

The impact of authentic leadership on employee engagement and productivity in South Africa

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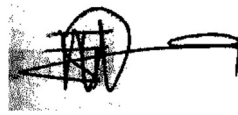
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DECLARATION

I, Tapiwa Victor Mapurisa, declare that this research article is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.



TAPIWA VICTOR MAPURISA,

Signed atNorthwold, Randburg.....

On the2nd..... day of ...June..... 2023..

DEDICATION

I dedicate this research article to my wife and kids that have supported my endeavour by allowing me the time away from family to focus on my studies.

ACKNOWLEDGEMENTS

I would like to acknowledge all those who provided assistance, support, hot meals and including my supervisor, other faculty members who assisted, family, friends, and survey respondents.

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ABSTRACT

To be able to understand how personality traits i.e. honesty-humility and leadership styles affect engagement/productivity in the workplace, this study has been conducted. 160 participants participated in a field study to explore the link between honesty-humility, authentic leadership, and employee engagement/productivity. Correlation and regression analyses were used to test hypotheses. Employee engagement/productivity is impacted by honesty-humility, and authentic leadership enhances honesty-humility. Honesty-humility should be examined in relation to other leadership styles in future studies. This relationship can also be further explored across different cultures through further studies. Authentic leadership can foster engagement within an organization by creating an environment that is conducive to employee engagement through positive leadership behaviour. In this study, the honesty-humility dimension is added to the established Big Five model to expand the model to include consideration of individual differences. Authentic leadership is also examined in relation to personality traits and engagement, as a moderating effect.

Keywords: Engagement, Authentic leadership, Big Five, HEXACO,

CHAPTER 1. INTRODUCTION

1.1 Purpose of the study

The purpose of this research is to contribute to explore and look into how personality traits i.e. honesty-humility and authentic leadership styles affect engagement/productivity of employees in the workplace. This research focuses personality trait, honesty-humility and the leadership style studied is authentic leadership.

1.2 Context of the study

Gallup, describes engaged employees as individuals "committed to their work, involved in it, and enthusiastic about it" (Gallup, 2013; p12). As a result, these employees perform better in their jobs as well as outside their jobs (Alfes et al, 2011), possess more creative behaviours (Chughtai, 2013), are more effective as employees (Chaurasia and Shukla, 2013), and show less intentions to find other employment (Alfes et al, 2011; Chughtai, 2013). Those who are disengaged report unhappiness at work and inactiveness in employment (Gallup, 2013). Engagement of employees is associated with absenteeism, negative work actions, not getting involved, and job resignations (Soane et al., 2013). Furthermore, engagement of employees impacts company profitability, quality of products, satisfaction of customers and overall outcomes of the organisation (Harter et al., 2013). To achieve organizational success, it is essential to identify and work on issues that affect engagement of employees. Gallup surveys conducted almost two decades ago have consistently found low levels of employee engagement. The concerns about engagement of employees have resulted in research by consultants and academics identifying a myriad of variables that impact employee engagement. Despite the awareness of low engagement levels and the implementation and research of various variables, progress is little in this area, it has been found that engagement is usually around 30% (Mann and Harter, 2016). As a result, it is widely concluded that engagement of employees results from a combination of individual as well as organisational related factors (Macey and Schneider, 2008). Various organizational factors have been studied extensively for their impact on employee engagement. There is evidence that workplace culture, policies, procedures (Anitha, 2014), as well as performance management and human resource management practices, have direct effects on employee engagement. The quality of a leader's relationship with employees has been shown to have a direct effect on how engaged employees are (Bakar, 2013), as well. Specifically, this study will investigate how a leadership style like authentic leadership affects employee engagement at work. In this way, management studies will be able to gain a better understanding of how to engage employees at work.

1.3 Problem statement

1.3.1 *Main problem*

The management has a responsibility to support the employees and to be committed to the success of the employees and the company. Bates, 2004 emphasizes this. Additionally, Bates stressed that management must build employee trust every day to maintain consistently higher levels of engagement. Employee engagement plays a crucial role in measuring organizational health according to Bates. Employee engagement has received considerable research attention, but practitioners are still seeking ways to engage their workforce meaningfully.

There is a lack of literature studying the relationship between employee engagement and other constructs such as leadership style. Also, “employee engagement” and “retention” are often used interchangeably in organizations. The purpose of this paper is to determine elements of authentic leadership that impact on employee engagement to help clear up this misperception.

Product quality, customer satisfaction, and profitability are all impacted by employee engagement levels. To achieve organizational success, it is crucial to identify and propose solutions for low employee engagement. Therefore, the problem addressed by this study is to identify how perceptions of a leadership style i.e., authentic leadership, influence employee engagement in the workplace.

Bates, 2004 states that management needs to build trust in order to raise the levels of employee engagement. An extension of this research is to look at the leadership style in an organisation as the biggest influencer of employee trust and therefore engagement. Literature has indicated authentic leadership as a key component to building trust amongst employees. Therefore, this paper investigates the relationship between employee engagement and a specific leadership style that has been proven to build trust, that is authentic leadership. In recent years, authentic leadership has been rebranded with other descriptions but at the core it is still authentic leadership

according to its original frameworks and therefore authentic leadership is still relevant in the current leadership landscape.

According to Judge and Zapata (2015), the Big Five model of personality identifies conscientiousness, agreeableness, emotionality, openness to experience, and extraversion as the dominant characteristics of the workplace. Three central motivational theories, namely goal setting, expectancy, and self-efficacy, were positively associated with the Big Five traits, according to Judge and Ilies (2002). There is also an association between the Big Five and high levels of performance, both at the individual and team levels. Additionally, conscientiousness and extraversion had been found to correlate positively when compared to job satisfaction (Judge et al., 2002). The Big Five traits have recently been examined in relation to employee engagement levels by researchers. Engagement seems to be influenced most by conscientiousness and extraversion.

Lee and Ashton (2004) have augmented the Big Five framework by introducing a sixth dimension, which they label honesty-humility. A low sense of entitlement is associated with individuals that display high honesty-humility (Ashton and Lee, 2007). Honest-humility people avoid manipulating or deceiving others; taking advantage of others is not usually a part of their personality or feeling entitled to do so, nor do they desire to have more than others. The sixth dimension of personality has been empirically supported in a number of studies (Ashton and Lee, 2008; Lee and Ashton, 2006; De Vries et al., 2008).

In organizational settings, it would be beneficial to understand how honesty and humility impact individual attitudes and behaviours. However, very little research has been conducted on the way honesty-humility relates to employee engagement. In contrast, O'Neill et al. (2014) hypothesized the question that honesty, in addition to Big Five traits, would improve engagement.

1.4 Significance of the study

Saks and Gruman (2011) found a link between emotions, self-efficacy, and engagement. Research has shown that people with strong traits such as hope, efficacy, resilience and in addition optimism are highly engaged at work. Spirituality has been linked to engagement in other studies (Bakar, 2013; Meskelis and Whittington, 2020). Because these stable personality traits correlate with high engagement of employees, this research indicates that engagement is more of an employee-driven characteristic than an organizational trait that can be improved. It is believed an investigation into employee engagement will enhance our understanding of the subject. Underdeveloped in the literature on engagement is the potential dispositional nature of employee engagement.

Management practices will be guided by whether management practices like leadership styles can improve employee engagement or whether there is no relationship and employee engagement is intrinsic and dependent on individual characteristics. Those in leadership and management will benefit from this study, and their hiring practices can be guided by the findings.

1.5 Delimitations of the study

- The research will not be restricted by demographics, industry sector, company type, or employee position in the company.
- Research surveys will be freely accessible to a wide range of employees at different levels according to the samples stated below.
- The data will be collected using two convenient samples. One sample will be collected using an online survey of the University of the Witwatersrand. The second sample will be obtained through an online survey provided to networks of LinkedIn website subscribers.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

Gallup, describes engaged employees as individuals "committed to their work, involved in it, and enthusiastic about it" (Gallup, 2013; p12). As a result, these employees perform better in their jobs as well as outside their jobs (Alfes et al, 2011), possess more creative behaviours (Chughtai, 2013), are more effective as employees (Chaurasia and Shukla, 2013), and show less intentions to find other employment (Alfes et al, 2011; Chughtai, 2013). Those who are disengaged report unhappiness at work and inactiveness in employment (Gallup, 2013). Engagement of employees is associated with absenteeism, negative work actions, not getting involved, and job resignations (Soane et al., 2013). Furthermore, engagement of employees impacts company profitability, quality of products, satisfaction of customers and overall outcomes of the organisation (Harter et al., 2013). To achieve organizational success, it is essential to identify and work on issues that affect engagement of employees. Gallup surveys conducted almost two decades ago have consistently found low levels of employee engagement. The concerns about engagement of employees have resulted research by consultants and academics identifying a myriad of variables that impact employee engagement. Despite the awareness of low engagement levels and the implementation and research of various variables, progress is little in this area, it has been found that engagement is usually around 30% (Mann and Harter, 2016). As a result, it widely concluded that engagement of employees results from a combination individual as well as organisation related factors (Macey and Schneider, 2008). Various organizational factors have been studied extensively for their impact on employee engagement. There is evidence that workplace culture, policies, procedures (Anitha, 2014), as well as performance management and human resource management practices, have direct effects on employee engagement. The quality of a leader's relationship with employees has been shown to have a direct effect on how engaged employees are (Bakar, 2013), as well. Specifically, this study will investigate how an honesty-humility personality trait and leadership style like authentic leadership affects

employee engagement at work. In this way, management studies will be able to gain a better understanding of how to engage employees at work.

2.2 Definition of topic or background discussion.

Recent research has examined authenticity in leadership (e.g., George, 2007; Walumbwa, Wang, Wang, Schaubroeck, & Avolio, 2010). It describes leaders who have a high capacity for processing information about themselves (their values, beliefs, goals, and feelings), who have a clear personal identity, and who have the ability to use that identity to adapt their leadership behaviour to meet the needs of the society (Chan, Hannah, & Gardner, 2005). Managers need to demonstrate both authenticity and integrity in order to earn followers' respect and influence their actions (Duignan & Bhindi, 1997). Integrity is demonstrated when they demonstrate their own personal values in alignment with the ethical code. In other words, authentic managers cannot be authentic in a negative way (Fields, 2013). Integrity is a constant reflection of authenticity (Cooper, Scandura, & Schriesheim, 2005).

Work engaged employees are up to two times more productive than non-engaged employees: they work with passion, and they drive innovation that propels the organization forward (Attridge, 2009). Hence, human resource managers seek to boost organizational productivity and success by enhancing the work engagement of employees (Harter, Schmidt & Keyes, 2003) while increasing retention, decreasing absenteeism, increasing productivity, and improving personal well-being (Robertson & Cooper, 2009). For it to be sustained, work engagement must be understood from the perspective of employees (Truss, Delbridge, Alfes, Shantz, & Soane, 2014).

According to Hoogervorst et al. (2012), more research needs to be conducted on leadership with leadership practices analysed as antecedent conditions for enhanced employee behaviour. A dyadic relationship develops unspoken power within the manager, which allows them to use that power positively to empower their employees and to execute daily goals and functions within their organization. It also creates an organizational perception of fairness and organizational commitment

(Rhoades & Eisenberger, 2002), which can influence employee performance (Van De Voorde et al., 2012).

Engagement vs Other Constructs

The argument that engagement is related to other constructs in organisational behaviour but distinct from them seems to have sufficient validity. Robinson et al (2004), for example, state that: "...engagement combines elements of both commitment and OCB but is not an exact match for either." The difference between organisational commitment and engagement, according to Saks (2006), is in the way that organisational commitment refers to an individual's attitude towards their organization, whereas engagement is more than an attitude; it refers to the degree of attention a person gives to the work they do and how absorbed they are in the act of performing their duties. Further, engagement focuses more on formal role performance than purely extra-role behaviour, despite the fact that OCB involves voluntary and informal behaviours that can help co-workers and the organization.

The constructs of job involvement and 'flow' are most closely associated with engagement, according to May et al (2004). The term job involvement is defined as a state of cognitive or belief identification with a job. Different from engagement, this refers to the way in which an individual employs himself/herself while performing a job. In addition, although job involvement emphasizes cognitions, engagement includes emotions and behaviours, according to most definitions.

'Flow' refers to the whole sensation that people experience when they are totally engaged in their actions. In a flow experience, individuals are not motivated by external rewards or goals, as the activity itself continually challenges them. Flow, on the other hand, refers to the momentary involvement of an individual in an activity; engagement, on the other hand, means an involved participant over a prolonged period of time (Kahn, 1990; Holbeche and Springett, 2003).

2.3 Main problem discussion

The environment of organisations requires leadership for a wide range of reasons not limited to changing international and local business environments, but inclusive of a plethora of varied problems that challenge businesses (Bennis, 1989). Increasing evidence from the current century indicates that companies now require leadership of a different kind to succeed (Sims et al., 2007). Positive leadership can be implied by progressive workplace relationships because it is a way in which managers can help employees develop positive relationships through modelling (Hatfield et al., 1994). Authenticity is the most important component of effective leadership, as Kouzes and Posner (2007) found. Authentic leadership has gained increased attention both in the academic and the practical spheres in recent years (e.g., Walumbwa et al., 2010). A leader who shows authentic leadership is someone who treats subordinates with authenticity, does not misalign values plus actions, and works with subordinates to better the organisation (Walumbwa et al., 2008). A recent review of studies has demonstrated the impact of authentic leadership on employee attitudes, behaviours, and work outcomes, including organizational commitment, employee job satisfaction, trust, creativity, performance, engagement, and organizational citizenship behaviour (OCB) (e.g., Walumbwa et al., 2008; Walumbwa et al., 2011; Walumbwa et al., 2010). These important leadership roles are held by the supervisors or sector leaders of a company. Authentic leadership, according to Gardner, Avolio, Luthans, May, and Walumbwa (2005), goes beyond an individual's authenticity to encompass a leader's relationship with his/her followers. Leaders must complement themselves by helping others become authentic as well. Through their authentic words and actions, authentic leaders positively and continuously influence their employees. To have this effect, authentic leadership must be perceived by the employees as authentic.

The management has a responsibility to support the employees and to be committed to the success of the employees and the company. Bates, 2004 emphasizes this. Additionally, Bates stressed that management must build employee trust every day to maintain consistently higher levels of engagement. Employee engagement plays a crucial role in measuring organizational health according to Bates. Employee

engagement has received considerable research attention, but practitioners are still seeking ways to engage their workforce meaningfully.

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satisfaction (Judge et al., 2002). The Big Five traits have recently been examined in relation to employee engagement levels by researchers. Engagement seems to be influenced most by conscientiousness and extraversion.

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In organizational settings, it would be beneficial to understand how honesty and humility impact individual attitudes and behaviours. However, very little research has been conducted on the way honesty-humility relates to employee engagement. In contrast, O'Neill et al. (2014) hypothesized the question that honesty, in addition to Big Five traits, would improve engagement.

2.3.1 Research Question

Does a personality trait, honesty-humility and leadership style, authentic leadership, positively influence employee engagement and productivity of employees? The question addressed by this study is to identify whether perceptions of an honesty-humility and authentic leadership in direct supervisors, positively influences employee engagement and productivity in work environments.

2.4 Conclusion of Literature Review

According to research, authenticity contributes significantly to a leader's charisma; employees who work with authentic leaders identify more closely with them and the organization (Ilies et al., 2005), trust them more, and are more engaged at work

(Avolio et al., 2004). Leadership is not just about what the leader does, it is also dependent on how employees perceive behaviour of the supervisor as authentic.

Researchers have been studying engagement for over two decades. Kahn (1990), who first conceptualized employee engagement, defined it as "the means by which employees express themselves physically, cognitively, and emotionally when they perform their roles" (p. 693). Employee engagement, organizational improvement, and financial performance have been studied by organizational researchers (Harter et al., 2002). The growing interest in employee engagement and how it influences employees at work has resulted in systematic research efforts (Christian et al., 2011).

2.4.1 Research Question

Does a personality trait, honesty-humility and leadership style, authentic leadership, positively influence employee engagement and productivity of employees? The question addressed by this study is to identify whether perceptions of an honesty-humility and authentic leadership in direct supervisors, positively influences employee engagement and productivity in work environments.

CHAPTER 3. METHODOLOGY

3.1 Research methodology / paradigm

Quantitative research aims to advance our knowledge and understanding of the social world. Researchers use quantitative techniques to observe and analyse social situations. Statistics and numbers allow quantitative research to produce objective data. This is done in a systematic, scientific manner, allowing others to replicate the results. Finding patterns and averages, making predictions, testing causal relationships, and generalizing results to a broader population are the main uses of the data (Gcu.edu, 2021).

Quantitative research methodology relies heavily on descriptive statistics, correlation, and regression. It is the process of formalizing correlation and covariance into a linear relationship by assuming one of the variables is dependent on the other. Regression is further described by a detailed definition. In regression, you are looking for 1) associations 2) between multiple variables 3) in which you believe that one of the variables (the dependent variable DV) can be explained or predicted by the others (the independent variables IVs).

Hence, regression analysis is valid and will be used for this research question, as there are dependent variables and independent variables, which may or may not have a causal relationship.

3.2 Research Design & Instrument

Using the Qualtrics online platform, the participants received a survey collected via an online survey. Participant self-reports were used to measure traits linked to personality and engagement with their work. Based on participants' social reports regarding their immediate leader, it will be captured the essence of authentic leadership. The following sections describe each of the measures.

Dependent variable: employee engagement

Rich et al. (2010) developed the 18-item scale for measuring employee engagement. In subsequent research by Whittington et al., (2020), the 18-item scale consistently displayed high reliability. Physical engagement, emotional engagement, and cognitive engagement are three separate constructs identified by Kahn (1990) to define engagement. Six items will be used for each construct, which will range from 1 (strongly disagree) to 5 (strongly agree).

Physical engagement refers to level of energy applied and level of involvement at work. Emotional engagement refers to how pleasant and enthusiastic one is at work. Cognitive engagement refers to the degree and depth of focus and concentration exerted during the execution of work deliverables.

In this present study, the research question will not differentiate among engagement subscales. The research will test the hypotheses using a unidimensional measure of engagement. Previous research using this unidimensional measure had acceptable Cronbach's alphas ($\alpha = 0.95$, Rich et al., 2010; $\alpha = 0.87$, Whittington et al., 2020).

Moderating variable: authentic leadership

The authentic leadership instrument containing 12 items was formulated by Neider and Schriesheim (2011) were used to assess participants' social reports of supervisors' authentic leadership behaviours. The reliabilities of this measure have been demonstrated in past research (Rahimnia et al., 2014; Stander et al., 2015). This instrument uses a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Four unique dimensions of authentic leadership are studied, including self-awareness, relational transparency, an internalized moral perspective, and balanced processing (Whittington et al., 2020).

In this present study, hypotheses will not differentiate among authentic leadership subscales. The hypotheses in this study will be tested using a higher-order one-dimensional construct. As a unidimensional construct, this measure of authentic leadership has shown significant internal validity in previous studies ($\alpha = 0.96$, Men and Stacks, 2014; $\alpha = 0.91$, Gill and Caza, 2015).

Independent Variables

Lee and Ashton (2013) developed the 60-item HEXACO personality inventory to assess participants' personalities. This measure has been validated in several studies (Ashton and Lee, 2008; Lee and Ashton, 2006, 2016). Honesty–humility is included in the HEXACO scale along with emotionality (E), extraversion (X), agreeableness (A), conscientiousness (C) and openness to experience (O). Ten items are used to capture each dimension, with responses ranging from 1 (strongly disagree) to 5 (strongly agree) on a five-point likert scale. The subscale scores were obtained by calculating the average from the responses to the 10 items in each subscale.

Honesty and humility (H) are traits that tend to prevent a person from being deceitful, greedy, and pretentious. In contrast to being tough, fearless, and insensitive, emotionality (E) indicates that an individual tends to be emotional, anxious, and fearful. As opposed to being shy, passive, and quiet, extroversion (X) involves being outgoing, social, and talkative. In contrast to being ill-tempered, temperamental, and quarrelsome, agreeableness (A) refers to the natural tendency of an individual to be patient, peaceful, and lenient. I measured conscientiousness (C) by comparing how organized, responsible, and efficient you tend to be, as opposed to being sloppy, careless, or irresponsible. In addition, openness to experience (O) signifies an intellectual and creative ability, rather than shallowness, unimaginative, and closed-mindedness (Meskelis and Whittington, 2020).

3.3 Population and sample

3.3.1 *Population*

The population for this study includes a broad spectrum of employees from various sectors in the workspace.

3.3.2 *Sample and sampling method*

The way that employee engagement relates to authentic leadership and honesty-humility was examined using a survey involving approximately 160 participants. Two convenient samples were used to collect data. The first sample was obtained at the University of the Witwatersrand. The second sample was acquired via an online professional network. According to Handcock and Gile (2011), “the initial sample is drawn by a convenience mechanism and referrals lead to more sample groups”. “The advantage of snowball sampling is the ability to recruit participants in a short period of time and to collect data in a cost-effective manner” (Dudovskiy, 2016).

3.4 Data analysis and interpretation

This quantitative research methodology relies heavily on descriptive statistics, correlation, moderation, and regression. Correlation and covariance were formalised into a linear relationship by assuming one of the variables is dependent on the other. That is employee engagement is dependent on honesty-humility and authentic leadership. In regression, I was looking for associations between two variables in which it is believed that one of the variables (employee engagement) can be explained or predicted by the other variable (honesty-humility or authentic leadership).

3.5 The research instruments.

Dependent variable: employee engagement instrument

The research instrument is an open questionnaire that has been previously published and has been used before. The advantages of this instrument are the high Cronbach alphas produced in previous studies and therefore it is a reliable scale to measure employee engagement.

Rich et al. (2010) developed the 18-item scale for measuring employee engagement. In subsequent research by Whittington et al., (2020), the 18-item scale consistently displayed high reliability. Physical engagement, emotional engagement, and cognitive engagement are three separate constructs identified by Kahn (1990) to define engagement. Six items will be used for each construct, which will range from 1 (strongly disagree) to 5 (strongly agree).

In this present study, the research question will not differentiate among engagement subscales. The research will test the hypotheses using a unidimensional measure of engagement. Previous research using this unidimensional measure had acceptable Cronbach's alphas ($\alpha = 0.95$, Rich et al., 2010; $\alpha = 0.87$, Whittington et al., 2020).

Instrument details below by Rich et al, 2010

Physical engagement

"I work with intensity on my job".

"I exert my full effort to my job".

"I devote a lot of energy to my job".

"I try my hardest to perform well on my job".

"I strive as hard as I can to complete my job".

"I exert a lot of energy on my job".

Emotional engagement

"I am enthusiastic in my job".

"I feel energetic at my job".

"I am interested in my job".

"I am proud of my job".

"I feel positive about my job".

"I am excited about my job".

Cognitive engagement

"At work, my mind is focused on my job".

"At work, I pay a lot of attention to my job".

"At work, I focus a great deal of attention on my job".

"At work, I am absorbed by my job".

"At work, I concentrate on my job".

"At work, I devote a lot of attention to my job".

Moderating variable: authentic leadership instrument

The research instrument is an open questionnaire that has been previously published and has been used before. The advantages of this instrument are the high Cronbach alphas produced in previous studies and therefore it is a reliable scale to measure authentic leadership.

Twelve questions in the authentic leadership instrument that was formulated by Neider and Schriesheim (2011) will be used to assess participants' social reports of supervisors' authentic leadership behaviours. The reliabilities of this measure have been demonstrated in past research (Rahimnia and Sharifirad, 2014; Stander et al., 2015). The instrument uses a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Four unique dimensions of authentic leadership are covered, including self-awareness, relational transparency, an internalized moral perspective, and balanced processing. As a unidimensional construct, this measure of authentic leadership has shown significant internal validity in previous studies ($\alpha = 0.96$, Men and Stacks, 2014; $\alpha = 0.91$, Gill and Caza, 2015).

Instrument details below: by Neider and Schriesheim (2011):

1. "My leader solicits feedback for improving his/her dealings with others." (S)
2. "My leader clearly states what he/she means." (R)
3. "My leader shows consistency between his/her beliefs and actions." (M)
4. "My leader asks for ideas that challenge his/her core beliefs." (B)
5. "My leader describes accurately the way that others view his/her abilities." (S)
6. "My leader admits mistakes when they occur." (R)
7. "My leader uses his/her core beliefs to make decisions." (M)
8. "My leader carefully listens to alternative perspectives before reaching a conclusion." (B)
9. "My leader shows that he/she understands his/her strengths and weaknesses." (S)
10. "My leader openly shares information with others." (R)
11. "My leader resists pressures on him/her to do things contrary to his/her beliefs." (M)
12. "My leader objectively analyses relevant data before making a decision." (B)
13. "My leader is clearly aware of the impact he/she has on others." (S)
14. "My leader expresses his/her ideas and thoughts clearly to others." (R)
15. "My leader is guided in his/her actions by internal moral standards." (M)
16. "My leader encourages others to voice opposing points of view." (B)

Note: Abbreviations used are: (S)=Self-Awareness, (R)=Relational Transparency, (M)=Internalized Moral Perspective, and (B) = Balanced Processing. Instructions

given respondents in organizations usually include the definitional statement, "Please note that the term 'leader' means your immediate or direct supervisor."

Independent variables: HEXACO instrument

The research instrument is an open questionnaire that has been previously published and has been used before. The advantages of this instrument are the high Cronbach alphas produced in previous studies and therefore it is a reliable scale to measure personality traits.

Lee and Ashton (2013) developed the 60-item HEXACO personality inventory to assess participants' personalities. This measure has been validated in several studies (Ashton and Lee, 2008; Lee and Ashton, 2006, 2016).

Instrument details below: by Lee and Ashton (2013):

- 1 "I would be quite bored by a visit to an art gallery."
- 2 "I plan ahead and organize things, to avoid scrambling at the last minute."
- 3 "I rarely hold a grudge, even against people who have badly wronged me."
- 4 "I feel reasonably satisfied with myself overall."
- 5 "I would feel afraid if I had to travel in bad weather conditions."
- 6 "I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed."
- 7 "I'm interested in learning about the history and politics of other countries."
- 8 "I often push myself very hard when trying to achieve a goal."
- 9 "People sometimes tell me that I am too critical of others."
- 10 "I rarely express my opinions in group meetings."
- 11 "I sometimes can't help worrying about little things."
- 12 "If I knew that I could never get caught, I would be willing to steal a million dollars."
- 13 "I would enjoy creating a work of art, such as a novel, a song, or a painting."
- 14 "When working on something, I don't pay much attention to small details."
- 15 "People sometimes tell me that I'm too stubborn."
- 16 "I prefer jobs that involve active social interaction to those that involve working alone."

- 17 "When I suffer from a painful experience, I need someone to make me feel comfortable."
- 18 "Having a lot of money is not especially important to me."
- 19 "I think that paying attention to radical ideas is a waste of time."
- 20 "I make decisions based on the feeling of the moment rather than on careful thought."
- 21 "People think of me as someone who has a quick temper."
- 22 "On most days, I feel cheerful and optimistic."
- 23 "I feel like crying when I see other people crying."
- 24 "I think that I am entitled to more respect than the average person is."
- 25 "If I had the opportunity, I would like to attend a classical music concert."
- 26 "When working, I sometimes have difficulties due to being disorganized."
- 27 "My attitude toward people who have treated me badly is "forgive and forget"."
- 28 "I feel that I am an unpopular person."
- 29 "When it comes to physical danger, I am very fearful."
- 30 "If I want something from someone, I will laugh at that person's worst jokes."

Continued...

- 31 "I've never really enjoyed looking through an encyclopedia."
- 32 "I do only the minimum amount of work needed to get by."
- 33 "I tend to be lenient in judging other people."
- 34 "In social situations, I'm usually the one who makes the first move."
- 35 "I worry a lot less than most people do."
- 36 "I would never accept a bribe, even if it were very large."
- 37 "People have often told me that I have a good imagination."
- 38 "I always try to be accurate in my work, even at the expense of time."
- 39 "I am usually quite flexible in my opinions when people disagree with me."
- 40 "The first thing that I always do in a new place is to make friends."
- 41 "I can handle difficult situations without needing emotional support from anyone else."
- 42 "I would get a lot of pleasure from owning expensive luxury goods."
- 43 "I like people who have unconventional views."
- 44 "I make a lot of mistakes because I don't think before I act."
- 45 "Most people tend to get angry more quickly than I do."
- 46 "Most people are more upbeat and dynamic than I generally am."
- 47 "I feel strong emotions when someone close to me is going away for a long time."
- 48 "I want people to know that I am an important person of high status."
- 49 "I don't think of myself as the artistic or creative type."
- 50 "People often call me a perfectionist."
- 51 "Even when people make a lot of mistakes, I rarely say anything negative."
- 52 "I sometimes feel that I am a worthless person."
- 53 "Even in an emergency I wouldn't feel like panicking."
- 54 "I wouldn't pretend to like someone just to get that person to do favors for me."
- 55 "I find it boring to discuss philosophy."
- 56 "I prefer to do whatever comes to mind, rather than stick to a plan."
- 57 "When people tell me that I'm wrong, my first reaction is to argue with them."
- 58 "When I'm in a group of people, I'm often the one who speaks on behalf of the group."
- 59 "I remain unemotional even in situations where most people get very sentimental."
- 60 "I'd be tempted to use counterfeit money, if I were sure I could get away with it."

3.6 Limitations of the study

The limitation of this study is that employee engagement may be explained by more than one variable in the workplace and therefore this study may be a portion of the context in which employee engagement can be explained. Therefore, more comprehensive studies including more variables may be a more wholistic view of employee engagement and resulting employee productivity in the workplace.

CHAPTER 4. RESULTS

4.1 Introduction

Having collected data on employee engagement, authentic leadership and personality traits, the following analyses were carried out, descriptive statistics, intercorrelations, two different regression analyses involving the big five personality traits plus honesty-humility as independent variables and authentic leadership as a moderating variable with moderating effects on employee engagement and honesty–humility. The results of these analyses are presented in this chapter.

4.2 Honesty-humility, Authentic Leadership relation to Employee Engagement and Therefore Employee Productivity

Descriptive Statistics						
	N	Range	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Honesty–humility	160	2.09	3.3517	.03390	.42885	.184
Emotionality	160	2.70	3.3592	.04182	.52895	.280
Extraversion	160	2.60	3.1619	.04265	.53949	.291
Agreeableness	160	2.40	3.2594	.04168	.52721	.278
Conscientiousness	160	2.70	3.6789	.04066	.51427	.264
Openness to experience	160	2.10	3.6275	.03695	.46742	.218
Employee Engagement	160	3.44	3.9476	.04608	.58285	.340

Authentic Leadership	160	3.63	3.3465	.05966	.75470	.570
Valid N (listwise)	160					

Intercorrelations

		Correlations							
		Honesty– humility	Emotionality	Extraversion	Agreeableness	Conscientiousness	Openness to experience	Employee Engagement	Authentic Leadership
Honesty–humility	Pearson Correlation	1	-.015	.026	.148	.295**	.048	-.086	-.134
	Sig. (2-tailed)		.852	.740	.061	.000	.543	.282	.090
	N	160	160	160	160	160	160	160	160
Emotionality	Pearson Correlation	-.015	1	-.101	-.066	-.063	-.022	.173*	.088
	Sig. (2-tailed)	.852		.205	.405	.428	.785	.028	.270
	N	160	160	160	160	160	160	160	160
Extraversion	Pearson Correlation	.026	-.101	1	.173*	.182*	.195*	-.019	.023
	Sig. (2-tailed)	.740	.205		.028	.021	.013	.812	.778
	N	160	160	160	160	160	160	160	160
Agreeableness	Pearson Correlation	.148	-.066	.173*	1	.153	.005	-.236**	-.089
	Sig. (2-tailed)	.061	.405	.028		.054	.951	.003	.260
	N	160	160	160	160	160	160	160	160
Conscientiousness	Pearson Correlation	.295**	-.063	.182*	.153	1	.141	.004	-.012
	Sig. (2-tailed)	.000	.428	.021	.054		.074	.960	.876
	N	160	160	160	160	160	160	160	160
Openness to experience	Pearson Correlation	.048	-.022	.195*	.005	.141	1	-.013	.048
	Sig. (2-tailed)	.543	.785	.013	.951	.074		.873	.549
	N	160	160	160	160	160	160	160	160
Employee Engagement	Pearson Correlation	-.086	.173*	-.019	-.236**	.004	-.013	1	.397**

	Sig. (2-tailed)	.282	.028	.812	.003	.960	.873		.000
	N	160	160	160	160	160	160	160	160
Authentic Leadership	Pearson Correlation	-.134	.088	.023	-.089	-.012	.048	.397**	1
	Sig. (2-tailed)	.090	.270	.778	.260	.876	.549	.000	
	N	160	160	160	160	160	160	160	160

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

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

In this study from the table above it shows employee engagement was significantly correlated with Emotionality ($r = 0.173$, $p < 0.05$), as well as with Agreeableness to experience ($r = -0.236$, $p < 0.05$) and with Authentic Leadership ($r = -0.397$, $p < 0.01$). There was no significant correlation between honesty-humility and engagement ($r = -0.086$, ns). There was no significant correlation between honesty-humility (H) and authentic leadership ($r = -0.134$, ns). In addition, none of the other subscales have a significant correlation with authentic leadership except for the employee engagement scale.

Direct effect: personality traits and engagement

Regression 1: Big Five traits as independent variables and engagement as the dependent variable.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.291 ^a	.085	.055	.56666

a. Predictors: (Constant), Openness to experience, Agreeableness, Emotionality, Conscientiousness, Extraversion

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.564	5	.913	2.843	.017 ^b
	Residual	49.449	154	.321		
	Total	54.014	159			

a. Dependent Variable: Employee Engagement

b. Predictors: (Constant), Openness to experience, Agreeableness, Emotionality, Conscientiousness, Extraversion

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	3.984	.619		6.439	.000	2.762	5.207
	Emotionality	.180	.086	.163	2.104	.037	.011	.349
	Extraversion	.037	.087	.034	.425	.671	-.135	.210
	Agreeableness	-.264	.087	-.239	-3.018	.003	-.436	-.091
	Conscientiousness	.054	.090	.047	.596	.552	-.125	.232
	Openness to experience	-.027	.099	-.021	-.271	.787	-.222	.168

a. Dependent Variable: Employee Engagement

This study shows the model to be statistically significant at $p < 0.05$, 8.5% (adjusted $R^2 = 0.085$), Emotionality is a significant positive predictor of

Engagement (0.180, $p < 0.05$) and Agreeableness is also a significant negative predictor (-0.264, $p < 0.05$).

Regression 2: Big Five traits with honesty–humility included as independent variables and engagement as the dependent variable.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.298 ^a	.089	.053	.56719

a. Predictors: (Constant), Honesty–humility, Emotionality, Openness to experience, Agreeableness, Extraversion, Conscientiousness

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.793	6	.799	2.483	.025 ^b
	Residual	49.221	153	.322		
	Total	54.014	159			

a. Dependent Variable: Employee Engagement

b. Predictors: (Constant), Honesty–humility, Emotionality, Openness to experience, Agreeableness, Extraversion, Conscientiousness

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4.192	.666		6.290	.000	2.875	5.508
	Emotionality	.181	.086	.164	2.108	.037	.011	.350
	Extraversion	.034	.088	.031	.384	.702	-.139	.207
	Agreeableness	-.255	.088	-.231	-2.897	.004	-.429	-.081
	Conscientiousness	.076	.094	.067	.807	.421	-.110	.262
	Openness to experience	-.025	.099	-.020	-.256	.798	-.221	.170
	Honesty–humility	-.093	.111	-.069	-.843	.401	-.312	.125

a. Dependent Variable: Employee Engagement

Statistically significant changes in the adjusted R^2 were seen in a second regression. Statistically significant results are obtained with the study indicating that Honesty-humility, including the Big Five personality traits, explains variance in engagement with a $R^2 = 0.089$ at $p < 0.05$.

It is investigated whether honesty-humility is positively associated with employee engagement. According to the correlation matrix, honesty and humility were not significantly correlated with engagement ($r = -0.086$, ns). However, when honesty-humility was added to the personality traits and engagement model, R^2 increased to 0.089 at $p < 0.05$. This therefore supports the research question.

Moderating effects of authentic leadership on Employee Engagement and Honesty-humility

```
*****
****
Model : 4
      Y : EE
      X : H
      M : AL

Sample
Size: 160

*****
****
OUTCOME VARIABLE:
AL

Model Summary
  R      R-sq      MSE      F      df1      df2      p
.1343    .0180    .5628    2.9032    1.0000    158.0000    .0904

Model
      coeff      se      t      p      LLCI      ULCI
constant    4.1388    .4688    8.8291    .0000    3.2129    5.0646
H           -.2364    .1387   -1.7039    .0904   -.5104    .0376

*****
****
OUTCOME VARIABLE:
EE
```

Model Summary						
R	R-sq	MSE	F	df1	df2	p
.3981	.1585	.2895	14.7810	2.0000	157.0000	.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	3.0837	.4109	7.5055	.0000	2.2722	3.8952
H	-.0448	.1004	-.4458	.6564	-.2431	.1536
AL	.3030	.0571	5.3098	.0000	.1903	.4157

Test(s) of X by M interaction:				
F	df1	df2	p	
.5637	1.0000	156.0000	.4539	

***** TOTAL EFFECT MODEL

OUTCOME VARIABLE:
EE

Model Summary						
R	R-sq	MSE	F	df1	df2	p
.0856	.0073	.3394	1.1671	1.0000	158.0000	.2816

Model						
	coeff	se	t	p	LLCI	ULCI
constant	4.3376	.3640	11.9168	.0000	3.6187	5.0566
H	-.1164	.1077	-1.0803	.2816	-.3292	.0964

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y

Total effect of X on Y						
Effect	se	t	p	LLCI	ULCI	
-.1164	.1077	-1.0803	.2816	-.3292	.0964	

Direct effect of X on Y						
Effect	se	t	p	LLCI	ULCI	
-.0448	.1004	-.4458	.6564	-.2431	.1536	

Indirect effect(s) of X on Y:				
	Effect	BootSE	BootLLCI	BootULCI
AL	-.0716	.0430	-.1603	.0083

***** ANALYSIS NOTES AND ERRORS

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

----- END MATRIX -----

As a result of these findings, we are able to explain 15.9% (adjusted $R^2 = 0.159$) of the variance in engagement via honesty–humility, authentic leadership, and the interaction term (honesty–humility x authentic leadership). Although Honesty-humility has no statistically significant effect on Engagement (-0.045, ns). As the adjusted R^2 was 0.007 when only honesty-humility was considered as an independent variable, adding authentic leadership and the interaction term increased the percentage of effect explained by the predictors. Based on the statistical significance of each variable on employee engagement, we come to the conclusion that authentic leadership is significant at a $p < 0.05$ and honesty-humility is not. This interaction term also has a p-value of 0.454, which is not statistically significant.

Authentic leadership was examined as a moderator of the relationship between honesty-humility and engagement. Specifically, the hypothesis suggests that authentic leadership would enhance (strengthen) the relationship between honesty–humility and engagement. Despite concluding that honesty-humility does not have a statistically significant effect on engagement, the research question is supported because the model has statistical significance and 15.9% of engagement variance can be explained by honesty-humility, authentic leadership, and interaction terms (honesty-humility x authentic leadership). Honesty-humility and engagement were also expected to be enhanced by authentic leadership. There are three types of moderators: neutralizers, enhancers, and substitutes. Our model supports our expectation that authentic leadership would enhance the relationship between honesty-humility and engagement in this study.

4.2 Diagnostic Tests

Harman's one-factor test

HEXACO Variables

Total Variance Explained						
Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.047	9.163	9.163	6.047	9.163	9.163
2	5.580	8.455	17.618			
3	3.873	5.869	23.486			
4	3.130	4.742	28.228			
5	2.854	4.324	32.552			
6	2.580	3.910	36.461			
7	2.343	3.550	40.012			
8	2.157	3.268	43.279			
9	2.060	3.122	46.401			
10	1.892	2.866	49.268			
11	1.773	2.686	51.954			
12	1.617	2.450	54.404			
13	1.473	2.232	56.635			
14	1.379	2.089	58.725			
15	1.284	1.945	60.670			
16	1.266	1.919	62.589			
17	1.229	1.862	64.451			
18	1.196	1.813	66.263			
19	1.189	1.801	68.065			
20	1.161	1.758	69.823			
21	1.093	1.656	71.479			
22	.994	1.505	72.985			
23	.964	1.460	74.445			
24	.949	1.437	75.882			
25	.874	1.325	77.207			
26	.840	1.273	78.480			
27	.829	1.256	79.736			
28	.788	1.194	80.930			

29	.779	1.181	82.111			
30	.722	1.094	83.205			
31	.698	1.058	84.262			
32	.666	1.010	85.272			
33	.640	.970	86.242			
34	.628	.952	87.194			
35	.612	.927	88.121			
36	.579	.877	88.998			
37	.549	.832	89.830			
38	.515	.780	90.610			
39	.487	.737	91.347			
40	.461	.698	92.045			
41	.450	.682	92.727			
42	.403	.610	93.337			
43	.394	.596	93.933			
44	.389	.590	94.523			
45	.356	.539	95.062			
46	.333	.505	95.566			
47	.313	.474	96.040			
48	.304	.460	96.500			
49	.276	.418	96.918			
50	.270	.408	97.327			
51	.241	.365	97.691			
52	.230	.348	98.039			
53	.220	.333	98.372			
54	.208	.316	98.688			
55	.181	.274	98.961			
56	.173	.262	99.223			
57	.158	.240	99.463			
58	.140	.212	99.675			
59	.127	.192	99.867			
60	.088	.133	100.000			

Extraction Method: Principal Component Analysis.

Employee Engagement and Authentic Leadership

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.027	35.375	35.375	11.396	33.518	33.518
2	5.470	16.089	51.464			
3	1.915	5.632	57.096			
4	1.523	4.479	61.575			
5	1.157	3.404	64.979			
6	.997	2.931	67.910			
7	.966	2.842	70.752			
8	.816	2.400	73.152			
9	.804	2.365	75.517			
10	.624	1.834	77.351			
11	.605	1.780	79.131			
12	.545	1.602	80.733			
13	.529	1.556	82.290			
14	.516	1.518	83.807			
15	.494	1.453	85.260			
16	.461	1.356	86.616			
17	.443	1.304	87.920			
18	.380	1.119	89.039			
19	.373	1.098	90.138			
20	.344	1.010	91.148			
21	.321	.944	92.093			
22	.307	.903	92.996			
23	.296	.871	93.867			
24	.282	.828	94.695			
25	.265	.781	95.476			
26	.229	.673	96.148			
27	.222	.651	96.800			
28	.204	.599	97.399			
29	.181	.533	97.932			
30	.176	.517	98.449			
31	.169	.498	98.946			
32	.138	.407	99.353			
33	.119	.350	99.704			

34	.101	.296	100.000			
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Extraction Method: Principal Axis Factoring.

Interpretation

If the total variance extracted by one factor exceeds 50%, common method bias is present in your study. There is no problem with common method bias in this data since the total variance extracted by one factor is 9.163% for HEXACO and 33.518% for Employee Engagement and Authentic Leadership, both are less than the recommended threshold of 50%. It also shows this study is consistent and, the results were not due solely to common source variance.

Reliability Tests

HEXACO measurement items

Honesty–humility

Reliability Statistics	
Cronbach's Alpha	N of Items
.637	10

Emotionality

Reliability Statistics	
Cronbach's Alpha	N of Items
.687	10

Extraversion

Reliability Statistics	
Cronbach's Alpha	N of Items
.677	10

Agreeableness

Reliability Statistics	
Cronbach's Alpha	N of Items
.681	10

Conscientiousness

Reliability Statistics	
Cronbach's Alpha	N of Items
.701	10

Openness to experience

Reliability Statistics	
Cronbach's Alpha	N of Items
.609	10

The Cronbach Alphas for the HEXACO subscales ranged from $\alpha=0.609$ to $\alpha=0.701$ which consistent with previous studies by Whittington and Meskelis (2020). The values are acceptable and show that the scales are valid.

Employee Engagement and Authentic Leadership

Employee Engagement

Cronbach's Alpha	N of Items
.934	18

Authentic leadership

Cronbach's Alpha	N of Items
.938	16

The Cronbach Alphas for the authentic leadership and engagement subscales ranged were $\alpha=0.938$ to $\alpha=0.934$ respectively which consistent with previous studies by Whittington and Meskelis (2020). The values are very good and show that the scales are valid.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity

Employee Engagement and Authentic Leadership

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.903
Bartlett's Test of Sphericity	Approx. Chi-Square	4420.034
	df	561
	Sig.	.000

This study's results in the table above shows that Keyser– Meyer–Olkin (KMO = 0.903) and Bartlett's test of specificity ($\chi^2 = 4420.034$, $p = 0.000$). This indicates that the sample was significant and adequate for the study.

CHAPTER 5. CONCLUSION

Engagement and Productivity

Employee engagement and individual differences were the principal objectives of this study. Honesty-humility was examined in relation to employee engagement in this study. Kim et al., 2009; Scheepers et al., 2016 identified extraversion and conscientiousness as highly correlated to engagement. I attempted to replicate and extend Whittington and Meskelis's (2020) findings. Engagement was significantly correlated with both emotionality and agreeableness in this study. Emotionality and agreeableness were significantly related to engagement when these traits were included together in a regression analysis. There was a statistically significant change in the amount of variance explained when honesty-humility was added to the Big Five traits.

Due to these results, I may be able to describe engaged employees as having a cluster of emotionality, agreeableness, and honesty-humility. In both correlation and regression analyses, agreeableness is associated with engagement most strongly, followed by emotionality. According to these results, agreeableness, emotionality, and a contribution from honesty-humility contribute significantly to engagement levels, indicating an engaging personality. Based on these results, I conclude that attitudes and behaviours at work are strongly impacted by personality traits.

Meskelis and Whittington (2020) have reported similar findings previously. High-scoring honesty-humility individuals exhibit honesty and loyalty across their lives, which causes them to be fully engaged at work. These employees seem to believe that being mentally absent while showing up for work would be dishonest, since they are not fully embracing their jobs.

It is evident from these results that personality plays a significant role in employee engagement. It is natural for some employees to engage with their work because of their personality traits. There is no context or manager behaviour that will determine whether these employees are engaged at work.

This study extends earlier research by looking at the role of authenticity in leadership, which is consistent with personality-related results from earlier studies. Employee engagement was significantly correlated with the perceived authentic leadership style of direct supervisors. Leadership that is authentic directly impacts employee engagement positively and significantly. Authentic leaders have been found to demonstrate integrity in their leadership, which has been shown to positively impact employee engagement (Gardner et al., 2005). In order to create psychological safety for followers, an authentic leader must exhibit qualities such as integrity, transparency, and consistency (Gardner et al., 2005). Employee engagement relies heavily on psychological safety. When authentic leaders act in a trustworthy manner, it creates a psychological environment in which employees feel safe and engaged. In order for an individual to be engaged, Kahn (1990) identified psychological safety as an important component.

As expected, the relationship between honesty-humility and engagement is enhanced by authentic leadership, in line with expectations that authentic leadership enhances this relationship. Furthermore, this can be used practically, including the fact that it supports our original hypothesis as well as the fact that organizations don't necessarily have to hire employees who are already highly engaged but can do something to engage employees through their leadership styles.

According to our findings, authentic leadership enhances personality traits associated with engagement. It has been found in this study that individuals who are high in honesty-humility are likely to be well engaged in the workplace. A leader's authenticity functions as an enhancer for honesty and humility, so when they exhibit authentic leadership behaviour, they are more likely to drive high engagement levels. Perceived authentic leadership styles by managers can also stimulate engagement even if the individual lacks a particular personality trait.

Various situational factors including personality traits can be used improve employee engagement and productivity. As well as a person's personality and authentic leadership, other tools like the human resources value chain (HRVC) and performance management systems can also complement the requirements in an organisation to improve engagement and productivity (Whittington et al., 2017). Other research has looked at personality traits and leadership behaviours, however, this study identified authentic leadership's enhancing effect on honesty-humility as a force for employee engagement. It has been shown that management behaviour influences employee engagement both directly and indirectly. The leader's behaviour also increases the need for certain characteristics in the employee's personality to be positively correlated with employee engagement.

Implications in Practice

The results of this study support the notion that employee engagement is dispositional. Despite contextual factors such as organizational practices and manager behaviour, some individuals will remain engaged at work. There is a significant relationship between employee engagement and a cluster of personality traits consisting of emotionality, honesty-humility, and agreeableness. Employees bring these traits to work with them. In light of these findings, employers may benefit from using the HEXACO survey as a pre-hire assessment for identifying engaged personalities. Employee regulations, however, prohibit this. An organization could claim that certain personality factors are bona fide occupational qualifications if they had conducted a rigorous concurrent validation study with many employees. My opinion is that this is a risky proposition even if a rigorous validation has been conducted. An organization cannot rely solely on personality traits to engage its employees, so organizational systems and the right leadership styles must be implemented in order to achieve this goal. Leadership behaviours seen to be authentic reduce the requirement for intrinsic personality traits. High levels of personality traits are only important when authentic leadership behaviours are absent, according to the results of this study.

In spite of the fact that organizations cannot hire or select their employees based on a single characteristic such as honesty–humility, research shows that authentic leadership can affect employee engagement levels when employees lack a high level of honesty–humility (Meskelis and Whittington, 2020). It seems that when considering engagement, authentic leadership behaviours diluted the importance of honesty–humility. As a result of these results, I can see how important leader behaviour is. Buckingham and Coffman's (2004) contention that employees leave managers, not companies, is backed up by these results. Authentic leadership behaviours can be leveraged by organizations by encouraging leaders to act confidently, optimistically, transparently, and morally. By combining organisational cultures, programs and mentorship that encourages these behaviours, we can learn and master these behaviours. Organizations can convey a message and cultivate an environment that rewards and values those behaviours, even if some leaders have a natural tendency to exhibit those behaviours (Meskelis and Whittington, 2020).

There are some limitations to this study, even though it provides interesting findings. It is important to note that the sample size is the first limitation. Even though the sample was relatively small, the diversity of companies, positions, and demographics makes these findings more generalizable. As in the exponential non-discriminatory snowball sampling method, the advantages of snowball sampling include the ability to recruit participants quickly and the ability to collect data cost-effectively (Dudovskiy, 2016). There are, however, two limitations to this method. It is possible to oversample a particular peer network, leading to bias. A sample obtained from the general population is not guaranteed to be representative of the general population (Dudovskiy, 2016).

This study also has a limitation related to potential competing hypotheses. Rival hypotheses can be investigated in all studies. An early decision must be made regarding the number of hypotheses to be considered in empirical research. Naturally, this choice will have a significant impact on the study as a whole. There could be various combinations of independent, dependent, and moderating variables which have not been taken into account. The purpose of

this study was to examine only one situational factor - authentic leadership behaviour - on the relationship between individual differences and engagement. These other elements should be examined in future studies.

A third limitation is the fact that participants self-report their personality traits. There may be some bias in self-reports, but they are the best choice for measuring attitudes, preferences, and personality traits in the head. A social report is used to measure authentic leadership based on employees' observations of their immediate supervisor's authentic leadership behaviours. Other than sex and age, no demographic data was collected in this study. I do not expect the level of education to play a role in these responses, given the nature of the constructs examined in this study. Authentic leadership evaluations should be examined in settings where employees lack certain levels of formal education in the future.

I utilized a field study methodology to ensure contextual realism in our research by examining specific aspects of full-time employees' workplaces and their personalities' impact on engagement. In our study, we chose to focus primarily on authenticity and personality, leaving out other variables indicated by other research to significantly influence employee engagement. Integrating honesty-humility into a more complete model dependent variables of employee engagement would be useful in future research.

Future Research Direction

In this study, we examined how individual differences influence employee engagement to provide a partial answer. A high level of honesty-humility is associated with greater employee engagement. According to this result, combined with past research focusing exclusively on the Big Five traits, high engagement by employees can be attributed to a combination of emotionality, agreeableness, and honesty-humility. An "engaged personality" can be operationalized as a cluster of these traits combined. This cluster needs to be validated in future research.

According to the findings of this study, honesty–humility and the engaged personality cluster play the most important roles in employee engagement. No matter how a leader behaves or what policies and practices the organization has, these employees are engaged at work. To examine the connection between engagement and personality, we examined the role of authentic leadership as a possible moderator. It would be interesting to examine other human resources value chain practices such as enriched jobs, integrated performance management systems, and other human resource practices in future studies. Employee engagement has yet to be studied in relation to personality traits, especially honesty-humility. Individual differences and how they impact engagement certainly needs to be better understood. A wider field of individual characteristics should be considered in future studies.

Recommendations

It has been found in this study that agreeableness and emotionality are highly correlated to engagement. In addition, authentic leadership and personality traits like honesty-humility have a significant positive influence on engagement. It is clear here to have an engaged workforce, the employee needs to bring positive personality traits and the organisation can enhance engagement by providing authentic leaders. It is therefore recommended that organisations that wish to improve engagement use a combination of hiring methods that pick candidates that bring the right personality traits in addition to their experience and creating a work environment where leaders are trusted and authentic, thereby creating psychological safety for their employees. This combined will produce an engaged workforce.

REFERENCES

- Alfes, K., Shantz, A. D., Truss, C., & Soane, E. C. (2013). The link between perceived human resource management practices, engagement, and employee behaviour: a moderated mediation model. *The international journal of human resource management*, 24(2), 330-351.
- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International journal of productivity and performance management*.
- Ashton, M. C., & Lee, K. (2007). Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personality and social psychology review*, 11(2), 150-166.
- Ashton, M. C., & Lee, K. (2008). The HEXACO model of personality structure and the importance of the H factor. *Social and Personality Psychology Compass*, 2(5), 1952-1962.
- Attridge, M. (2009). Measuring and managing employee work engagement: A review of the research and business literature. *Journal of Workplace Behavioral Health*, 24(4), 383-398.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The leadership quarterly*, 15(6), 801-823.
- Bakar, M. A. (2013). Cognitive, Affective, Spiritual: Transformative Learning in an Islamic Education Programme. In *Spirituality: New Reflections on Theory, Praxis and Pedagogy* (pp. 101-112). Brill.
- Bates, S. (2004), "Getting engaged", available at: www.shrm.org/hr-today/news/hr-magazine/pages/0204covstory.aspx (accessed 09 August 2022).
- Bennis, W. (1989). *Why leaders can't lead* (pp. 118-120). San Francisco: Jossey-Bass.
- Bhindi, N., & Duignan, P. (1997). Leadership for a new century: Authenticity, intentionality, spirituality, and sensibility. *Educational management & administration*, 25(2), 117-132.
- Buckingham, M., & Coffman, C. (2004). *First, break all the rules*. Sidae ũi Cháng.
- Chan, A., Hannah, S. T., Gardner, W. L., Avolio, B. J., & Walumbwa, F. O. (2005). Authentic leadership theory and practice: Origins, effects, and development. *Authentic leadership theory and practice: Origins, effects, and development*, 3-42.
- Chaurasia, S., & Shukla, A. (2013). The influence of leader-member exchange relations on employee engagement and work role performance. *International Journal of Organization Theory & Behavior*.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel psychology*, 64(1), 89-136.
- Chughtai, A. A., & Buckley, F. (2013). Exploring the impact of trust on research scientists' work engagement: Evidence from Irish science research centres. *Personnel Review*.
- Cooper, C. D., Scandura, T. A., & Schriesheim, C. A. (2005). Looking forward but learning from our past: Potential challenges to developing authentic leadership theory and authentic leaders. *The leadership quarterly*, 16(3), 475-493.
- De Vries, R. E., de Vries, A., & Feij, J. A. (2009). Sensation seeking, risk-taking, and the HEXACO model of personality. *Personality and Individual Differences*, 47(6), 536-540.

- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: contributions to perceived organizational support and employee retention. *Journal of applied psychology*, 87(3), 565.
- Emuwa, A. (2013). Authentic leadership: Commitment to supervisor, follower empowerment, and procedural justice climate. *Emerging Leadership Journeys*, 6(1), 45-65.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The leadership quarterly*, 16(3), 343-372.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The leadership quarterly*, 16(3), 343-372.
- Gcu.edu. (2021) Retrieved 12/06/2022 <https://www.gcu.edu/blog/doctoral-journey/why-quantitative-research-important#:~:text=The%20purpose%20of%20quantitative%20research,or%20events%20that%20affect%20people.&text=Quantitative%20research%20produces%20objective%20data,communicated%20through%20statistics%20and%20numbers.>
- George, B., Sims, P., McLean, A. N., & Mayer, D. (2007). Discovering your authentic leadership. *Harvard business review*, 85(2), 129.
- George, J. M. (2007). 9 Creativity in organizations. *Academy of Management annals*, 1(1), 439-477.
- Gruman, J. A., & Saks, A. M. (2011). Performance management and employee engagement. *Human resource management review*, 21(2), 123-136.
- Handcock, M. S., & Gile, K. J. (2011). Comment: On the concept of snowball sampling. *Sociological Methodology*, 41(1), 367-371.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *Journal of applied psychology*, 87(2), 268.
- Harter, J. K., Schmidt, F. L., & Keyes, C. L. (2003). Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies.
- Harter, J. K., Schmidt, F. L., Agrawal, S., Plowman, S. K., & Blue, A. (2013). The relationship between engagement at work and organizational outcomes. *Gallup Poll Consulting University Press, Washington*.
- Hatfield, C., & Cacioppo, J. Rapson (1994) Emotional Contagion.
- Hoogervorst, N., De Cremer, D., van Dijke, M., & Mayer, D. M. (2012). When do leaders sacrifice?: The effects of sense of power and belongingness on leader self-sacrifice. *The Leadership Quarterly*, 23(5), 883-896.
- Ilies, R., Morgeson, F. P., & Nahrgang, J. D. (2005). Authentic leadership and eudaemonic well-being: Understanding leader-follower outcomes. *The leadership quarterly*, 16(3), 373-394.
- Judge, T. A., & Ilies, R. (2002). Relationship of personality to performance motivation: a meta-analytic review. *Journal of applied psychology*, 87(4), 797.
- Judge, T. A., & Zapata, C. P. (2015). The person-situation debate revisited: Effect of situation strength and trait activation on the validity of the Big Five personality traits in predicting job performance. *Academy of Management Journal*, 58(4), 1149-1179.

- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: a qualitative and quantitative review. *Journal of applied psychology*, 87(4), 765.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal*, 33(4), 692-724.
- Kim, H. J., Shin, K. H., & Swanger, N. (2009). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. *International Journal of Hospitality Management*, 28(1), 96-104.
- Kouzes, J. M., & Posner, B. Z. (2007). Leadership is in the eye of the follower. *The Pfeiffer book of successful leadership development tools*, 154(3).
- Lee, K., & Ashton, M. C. (2004). Psychometric properties of the HEXACO personality inventory. *Multivariate behavioral research*, 39(2), 329-358.
- Lee, K., & Ashton, M. C. (2006). Further assessment of the HEXACO Personality Inventory: two new facet scales and an observer report form. *Psychological assessment*, 18(2), 182.
- Lee, K., & Ashton, M. C. (2013). Prediction of self-and observer report scores on HEXACO-60 and NEO-FFI scales. *Journal of Research in Personality*, 47(5), 668-675.
- Linda Holbeche, L., & Springett, N. (2003). In Search of Meaning in the Workplace, roffeypark.com. *Retrieved from*.
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and organizational Psychology*, 1(1), 3-30.
- Mann, A., & Harter, J. (2016). The worldwide employee engagement crisis. *Gallup Business Journal*, 7(1), 1-5.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of occupational and organizational psychology*, 77(1), 11-37.
- Meskelis, S., & Whittington, J. L. (2020). Driving employee engagement: how personality trait and leadership style impact the process. *Journal of Business & Industrial Marketing*.
- Mitchell, A., & Education, A. E. (2018, July). A review of mixed methods, pragmatism and abduction techniques. In *Proceedings of the European Conference on Research Methods for Business & Management Studies* (pp. 269-277).
- Neider, L. L., & Schriesheim, C. A. (2011). The authentic leadership inventory (ALI): Development and empirical tests. *The leadership quarterly*, 22(6), 1146-1164.
- O'Neill, T. A., Hambley, L. A., & Chatellier, G. S. (2014). Cyberslacking, engagement, and personality in distributed work environments. *Computers in Human Behavior*, 40, 152-160.
- Rahimnia, F., & Sharifirad, M. S. (2015). Authentic leadership and employee well-being: The mediating role of attachment insecurity. *Journal of Business Ethics*, 132(2), 363-377.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of management journal*, 53(3), 617-635.
- Robertson, I. T., & Flint-Taylor, J. (2009). Leadership, psychological well-being, and organizational outcomes. *The Oxford Handbook of Organizational Well Being*.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of managerial psychology*, 21(7), 600-619.

Scheepers, R. A., Arah, O. A., Heineman, M. J., & Lombarts, K. M. (2016). How personality traits affect clinician-supervisors' work engagement and subsequently their teaching performance in residency training. *Medical teacher*, 38(11), 1105-1111.

Sorenson, S. (2013). How employee engagement drives growth. *Gallup business journal*, 1, 1-4.

Stander, F. W., De Beer, L. T., & Stander, M. W. (2015). Authentic leadership as a source of optimism, trust in the organisation and work engagement in the public health care sector. *SA Journal of Human Resource Management*, 13(1), 1-12.

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48(6), 1273-1296.

Tamir, M., & Robinson, M. D. (2004). Knowing good from bad: the paradox of neuroticism, negative affect, and evaluative processing. *Journal of personality and social psychology*, 87(6), 913.

Truss, C., Delbridge, R., Alfes, K., Shantz, A., & Soane, E. (Eds.). (2013). *Employee engagement in theory and practice*. London: Routledge.

Truss, K., Soane, E., Delbridge, R., Alfes, K., Shantz, A., & Petrov, G. (2011). Employee engagement, organisational performance and individual wellbeing: exploring the evidence, developing the theory. *International Journal of Human Resource Management*, 22(12), 232-233.

Van De Voorde, K., Paauwe, J., & Van Veldhoven, M. (2012). Employee well-being and the HRM–organizational performance relationship: a review of quantitative studies. *International Journal of Management Reviews*, 14(4), 391-407.

Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of management*, 34(1), 89-126.

Walumbwa, F. O., Christensen, A. L., & Hailey, F. (2011). Authentic leadership and the knowledge economy: Sustaining motivation and trust among knowledge workers. *Organizational dynamics*, 40(2), 110-118.

Walumbwa, F. O., Wang, P., Wang, H., Schaubroeck, J., & Avolio, B. J. (2010). Retracted: Psychological processes linking authentic leadership to follower behaviors.

Whittington, J. L., Meskelis, S., Asare, E., & Beldona, S. (2017). *Enhancing employee engagement: An evidence-based approach*. Springer.