressure loaded on the communal construct. Due to the misalignment with the original AC-IN scale created a decision was made to remove that item leaving only two items loaded to agentic-confidence, as discussed in section 5.5.4.

Due to the limited number of items loaded on the second factor, and an updated Cronbach's alpha of below 0.7, a decision was made to exclude the second factor (agentic-confidence) from the regression analysis (Hair et al., 2010). Reliability was confirmed for the remaining factor, renamed agentic leadership, with a Cronbach's alpha of 0.901.

When Bakan (1966) introduced the term agency into the psychology world, he referred to an isolated and self-focused mentality with a drive to achieve. The concept of agentic leadership has been expanded upon and discussed by individuals such as Trapnell and Paulhus (2012), Abele and Wojciszke (2007), Rosette and Tost (2010) and more recently by Griffiths, Roberts and Price (2019), Gerzeme and D'antonio (2017) and Abele et al. (2016).

Agentic and communal leadership are explicitly associated with gender, with agentic leadership being associated with the masculine, traditional leadership style (Paustian-Underdahl, Walker, & Woehr, 2014). Men have been traditionally associated with leadership due to the congruence between traditional gender norms and traditional leadership. Eagly and Karua (2002) spoke of this congruence in their seminal work on the RCT.

6.3.2. Communal leadership

The communal leadership construct was examined using the AC-IN scale (Abele et al., 2016). The analysis of this construct can be seen in section 5.4 in chapter 5.

Construct validity was tested for using a Pearson's correlation; all items were found to be valid and thus were kept in the scale.

A CFA was run to test for convergent validity but there was poor model fit and therefore an EFA was run. All items had high loadings and were thus kept in the scale. When a Principle Component Analysis was run during the EFA, the communal leadership construct loaded on a single factor. Reliability was confirmed with a Cronbach's alpha of 0.943.

When Bakan (1966) spoke of communion, he referred to a sense of togetherness with a focus on others and a desire to collaborate. Prior to Bakan's definition Asch (1946) spoke of traits of warmth and honesty, which later became aligned with the concept of communal leadership which Trapnell and Paulhus (2012) equated with a number of traits including forgiveness, loyalty, harmony and compassion.

Communal leadership is explicitly associated with female leaders due to the association with feminine leadership (Rosette, Mueller, & Lebel, 2015). An incongruence exists between females and with traditional leadership roles as the latter have been traditionally associated with men and masculine leadership (Eagly and Carli, 2007)

6.3.3. Work engagement

The work engagement construct was examined using the Utrecht Work Engagement scale (Schaufeli & Bakker, 2004). The analysis of this construct can be seen in section 5.5 in chapter 5. Construct validity was tested for using a Pearson's correlation and all items were found to valid and thus were kept in the scale (Swank & Mullen, 2017).

A CFA was run to test for convergent validity but there was poor model fit and therefore an EFA was run (Beavers et al., 2010). All items had high loadings and were thus kept in the scale. When a PCA was run during the EFA, the work engagement construct loaded on a single factor. Reliability was confirmed with a Cronbach's alpha of 0.936.

Kahn's (1990) concept of work engagement described the construct as a physical, cognitive and emotional connections to one's work. The definition was expanded

upon by individuals such as Maslach and Leiter (1997) and Rothbard (2001). This study chose to focus on the widely accepted definition offered by Schaufeli and Bakker (2004) that broke the construct into three sub-constructs namely, vigour, dedication and absorption. These three sub-constructs were related to Kahn's definition of the construct whereby vigour was aligned with the physical connection, dedication with the emotional connection and absorption with the cognitive connection an employee has with their work.

6.4. Descriptive statistics

Table 17 illustrates the descriptive statistics of the leadership constructs namely agentic-capacity, agentic-confidence and communal leadership. Due to agentic-confidence being removed from the regression analysis the descriptive statistics of only agentic-capacity (now renamed to agentic leadership) and communal leadership will be assessed, as seen in Table 32.

Table 32: Descriptive statistics - Agentic and Communal leadership

	Agentic Leadership	Communal Leadership
N	153	153
Mean	4,22	3,92
Std Dev	1.04	1,18
Skewness	0,196	0,196
Kurtosis	0,39	0,39

Below are the highlights from the descriptive statistics listed in as well as a few other insights garnered from the data. Refer to Appendix 10 for the descriptive data at item level.

- The mean score for the agentic leadership style was higher than the mean score for communal leadership which indicates that respondents tended to view their managers as having a more agentic leadership style.
- Further to this, 116 respondents perceived their managers as exhibiting agentic leadership styles, while 22 perceived a communal leadership style

and 15 perceived them as a balance between the two, also known as androgynous leadership.

- There was a smaller degree of dispersion in the agentic items answered compared to the communal items answered.
- The skewness toward agentic leadership may be an indication that female managers continue to feel pressured to exhibit agentic leadership traits due to the dominant hold of masculine leadership styles in organisations (Griffiths, Roberts, & Price, 2019; Paustian-Underdahl, Walker, & Woehr, 2014; Schock, Gruber, Scherndl, & Ortner, 2019)
- The skewness and kurtosis levels represented fairly symmetrical and normally distributed data.

The descriptive statistics for the work engagement represented by the three sub-constructs vigour, dedication and absorption, are displayed in Table 23. Below are the highlights from the descriptive statistics as well as a few other insights garnered from the data. Refer to Appendix 11 for the descriptive statistics of work engagement at item level.

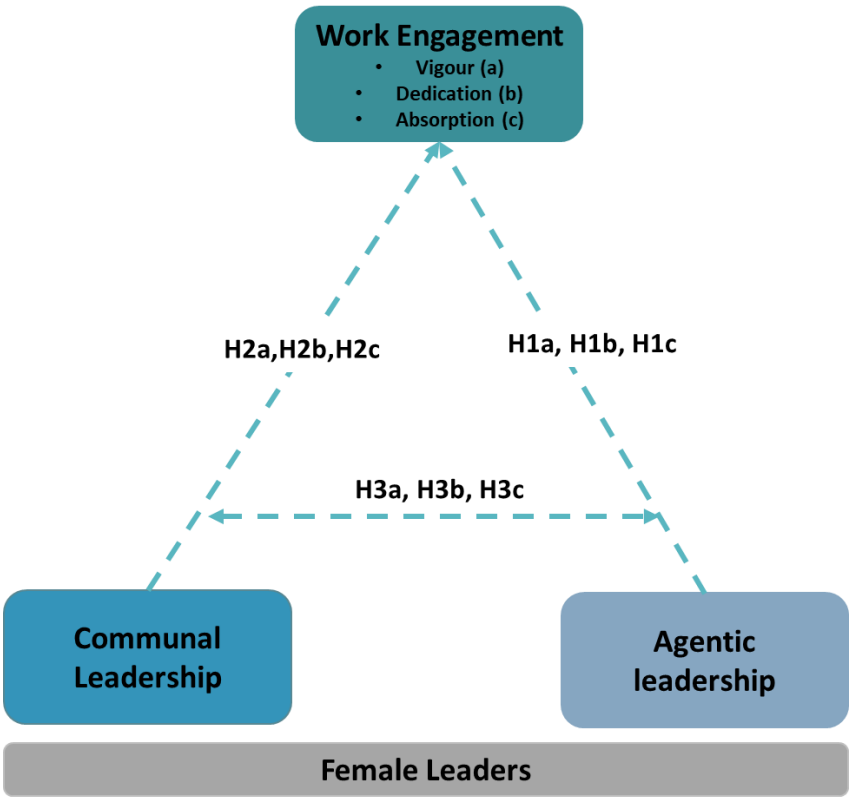
- The mean score for absorption was higher than that of dedication and vigour, indicating that the sample was more cognitively connected with their job compared to physically and emotionally engaged.
- Having said that, the mean scores across all three indicate a relatively high level of work engagement.
- The skewness and kurtosis levels represented fairly symmetrical and normally distributed data.

6.5. Research objectives and hypotheses

This study aimed to identify if female leaders exhibiting communal or agentic leadership traits, can have an influence on their employees' level of work engagement. The three sub-constructs of work engagement (vigour, dedication and absorption) led to three sub-hypotheses per hypothesis (H1a, H1b, H1c; H2a, H2b, H2c and H3a, H3b, H3c).

.

Figure 16: Visual representation of research hypotheses



The figure above (Figure 16) is a visual representation of the research hypotheses

6.5.1. Research objective 1 and hypothesis 1

Research objective 1 focused on identifying if female leaders exhibiting agentic leadership traits can have an influence on their employees' level of work engagement.

6.5.1.1. Hypothesis 1a

The first null hypothesis ($H_0$1a) stated that no relationship exists between female leaders exhibiting agentic leadership traits and their employee's vigour toward their work. The alternative hypotheses ($H_1$1a) stated that a relationship exists between female leaders exhibiting agentic leadership and their employees' vigour toward their work.

It was found that the agentic leadership style had a significant relationship with vigour and explained 4.9% of the variance. Therefore, the researcher rejects the null hypothesis identifying that female leaders exhibiting an agentic leadership style have a predictive influence on employees' level of vigour toward their work.

6.5.1.2. Hypothesis 1b

The second null hypothesis ($H_0$1b) stated that no relationship exists between female leaders exhibiting agentic leadership traits and their employee's dedication to their work. The alternative hypotheses ($H_1$1b) stated that a relationship exists between female leaders exhibiting agentic leadership and their employees' dedication toward their work.

It was found that the agentic leadership style had a significant relationship with dedication and explained 6.1% of the variance. Therefore, the researcher rejects the null hypothesis identifying that female leaders exhibiting an agentic leadership style have a predictive influence on their employees' level of dedication toward their work.

6.5.1.3. Hypothesis 1c

The third null hypothesis ($H_0$1c) stated that no relationship exists between female leaders exhibiting agentic leadership traits and their employee's absorption in their work. The alternative hypotheses ($H_1$1c) stated that a relationship exists between female leaders exhibiting agentic leadership and their employees' absorption in their work.

It was found that the agentic leadership style had a significant relationship with absorption and explained 11.4% of the variance. Therefore, the researcher rejects the null hypothesis identifying that female leaders exhibiting an agentic leadership style have a predictive influence on their employees' level of absorption in their work.

6.5.2. Interpretation of hypothesis 1 results

This section will interpret the results of hypothesis 1 by aligning it with the relevant literature found in chapter 2.

Figure 17: Visual representation of hypothesis 1 results

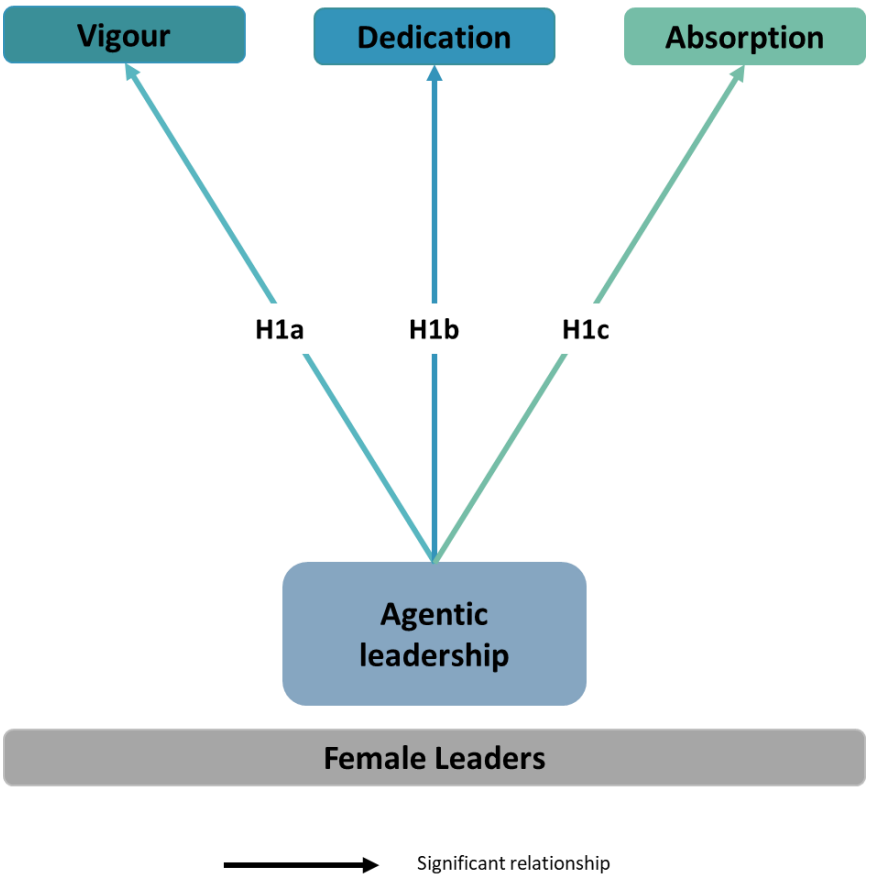


Figure 17 illustrates the results of Hypothesis 1, highlighting that agentic leadership has a significant relationship with all three sub-constructs.

Hypothesis 1a was related to vigour, which is a sub-construct of work engagement. It is defined as the physical connection an employee has with their work with specific reference to the employees' level of energy, ability to face and overcome challenges and the willingness they had to exert their energy on work (Geldenhuys, Laba, & Venter, 2014).

The results from H1a state that agentic leadership has an influence on vigour. Agentic leadership was represented by the items relating to being resilient, being intelligent (clever and smart), being competent, efficient and capable.

The association identified between agentic leadership and vigour aligns with prior academic literature (Shirom, 2007) that drew associations between the antecedent of rewards and punishment and the ability to drive an employee's level of vigour. The use of rewards and punishments is a strategy employed by leaders exhibiting a

transactional style of leadership (Sungara Silva, & Mendis, 2017). Transactional leadership is often equated to a traditional leadership style and has been likened to agentic leadership due to the common leadership traits experienced across both leadership styles (Sugiyama et al., 2016; Wolfram & Gratton, 2014).

Hypothesis 1b was related to dedication, which is a sub-construct of work engagement. It is defined as the emotional connection an employee has with their work (Geldenhuys, Laba, & Venter, 2014) with specific reference to the pride they have in their work, the meaningfulness they place on their work and their enthusiasm toward their organisation (Strom, Sears, & Kelly, 2014)

The results from H1b state that agentic leadership has an influence on dedication and this association aligns with prior academic literature (Hall, 2014). Hall (2014) spoke of antecedents to dedication such as a leader's ability to be open and honest with their employee, setting appropriate expectations for their employees, whilst ensuring they feel valued. Agentic leaders are characterised by being efficient and goal driven (Abele & Wojciszke, 2014; Abele & Wojciszke, 2007; Rosette & Tost, 2010) therefore a strategy an agentic leader could employ is to set appropriate expectations; the influence that agentic leadership was found to have on dedication is supported by prior literature.

Hypothesis 1c was related to absorption which is a sub-construct of work engagement that was defined as the cognitive connection an employee has with their work (Geldenhuys, Laba, & Venter, 2014) with specific reference to a happy mindset, becoming immersed in their work and sometimes struggling to disengage from it (Strom, Sears, & Kelly, 2014).

The results from H1c state that agentic leadership has an influence on absorption. The association identified between agentic leadership and absorption aligns with prior academic literature (Coetzee & Veldman, 2016). Coetzee and Veldman (2016) stated that a manager's credibility, behaviour and trustworthiness as well as the employees work relationships, their desire to achieve and be autonomous, and finally whether the employees felt cared for all influenced their level of absorption in their work. The managers credibility and the employees desire to be autonomous and achieve are associated with an agentic leadership style because agentic leadership traits include influence, status, a drive to achieve and to be autonomous (Trapnell & Paulhus, 2012).

6.5.3. Research objective 2 and hypothesis 2

Research objective 2 focused on identifying if female leaders exhibiting communal leadership traits can have an influence on their employees' level of work engagement.

6.5.3.1. Hypothesis 2a

The fourth null hypothesis ($H_0$2a) stated that no relationship exists between female leaders exhibiting communal leadership traits and their employees' vigour toward their work. The alternative hypotheses ($H_1$2a) stated that a relationship exists between female leaders exhibiting communal leadership traits and their employees' vigour toward their work.

It was found that the communal leadership style had a significant relationship with vigour and explained 33.7% of the variance. Therefore, the researcher rejects the null hypothesis identifying that female leaders exhibiting a communal leadership style have a predictive influence on their employees' level of vigour toward their work.

6.5.3.2. Hypothesis 2b

The fifth null hypothesis ($H_0$2b) stated that no relationship exists between female leaders exhibiting communal leadership traits and their employees' dedication toward their work. The alternative hypotheses ($H_1$2b) stated that a relationship exists between female leaders exhibiting communal leadership traits and their employees' dedication toward their work.

It was found that the communal leadership style had a significant relationship with dedication and explained 27.7% of the variance. Therefore, the researcher rejects the null hypothesis identifying that female leaders exhibiting a communal leadership style have a predictive influence on their employees' level of dedication toward their work.

6.5.3.3. Hypothesis 2c

The sixth null hypothesis ($H_0$2c) stated that no relationship exists between female leaders exhibiting communal leadership traits and their employees' absorption in their work. The alternative hypotheses ($H_1$2c) stated that a relationship exists between female leaders exhibiting agentic leadership and their employees' absorption in their work.

The results found that there was no significant relationship between the communal leadership and absorption. Therefore, the researcher accepts the null hypothesis identifying that female leaders exhibiting a communal leadership style do not have a predictive influence on their employees' level of absorption in their work.

6.5.4. Interpretation of hypothesis 2 results

This section interprets the results of hypothesis 2 by aligning it to the relevant literature found in chapter 2.

Figure 18: Visual representation of hypothesis 2 results

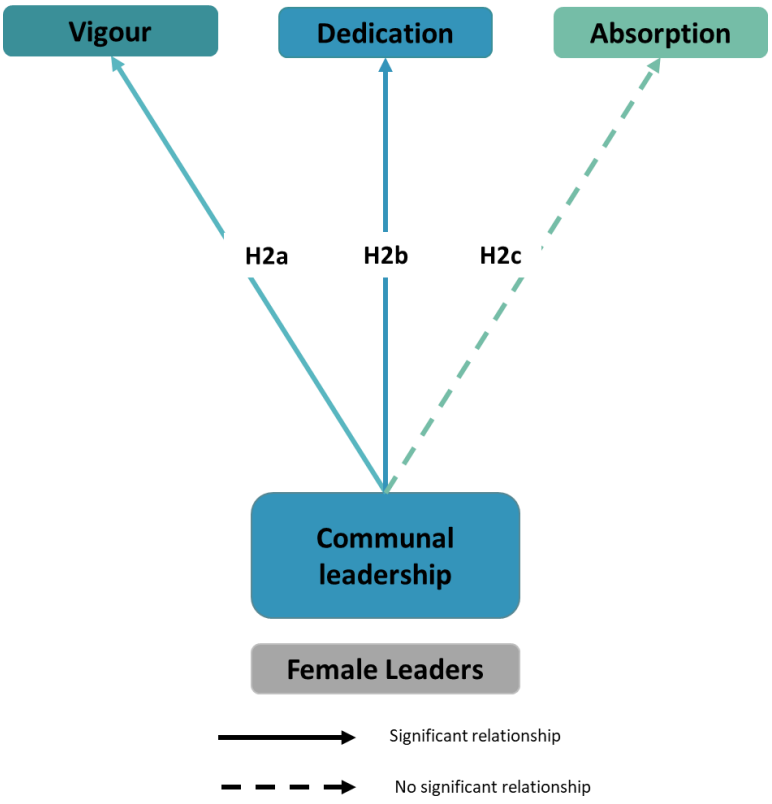


Figure 18 illustrates the results of Hypothesis 2, highlighting that communal leadership has a significant relationship with two of the three sub-constructs, namely vigour and dedication. No significant relationship was found between communal leadership and absorption. Results from H2a and H2b state that communal leadership has an influence on vigour and dedication. These associations identified align to prior academic literature (Hall, 2014; Shirom, 2007). Communal leadership was found to have an association with vigour that accounted for 33.7% of the variance and an association with dedication that accounted for 27.7% of the variance.

With regards to vigour, one of the main antecedents for vigour and work engagement as a whole, is transformational leadership (Hawkes, Biggs, & Hegerty, 2017; Kim, Kolb, & Kelly, 2012; Strom, Sears, & Kelly). Transformational leadership inspires employees to work toward a common goal through a relational leadership approach that fosters trust between the leader and their followers (Strom, Sears, & Kelly, 2014; Wolfram & Gratton, 2014). Prior academic literature argues that transformational leadership has an association with work engagement (Hawkes, Biggs, & Hegerty, 2017; Kim, Kolb, & Kelly, 2012; Strom, Sears, & Kelly).

This leadership style is associated with communal leadership due to the number of leadership traits they have in common, including collaboration and communication (Paustian-Underdahl, Walker, & Woehr, 2014; Rosette & Tost, 2010; Rosette et al., 2016), hence the development of hypothesis 2 that communal leadership has an association with work engagement.

From the perspective of dedication (H2b) two out of the three antecedents of the sub-construct are related to communal leadership, namely the leader's ability to be transparent with their employee's whilst ensuring they feel valued therefore one would expect a communal leader to influence their employee's levels of work engagement.

Transformational leadership and communal leadership have been associated with female leaders specifically (Griffiths, Roberts, & Price, 2019; Abele, 2003; Rosette, Mueller, & Lebel, 2015) and because the sample included employees reporting to a female manager it is no surprise that their female managers have a strong influence on the employee's level of vigour and dedication toward their work.

The results from hypothesis H2c found that communal leadership had no significant relationship with absorption. This contradicts prior academic literature somewhat

because a few of antecedents of the sub-construct are related to communal leadership, namely the employee's desire for positive relationships, to be cared for and their managers trustworthiness (Coetzee & Veldman, 2016). The lack of significant relationship between the two constructs could be subject to the number of antecedents related to agentic leadership rather than communal leadership. The antecedents of the managers credibility and the employees desire for autonomy and achievement are associated with agentic leadership traits (Coetzee & Veldman, 2016) and perhaps these antecedents have a stronger association with absorption compared to communal leadership, which could be seen through the results of H1c in section 6.5.1.3. Further to this, the disconnection could be due to absorption being the cognitive component of work engagement (Kahn, 1990; Geldenhuys, Laba, & Venter, 2014) whereas communal leadership approaches from an emotional perspective (Abele & Wojciszke, 2014; Rosette, Mueller, & Lebel, 2015).

The regression for vigour found 39.99% of the variance explained to be due to both leadership constructs, the regression for dedication found 36.6% of the variance explained to be due to both leadership constructs and finally the regression for absorption found 25.58% of the variance explained to be due to both leadership constructs. Which means that there was residual variance in each regression model that was not explained by the leadership constructs. Although this is outside the scope of this study this residual variance could be due to the number the antecedents associated with the employee themselves and not their manager, including the employees' level of charisma, their level of expertise, their positive relationships at work, whether they felt valued, their ability to control resources and the power of their position (Coetzee & Veldman; Hall, 2014; Shirom, 2007).

6.5.5. Research objective 3 and hypothesis 3

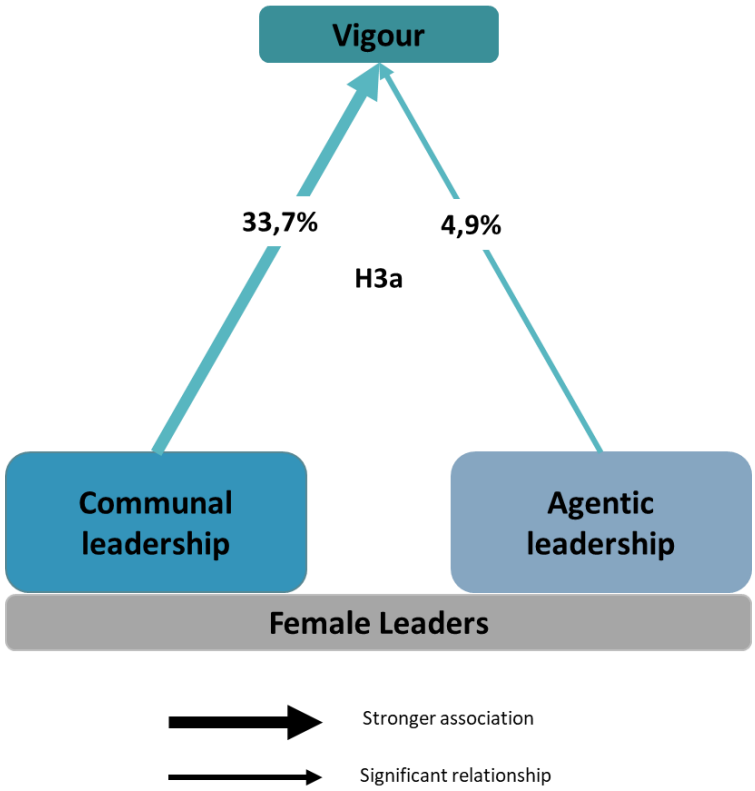
Research objective 3 focused on identifying whether female leaders exhibiting communal leadership traits had a stronger association with their employee's level of work engagement compared to female leader exhibiting agentic leadership traits.

6.5.5.1. Hypothesis 3a

The seventh null hypothesis ($H_0$3a) stated that a female leader exhibiting a communal leadership style does not have a stronger association with their employees' vigour. The alternative hypotheses ($H_1$3a) stated that a female leader exhibiting a communal leadership style does have a stronger association with their employees' vigour.

The construct of vigour had a significant relationship with both the agentic leadership and communal leadership styles. By comparing the percentage of variance explained by communal leadership style and percentage of variance explained by the agentic leadership style the researcher rejects the null hypothesis as the communal leadership style explains 33.7% of the variance in vigour compared to 4.9% by agentic leadership. Refer to Figure 19 for a visual representation of hypothesis 3a.

Figure 19: Visual representation of hypothesis H3a

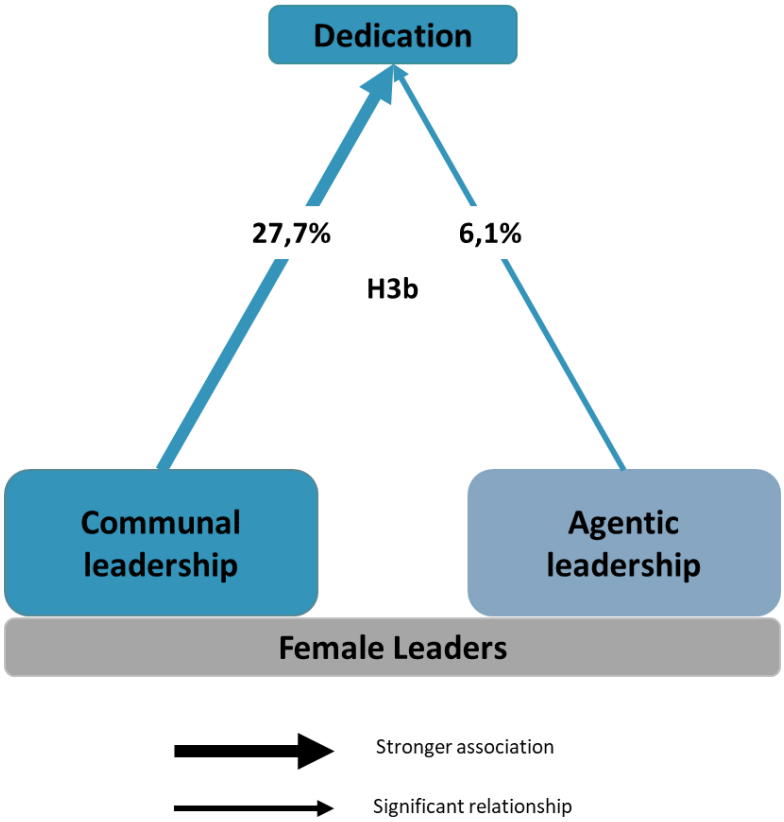


6.5.5.2. Hypothesis 3b

The eighth null hypothesis ($H_0$3b) stated that a female leader exhibiting a communal leadership style does not have a stronger association with their employees' dedication. The alternative hypotheses ($H_1$3b) stated that a female leader exhibiting a communal leadership style does have a stronger association with their employees' dedication.

The construct of dedication had a significant relationship with both the agentic leadership and communal leadership styles. By comparing the percent of variance explained by the communal leadership style and the percent of variance explained by the agentic leadership style the researcher rejects the null hypothesis as the communal leadership style explains 27.7% of the variance in dedication compared to 6.1% by agentic leadership. Refer to Figure 20 for a visual representation of hypothesis 3a.

Figure 20: Visual representation of hypothesis H3b

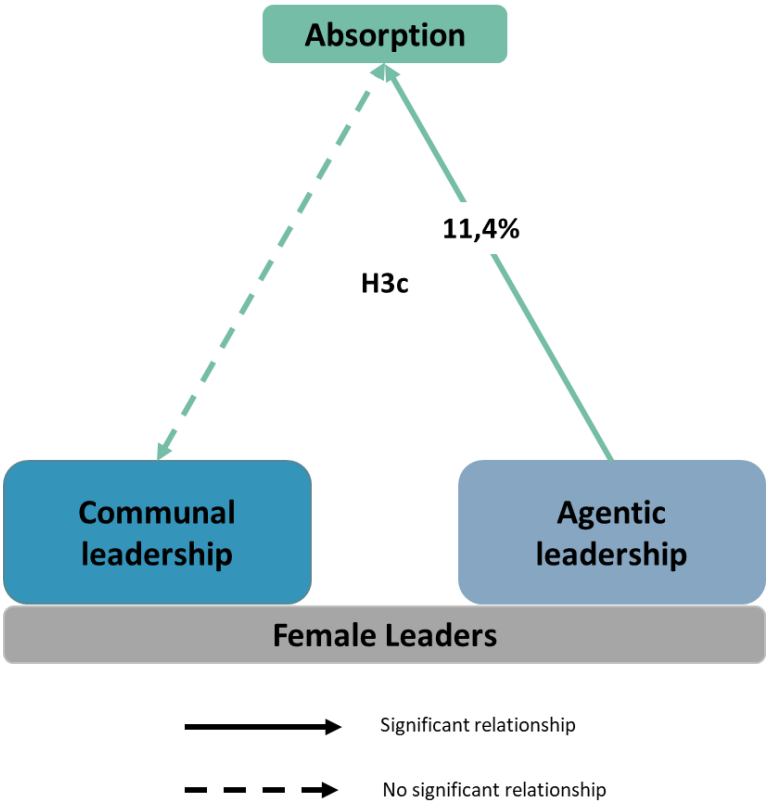


6.5.5.3. Hypothesis 3c

The ninth null hypothesis ($H_0$3c) stated that a female leader exhibiting a communal leadership style does not have a stronger association with their employees' absorption, compared to a female leader exhibiting an agentic leadership style. The alternative hypotheses ($H_1$3c) stated that a female leader exhibiting a communal leadership style does have a stronger association with their employees' absorption, compared to a female leader exhibiting an agentic leadership style.

The construct of absorption had a significant relationship with the agentic leadership style. Absorption was found to have no significant relationship with the communal leadership style. Therefore, the researcher accepts the null hypothesis as the communal leadership style does not have a stronger association with the construct of absorption, whereas agentic leadership explains 11.4% of an employee's level of absorption at work, as seen in Figure 21.

Figure 21: Visual representation of hypothesis H3c



6.5.6. Interpretation of hypothesis 3 results

In hypothesis 3a communal and agentic leadership were found to influence vigour, with communal explaining 33.7% of the variance and agentic only 4.9%. The antecedent of transformational leadership, which is strongly associated with communal leadership and not agentic leadership, is seen as an antecedent with vigour (Griffiths, Roberts, & Price, 2019; Rosette & Tost, 2010; Rosette et al., 2016). Only a single antecedent of vigour is aligned to agentic leadership, namely the managers use of rewards, which could explain the low level of variance explained by agentic leadership.

Further to this, when a female leader leads in an agentic manner they can be met with the backlash effect. The phenomenon refers to women leaders being viewed in a negative light when exhibiting agentic leadership characteristics (Eagly & Carli, 2007; Zheng, Kark, & Meister, 2018). Furthermore, due to the perceived role violation, women in leadership positions tend to be evaluated more harshly than their male counterparts (Rosette, Mueller, & Lebel, 2015). Due to the sample being employee's reporting to female managers the backlash effect could account for the low variance explained by the agentic leadership style.

Hypothesis 3b saw similar results whereby communal leadership and agentic leadership were found to influence dedication, with communal explaining 27.7% of the variance and agentic only 6.1%. The backlash effect, as mentioned in the paragraph above, could play a role here too as with vigour. Along with this the antecedents related to dedication are better aligned to communal leadership, specifically the antecedents regarding open and honest leaders who ensure their employees feel valued (Abele & Wojciszke, 2014; Trapnell & Paulhus, 2012).

Further to this, it has been argued that communal leadership may be more effective than agentic leadership due to the current need for collaboration, communication and equality within the workplace (Paustian-Underdahl, Walker, & Woehr, 2014). Studies found that communal leadership is celebrated and appreciated over and above agentic leadership styles by employee's and future leaders (Gerzema & D'antonio, 2017; Griffiths, Roberts, & Price, 2019). Thus, one would expect communal leadership to not only have an influence, as proven by hypothesis 2a and 2b, but have a stronger association with vigour and dedication compared to agentic leadership

Hypothesis 3c follows a different path whereby only agentic leadership has a significant relationship with absorption. The main difference with this hypothesis is that communal leadership was found to have no influence over absorption. As discussed earlier a reason for this departure could be that absorption is the cognitive component of work engagement (Kahn, 1990; Geldenhuys, Laba, & Venter, 2014) whereas communal leadership approaches from an emotional perspective (Abele & Wojciszke, 2014; Rosette, Mueller, & Lebel, 2015).

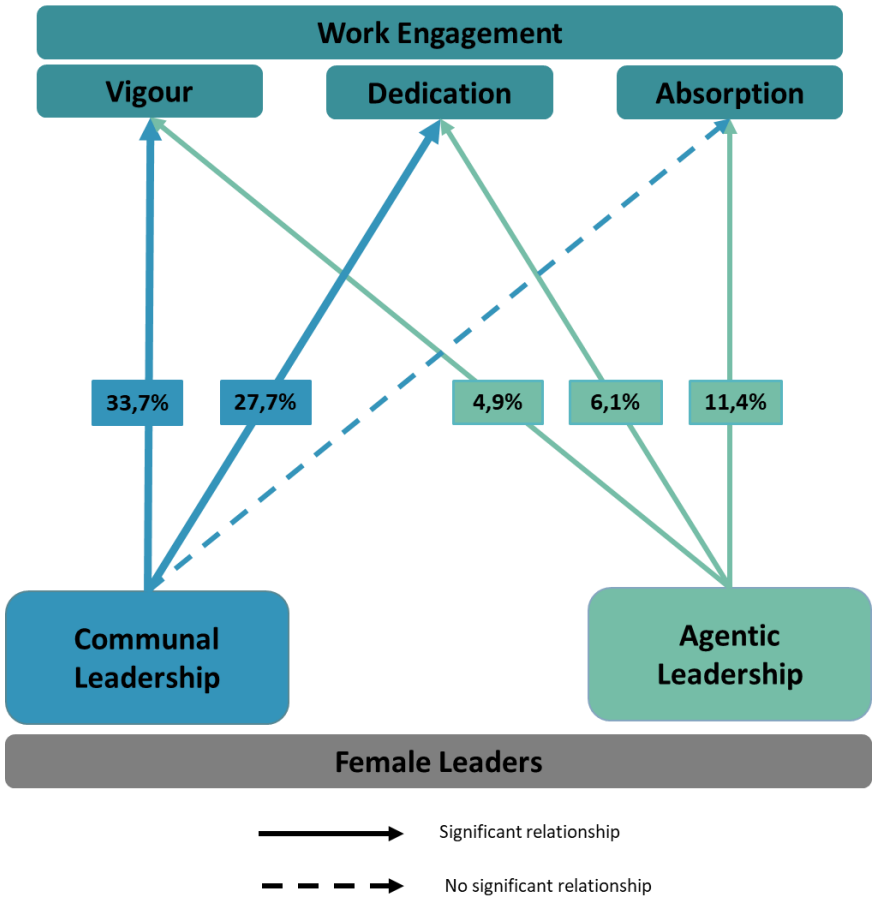
The variance explained by agentic leadership was 11.4% which was higher than the variance explained by agentic leadership for vigour and dedication, but still relatively low compared to the variance explained by communal leadership for vigour and dedication. A reason for this could be the age of the sample. According to Schaufeli and Bakker (2004) and Kim and Kang (2016) the older one gets the more engaged they become in their work. The age demographic was the only demographic to have a significant relationship with absorption, and had no significant relationship with the other two sub-constructs therefore supporting the literature that the older an employee gets the more absorbed they become in their work. Which means that the younger the employee the less absorbed they are in their work.

As seen in Figure 11 the sample for this study was skewed toward a younger demographic with 72% of all respondents aged 40 years and younger. The younger sample of respondents could be a contributing factor as to why there was a relatively low level of variance explained by agentic leadership.

6.6. Chapter conclusion

This chapter provided an overview of the three constructs, namely agentic leadership, communal leadership and work engagement. It went on to discuss the three research objectives and subsequent hypotheses. The results from chapter 5 were unpacked and it was found that agentic leadership had an association with all three sub-constructs of work engagement, communal leadership had a stronger association with two of the three sub-constructs (vigour and dedication), but lacked an association with absorption.

Figure 22: Overview of hypotheses results



These results in Figure 22 contribute toward the understanding of female leadership, with a focus on the agentic and communal leadership styles, in reference to work engagement. Chapter 7 will discuss the principle findings, implications for management, limitations of the research and suggestions for future research.

7. Chapter 7: Conclusion

7.1. Introduction

This research attempted to identify whether a female leader exhibiting agentic or communal leadership would have an influence on her employees' work engagement. The purpose of this research was anchored in two challenges, the low levels of work engagement in organisations in South Africa, and the low levels of female representation in senior leadership positions in organisation in South Africa.

Work engagement levels amongst employees in South Africa are at the dismally low level of 9% (SABPP, 2014). Low levels of work engagement can be extremely costly for organisations, as indicated by the following powerful statistics: low levels of work engagement have cost the USA between $450 to $500 billion dollars a year (Gallup, 2013). Keeping in mind that in the work engagement levels in the USA are around 30% compared to the dire 9% within South Africa, the need to address work engagement in organisations in South Africa is crucial. Further to this, high levels of work engagement can lead to increased job satisfaction and productivity as well as decreased turnover and absenteeism, to name a few of the benefits associated (Kim, Kolb, & Kim, 2012; Strom, Sears, & Kelly, 2014; Geldenhuys, Laba, & Venter, 2014).

Employees can be known to be more engaged when they are managed by a female (Castrillon, 2019), and therefore perhaps an increased level of female representation in leadership positions could lead to an increase in work engagement within organisations in South Africa. If this is a potential part of the solution, we have some way to go as only 29% of all senior decision-making roles are occupied by women in South Africa (Grant Thornton, 2018a). Lifting female representation in leadership roles is said to have many benefits over and above work engagement, which include, but are not limited to, improved professionalism, increased efficiency, and productivity amongst the staff (Fine & Sojo, 2019; Wu & Cheng, 2016). Along with this, organisations with higher female representation in leadership roles have been found to perform better from a financial perspective compared to than those with a lower female representation in leadership roles (Hoobler et al., 2018; Isidro & Sobral, 2014).

RCT, together with other theoretical constructs such as the backlash effect, the glass cliff and the paradox of female leadership, have all contributed to outdated and stereotypical views of what it takes to be a leader, with the leader's gender often at the forefront. However, as the literature on the benefits of female leadership continues to grow, management within organisations should take note in an attempt to capture competitive advantage in the current trying economic times.

The potential benefits resulting from increased levels of female representation in senior leadership roles, and from the subsequent improved levels of work engagement, support the need for further research in these areas. This research aimed to address work engagement from a previously unresearched angle by evaluating its relationship with agentic and communal leadership whilst attempting to contribute to the discourse of female leadership. This final chapter will highlight the principal findings per research objective followed by the implications these findings could have for management. Finally, the limitations of the research and recommendations for future research are discussed.

7.2. Principal findings

Two out of the four control variables had no influence on work engagement, whereas the employees age and tenure with their manager were found to have a positive influence on their level of absorption and dedication respectively. With regards to age, the positive correlation coefficient meant that the older an employee is the more cognitively connected they become with their work. This could perhaps be due to older employees working in more senior and cognitively demanding positions.

From the perspective of the employee's tenure with their manager, this had a negative correlation coefficient which meant the longer an employee reported to their manager the less engaged they became in their work. Perhaps this could be an indication in the breakdown of the relationships between managers and their employees' overtime. The dedication of an employee is related to how emotionally connected they feel to their work thus the relationship with their manager would play an integral role in this.

Research objective 1 aimed to identify if female leaders exhibiting an agentic leadership style had an influence on their employees' work engagement. During exploratory factor analysis the agentic leadership construct loaded onto two components that were renamed agentic-capacity and agentic-confidence. Both components were found to be reliable. However, a second EFA (seen in Appendix 12) was run that included all items. This EFA found that the item for pressure loaded on the communal leadership construct, which was in contradiction with the original scale created by Abele et al. (2016). A decision was made to remove the item, which meant that agentic-confidence was only supported by two items (leadership qualities and self-confidence). Further to this another reliability test confirmed the need to remove the agentic-confidence construct, resulting in agentic-capacity representing the agentic leadership style in a South African context. It was thus re-named agentic leadership. Agentic leadership, namely a leader's resilience, intelligence, competence, capability and efficiency, was found to have an influence on all three sub-constructs of work-engagement (vigour, dedication and absorption).

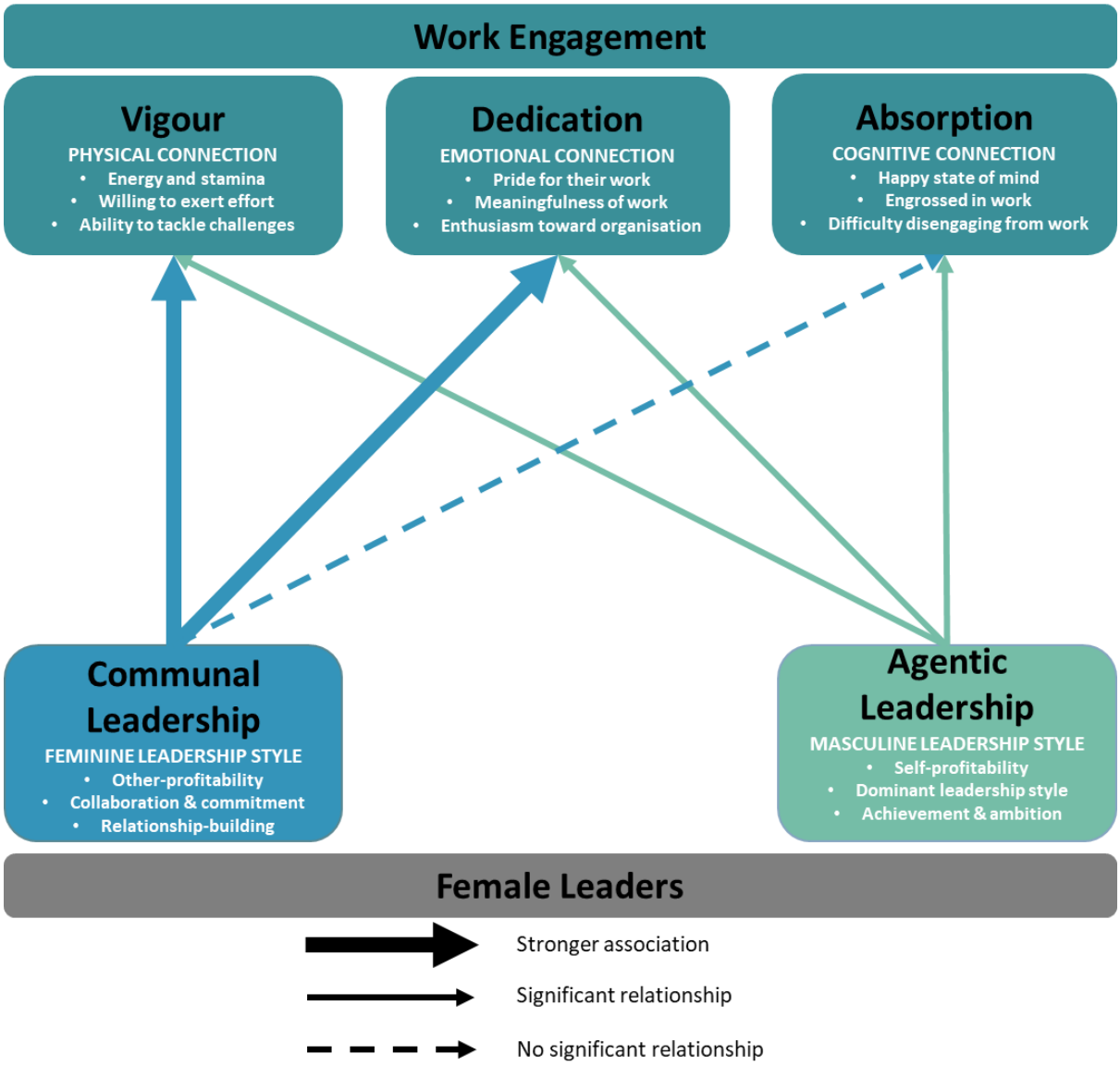
Research objective two investigated whether the communal leadership style had an influence on the three sub-constructs of work engagement. It was found that communal leadership had an influence on an employee's vigour and dedication to their work but not on their level of absorption. This meant that this leadership style had an impact on the employee's physical and emotional connection with their job but not with their cognitive connection with their work. Prior literature (Coetzee & Veldman, 2016; Hall, 2014; Shirom, 2007) supported the associations between communal leadership and vigour and dedication; however, this research was not aligned to the literature in finding no association with absorption. This could be due to the number of antecedents for absorption that are associated with agentic leadership as opposed to communal leadership (Coetzee & Veldman, 2016).

Finally, research objective three aimed to identify which leadership style had a stronger association with work engagement so as to identify the best way to drive work engagement amongst employees. The research found that communal leadership had a far stronger association with vigour and dedication compared to agentic leadership, yet due to the lack of association between communal leadership and absorption, agentic leadership had a stronger association with the third construct of absorption. With regards to the physical connection (vigour) communal leadership

explained 33.7% of the variance whereas agentic leadership only had a slight impact as it explained 4.9% of the variance. From a perspective of the emotional connection (dedication), communal leadership explained 27.7% of the variance whereas agentic leadership only had a slight impact as it explained 6.1% of the variance. Finally, with regards to the cognitive connection (absorption), agentic leadership was the only leadership construct to have an association with it which explained 11.4% of the variance of absorption. Which means that both agentic and communal leadership styles are required to promote all three elements of work engagement.

These findings have important implications for management and provide valuable insights into how best to drive an employee's engagement so as to take advantage of the number of benefits associated to improved levels of vigour, dedication and absorption. Refer to Figure 23 for the conceptual model representing the findings of this study.

Figure 23: Conceptual model



7.3. Implications for management

Within the competitive markets of today, human capital has become an invaluable resource as organisations must work hard to obtain higher output from fewer employees. For this reason, an employee's psychological capability and investment in their work has become a focus for many organisations, also referred to as their level of work engagement (Schaufeli, 2013).

7.3.1. Managers taking accountability for, and understanding the impact of, work engagement

A bleak 9% of employees working in South Africa are said to be engaged in their work (SABPP, 2014). A lack of engagement amongst employees has proven to have extremely costly impacts (Gallup, 2013; Towers Watson, 2012). Therefore, management within organisations should appreciate this and accept accountability in working to promote higher levels of work engagement within their employees. This requires management to understand the antecedents of work engagement with a specific focus on the type of leaders and leadership styles required to promote work engagement effectively. Further to this, this study found that the longer an employee reports to their manager the less emotionally connected they become to their work, and this could be due to a break down in the manager-employee relationship as time lapses. Managers should work toward maintaining healthy and productive relationships with their employees' so as to promote their employee's dedication rather than erode it overtime.

7.3.2. Understanding and promoting the type of leaders and leadership style required to drive work engagement

Due to outdated perceptions of leadership, which is addressed in the RCT (Eagly & Karau, 2002) females are seen to be incongruent with leadership due to the mismatch between traditional leadership and gender norms. However, the results garnered from this research emphasise that female leaders have a positive impact on their employees' levels of work engagement. Therefore, management should seek to hire more female managers in senior leadership roles to effectively promote work engagement.

This research also found that female leaders exhibiting both agentic and communal leadership traits had an influence on their employees' work engagement. Although agentic leadership had an influence on all elements of work engagement, communal leadership had a far stronger impact on two of the three elements of work engagement. Management should recognise the impact that not only female leaders, but female leaders who are perceived to be trustworthy, inspiring and compassionate (communal), can have on employees' work engagement, and subsequently on the performance of an organisation.

7.3.3. Female leaders must learn to engage in both leadership styles

The results show that both agentic and communal leadership have an impact on work engagement when exhibited by a female. Communal leadership has a stronger influence on vigour and dedication, yet has no influence on absorption. The influence that agentic leadership has on all three sub-constructs, specifically absorption, highlights the need for female managers with both leadership styles. Female managers with a communal leadership style will need to learn to engage in both styles in order to influence not only their employees emotional and physical connection to their work, but their cognitive connection too. Female managers with an agentic leadership style will need to learn to engage in a communal style so as to enhance the influence they have on their employees emotional and physical connection to their work. Therefore, management should look to employ female managers with the ability to engage in both leadership styles. The combination of both masculine and feminine leadership traits is referred to as androgynous leadership; it is known to be an effective style of leadership (Eagly & Carli, 2007).

This study contributes to the discourse of female leadership in an attempt to shift outdated and misconstrued perceptions around female leadership and the powerful impact female leaders can have on employee and organisational performance.

7.4. Limitations of the research

The salient limitations of this study include:

- Only female managers and only agentic and communal leadership styles were considered. Male managers and other leadership styles were not considered in this study; thus, an incomplete picture may be captured.
- There was a lack of academic literature on the association between communal and agentic leadership and work engagement.
- Due to the researcher's lack of experience, the scope and depth of discussions may be limited.
- The study does not take employees' intrinsic motivations into account, which can be powerful antecedents to work engagement.
- This study relied on the employees' perception of their managers' leadership, and therefore may be skewed due to personal bias.
- The cross-sectional design of this study could result in a snapshot of the respondents' perceptions, therefore different findings could be generated if the study were to be redone. Refer to section 4.8 for more details.
- The data being collected from the same respondents simultaneously can lead to Common Method Bias (CMB), and therefore a Harman's single test was run. The results found that a threat of CMB was not present. Refer to section 4.8 for more details.
- The techniques of non-probability sampling and snowball sampling were utilised. These can result in sections of the population not being able to partake, while those respondents who did partake could be similar to one another, resulting in similar responses. Refer to section 4.8 for more details.
- A threat of non-response bias was present due to the number of individuals who failed to respond. The lost information from these non-respondents can result in a bias which was not tested for and is thus a limitation for this study. Refer to section 4.8 for more details.

7.5. Recommendations for future research

Based on the limitations noted in section 7.4, the following recommendations for future research are made. Firstly, it is recommended that future studies include male leaders to allow for comparison between the two genders when it comes to the promotion of work engagement. Secondly, future studies could evaluate a few different leadership styles in conjunction with gender so as to understand the

landscape of leadership and work engagement more holistically. Thirdly, a potential avenue to explore could be the employees' intrinsic motivations and how these could impact their levels of work engagement. Finally, future studies could evaluate both managers and employees separately to account for any personal bias that employees may have toward their leaders.

7.6. Conclusion of document

The low levels of work engagement as well as the low levels of female representation in leadership roles within organisations in South Africa prove to be ongoing challenges with negative consequences. The benefits associated with improving these levels provide incentive for management to work toward higher female representation within senior leadership positions as well as higher levels of work engagement amongst employees.

The results of this study provide insights into the benefits of female leadership, exhibiting both agentic and communal leadership styles, with regards to promoting work engagement, and thus contributing to the discourse on the importance of both female leadership and engaged employees.

8. References

Abele, A. E. (2003). The dynamics of masculine-agentic and feminine-communal traits: findings from a prospective study. *Journal of Personality and Social Psychology, 85(4),* 768-776. doi: 10.1037/0022-3514.85.4.768

Abele, A. E., Hauke, N., Peters, K. Louvet, E., Szymkow, A., & Duan, Y. (2016). Facets of the fundamental content dimensions: agency with competence and assertiveness—communion with warmth and morality. *Frontiers in Psychology*, 7, 4-5,8-12,14. doi: 10.3389/fpsyg.2016.01810

Abele, A. E., & Wojciszke, B. (2007). Agency and communion from the perspective of self versus others. *Journal of Personality and Social Psychology*, 93(5), 751-763. doi: 10.1037/0022-3514.93.5.751

Abele, A. E., & Wojciszke, B. (2014). Communal and agentic content in social cognition: A dual perspective model. *Advances in Experimental Social Psychology*, 50, 195-255. doi: 10.1016/B978-0-12-800284-1.00004-7

Avolio, B. J., Gardner, W. L., Walumbwa, F., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leader's impact follower attitudes and behaviors. *The Leadership Quarterly*, 15, 801-823.

Avolio, B. J., & Gardner, W. L. (2005). Authentic Leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16, 315-338. doi: 10.1016/j.leaqua.2005.03.001j

Azorin, J. M. & Cameron, R. (2010). The application of mixed methods in organisational research: A literature review. *Electronic Journal of Business Research Methods*, 8 (2). 95-105.

Awang, Z.B. (2015). Chapter 3: Validating the measurement model: CFA. SEM made simple: A gentle approach to learning structural equation modeling. Bandar Baru Bangi: MPWS Rich Resources.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.

Barreiro, P. L. & Albandoz, J. P. (2001). Population and sample. Sampling techniques. University of Seville. Retrieved from

https://optimierung.mathematik.uni-kl.de/mamaeusch/veroeffentlichungen/ver_texte/sampling_en.pdf

Bass, B. (1985). Leadership: Good, better, best. *Organizational Dynamics*, 13(3), 26-40. doi: 10.1016/0090-2616(85)90028-2

Beavers, A. S., Lounsbury, J. W., Richards, J. K., Huck, S. W., Skolits, G. J., & Esquivel, S. L. (2013). Practical considerations for using exploratory factor analysis in educational research. *Practical Assessment, Research and Evaluation*, 18(6).1-13.

Business Women's Association of South Africa. (2017). Women in Leadership Census. Business Women's Association of South Africa. Cape Town

Carli, L. L., & Eagly, A. H. (2016). Women face a labyrinth: an examination of metaphors for women leaders. *Gender in Management: An International Journal*, 31(8). 8,514-537. Doi: 10.1108/GM-02-2015-0007

Castrillon, C. (2019). Why women-led companies are better for employees. Forbes. Retrieved from https://www.forbes.com/sites/carolinecastrillon/2019/03/24/why-women-led-companies-are-better-for-employees/#665435c23264

Chilisa, B., & Kawulich, B. (2012). Selecting a research approach: paradigm, methodology and methods. In *Doing Social Research: A Global Context* (ed). Wagner, C., Kawulich, B., & Garner, M. 1-21. London: McGraw-Hill Higher Education.

CIRT. (n.d.). When to Use Quantitative Methods. Retrieved from https://cirt.gcu.edu/research/developmentresources/research_ready/quantresearch/whentouse

Coetzee, M., & Veldman, D. (2016). Psychological work immersion enablers and behavioural indicators: Exploring socio-demographic differences among staff members. *South African Journal of Labour Relations*, 40(1), 42-58.

Coetzer, TC. F., & Rothmann, S. (2007). Job demands, job resources and work engagement of employees in a manufacturing organisation. *Southern African Business Review*, 11(3), 17-32.

Costello, A.B., & Osborne, J.W. (2011). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation*, 10(7). 1-139.

Davis, P. J., Frolova, Y., & Callahan, W. (2016). Workplace diversity management in Australia. *Equality, Diversity and Inclusion: An International Journal*, 35 (2), 81-98. doi: 10.1108/EDI-03-2015-0020

De Oliveira, L. B., & da Costa Rocha, J. (2017). Work engagement: Individual and situational antecedents and its relationship with turnover intention. *Review of Business Management*, 19(65), 415-431.

Eagly, A. H. (2007). Female leadership advantage and disadvantage: Resolving the contradictions. *Psychology of Women Quarterly*, 31(1), 1-12. doi: 0.1177/0149206316628643

Eagly, A. H., & Carli, L. L. (2007). Women and the labyrinth of leadership. *Harvard Business Review*, 85(9), 62-71. doi:10.1037/e664062007-001

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109, 573–598.

Eichhorn, B. R. (2014). Common method variance techniques. Cleveland State University, Department of Operations & Supply Chain Management. Cleveland, OH: SAS Institute Inc.

Ergle, D. (2015). Perceived feminine vs masculine leadership qualities in corporate boardrooms. *Management of organizations: Systematic research*, 74, 41-54.

Fine, C., & Sojo, V. (2019). Women's value: beyond the business case for diversity and inclusion. *The Lancet*, 393(10171), 515-516. doi:10.1016/S0140-6736(19)30165-5

Gallup, Inc. (2013). *State of the American Workplace: Employee Engagement Insights for US Business Leaders*. Washington: Gallup, Inc.

Gardner, W. L., Cogliser, C. C., Davis, K. M., & Dickens, M. P. (2011). Authentic leadership: A review of the literature and research agenda. *The Leadership Quarterly*, 22, 1120-1145. doi: 10.1016/j.leaqua.2011.09.007

Geldenhuys, M., Laba, K., & Venter, C.M. (2014). Meaningful work, work engagement and organisational commitment. *SA Journal of Industrial Psychology*, 40(1), 1-10. doi: 10.4102/sajip.v40i1.1098

Gerzema, J., & D'antonio, M. (2017). The Athena doctrine: Millennials seek feminine values in leadership. *Journal of Leadership Studies*, 10(4), 63-65. doi: 10.1002/jls.21506

Grant Thornton. (2018a). Percentage of women in senior roles in SA creeps up. Retrieved from https://www.grantthornton.co.za/Newsroom/wib-ibr-2018/

Grant Thornton. (2018b). Women in business: beyond policy to progress. Grant Thornton. Chicago. Retrieved from https://www.grantthornton.global/globalassets/1.-member-firms/global/insights/women-in-business/grant-thornton-women-in-business-2018-report.pdf

Griffiths, O., Roberts, L. & Price, J. (2019). Desirable leadership attributes are preferentially associated with women: A quantitative study of gender and leadership roles in the Australian workforce. *Australian Journal of Management*, 44(1), 32–49. doi: 10.1177/0312896218781933

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis: A Global Perspective*. (Seventh). Upper Saddle River, New Jersey: Pearson Education Limited.

Hall, J. (2014). 11 simple ways to show your employees you care. *Forbes*. Retrieved from https://www.forbes.com/sites/johnhall/2014/03/10/11-simple-ways-to-show-your-employees-you-care/#131a3abf450e

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193-206. doi:10.5465/amr.1984.4277628

Harter, J., & Adkins, A. (2015). What great managers do to engage employees. *Harvard Business Review*. Retrieved from https://hbr.org/2015/04/what-great-managers-do-to-engage-employees

Hawkes, A. J., Biggs, A., & Hegerty, E. (2017). Work Engagement: Investigating the role of transformational leadership, job resources, and recovery. *The Journal of Psychology*, 151(6), 509-531. doi: 10.1080/00223980.2017.1372339

Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. Evidence-Based Nursing, 18(3), 66-67. doi: 10.1136/eb-2015-102129

Hernandez Bark, A. S., Escartin, J., Schuh. S. C., & van Dick, R. (2016). Who leads more and why? A mediation model from gender to leadership role occupancy. *Journal of Business Ethics*, 139(3), 473-483. doi: 10.1007/s10551-015-2642-0

Hills, J. (2015). Addressing gender quotas in South Africa: Women empowerment and gender equality legislation. *Deakin Law Review*, 20 (1), 153-184. doi: 10.21153/dlr2015vol20no1art498

Hinkin, T. R., & Schriesheim, C. A. (1989). Development and application of new scales to measure the French and Raven (1959) bases of social power. *Journal of Applied Psychology, 74*(4), 561-567.

Hoobler, J. M., Masterson, C. R., Nkomo, S. M., & Michel, E. J. (2018). The business case for women leaders: Meta-analysis, research critique, and path forward. *Journal of Management*, 44 (6), 1-50. doi: 10.1177/0149206316628643

Isidro, H. & Sobral, M. (2014). The effects of women on corporate boards on firm value, financial performance and ethical and social compliance. *Journal of Business Ethics*, 132(1), 1-19. doi: 10.1007/s10551-014-2302-9

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. doi:10.1016/0304-405x(76)90026-x

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *The Academy of Management Journal*, 33(4), 692-724

Kanter, R. M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82, 965-990.

Karelaia, N., & Guillén, L. (2014). Me, a woman and a leader: Positive social identity and identity conflict. *Organizational behavior and Human Decision Processes*, 125(2), 204-219. doi: 10.1016/j.obhdp.2014.08.002

Kim, N., & Kang, S. (2016). Older and more engaged: The mediating role of age-linked resources on work engagement. *Human Resource Management*, 56(5), 731-746. doi:10.1002/hrm.21802

Kim, W., Kolb, J. A., & Kim, T. (2012). The relationship between work engagement and performance: A review of empirical literature and a proposed research agenda. *Human Resource Development Review*, 12(3), 248-276. doi: 10.1177/1534484312461635

King, L., & Drake, K. (2018). How to drive employee engagement through high-performance leadership. *Nursing Management*, 49(7), 7-8. doi: 10.1097/01.NUMA.0000540053.83189.82

Korabik, K., & Ayman, R. (1989). Should women managers have to act like men?. *Journal of Management Development*, 8(6), 23-32. doi: 10.1108/EUM0000000001366

Kossek, E., Su, R., & Wu, L. (2017). "Opting Out" or "Pushed Out"? Integrating perspectives on women's career equality for gender inclusion and interventions. *Journal of Management*, 43(1), 228–254. doi: 10.1177/0149206316671582

Kothari, C. (2004). *Research Methodology: Methods and Techniques* (2nd ed.). New Delhi: New Age international (P) Limited, Publishers. Retrieved from http://dspace.utamu.ac.ug:8080/xmlui/bitstream/handle/123456789/181/Research Methodology - Methods and Techniques 2004.pdf?sequence=1

Krawczyk, N. (2017). How stubborn stereotypes hold women back. *Progressive Grocer*, 96(4), 22-23. Retrieved from http://web.b.ebscohost.com.uplib.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=7&sid=7f37b122-198c-4a08-b499-d2320b728a20%40sessionmgr103

Kulich, C., Iacoviello, V., and Lorenzi-Cioldi, F. (2018). Solving the crisis: When agency is the preferred leadership for implementing change. *The Leadership Quarterly*, 29(2), 295-308. doi: 10.1016/j.leaqua.2017.05.003

Ladkin, D, & Taylor, S. S. (2010). Enacting the 'true self': Towards a theory of embodied authentic leadership. *The Leadership Quarterly*, 21(1), 64-74. doi: 10.1016/j.leaqua.2009.10.005

Lee, M. (2014). Transformational leadership: Is it time for a recall?. *International Journal of Management and Applied Research*, 1(1), 17-29. doi: 10.18646/2056.11.14-002

Lee, J., & Ok, C. (2016). Hotel employee work engagement and its consequences. *Journal of Hospitality Marketing and Management*, 25(2), 133-166. doi: 10.1080/19368623.2014.994154

Markey, R. (2014, January 27). The four secrets to employee engagement. *Harvard Business Review*, issue(vol) 1-3. Retrieved from https://hbr.org/2014/01/the-four-secrets-to-employee-engagement

Maslach, C., & Leiter, M. P. (1997). T*he truth about burnout: How organizations cause personal stress and what to do about It*. San Francisco, CA: Jossey-Bass.

Mohajan, H. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. *Annals of Spiru Haret University*, 17(3), 58-82. Retrieved from https://mpra.ub.uni-muenchen.de/83458/1/MPRA_paper_83458.pdf

Moodley, L., Holt, T., Leke, A., & Desvaux, G. (2016). Women Matter Africa. Johannesburg: McKinsey and Company

Offermann, L. R., & Coats, M. R. (2018). Implicit theories of leadership: Stability and change over two decades. *The Leadership Quarterly*, 29(4), 513-522. doi: 10.1016/j.leaqua.2017.12.003

Paustian-Underdahl, S. C., Walker, L. S., & Woehr, D. J. (2014). Gender and perceptions of leadership effectiveness: A meta-analysis of contextual moderators. *Journal of Applied Psychology*, 99(6), 1129-1145. doi: 10.1037/a0036751

Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment. *Administrative Science Quarterly*, 17, 218-229.

Podsakoff, P. M., MacKenzie, S. B., Lee, J, & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. doi:10.1037/0021-9010.88.5.879

Reissova, A., Simsova, J., & Hasova, K. (2017). Gender difference in employee engagement. *Littera Scripta*, 10(2), 84-94.

Rosette, A. S.,Mueller, J. S., & Lebel, R. D. (2015). Are male leaders penalized for seeking help? The influence of gender and asking behaviors on competence perceptions. *The Leadership Quarterly*, 26(5), 749-762. doi: 10.1016/j.leaqua.2015.02.001

Rosette, A. S., Koval, C. Z., Ma, M., & Livingston, R. (2016). Race matters for women leaders: Intersectional effects on agentic deficiencies and penalties. *The Leadership Quarterly*, 27(3), 429-445.

Rosette, A. S., & Tost, L. P. (2010). Agentic women and communal leadership: How role prescriptions confer advantage to top women leaders. *Journal of Applied Psychology*, 95(2), 221-235. doi: 10.1037/a0018204

Rothbard, N.P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly*, 46(4), 655-684. doi: 10.2307/3094827

Ryan, M.K. & Haslam, A. (2005). The glass cliff: Evidence that women are over‐represented in precarious leadership positions. *British Journal of Management* 16(2), 81 – 90. doi:10.1111/j.1467-8551.2005.00433.x

SABPP. (2014). Fact Sheet: Employee Engagement. UNISA. Retrieved from https://www.unisa.ac.za/static/corporate_web/Content/About/Service%20departments/community%20engagement%20and%20outreach/documents/sabpp-fact-sheet_oct-2014-ce.pdf

Saunders, M., & Lewis, P (2018). *Doing Research in Business and Management* (2nd ed.). Pearson: London.

Schaufeli, W., Salanova, M., Gonzalez-Roma, V., & Bakker, A. (2002). The measurement of engagement and burnout and: A confirmative analytic approach. *Journal of Happiness Studies*, 3(1). 71-92. doi: 10.1023/A:1015630930326

Schaufeli, W., & Bakker, A. (2004). Utrecht Work Engagement Scale, p. 4-41, 48. Retrieved from https://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test_manual_UWES_English.pdf

Schaufeli, W.B. (2013). Chapter 1: What is engagement? In C. Truss, K. Alfes, R. Delbridge, A. Shantz, and E. Soane (Eds.), *Employee Engagement in Theory and Practice*. 1-37. London: Routledge.

Schock, A. K., Gruber, F., Scherndl, T., & Otner, T. (2019). Tempering agency with communion increases women's leadership emergence in all-women groups: Evidence for role congruity theory in a field setting. *Leadership Quarterly*, 30(2), 189-198. doi: 10.1016/j.leaqua.2018.08.003

Sheikh, K., & Mattingly, S. (1981). Investigating non-response bias in mail surveys. *Journal of Epidemiology and Community Health*, 35, 293-296.

Shirom, A. (2007). Chapter 7: Explaining vigor: On the antecedents and consequences of vigor as a positive affect at work. In D. Nelson, & C. L. Cooper, *Positive Organizational Behavior: Accentuating the Positive at Work*, 86-100. London: SAGE Publications Ltd.

Sinden, E. (2017). Exploring the gap between male and female employment in the South African workforce. *Mediterranean Journal of Social Sciences*, 8(6), 37-51. doi: 10.1515/mjss-2017-0040

Soifermann, K. L. (2010). *Compare and Contrast Inductive and Deductive Research Approaches*. University of Manitoba. Retrieved from https://files.eric.ed.gov/fulltext/ED542066.pdf

Sreenivasan, S., & Weinberger, L. E. (2018). Grow your organization by hiring nurturing leaders. *Nonprofit World*, 36(2), 9.

Statistics South Africa. (2017). Women in power: what do the statistics say?. Retrieved from http://www.statssa.gov.za/?p=10325

Strom, D. L., Sears, K. L., & Kelly, K. M. (2014). Work engagement: The roles of organizational justice and leadership style in predicting engagement among employees. *Journal of Leadership and Organizational Studies*, 21(1), 71-82. doi: 10.1177/1548051813485437

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571-610.

Sugiyama, K., Cavanagh, K.V., van Esch, C., Bilimoria, D., & Brown, C. (2016). Inclusive leadership development: Drawing from pedagogies of women's and

general leadership development programs. *Journal of Management Education*, 40(3), 253-292. doi: 10.1177/1052562916632553

Sungara Silva, D. A. C., & Mendis, B. A. K. M. (2017). Male vs female leaders: Analysis of transformational, transactional & laissez-faire women leadership styles. *European Journal of Business and Management*, 9(9), 19-26.

Swank, J. M., & Mullen, P. R. (2017). Evaluating evidence for conceptually related constructs using bivariate correlations. *Measurement and Evaluation in Counselling and Development*, 50(4), 270-274. doi: 10.1080/07481756.2017.1339562

Tajfel, H., & Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G. Austin & S. Worchel (Eds.), *The Social Psychology of Inter-Group Relations* (pp. 33–47). Monterey, CA: Brooks/Cole.

Towers Watson. (2012). *2012 Global Workforce Study*. London: Towers Watson.

Trapnell, P. D., & Paulhus, D. L. (2012). Agentic and communal values: Their scope and measurement. *Journal of Personality Assessment*, 94(1), 39–52. doi: 10.1080/00223891.2011.627968

University of Stellenbosch Business School. (2017, May 18). *Women in leadership – Is gender equity still an issue?* [Blog]. Retrieved from https://usb-ed.com/blog/women-in-leadership-is-gender-equity-still-an-issue/

Wegner, T. (2017). *Applied Business Statistics* (3th ed.). Cape Town: Juta and Company ltd.

Wen, X., Quacoe, D., Quacoe, D., Appiah, K., & Ada Danso, B. (2019). Analysis on bioeconomy's contribution to GDP: Evidence from Japan. *Sustainability, 11(3),* 1-17.

Wilson VanVoorhuis, C. R., & Morgan, B. L. (2007). Understanding power and rules of thumb for determining sample sizes. *Tutorials in Quantitative Methods for Psychology, 3(2),* 43-50.

Wójcik-Karpacz, A. (2018). The research on work engagement: theoretical aspects and the results of researches in the company operating in the IT sector. *Management*, 22(2), 60 – 79. doi: 10.2478/manment-2018-0023

Wolff, B. (2019). The truth about employee disengagement. Canadian Institute Of Management. *Article Weekly*. Retrieved from https://www.articleweekly.com/brad-wolff/employee-disengagement/

Wolfram, H., & Gratton, L. (2014). Gender role self-concept, categorical gender, and transactional-transformational leadership: Implications for perceived workgroup performance. *Journal of Leadership and Organizational Studies*, 21(4), 338-353.doi: 10.1177/1548051813498421

Wollard, K. K., & Shuck, B. (2011). Antecedents to employee engagement: A structured review of the literature. *Advances in Developing Human Resources*, 13(4), 429-446. doi: 10.1177/1523422311431220

World Economic Forum. (2018). The global gender gap report 2018. Cologny: World Economic Forum. Retreived from http://www3.weforum.org/docs/WEF_GGGR_2018.pdf

Wu, R., & Cheng, X. (2016). Gender equality in the workplace: The effect of gender equality among the Chilean manufacturers. *The Journal of Developing Areas*, 50(1), 257-274. doi: 10.1353/jda.2016.0001

Zheng, W., Kark, R., & Meister, A. L. (2018). Paradox versus dilemma mindset: A theory of how women leaders navigate the tensions between agency and communion. *The Leadership Quarterly*, 29(5), 584-594. doi: 10.1016/j.leaqua.2018.04.001

9. Appendices

Appendix 1: Informed consent and online questionnaire

Hello,

I am currently a student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfilment of an MBA.

I am conducting research on the influence of different styles of leadership on the engagement of employees. To that end, you are asked to complete a questionnaire on your managers leadership style and your levels of work engagement. Your "manager" refers to the individual that you report to directly. This questionnaire should take no more than 8 - 10 minutes of your time.

Your participation is voluntary, and you can withdraw at any time without penalty. Your participation is anonymous, as all data will be aggregated and reported without identifiers. By completing the survey, you indicate that you voluntarily participate in this research.

If you have any concerns, please contact my supervisor or me. Our details are provided below.

Researcher name: Robyn Dunlop
Researcher email: 18370617@mygibs.co.za
Phone: 082 805 6094

Research Supervisor: Caren Scheepers
Researcher email: scheepersc@gibs.co.za
Phone: 082 922 7072

1. Are you working in South Africa?
   A: Yes
   B: No

2. Is your current manager in a senior management position (or above) within the organisation you work for?
   A: Yes
   B: No

3. Is your current manager a female?
   A: Yes
   B: No

4. What is your gender?
   A: Female
   B: Male

5. In what age category are you?
   A: Under 20
   B: 20-29
   C: 30-39
   D: 40-49
   E: 50-60
   F: 60+

6. How long have you reported to your current manager?
   A: 0-1 year
   B: 1-2 years
   C: 2-4 years
   D: 4-6 years
   E: 6 years +
7. How long have you worked in your current organisation?
   A: 0-1 year
   B: 1-2 years
   C: 2-4 years
   D: 4-6 years
   E: 6 years +

Leadership Style

The following questions apply to your manager's leadership style. Your manager refers to the individual you report to directly.

8. Please indicate how the following characteristics apply to your manager.

   If you, for instance think that your manager is very diligent, then you choose the "1". If you think your manager is very lazy, then you choose the "5". If you think your manager is neither very diligent nor very lazy, then you choose the "3". If you think your manager is somewhat diligent (or lazy) then you choose the "2" (or "4" on the right-hand side.)

1	2	3	4	5
Very Diligent	Somewhat Diligent	Neither	Somewhat Lazy	Very lazy

9. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Give up very easily	Somewhat give up easily	Neither	Somewhat never give up easily	Never give up easily

10. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Not at all friendly	Somewhat not friendly	Neither	Somewhat friendly	Very friendly

11. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Have leadership qualities	Somewhat have leadership qualities	Neither	Somewhat have no leadership abilities	Have no leadership abilities at all

12. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very capable	Somewhat capable	Neither	Somewhat little capable	Little capable

13. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very just	Somewhat just	Neither	Somewhat not just	Not very just

14. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very assertive	Somewhat assertive	Neither	Somewhat not assertive	Not at all assertive

15. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Not at all self-confident	Somewhat not self-confident	Neither	Somewhat self-confident	Very self-confident

16. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Not very clever	Somewhat not clever	Neither	Somewhat clever	Very clever

17. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Not trustworthy	Somewhat not trustworthy	Neither	Somewhat trustworthy	Very trustworthy

18. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Little caring	Somewhat little caring	Neither	Somewhat caring	Very caring

19. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Go to pieces under pressure	Somewhat go to pieces under pressure	Neither	Somewhat stand up well under pressure	Stand up well under pressure

20. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very cold in relation to others	Somewhat cold in relation to others	Neither	Somewhat warm in relations with others	Very warm in relation to others

21. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very competent	Somewhat competent	Neither	Somewhat little competent	Very competent

22. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Little empathic	Somewhat little empathic	Neither	Somewhat empathic	Very empathic

23. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very fair	Somewhat fair	Neither	Somewhat not fair	Not very fair

24. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very smart	Somewhat smart	Neither	Somewhat not smart	Not very smart

25. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very efficient	Somewhat efficient	Neither	Somewhat not efficient	Not very efficient

26. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very considerate	Somewhat considerate	Neither	Somewhat inconsiderate	Very inconsiderate

27. Please indicate how the following characteristics apply to your manager.

1	2	3	4	5
Very affectionate	Somewhat affectionate	Neither	Somewhat little affectionate	Little affectionate

Last few questions...you're doing great!

The following 9 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, select '1'. If you have had this feeling, indicate how often you feel it by selecting the number (from 2 to 7) that best describes how frequently you feel that way.

28. At my work, I feel bursting with energy

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

29. At my job, I feel strong and vigorous

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

30. I am enthusiastic about my job

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

31. My job inspires me

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

32. When I get up in the morning, I feel like going to work

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

33. I feel happy when I am working intensely

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

34. I am proud on the work that I do

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

35. I am immersed in my work

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

36. I get carried away when I'm working

	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

Thank you for your participation, you've been an enormous help!

If you know anyone who would be interested in taking part please send them the link below: https://www.surveymonkey.com/r/FL_WE_RDunlop

Appendix 2: Codebook

Label	Items	Coding	Reverse Questions
Screening Questions			
screening question 1	Are you working in South Africa?	n/a - response not valid if NO	n/a
screening question 2	Is your current manager in a senior management position (or above) within the organisation you work for?	n/a - response not valid if NO	n/a
screening question 3	Is your current manager female?	n/a - response not valid if NO	n/a
Demographic Information			

Age	In what age category are you?	Under 20 = 1 20-29 = 2 30-39 = 3 40-49 = 4 50-60= 5 60+ = 6 Coded to Dummy Data for Multiple Regression Under 20 = 0 20-29 = 0 30-39 = 0 40-49 = 1 50-60= 1 60+ = 1	n/a
Gender	What is your gender?	Female = 1 Male = 2 Coded to Dummy Data for Multiple Regression Female = 1 Male = 0	n/a
Tenure with Manager	How long have you reported to your current manager?	0-1 year = 1 1-2 years = 2 2-4 years = 3 4-6 years = 4 6+ years = 5 Coded to Dummy Data for Multiple Regression 0-1 year = 0 1-2 years = 0 2-4 years = 0 4-6 years = 1 6+ years = 1	n/a

Tenure with organisation	How long have you in your current organisation?	0-1 year = 1 1-2 years = 2 2-4 years = 3 4-6 years = 4 6+ years = 6 Coded to Dummy Data for Multiple Regression 0-1 year = 0 1-2 years = 0 2-4 years = 0 4-6 years = 1 6+ years = 1	n/a
Managers leadership style			
Diligence	Please indicate how the following characteristics apply to your manager.	n/a - warm up question and therefore not used	n/a
Resilience(A)	Please indicate how the following characteristics apply to your manager.	Gives up very easily = 1 Gives up somewhat easily = 2 Neither = 3 Somewhat never gives up easily = 4 Never gives up easily = 5	none
Friendliness(C)	Please indicate how the following characteristics apply to your manager.	Not at all friendly = 1 Somewhat not at all friendly = 2 Neither = 3 Somewhat friendly = 4 Very friendly = 6	none
LeadershipQual(A)	Please indicate how the following characteristics apply to your manager.	Has leadership qualities = 5 Somewhat has leadership qualities = 4 Neither = 3 Somewhat has no leadership abilities = 2 No leadership abilities = 1	Reverse Question
Capability(A)	Please indicate how the following characteristics apply to your manager.	Very capable = 5 Somewhat capable = 4 Neither = 3 Somewhat litte capable = 2 Little capable = 1	Reverse Question

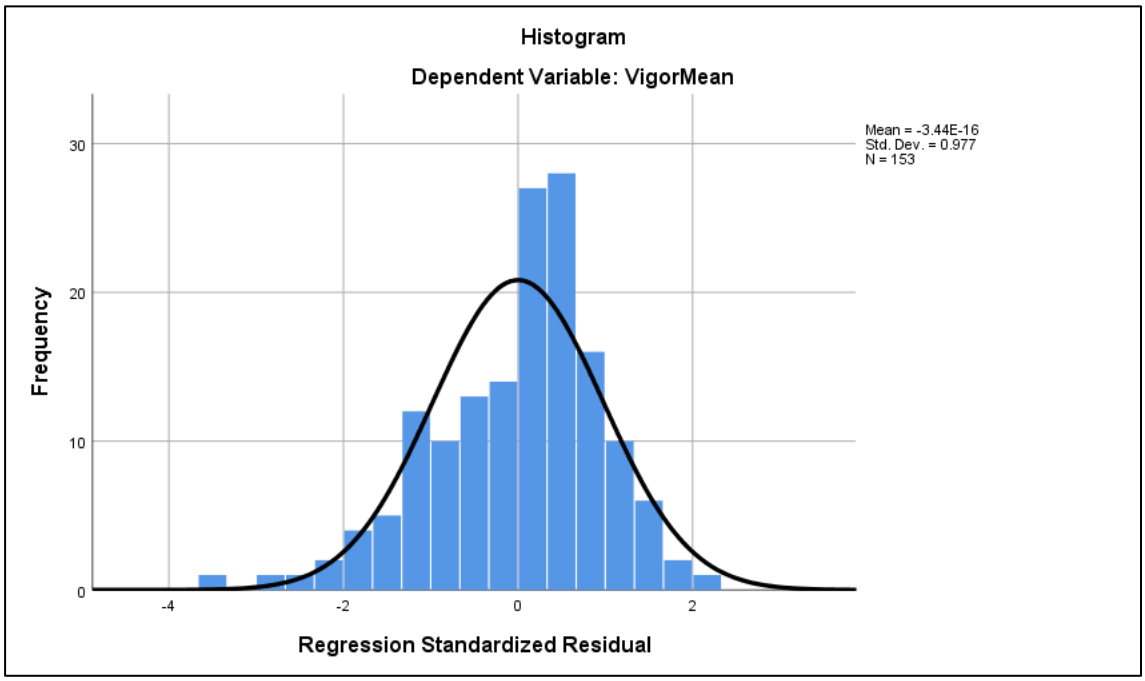
Just(C)	Please indicate how the following characteristics apply to your manager.	Very just = 5 Somewhat just = 4 Neither = 3 Somewhat not just = 2 Not very just = 1	Reverse Question
Assertiveness(A)	Please indicate how the following characteristics apply to your manager.	Very assertive = 5 Somewhat assertive = 4 Neither = 3 Somewhat not assertive = 2 Not at all assertive = 1	Reverse Question
Selfconfidence(A)	Please indicate how the following characteristics apply to your manager.	Not at all self-confident = 1 Somewhat not self-confident = 2 Neither = 3 Somewhat self-confident = 4 Very self-confident = 5	None
Clever(A)	Please indicate how the following characteristics apply to your manager.	Not very clever = 1 Somewhat not clever = 2 Neither = 3 Somewhat clever = 4 Very clever = 5	None
Trustworthiness(C)	Please indicate how the following characteristics apply to your manager.	Not trustworthy = 1 Somewhat not trustworthy = 2 Neither = 3 Somewhat trustworthy = 4 Very trustworthy = 5	None
Caring(C)	Please indicate how the following characteristics apply to your manager.	Little caring = 1 Somewhat little caring = 2 Neither = 3 Somewhat caring = 4 Very caring = 5	None
Pressure(A)	Please indicate how the following characteristics apply to your manager.	Goes to pieces under pressure = 1 Somewhat goes to pieces under pressure = 2 Neither = 3 Somewhat stands up well under pressure = 4 Stands up well under pressure = 5	None
Relations(C)	Please indicate how the following characteristics apply to your manager.	Very cold in relations with others = 1 Somewhat cold in relations with others = 2 Neither = 3 Somewhat warm in relations with others = 4 Very warm in relations with others = 5	None

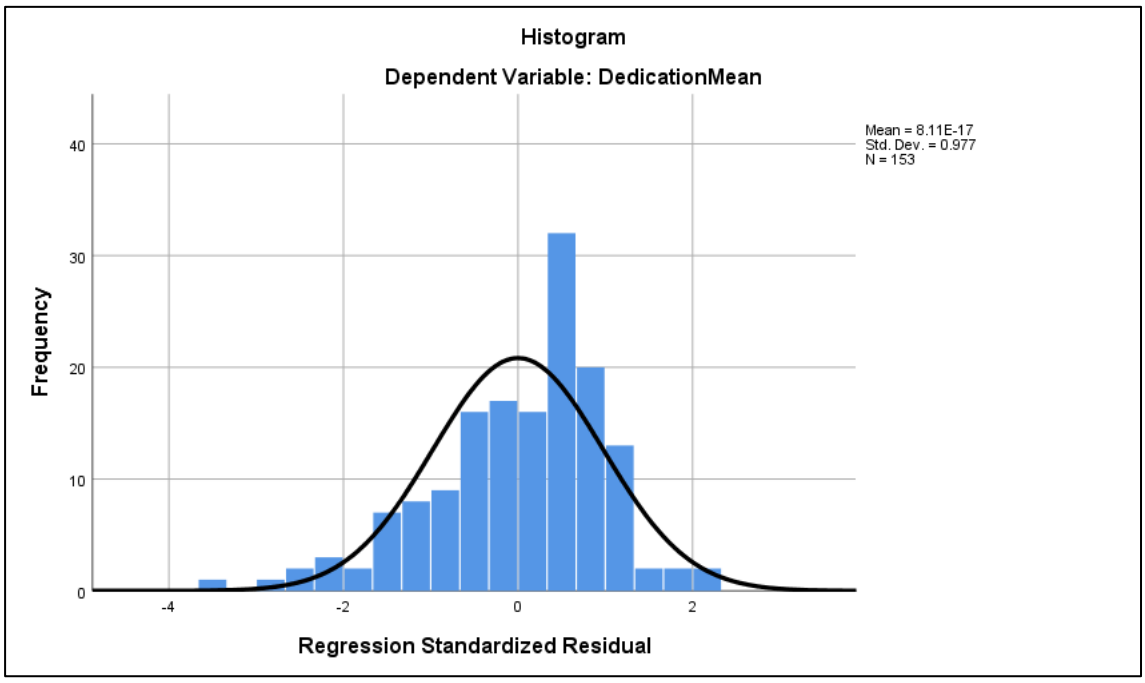
Competence(A)	Please indicate how the following characteristics apply to your manager.	Very competent = 5 Somewhat competent = 4 Neither = 3 Somewhat little competent = 2 Little competent = 1	Reverse Question
Empathic(C)	Please indicate how the following characteristics apply to your manager.	Little empathic = 1 Somewhat little empathic = 2 Neither = 3 Somewhat empathic = 4 Very empathic = 5	None
Fairness(C)	Please indicate how the following characteristics apply to your manager.	Very fair = 5 Somewhat fair = 4 Neither = 3 Somewhat not fair = 2 Not very fair = 1	Reverse Question
Smart(A)	Please indicate how the following characteristics apply to your manager.	Very smart = 5 Somewhat smart = 4 Neither = 3 Somewhat not smart = 2 Not very smart = 1	Reverse Question
Efficiency(A)	Please indicate how the following characteristics apply to your manager.	Very efficient = 5 Somewhat efficient = 4 Neither = 3 Somewhat not efficient = 2 Not very efficient = 1	Reverse Question
Consideration(C)	Please indicate how the following characteristics apply to your manager.	Very considerate = 5 Somewhat considerate = 4 Neither = 3 Somewhat inconsiderate = 2 Very inconsiderate = 1	Reverse Question
Affection(C)	Please indicate how the following characteristics apply to your manager.	Very affectionate = 5 Somewhat affectionate = 4 Neither = 3 Somewhat little affectionate = 2 Little affectionate= 1	Reverse Question
Work Engagement			
VI1	At my work, I feel bursting with energy	Never = 1 Almost Never = 2 Rarely = 3 Sometimes = 4	None
VI2	At my job, I feel strong and vigorous		None

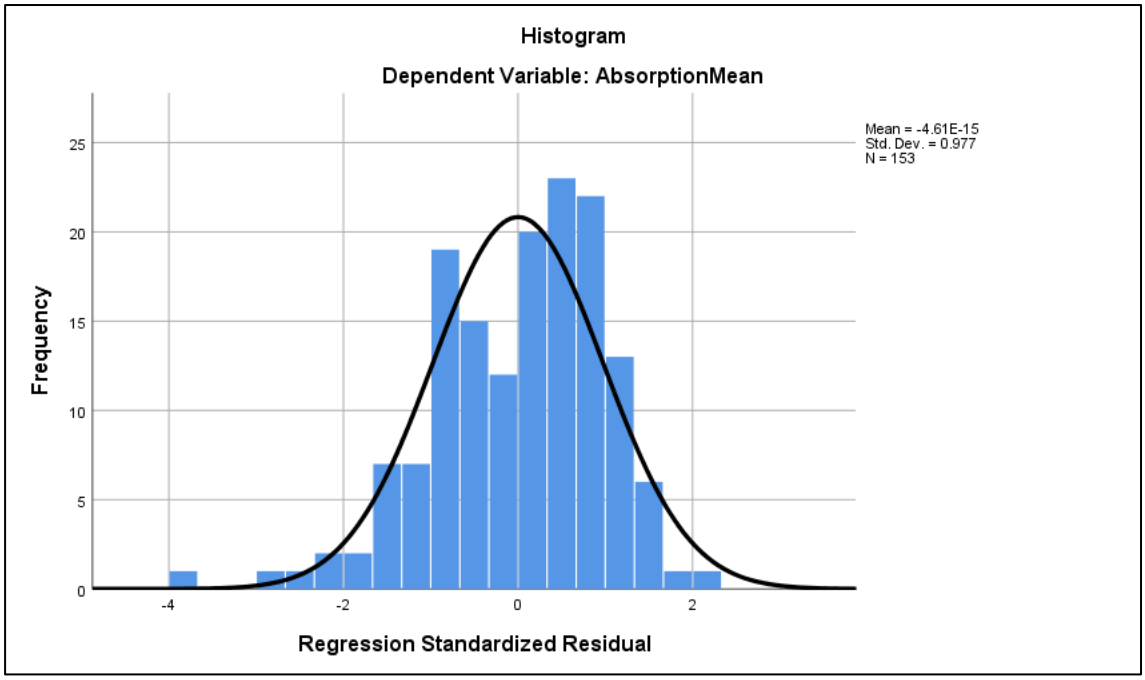
VI3	When I get up in the morning, I feel like going to work	Often = 5 Very often = 6 Always =7	None
DE1	I am enthusiastic about my job		None
DE2	My job inspires me		None
DE3	I am proud on the work that I do		None
AB1	I feel happy when I am working intensely		None
AB2	I am immersed in my work		None
AB3	I get carried away when I'm working		None

Appendix 3: Multiple regression assumption graphs

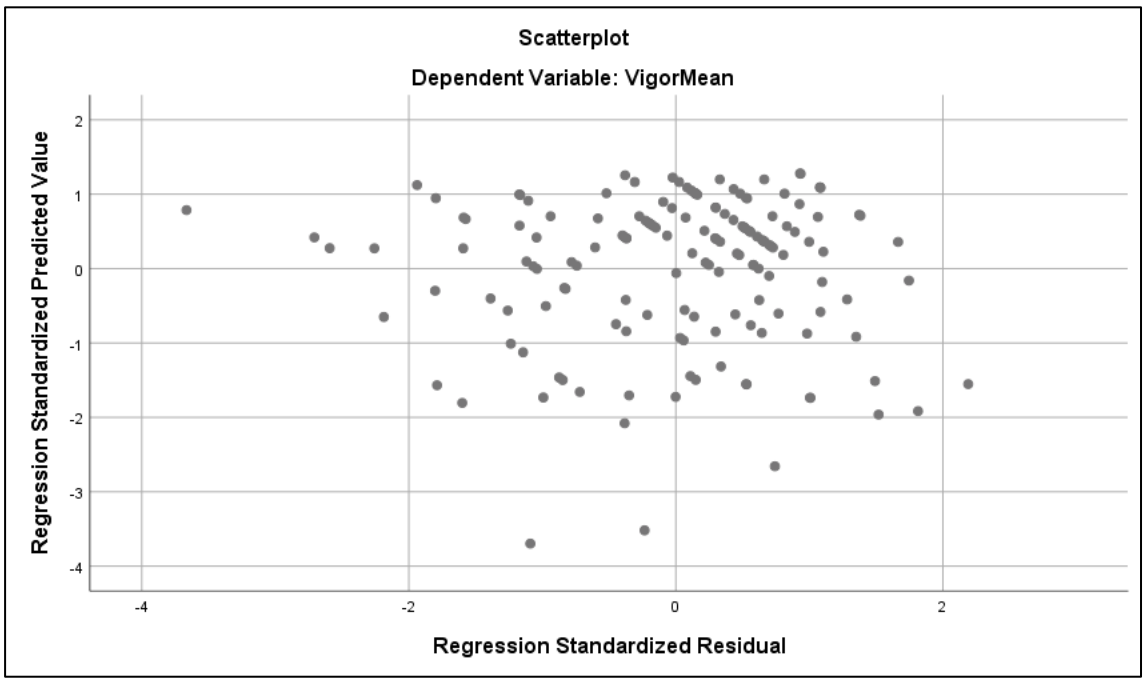
Normality of Data – Vigour, Dedication, Absorption

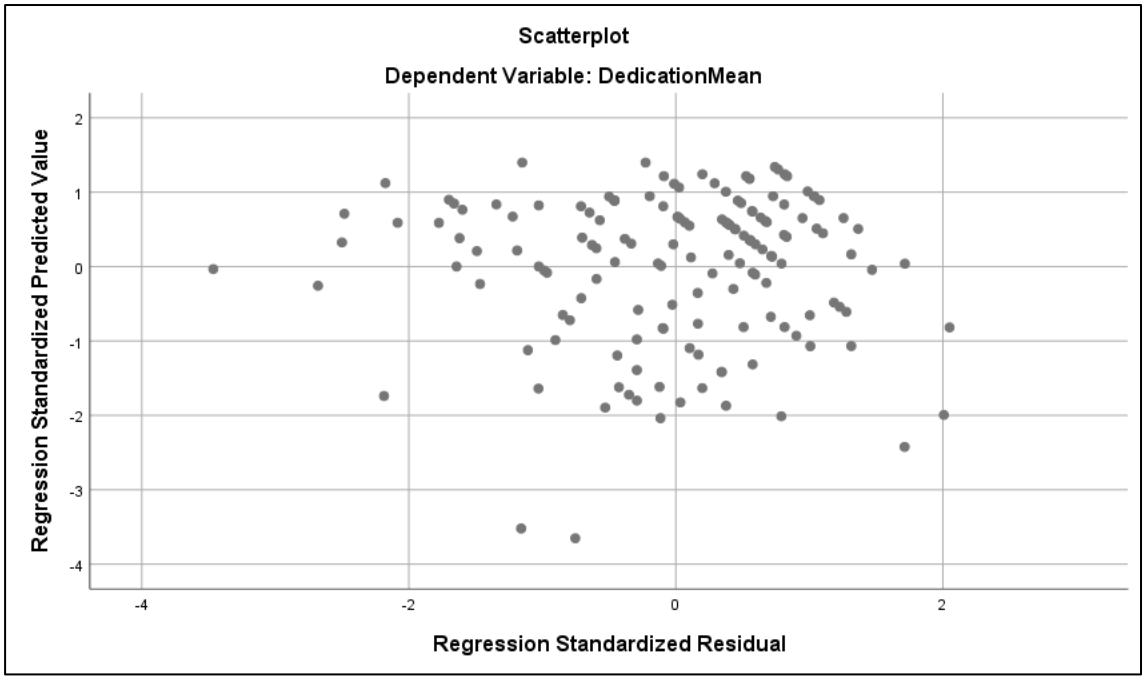


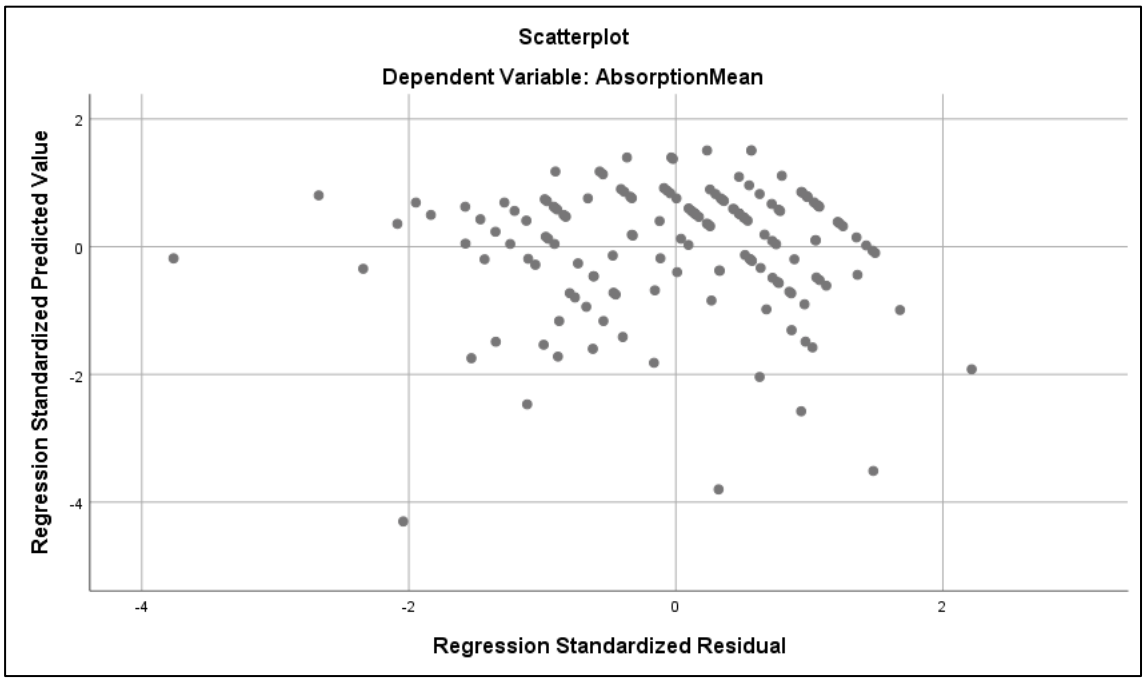




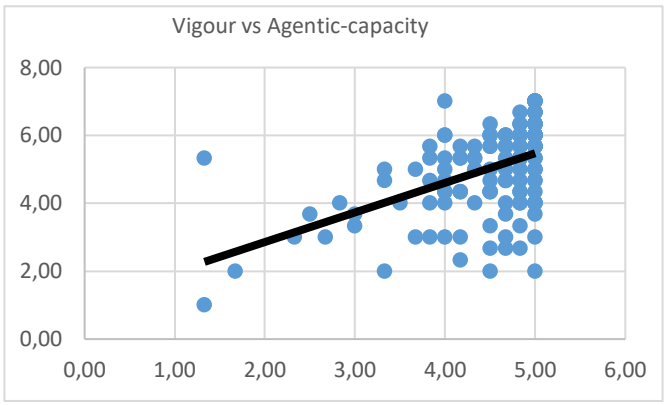
Homoscedasticity – Vigour, Dedication, Absorption

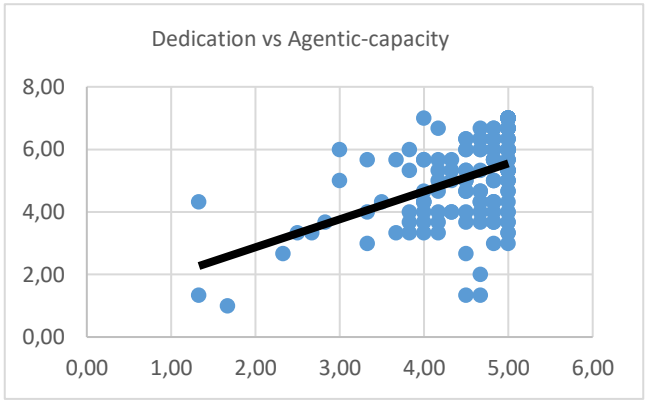


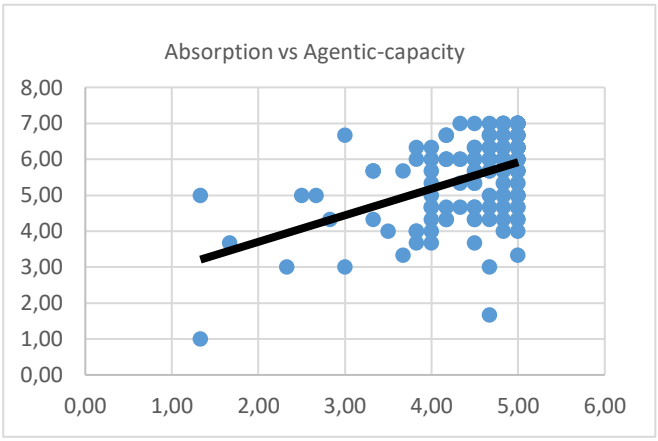

Scatterplot
Dependent Variable: DedicationMean
Regression Standardized Predicted Value
Regression Standardized Residual
2
1
0
-1
-2
-3
-4
-4
-2
0
2

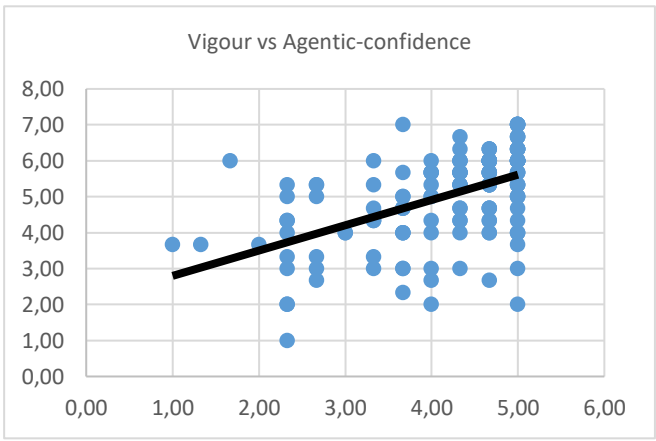

Scatterplot
Dependent Variable: AbsorptionMean
Regression Standardized Predicted Value
Regression Standardized Residual
2
0
-2
-4
-4
-2
0
2

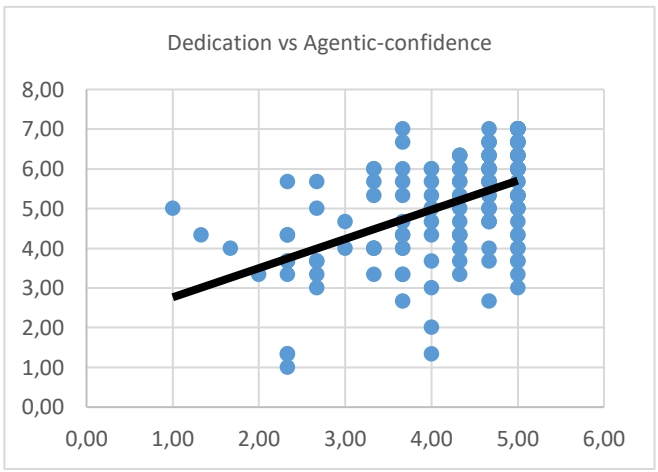
Linearity – Vigour, Dedication, Absorption

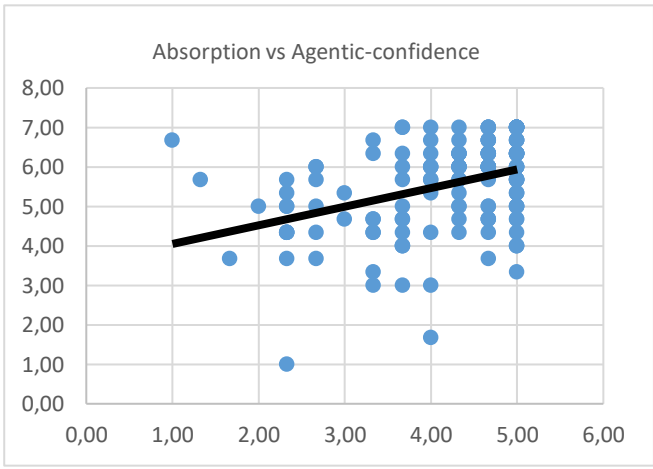


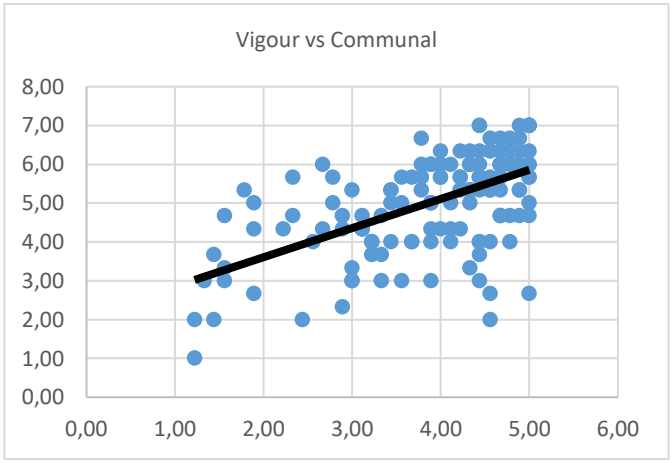


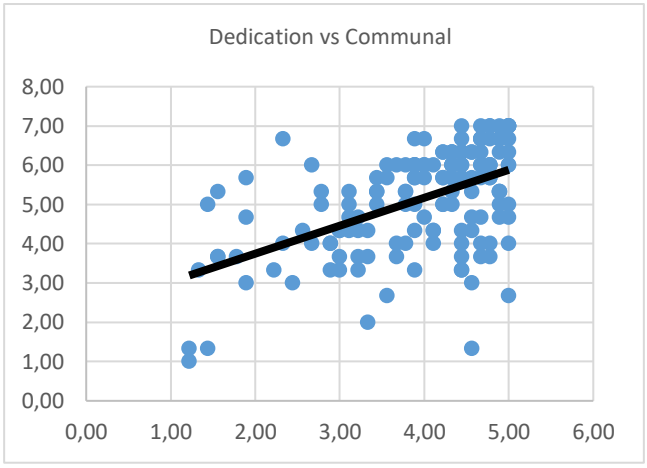


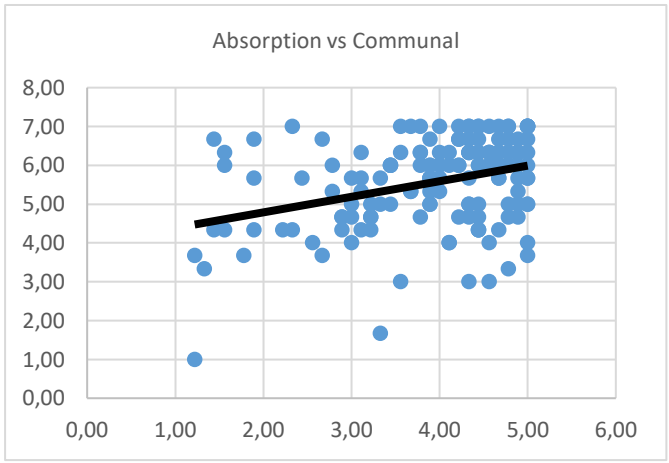







Vigour vs Communal
8,00
7,00
6,00
5,00
4,00
3,00
2,00
1,00
0,00
0,00
1,00
2,00
3,00
4,00
5,00
6,00


Dedication vs Communal
8,00
7,00
6,00
5,00
4,00
3,00
2,00
1,00
0,00
0,00
1,00
2,00
3,00
4,00
5,00
6,00


Absorption vs Communal
8,00
7,00
6,00
5,00
4,00
3,00
2,00
1,00
0,00
0,00
1,00
2,00
3,00
4,00
5,00
6,00

Appendix 4: Construct validity test for agentic leadership

Version 1

Correlations											
		ResilienceA	LeadershipQualA	CapabilityA	AssertivenessA	SelfConfidenceA	CleverA	PressureA	CompetenceA	SmartA	EfficiencyA
ResilienceA	Pearson Correlation	1	.457**	.570**	.289**	.401**	.517**	.371**	.595**	.513**	.528**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153	153
LeadershipQualA	Pearson Correlation	.457**	1	.633**	.179*	.474**	.473**	.670**	.564**	.581**	.574**
	Sig. (2-tailed)	.000		.000	.027	.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153	153
CapabilityA	Pearson Correlation	.570**	.633**	1	.139	.300**	.707**	.483**	.747**	.732**	.635**
	Sig. (2-tailed)	.000	.000		.086	.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153	153
AssertivenessA	Pearson Correlation	.289**	.179*	.139	1	.365**	.211**	.129	.114	.217**	.113
	Sig. (2-tailed)	.000	.027	.086		.000	.009	.112	.162	.007	.164
	N	153	153	153	153	153	153	153	153	153	153
SelfConfidenceA	Pearson Correlation	.401**	.474**	.300**	.365**	1	.271**	.415**	.381**	.299**	.342**
	Sig. (2-tailed)	.000	.000	.000	.000		.001	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153	153

CleverA	Pearson Correlation	.517**	.473**	.707**	.211**	.271**	1	.372**	.686**	.787**	.549**
	Sig. (2-tailed)	.000	.000	.000	.009	.001		.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153	153
PressureA	Pearson Correlation	.371**	.670**	.483**	.129	.415**	.372**	1	.405**	.470**	.575**
	Sig. (2-tailed)	.000	.000	.000	.112	.000	.000		.000	.000	.000
	N	153	153	153	153	153	153	153	153	153	153
CompetenceA	Pearson Correlation	.595**	.564**	.747**	.114	.381**	.686**	.405**	1	.685**	.581**
	Sig. (2-tailed)	.000	.000	.000	.162	.000	.000	.000		.000	.000
	N	153	153	153	153	153	153	153	153	153	153
SmartA	Pearson Correlation	.513**	.581**	.732**	.217**	.299**	.787**	.470**	.685**	1	.572**
	Sig. (2-tailed)	.000	.000	.000	.007	.000	.000	.000	.000		.000
	N	153	153	153	153	153	153	153	153	153	153
EfficiencyA	Pearson Correlation	.528**	.574**	.635**	.113	.342**	.549**	.575**	.581**	.572**	1
	Sig. (2-tailed)	.000	.000	.000	.164	.000	.000	.000	.000	.000	
	N	153	153	153	153	153	153	153	153	153	153

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

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

Version 2

Correlations										
		ResilianceA	LeadershipQualA	CapabilityA	SelfConfidenceA	CleverA	PressureA	CompetenceA	SmartA	EfficienceA
ResilianceA	Pearson Correlation	1	.457**	.570**	.401**	.517**	.371**	.595**	.513**	.528**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
LeadershipQualA	Pearson Correlation	.457**	1	.633**	.474**	.473**	.670**	.564**	.581**	.574**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
CapabilityA	Pearson Correlation	.570**	.633**	1	.300**	.707**	.483**	.747**	.732**	.635**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
SelfConfidenceA	Pearson Correlation	.401**	.474**	.300**	1	.271**	.415**	.381**	.299**	.342**
	Sig. (2-tailed)	.000	.000	.000		.001	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
CleverA	Pearson Correlation	.517**	.473**	.707**	.271**	1	.372**	.686**	.787**	.549**
	Sig. (2-tailed)	.000	.000	.000	.001		.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
PressureA	Pearson Correlation	.371**	.670**	.483**	.415**	.372**	1	.405**	.470**	.575**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
CompetenceA	Pearson Correlation	.595**	.564**	.747**	.381**	.686**	.405**	1	.685**	.581**

	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000
	N	153	153	153	153	153	153	153	153	153
SmartA	Pearson Correlation	.513**	.581**	.732**	.299**	.787**	.470**	.685**	1	.572**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000
	N	153	153	153	153	153	153	153	153	153
EfficienceA	Pearson Correlation	.528**	.574**	.635**	.342**	.549**	.575**	.581**	.572**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	
	N	153	153	153	153	153	153	153	153	153

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

Appendix 5: Construct validity test for communal leadership

Correlations

		FriendlinessC	JustC	TrustworthinessC	CaringC	RelationsC	EmpathicC	FairnessC	ConsiderationC	AffectionC
FriendlinessC	Pearson Correlation	1	.520**	.561**	.752**	.773**	.705**	.561**	.617**	.648**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
JustC	Pearson Correlation	.520**	1	.651**	.675**	.551**	.546**	.767**	.652**	.460**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
TrustworthinessC	Pearson Correlation	.561**	.651**	1	.678**	.588**	.586**	.669**	.657**	.527**

	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
CaringC	Pearson Correlation	.752**	.675**	.678**	1	.761**	.782**	.684**	.755**	.700**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
RelationsC	Pearson Correlation	.773**	.551**	.588**	.761**	1	.776**	.564**	.637**	.725**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
EmpathicC	Pearson Correlation	.705**	.546**	.586**	.782**	.776**	1	.592**	.717**	.698**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
FairnessC	Pearson Correlation	.561**	.767**	.669**	.684**	.564**	.592**	1	.748**	.499**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000
	N	153	153	153	153	153	153	153	153	153
ConsiderationC	Pearson Correlation	.617**	.652**	.657**	.755**	.637**	.717**	.748**	1	.601**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000
	N	153	153	153	153	153	153	153	153	153
AffectionC	Pearson Correlation	.648**	.460**	.527**	.700**	.725**	.698**	.499**	.601**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	
	N	153	153	153	153	153	153	153	153	153

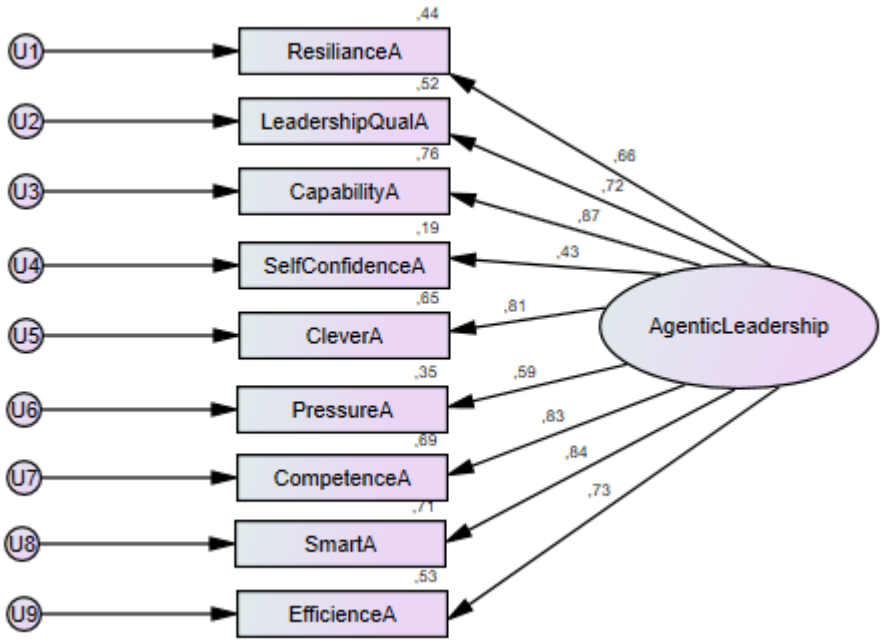
**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 6: Construct validity test for work engagement

Correlations										
		VI1	VI2	VI3	DE1	DE2	DE3	AB1	AB2	AB3
VI1	Pearson Correlation	1	.718**	.701**	.606**	.687**	.606**	.493**	.537**	.329**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
VI2	Pearson Correlation	.718**	1	.830**	.725**	.719**	.645**	.549**	.560**	.384**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
VI3	Pearson Correlation	.701**	.830**	1	.834**	.785**	.694**	.632**	.632**	.476**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
DE1	Pearson Correlation	.606**	.725**	.834**	1	.804**	.682**	.706**	.652**	.477**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
DE2	Pearson Correlation	.687**	.719**	.785**	.804**	1	.655**	.647**	.686**	.435**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
DE3	Pearson Correlation	.606**	.645**	.694**	.682**	.655**	1	.576**	.622**	.447**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000
	N	153	153	153	153	153	153	153	153	153
AB1	Pearson Correlation	.493**	.549**	.632**	.706**	.647**	.576**	1	.736**	.532**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000
	N	153	153	153	153	153	153	153	153	153
AB2	Pearson Correlation	.537**	.560**	.632**	.652**	.686**	.622**	.736**	1	.621**

	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000
	N	153	153	153	153	153	153	153	153	153
AB3	Pearson Correlation	.329**	.384**	.476**	.477**	.435**	.447**	.532**	.621**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	
	N	153	153	153	153	153	153	153	153	153
**. Correlation is significant at the 0.01 level (2-tailed).										

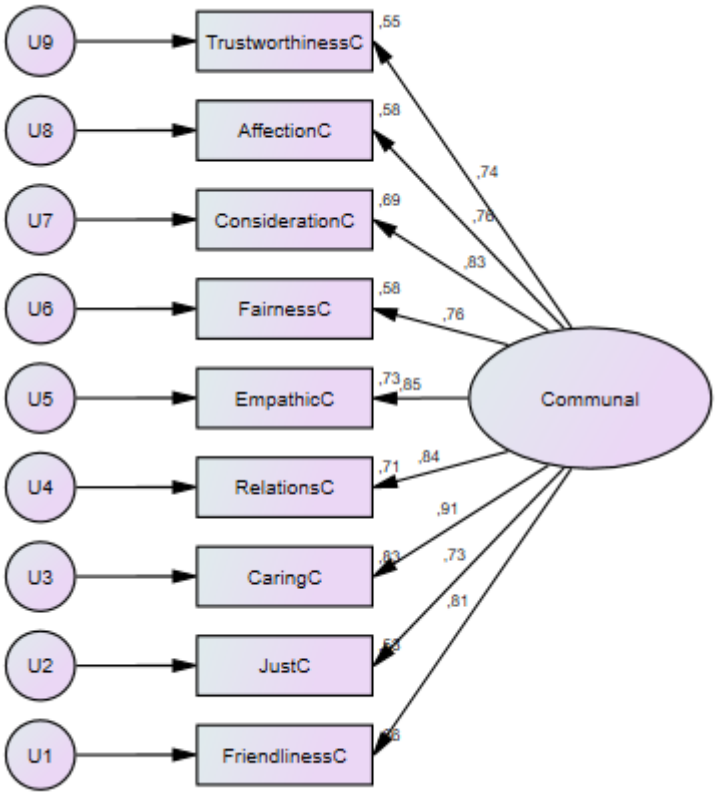
Appendix 7: CFA for agentic leadership construct



Calculation for Agentic leadership Average Variance Extracted (AVE)

Factor Loading	Factor Loading Squared (FLS)
0,66	0,4356
0,72	0,5184
0,87	0,7569
0,43	0,1849
0,81	0,6561
0,59	0,3481
0,83	0,6889
0,84	0,7056
0,73	0,5329
Total FLS	4,8274
AVE	**0,536**

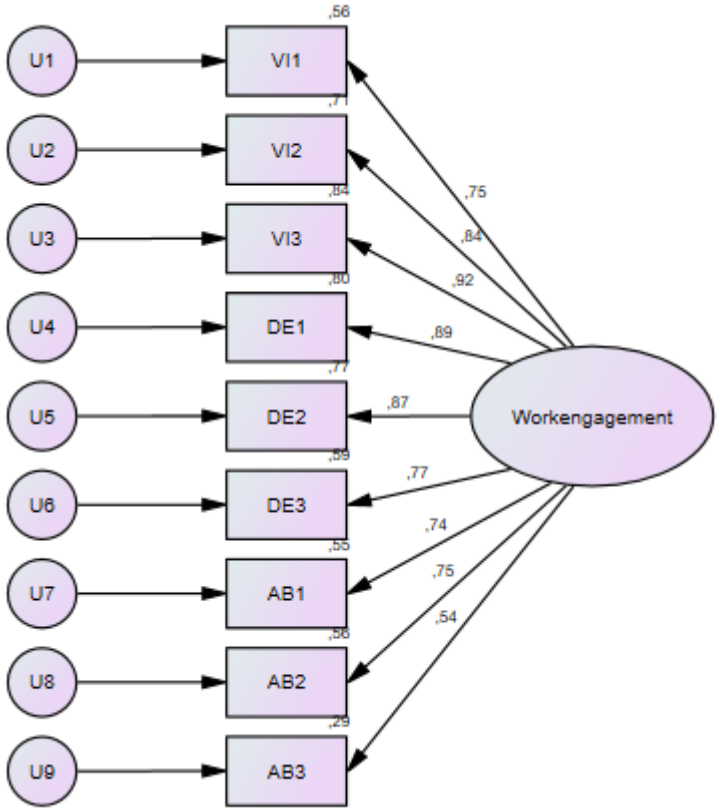
Appendix 8: CFA for communal leadership construct



Calculation for Communal leadership Average Variance Extracted (AVE)

Factor Loading	Factor Loading Squared (FLS)
0,81	0,6561
0,73	0,5329
0,91	0,8281
0,84	0,7056
0,85	0,7225
0,76	0,5776
0,83	0,6889
0,76	0,5776
0,74	0,5476
Total FLS	5,8369
AVE	**0,649**

Appendix 9: CFA for work engagement construct



Calculation for Work Engagement Average Variance Extracted

Factor Loading	**Factor Loading Squared (FLS)**
0,75	0,5625
0,84	0,7056
0,92	0,8464
0,89	0,7921
0,87	0,7569
0,77	0,5929
0,74	0,5476
0,75	0,5625
0,54	0,2916
Total FLS	5,6581
AVE	**0,629**

Appendix 10: Descriptive statistics for agentic and communal leadership (item level)

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ResilienceA	153	1	5	4,64	0,824	-2,603	0,196	6,587	0,390
FriendlinessC	153	1	5	4,16	1,071	-1,394	0,196	1,259	0,390
CapabilityA	153	1	5	4,60	0,814	-2,632	0,196	7,573	0,390
JustC	153	1	5	4,04	1,146	-1,219	0,196	0,702	0,390
CleverA	153	1	5	4,52	0,753	-2,234	0,196	6,616	0,390
TrustworthinessC	153	1	5	4,08	1,097	-1,156	0,196	0,550	0,390
CaringC	153	1	5	4,07	1,204	-1,378	0,196	0,950	0,390
RelationsC	153	1	5	3,73	1,235	-0,748	0,196	-0,559	0,390
CompetenceA	153	1	5	4,48	0,947	-2,192	0,196	4,475	0,390
EmpathicC	153	1	5	3,80	1,253	-0,950	0,196	-0,179	0,390
FairnessC	153	1	5	3,99	1,175	-1,280	0,196	0,862	0,390
SmartA	153	1	5	4,55	0,734	-2,296	0,196	7,153	0,390
EfficienceA	153	1	5	4,25	1,084	-1,766	0,196	2,655	0,390
ConsiderationC	153	1	5	3,98	1,189	-1,175	0,196	0,428	0,390
AffectionC	153	1	5	3,41	1,254	-0,543	0,196	-0,642	0,390

Appendix 11: Descriptive statistics for work Engagement (item level)

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
VI1	153	1	7	4,97	1,310	-0,722	0,196	0,369	0,390
VI2	153	1	7	5,05	1,373	-0,809	0,196	0,436	0,390
VI3	153	1	7	5,12	1,466	-0,726	0,196	0,018	0,390
DE1	153	1	7	5,02	1,558	-0,816	0,196	0,086	0,390
DE2	153	1	7	4,80	1,668	-0,588	0,196	-0,518	0,390
DE3	153	1	7	5,52	1,198	-0,876	0,196	0,985	0,390
AB1	153	1	7	5,83	1,224	-1,154	0,196	1,192	0,390
AB2	153	1	7	5,59	1,290	-1,107	0,196	1,626	0,390
AB3	153	1	7	5,24	1,437	-1,066	0,196	1,191	0,390

Appendix 12: EFA with all variables included

Rotated Component Matrix[a]

	Component			
	Communal	Work Engagement	Agentic-capacity	Agentic-confidence
ResilianceA	.035	.143	.682	.298
FriendlinessC	.841	.103	.172	-.003
LeadershipQualA	.452	.252	.442	.516
CapabilityA	.260	.249	.797	.141
JustC	.563	.183	.309	.511
SelfConfidenceA	.071	.062	.225	.777
CleverA	.123	.221	.852	.029
TrustworthinessC	.630	.232	.218	.387
CaringC	.855	.211	.141	.197
PressureA	.571	.274	.257	.459
RelationsC	.840	.206	.100	.095
CompetenceA	.166	.186	.819	.156
EmpathicC	.840	.245	.126	.045
FairnessC	.606	.215	.287	.503
SmartA	.270	.205	.800	.111
EfficienceA	.356	.248	.550	.368
ConsiderationC	.740	.183	.196	.333
AffectionC	.815	.182	.102	-.063
VI1	.388	.648	.262	.018
VI2	.366	.769	.054	.077
VI3	.295	.827	.109	.227
DE1	.239	.824	.143	.231
DE2	.264	.804	.162	.184
DE3	.188	.787	.090	.068
AB1	.162	.766	.193	.025
AB2	.083	.789	.331	-.043
AB3	-.088	.637	.247	.065

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.