

**Investigating the relationships between  
engaging leadership, need satisfaction, work  
engagement and workplace boredom within  
the South African mining industry**

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requirements for the degree *Master of Commerce* in  
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## COMMENTS

The reader should take note of the following:

- The *South African Journal of Industrial Psychology*'s (SAJIP) guidelines were utilised for the editorial style of this manuscript. The referencing in this mini-dissertation follows the format prescribed by the Publication Manual (6<sup>th</sup> edition) of the American Psychological Association (APA). These practices are in accordance with the policy of the Programme in Industrial Psychology of the North-West University (Potchefstroom) to use the APA style of referencing in all scientific documents as from January 1999.
- The mini-dissertation is submitted in the form of a research article.

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## DECLARATION

I, **Anthea Erasmus**, hereby declare that “Investigating the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom within the South African mining industry” is my own work and that the views and opinions expressed in this work are those of the author, and relevant literature references as cited in the manuscript.

I further declare that the content of this research was not and will not be submitted for any other qualification at any other tertiary institution.

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*M Fischer.*

**Maurine Fischer**

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## SUMMARY

**Title:** Investigating the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom within the South African mining industry

**Keywords:** Engaging leadership, need satisfaction, work engagement, workplace boredom, transformational leadership.

Leadership and the effects it has on organisational outcomes, has been a popular topic of interest due to its importance. Recently, engaging leadership has surfaced as a new leadership style that emphasises the connection between the leader and the follower. Leadership studies within the South African mining industry are especially beneficial due to the numerous challenges that the industry has faced in recent years. The current study investigated the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom within the South African mining industry.

The general objective of the study was to determine the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom. A cross-sectional research approach was followed. Non-probability, convenience sampling was utilised, whereby the sample consisted of 361 participants from the mining industry. The discriminant validity between engaging- and transformational leadership was tested. Thereafter, structural equation modelling was applied to analyse the relationships between the variables. This was done by testing the goodness-of-fit between the measurement models, utilising Cronbach's alpha coefficients and composite reliability coefficients to calculate the variables' reliability and adding regression paths between variables to determine the relationships between the variables in a structural model.

The results indicated that all of the variables had acceptable reliability values and that the discriminant validity between engaging- and transformational leadership was acceptable although a significant overlap existed between these two constructs. Furthermore, engaging leadership had a direct positive relationship with need satisfaction, but no significant relationship with either work engagement or workplace boredom. Interestingly, significant indirect relationships through need

satisfaction were found between engaging leadership and work engagement, and engaging leadership and workplace boredom – indicating the importance of need satisfaction as an important explanatory variable for these relationships.

Recommendations regarding practice and future research are made.

## OPSOMMING

**Titel:** ‘n Ondersoek na die verhoudings tussen insluitende leierskapseienskappe, behoefte bevrediging, werksbetrokkenheid en verveeldheid in die werksplek binne die Suid-Afrikaanse mynindustrie.

**Sleutelwoorde:** Insluitende leierskap, behoefte bevrediging, werksbetrokkenheid, verveeldheid, transformerende leierskap.

Leierskap en die effek wat dit op organisatoriese uitkomst het, is as gevolg van die belangrikheid daarvan ‘n populêre onderwerp. Onlangs het insluitende leierskap wat die konneksie tussen die leier en die navolger beklemtoon as ‘n nuwe leierskapstyl tevoorskyn gekom. Leierskapstudies binne die Suid-Afrikaanse mynindustrie kan veral daarby baat weens die talle uitdagings wat die industrie in onlangse jare moes hanteer.

Die huidige studie het die verwantskappe tussen insluitende leierskap, behoefte bevrediging, werksbetrokkenheid en verveeldheid binne die werksplek in die Suid-Afrikaanse mynindustrie ondersoek.

Die algemene doel van die studie was om die verhouding tussen insluitende leierskap, behoefte bevrediging, werksbetrokkenheid en verveeldheid in die werksplek vas te stel. ‘n Kruisseksionele navorsingsbenadering is gevolg. ‘n Nie-waarskynlikheidsteekproefneming is gedoen waarvoor die monster van 361 deelnemers uit die mynindustrie ingesamel is deur ‘n kruisseksionele navorsingsbenadering te volg. Die kritiese geldigheid tussen deelnemende en transformerende leierskap is getoets. Daarna is strukturele vergelykende modellering toegepas om die verhoudinge tussen die veranderlikes te ontleed. Dit is gedoen deur die geskiktheid tussen die metingsmodelle te toets deur die gebruik van Cronbach alfa koëffisiënte. Saamgestelde betroubare koëffisiënte is verder aangewend ten einde die betroubaarheid van veranderlikes te verreken en deur die byvoeging van regressiebane ten einde die verhoudings tussen die veranderlikes in ‘n strukturele model te bepaal.

Die uitslae het aangedui dat al die veranderlikes aanvaarbare betroubaarheidswaardes gehad het en dat die kritiese geldigheidswaardes tussen deelnemende- en transformerende leierskap aanvaarbaar was alhoewel daar 'n merkbare oorvleueling tussen die twee vorme bestaan. Verdermeer het deelnemende leierskap 'n direkte positiewe verhouding met behoefte versadiging, maar geen betekenisvolle verhouding met werksbetrokkenheid of verveeldheid in die werksplak nie. Interessant genoeg, is betekenisvolle verhoudings deur behoefte versadiging en werksbetrokkenheid asook tussen deelnemende leierskap en verveeldheid in die werksplek – wat die belangrikheid van behoefte bevrediging as 'n belangrike verklarende veranderlike vir hierdie verhoudings beklemtoon.

Aanbevelings aangaande die gebruik daarvan en toekomstige navorsing is gemaak.

**CHAPTER 1**  
**INTRODUCTION**

## **Introduction**

Leadership has been a topic of interest for many years and has gone through a diverse set of phases as the decades have passed (Alimo-Metcalfe, Alban-Metcalfe, Bradley, Mariathasan & Samele, 2008). In general, leadership has been shown to increase individual effectiveness, motivation, job satisfaction and the psychological well-being of employees (Alimo-Metcalfe & Alban-Metcalfe, 2004). Leadership has been recognised as a key contributor to organisational success (Clarke, Butcher & Bailey, 2004). More recently, Alimo-Metcalfe and Alban-Metcalfe (2001, 2005, 2006) have investigated the “post-heroic” era of leadership; a heroic leader was seen as distant and had the power to lead an organisation to success or complete failure, and was often linked with the charismatic leadership style (Howell & Shamir, 2005). However, a model for “nearby” or “engaging” leadership was then developed by Alban-Metcalfe and Alimo-Metcalfe (2007), moving away from “heroic” models of leadership and shifting their attention toward the relevancy of leadership within 21st century organisations and considering cultures other than that of the USA.

### **1.1 Problem statement**

Engaging leadership is a relatively new concept and a limited amount of research is available on the topic (Alban-Metcalfe & Alimo-Metcalfe, 2007; Alimo-Metcalfe & Alban-Metcalfe, 2001, 2005, 2006, 2011; Antonakis & Atwater, 2002; Hofstett-Kopperud, Martinsen & Wong-Humborstad, 2014; Shamir, 1995), especially regarding the influence of engaging leadership on employees’ work engagement through need satisfaction (Schaufeli, 2015).

Alimo-Metcalfe et al. (2008) explain that engaging leaders are genuinely concerned about the development and well-being of others; are able to create a united vision for all parties to strive towards; are in favour of a culture that promotes development in order for individuals to reach their full potential; continuously question current structures as to provide constructive criticism and to lead with new strategies. The authors go further by stating that “integrity, openness and transparency” (p. 587) are the values that engaging leadership is based upon while also truly appreciating colleagues and the roles they fulfil; along with being in a problem-solving and decision-making state of mind (Alimo-Metcalfe et al., 2008).

Moreover, Schaufeli (2015) explains that the term “engaging leaders” derives from idiosyncratic conceptualisations (e.g. Alimo-Metcalfe et al., 2008) or from existing conceptualisations, in particular, transformational leadership (e.g. Hofslett-Kopperud et al., 2014). Schaufeli sheds light on the overlap in the conceptualisation of both engaging and transformational leadership, which include idealised influence, inspirational motivation, intellectual stimulation and individualised consideration. Furthermore, Schaufeli points out that the main difference between these two styles of leadership is that engaging leadership does not focus on idealised influence and intellectual stimulation as emphasised in transformational leadership, although engaging leadership highlights the social bonding and/or connection with others which draws on the “closeness” of engaging leaders with others.

Schaufeli investigated the relationship between engaging leadership, work engagement and burnout by applying the job demands-resources (JD-R) model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001; Schaufeli & Bakker, 2004) of which the leadership measure used was based on the premises of fulfilling basic need satisfaction although basic need satisfaction was not actually considered as a mediating variable. The results indicated an exclusive, indirect relationship between engaging leadership, work engagement and burnout, mediated by job resources and demands. Moreover, the results presented a direct relationship between engaging leadership and the four expected outcomes, namely employability, self-related performance, performance behaviour and commitment.

Although familiar conceptualisations of work engagement (e.g. Kahn, 1990; Schaufeli & Bakker, 2004) have been used frequently throughout studies, it could still be considered a relatively new concept (Ghadi, Fernando & Caputi, 2012). Kahn (1990) describes engaged employees as being physically, cognitively and emotionally involved in their work roles as well as going above and beyond expectations in order to succeed. This study subscribes to Schaufeli, Salanova, Gonzalez-Roma & Bakker’s (2002) conceptualisation of work engagement which is defined as a “positive, fulfilling, work related state of mind that is characterised by vigour, dedication and absorption” (p. 74). Thus, employees that show high levels of energy (vigour), take pride and are enthused by their work (dedication), and are able to fully concentrate and be involved in their tasks (absorption), are considered engaged (Schaufeli et al., 2002). Insight into contributions toward work engagement is

important as high levels of work engagement hold multiple benefits for the organisation, which include increased customer satisfaction and loyalty, productivity, profitability and safety (Harter, Schmidt & Hayes, 2002). High levels of engagement among employees have also been proved to be beneficial toward their mental health (Schaufeli, Taris & Van Rhenen, 2008). Consequently, disengagement amongst employees take place when they detach themselves from their work (Kahn, 1990), negatively implicating the organisations' financial performance (Hansen, Byrne & Kiersch, 2014).

By utilising the self-determination theory (SDT; Ryan & Deci, 2000) as the basis on which employees' basic need satisfaction are fulfilled, the likelihood of determining the precise extent to which engaging leadership fulfils employees' basic need satisfaction, is enhanced (Schaufeli, 2015). SDT posits that people are inclined to experience psychological growth and personal well-being by fulfilling their basic psychological needs: autonomy, competence and relatedness (Deci & Ryan, 2008). Autonomy concerns that individuals behave according to their own willingness and preferences that are consistent with their values and interests (Deci & Ryan, 2000). By being able to perform one's capabilities in such a way that one is able to deal effectively with the environment, would fulfil the need for competence - whereas the need for relatedness is the desire to be able to connect with others in order to create and build meaningful relationships, fostering a sense of belonging (Deci & Ryan, 2000). SDT also suggests that satisfying employees' need for autonomy, competence and relatedness would most likely result in higher levels of job satisfaction and work engagement (Van den Broeck, Vansteenkiste, De Witte, Soenens & Lens, 2010). Therefore, measuring the degree to which engaging leadership satisfies employees' psychological needs would expectedly also predict their work engagement (Schaufeli, 2015). When engaging leadership behaviours are not found it is likely to leave employees' psychological needs dissatisfied and lead to burnout (Schaufeli, 2015).

Vincent-Höper, Muser and Janneck (2012) emphasise the immense pressure that supervisors are under since they are increasingly expected to take responsibility for employee health and well-being (Kelloway, Weigand, McKee & Das, 2013), ensure that employees adapt effectively to change in the organisation (Sarros, Cooper & Santora, 2011), think of new strategies and ways of thinking (Luthans, Van Wyk & Walumbwa, 2004), and to maintain high levels of engagement

among employees (Carasco-Saul, Kim & Kim, 2014). Therefore, engaging leaders are expected to provide for the work-related needs of employees in order to ensure their work-related well-being, e.g. work engagement and meaningful work. Except for the direct link between leadership and employees' well-being, leaders could also have an indirect influence on employee well-being through the job demands-resources approach (Schaufeli & Bakker, 2004). Leaders are responsible for distributing job demands and job resources to their subordinates, and should ensure a balanced work environment where employees' job demands do not exceed their job resources in order to prevent the health impairment process from occurring, which leads to negative outcomes such as burnout and ill-health (De Beer, Pienaar, Rothmann Jr., 2016). Instead, effective leaders should provide and maintain employees' job resources (e.g. supervisory support) which would lead to work engagement, resulting in better well-being among employees (Schaufeli, 2015).

Disengagement among employees is likely to occur when employees do not cope properly with workplace boredom (Whiteoak, 2014), negatively impacting on employee well-being (Game, 2007). Workplace boredom is defined as "an unpleasant, transient affective state in which an individual feels a pervasive lack of interest in and difficulty concentrating on the current study" (Fisher, 1993, p. 396) which causes people to withdraw from their work and to participate in counterproductive activities (Spector, Fox, Penney, Bruusema, Goh & Kessler, 2006). Workplace boredom could lead to several undesired effects for the organisation such as job dissatisfaction and reduced turnover (Kass, Vodanovich & Callender, 2001) as well as negatively influencing on overall organisational performance (Gemmill & Oakley, 1992). For the individual employee, psychological effects such as higher levels of anxiety, depression and neuroticism have also been reported (Caplan, Cobb, French, Harrison & Pinneau, 1975).

While engaged employees are committed and enthused by their work (Harter et al., 2002; Schaufeli, 2012), which involves a pleasureable-activating affect (Schaufeli, 2012), boredom is met at the opposite end of the scale concerning enthusiasm (Daniels, 2000), which is supplementary with a displeasurable-deactivating affect (Schaufeli, 2012). Game (2007) and Skowronski (2012) emphasise that workplace boredom still remains a relatively neglected research topic since Fisher's (1993) study more than 20 years ago, especially when compared to research done on other states in the workplace (Loukidou, Loan-Clarke & Daniels, 2009). Moreover, a

limited amount of research has been done on workplace boredom in South Africa. However, a recent validation study by Van Wyk, De Beer, Pienaar and Schaufeli (2016) has shown workplace boredom to be negatively related to both work engagement and organisational commitment within the South African context.

Originally monotonous and repetitive work tasks were seen as the main causes of workplace boredom (Lee, 1986; O'Hanlon, 1981). However, research conducted by Hill and Perkins (1985) and Shackleton (1981) expanded the traditional perception by adding that more specifically, the individual's reaction towards subjective monotony is one of the main causal contributors rather than objective monotony. A lack of stimulation relating to work tasks was also found to lead to boredom in terms of quantity or quality (Skowronski, 2012). Quantitative underload is defined as experiencing a lack of interest and not having much to do. Relating to monotony and unchallenging work tasks, qualitative underload occurs when a task fails to sufficiently hold one's focus while qualitative overload entails work tasks that are confusing and difficult, inducing some individuals to gravitate towards boredom (Fisher, 1993). Recent research in South Africa found a significant positive relationship between work underload and workplace boredom (Van Wyk et al., 2016). Fisher (1993) further mentions that situational factors should also be considered in the dynamics of boredom. Such a situational factor could be exposure to dissatisfying social interactions at work which may also present feelings of boredom (Fisher, 1993), since a task can be more interesting due to the relations with colleagues (Isaac, Sansone & Smith, 1999).

Engaging leadership is expected to have a negative relationship with workplace boredom, also based on SDT. For example, causes of boredom such as an unstimulating work environment; confusion around work tasks or the work role that an individual should fulfil (Fisher, 1993); not being provided with developmental opportunities (increasing competence and mastery) or freedom to make decisions in an autonomous manner (Hill & Perkins, 1985); as well as not receiving, or building any relatedness in the form of social support (Parker & Ohly, 2006), could be addressed with engaging leadership by providing employees with inspirational motivation and being concerned about each individual's growth and well-being (Alimo-Metcalfe et al., 2008; Schaufeli, 2015); thinking of new ways for them to work together with employees which fulfil the social support that lacks; providing employees with encouragement and motivation as well as giving

them a better sense of job satisfaction (Alimo-Metcalf et al., 2008). Therefore, assumptions could be made that the influence of engaging leadership on employees are likely to have a positive effect on workplace boredom, i.e. reduce workplace boredom levels by satisfying employee needs in this regard.

Certain leader behaviours (Xu & Thomas, 2010) and different styles of leadership, including interpersonal leadership (e.g. Hansen et al., 2014) and transformational leadership (e.g. Ghadi et al., 2012), which all share characteristics similar to engaging leadership, have been proven to positively relate to work engagement (e.g. Schaufeli, 2015). Although there has been little research that links leadership and workplace boredom (Carroll, Parker & Inkson, 2010; Loukidou et al., 2009), there seems to be even less research to suggest the influence that engaging leadership may have on workplace boredom, also through need satisfaction.

In the current study, workplace boredom will be placed opposite work engagement, as outcomes, to study the impact of engaging leadership on both constructs both directly and through need satisfaction. Some researchers have studied the influence of leadership on followers' basic needs (e.g. Hetland, Hetland, Andreassen, Pallesen & Notlaers, 2011; Kovjanic, Schuh & Jonas, 2013; Lanaj, Johnson & Lee, 2015), with Schaufeli's (2015) research concerning the effects of engaging leadership on work engagement and burnout appearing to be the closest and most current study. However, there has been little evidence of research, if any at all, that links engaging leadership with work engagement and workplace boredom through need satisfaction which will present new insights pertaining to these relationships.

Luthans et al. (2004) stated that South African organisational leaders might find it more difficult to thrive within the workplace when considering the country's history as well as socio-economic and political factors. The South African mining industry, in particular, seem to be in dire need of effective leadership since the industry faces seemingly endless unrest among mine workers and local communities, frequent industrial action against them and needing to deal with the constant strain of remaining a reckoning competitor within the global market (Bezuidenhout & Schultz, 2013). Research concerning leadership styles within South African mines appear to have mainly focused on either, a combination of leadership styles (Mclaggan, Bezuidenhout & Botha, 2013)

or, leaning toward transformational leadership (Bezuidenhout & Schultz, 2013). Therefore, this study proposes to investigate the relationship between engaging leadership, need satisfaction, work engagement and workplace boredom within the South African mining industry.

## 1.2 Research questions

- How are engaging leadership, need satisfaction, work engagement and workplace boredom conceptualised according to the literature?
- What discriminant validity does engaging leadership and transformational leadership show?
- What is the relationship between engaging leadership, need satisfaction, work engagement and workplace boredom?
- Does need satisfaction mediate the relationship between engaging leadership and work engagement, workplace boredom?
- What recommendations can be made for future research and practice?

## 1.3 Expected contribution of the study

### **1.3.1 Contribution to the individual**

Bass (1990) has stated that the relationship between leaders and followers is vital when considering that they fulfil each other's needs. It is predicted that the absence of engaging leadership behaviours would hinder the fulfilment of employees' basic needs (Schaufeli, 2015) and contribute to workplace boredom. On the other hand, engaging leaders are likely to fulfil employees' needs by inspiring, strengthening and connecting with their followers which would result in higher levels of work engagement (Schaufeli, 2015). Work engagement is seen as a vital component of affective work-related well-being (Cropanzano & Wright, 2001; Rothmann, 2008) whereas boredom holds a significant, negative impact for individual well-being (Martin, 2009). Direct connections between engaging leadership behaviours and work-related well-being have also been determined (Alban-Metcalf & Alimo-Metcalf, 2000), concluding that engaging leadership would probably have both a direct and indirect (through basic need fulfilment which increases work engagement

and likely decreases workplace boredom) positive effect on the individual employee's work-related well-being.

### **1.3.2 Contribution to the organisation**

By bringing engaging leadership to the organisation's attention, new insights could be obtained concerning current leadership programmes which in turn could lead to a multitude of advantages. These advantages include higher team performance, increased motivation, higher levels of job satisfaction, better commitment towards the organisation and the job itself, and increased well-being (Alimo-Metcalfe et al., 2008). Increased well-being could be indicative of increased self-esteem and self-confidence while also presenting lower stress levels and emotional exhaustion among employees (Alimo-Metcalfe et al., 2008). Ultimately the advantages regarding leadership could contribute to better overall functioning within the organisation and result in more profitable outcomes, especially when taking the complex mining environment into consideration (Bezuidenhout & Schultz, 2013).

### **1.3.3 Contribution to Industrial Psychology literature**

Besides for engaging leadership being a new concept to leadership literature (Alban-Metcalfe & Alimo-Metcalfe, 2007; Alimo-Metcalfe & Alban-Metcalfe, 2001, 2005, 2006; Alimo-Metcalfe et al., 2008; Shamir, 1995), it appears that Schaufeli's (2015) research is the only of its kind concerning engaging leadership and how it relates to basic need satisfaction in terms of the self-determination theory. Carasco-Saul et al. (2014) have argued that leadership and how it affects work engagement has also not been studied extensively enough, while little attempts have been made to investigate the relationship between leadership and workplace boredom. Therefore, Industrial Psychology literature would benefit from the study as it would provide for more insight regarding the relationship between engaging leadership, basic need satisfaction and work engagement as well as providing first insights by adding workplace boredom to the relationship.

## 1.4 Research objectives

The research objectives are divided into a general objective and specific objectives.

### **1.4.1 General objective**

To determine the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom.

### **1.4.2 Specific objectives**

- To determine how engaging leadership, need satisfaction, work engagement and workplace boredom are conceptualised according to the literature.
- To determine the discriminant validity of engaging leadership and transformational leadership.
- To determine the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom.
- To determine if need satisfaction mediates the relationship between engaging leadership and work engagement, workplace boredom.
- To make recommendations for future research and practice.

## 1.5 Research hypotheses

*H<sub>1</sub>*: Engaging leadership and transformational leadership show discriminant validity.

*H<sub>2</sub>*: Engaging leadership has a positive relationship with need satisfaction.

*H<sub>3</sub>*: Engaging leadership has a positive relationship with work engagement.

*H<sub>4</sub>*: Engaging leadership has a negative relationship with workplace boredom.

*H<sub>5</sub>*: Need satisfaction has a positive relationship with work engagement.

*H<sub>6</sub>*: Need satisfaction has a negative relationship with workplace boredom.

*H<sub>7</sub>*: Need satisfaction mediates the relationship between engaging leadership and work engagement.

*H<sub>8</sub>*: Need satisfaction mediates the relationship between engaging leadership and workplace boredom.

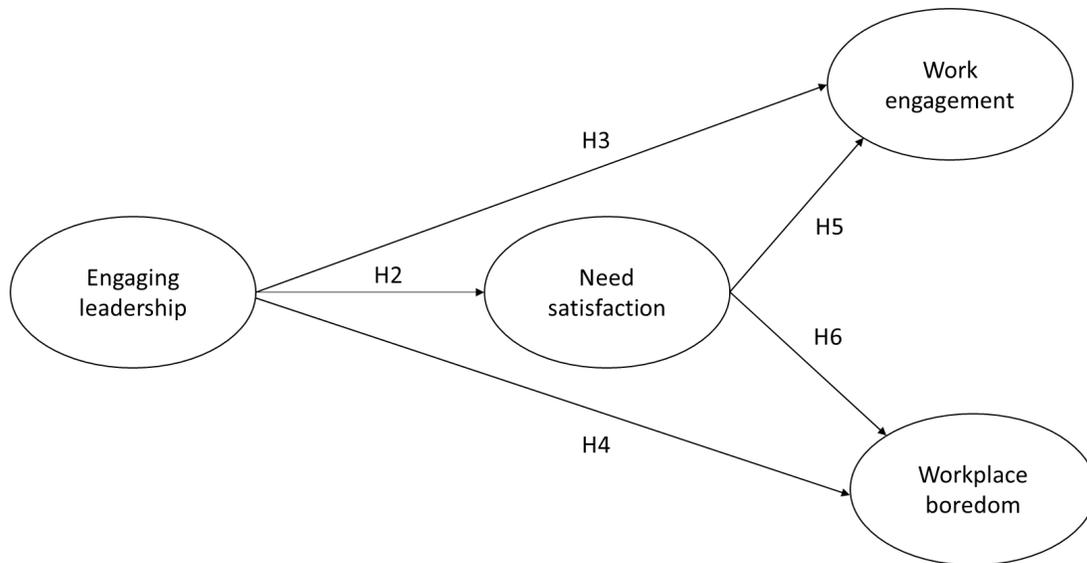


Figure 1. *The proposed research model.*

## 1.6 Research method

### **1.6.1 Research approach**

For the purposes of this study a quantitative research approach was followed. More specifically, a non-experimental, cross-sectional design was used since the data was collected from the prospective sample group during a single period in time via survey implementation (Fouché, Delport & De Vos, 2011). Advantages associated with a cross-sectional research approach include the likelihood of fewer expenses and fewer dropouts among participants due to the limited time in which the data are collected (Fouché et al., 2011), also when project funding is limited.

### **1.6.2 Literature review**

A meticulous literature review concerning engaging leadership, basic need satisfaction, work engagement and workplace boredom was conducted. Articles relevant to the study was obtained by means of several search engines, namely Google Scholar, EbscoHost (databases include the Academic Search Premiere, Business Source Premier, PsycARTICLES and PsycINFO), Emerald Insight Journals, JSTOR, SAePublications, ScienceDirect and Researchgate. The main journals that were referred to are: *Leadership & Organization Development Journal*, *Journal of Applied*

*Psychology, Personnel Review, Human Relations, Career Development International, Leadership Quarterly, Journal of Managerial Psychology, Journal of Organizational Behavior, Journal of Leadership & Organizational Studies, and Journal of Occupational and Organizational Psychology.* In conjunction with academic articles, other relevant sources were also consulted to ensure that a comprehensive review of the literature was done. Keywords that were utilised during the literature search included: leadership, engaging leadership, transformational leadership, basic need satisfaction, the self-determination theory (SDT), work engagement and workplace boredom.

### **1.6.3 Research participants**

Non-probability sampling was used during data collection. Specifically, convenience sampling in the form of accidental sampling was followed since data was gathered from readily available participants who fitted the criteria needed and that happened to cross paths with the researcher (Özdemir, St. Louis & Topbaş, 2011; Strydom, 2011a). Mining employees who were available and had the time to complete the questionnaire were targeted. The targeted mining organisation was ideal as they make use of the Paterson system of job grading, providing for many potential participants in various levels of the organisation. Specifically, the inclusion criteria entailed that participants be employed by the mining organisation(s); must be at least 18 years of age; and have at least ABET level 4 English proficiency in order to answer the survey questions which were presented in English only. All available employees that met the aforementioned inclusion criteria were approached to partake in the study, voluntarily. The sample objective was to gather at least 300 completed questionnaires.

### **1.6.4 Measuring instruments**

***Biographical questionnaire:*** Basic demographic characteristics of the participants were collected by means of a short (four question) biographical section at the start of the survey. This is necessitated due to the guidelines of the American Psychological Association (APA, 2008) for publications and due to the non-probability sampling method employed, i.e. to be transparent when disseminating the research results by providing the basic sample composition to consider the extent

and applicability of the generalisation of the results (Gravetter & Forzano, 2012). The demographic characteristics were: age (category), gender, ethnicity and level of education.

***Engaging leadership*** was measured with the Engaged Leadership Scale (Schaufeli, 2015). The 12 items were measured on a 5-point Likert scale, which ranges from “completely disagree” (1) to “completely agree” (5). Four subscales were measured, namely: strengthening (e.g. “My supervisor delegates tasks and responsibilities to team members”; 3 items), connecting (e.g. “My supervisor promotes team spirit”; 3 items), empowering (e.g. “My supervisor gives team members enough freedom and responsibility to complete their tasks”; 3 items), and inspiring (e.g. “My supervisor makes team members feel that they contribute to something important”; 3 items). The Cronbach’s alpha coefficients exceeded 0.70 (Schaufeli, 2015).

***Transformational leadership*** was measured with the Transformational Leadership scale which was developed by Rafferty and Griffin (2004). This scale consists of 15 items. An example item from this scale is ‘My supervisor has a clear understanding of where we are going’. All items were measured on a 5-point scale ranging from “Completely disagree” to “Completely agree”. Cronbach’s alpha reliability has shown this scale to be reliable with coefficients above 0.70.

***Need satisfaction*** was measured with the Work-Related Basic Need Satisfaction scale (W-BNS) (Van den Broeck et al., 2010). The measure consisted of 16 items by means of a five point Likert scale which ranges from “totally disagree” (1) to “totally agree” (5). The instrument measures satisfaction of employees’ basic needs, namely the need for autonomy (e.g. “I feel free to do my job the way I think it could best be done”; 6 items), the need for competence (e.g. “I am good at the things I do in my job”; 4 items), and the need for relatedness (e.g. “At work, I feel part of a group”; 6 items). The following Cronbach’s alpha coefficients of the basic needs, namely autonomy, competence and relatedness were found to be 0.81, 0.85 and 0.82 on average (Van den Broeck et al., 2010). The scale has also been utilised within the South African context, whereby the Cronbach’s alpha coefficients of autonomy, competence and relatedness were found to be 0.78, 0.82 and 0.86 (Rothmann, Diedericks & Swart, 2013).

*Work engagement* was measured with the 9-item Utrecht Work Engagement Scale (UWES-9) (Schaufeli, Bakker & Salanova, 2006). Schaufeli et al. (2006) developed a more convenient, 9-item scale from a 17-item scale across ten countries, of which South Africa was one. The UWES-9 is a self-report questionnaire which scores items on a seven point frequency rating scale ranging from “never” (0) to “always” (6). The instrument measured the three dimensions of work engagement, namely vigour (e.g. “At my work, I feel bursting with energy”; 3 items), dedication (e.g. “My job inspires me”; 3 items), and absorption (e.g. “I feel happy when I am working intensely”; 3 items). Across all ten countries the Cronbach’s alpha coefficients for the 9-item scale varied between 0.85 and 0.92 (Schaufeli et al., 2006). Other South African studies utilising the scale have found satisfactory Cronbach’s alpha coefficients for vigour, dedication and absorption ranging between 0.72 and 0.90 (Mendes & Stander, 2011; Janse van Rensburg, Boonzaier & Boonzaier, 2013).

*Workplace boredom* was measured with the Dutch Boredom Scale (DUBS) of which the experience and manifestation of workplace boredom was predominantly measured (Reijseger, Schaufeli, Peeters, Taris, Van Beek & Ouweneel, 2013). The DUBS consists of six items (e.g. “At my work, there is not so much to do” and “During work time I daydream”) which were scored by a five point rating scale ranging from “never” (1) to “always” (5). This scale has a reported Cronbach’s alpha coefficient of 0.78 within South African context (Van Wyk et al., 2016). The DUBS is reliable with a reported Cronbach’s alpha coefficient of 0.80 (Reijseger et al., 2013).

### **1.6.5 Research procedure**

After the Research Proposal Committee and the Research Ethics Committee of the North-West University approved the proposed study, various platinum mines were approached in order to obtain permission to collect the data from the relevant participants to answer the research questions. Participants received information on the research project and were invited to complete the questionnaires, i.e. the voluntary nature of the study and the confidentiality procedures to be followed, ensuring participants’ anonymity. Informed consent was obtained from the participants before they started completing the questionnaires. Hard copy questionnaires were distributed among participants and collected by hand. The data gathering occurred over a two-week period.

After collecting the data, the hard copies were captured by the researcher in the electronic data base in order to proceed with the statistical analysis. Only the researcher and research supervisor have access to this data file. The data file is password protected and stored by the research supervisor. All hard copies are securely stored at the University. Upon request, the relevant management of the prospective mines are able to receive feedback regarding the general findings of the results. However, only overall results will be provided to management since the anonymity and confidentiality of all participants would be strictly adhered to. Finally, the anonymous results were disseminated in the form of a master's thesis and potential publication(s) in a peer-reviewed scientific journal(s).

### **1.6.6 Statistical analysis**

Latent variable modelling was used in Mplus 7.4 to investigate the research questions and test the hypotheses (Muthén & Muthén, 2015). Structural equation modelling (SEM) methods firstly specifies a measurement model by means of confirmatory factor analysis (Brown, 2015). The fit of the research model was considered by the following indices: Comparative fit index (CFI), Tucker-Lewis index (TLI), and Root mean square error of approximation (RMSEA). Values for the CFI and TLI of 0.90 or above show adequate fit whereas 0.08 and below is considered adequate for the RMSEA (Van de Schoot, Lugtig & Hox, 2012). Composite reliability coefficients were calculated for the variables, as recent research has shown that the Cronbach's alpha coefficient is not accurate for categorically ordered data (Peters, 2014; Revelle & Zinbarg, 2009). Correlations were also investigated and effect sizes considered practically significant at  $r > 0.30-0.49$  for a medium effect, and  $r > 0.49$  for a large effect (Cohen, 1992).

To test the discriminant validity between the engaging leadership and transformational leadership variables, a model where the correlation remained unconstrained was compared to a model in which the correlation is constrained to unity (1.00) with the DIFFTEST option in Mplus. A non-significant chi-square comparison ( $p \geq 0.05$ ) would indicate that the constrained model was a better model compared to the unconstrained model – and that discriminant validity did not exist between the two variables.

Then as the next step in the SEM process, a structural model was established by adding regression paths in line with the research model and its accompanying hypotheses (see Figure 1 above). The direction and size of the standardized beta coefficients were considered. To test the mediating effects, the MODEL INDIRECT function in Mplus was used and 5000 bootstrapped replications were requested with 95% confidence intervals to ascertain the potential indirect effects (Rucker, Preacher, Tormala, & Petty, 2011). All parameters were considered statistically significant at the 95% level, i.e.  $p < 0.05$ .

### **1.6.7 Ethical considerations**

Ethical and fair practices were maintained throughout the entire course of the study. Strydom (2011b) emphasises the fundamentals on which mutual trust, cooperation and expectations are built concerning the involved parties of the research study. All actions were based on ethical decision-making in order to address any ethical issues that could have arisen in an appropriate manner. Ethical issues were limited by ensuring that no harm was done to any of the participants; that the participants were aware of the voluntary nature of the study whereby they could decide to retreat from the study at any time; that anonymity and confidentiality of the participants were adhered to; and that the participants were not misguided in any way (Strydom, 2011b). The participants received detailed information regarding the purpose of the study as well as the procedures to be followed and informed consent that should be obtained. Research proceedings only commenced once the Research Ethics Committee of the North-West University reviewed and approved the submitted research proposal.

### **1.7 Division of chapters**

The chapters in this mini-dissertation will be presented as follows:

Chapter 1: Introduction

Chapter 2: Research article

Chapter 3: Conclusions, limitations and recommendations

## **1.8 Chapter summary**

The problem statement, research objectives and research hypotheses were presented in this chapter. The research method and its particulars were explained as well as an indication of the chapters that were included in the current study.

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**CHAPTER 2**  
**RESEARCH ARTICLE**

# **Investigating the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom within the South African mining industry**

## **Abstract**

**Orientation:** Leadership remains an important area of research. Insights into employee motivation is furthered by investigating the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom.

**Research purpose:** The purpose of this study was to determine the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom. In addition, the study set out to determine the discriminant validity between engaging- and transformational leadership.

**Motivation for the study:** This study sought to address the gap in the literature regarding the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom. It expands on the limited research available on engaging leadership which can enhance leadership within organisations and result in increased employee well-being.

**Research design, approach and method:** A quantitative, cross-sectional design was followed whereby self-report questionnaires were completed by 361 employees within the South African mining industry. Latent variable modelling was employed to test the hypotheses and discriminant validity between engaging- and transformational leadership was tested.

**Main findings:** Engaging leadership had a significant, positive relationship with need satisfaction and indirect, significant relationships to both work engagement and workplace boredom through need satisfaction as a mediating variable. Unexpectedly, no direct, significant relationships were found between engaging leadership, work engagement and workplace boredom.

**Practical/Managerial implications:** Engaging leadership should be implemented within organisations or be added to existing, transformational leadership training programmes as it fulfils employees' basic needs, consequently contributing to positive employee- and organisational outcomes.

**Contribution/Value-add:** Theoretically, this study expands on existing, yet limited, engaging leadership theory and provides insights regarding the differences between engaging- and transformational leadership. Overall, new light is shed onto components of employee motivation through the fulfilment of employees' needs with engaging leadership which can hold multiple benefits for organisations, i.e. decreased workplace boredom and increased work engagement through need satisfaction.

**Keywords:** Engaging leadership, need satisfaction, work engagement, workplace boredom, transformational leadership.

## **Introduction**

In recent years, South Africa has experienced economic stagnation due to various political and socio-economic factors. Moreover, the South African mining industry has taken a major financial knock due to labour disputes concerning mine workers' wages and working conditions (Yager, Soto-Viruet & Barry, 2012), which were often the root cause for labour strikes as well as lower stock market prices regarding the export of minerals (Akinkgube, 2016). Continuous decreases in commodity prices forced mines to take caution regarding their investments and as a result, widespread retrenchments were implemented (Akinkgube, 2016). Now more than ever, effective leadership is required to lead remaining employees in uncharted territory. Today's leaders find themselves in a crucial position where profit-earning strategies are not the only important focus. Finding new ways of motivating and engaging employees in order for employees to go the extra mile for organisations and remain reckoning competitors are also at the top of leaders' lists (Savage-Austin & Honeycutt, 2011).

Many studies have pursued what makes a great leader. This comes as no surprise as leaders can significantly contribute to positive employee- and work outcomes, such as innovative work behaviour (Yidong & Xinxin, 2013; Ng, 2017), intrinsic motivation, eudaimonic well-being (Chen, Chen & Li, 2013), autonomy, developmental opportunities, social support (Breevaart, Bakker, Demerouti & Van den Heuvel, 2015), task performance and organisational citizenship behaviour (Ng, 2017), depending on the type of leader. Leadership studies initially focused on the theory of the "Great Man" which led to the investigation of leaders' attributes and traits, followed by behavioural theories of leaders as well as situational aspects which have an influence on leadership (Riaz & Haider, 2010). It seems that the interest in specific leadership styles become increasingly popular since Burns' (1978) and later Bass' (1985) development of transformational leadership theory.

More recently, engaging leadership has been added as a new style of leadership. The term 'engaging leadership' was first brought to light by Alban-Metcalfe and Alimo-Metcalfe (2007), who at first wanted to develop a new transformational leadership questionnaire that was specifically designed for the United Kingdom population (Alimo-Metcalfe & Alban-Metcalfe,

2001). By studying the different phases of leadership, they arrived at the conclusion that there is a need for 'nearby' leaders and developed the concept of engaging, transformational leaders (Alimo-Metcalf & Alban-Metcalf, 2001). Schaufeli (2015) utilised a different approach by basing engaging leadership on Ryan and Deci's (2000a) self-determination theory (SDT) which consists of autonomy, relatedness and competence. Therefore, a leader that imparts autonomy, relatedness and competence to its subordinates, is considered to be an engaging leader.

Various leadership studies have researched the contribution of leadership on subordinates' work engagement (Breevaart et al., 2015; Gözükara & Şimşek, 2015; Tims, Bakker & Xanthopoulou, 2011). Thus far, the engaging leadership studies mentioned, also included the effect on work engagement, both directly and indirectly. Interestingly, Schaufeli's (2015) results indicated that engaging leadership only contributed indirectly to work engagement through job resources and not also directly as expected. The job demands-resources model (Schaufeli & Bakker, 2004) was utilised as a theoretical foundation, illustrating that engaging leadership contributed to subordinates' motivational process of sufficient resources in order to cope efficiently with work demands (Bakker & Demerouti, 2007), which in turn prompts work engagement.

Similarly, the fulfilment of basic needs as stipulated by the SDT has also showed increased levels of work engagement (Albrecht, 2015; Schreurs, Van Emmerik, Van den Broeck & Guenter, 2014; Silman, 2014; Sulea, Van Beek, Sarbescu, Virga & Schaufeli, 2015). Also utilising the JD-R as theoretical model, Trépanier, Forest, Fernet and Austin (2015) found that if sufficient job resources were supplied to employees, their basic need satisfaction will be more fulfilled leading to higher autonomous motivation resulting in increased levels of work engagement and job performance. Moreover, the opposite of job resources, job demands, were also measured. Job demands and a lack of job resources corresponded with higher need frustration and controlled motivation among employees which resulted in psychosomatic complaints and psychological distress. As expected, exposure to high levels of job demands contributed to lower job performance and work engagement (Trépanier et al., 2015).

Contrastingly, when employees are bored at work it translates to both lower performance and motivational engagement (Pekrun, Goetz, Daniels, Stupnisky & Perry, 2010). Although workplace

boredom is a common occurrence and research regarding workplace boredom has steadily increased in recent years (Vodanovich & Watt, 2015), there still remains unexplored terrain (Bruursema, Kessler & Spector, 2011). The effect of leadership, more specifically engaging leadership, on employees' boredom is only one example of the literary shortcomings of workplace boredom that still requires more investigation.

The current study investigated the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom. Hetland, Hetland, Andreassen, Pallesen and Notelaers (2011), stated that there is still a gap in the literature regarding empirical evidence on the relationship between leadership and need satisfaction. Moreover, Schaufeli (2015) stated that his conceptualisation of engaging leadership is based on the fulfilment of employees' psychological needs, although need satisfaction was not included in that study. In light of this, the current study seeks to contribute to engaging leadership and basic need satisfaction. Additionally, it appears that only one study has focused on the relationship between basic need satisfaction and boredom (Sulea et al., 2015), which increases the significance of the current study's contribution to literature regarding need satisfaction and boredom. Although Alimo-Metcalfe, Alban-Metcalfe, Bradley, Mariathan and Samele (2008) did link engaging leadership with well-being, boredom was not included as a factor, nor was Schaufeli's conceptualisation of engaging leadership used. Further analysis of the literature on engaging leadership and workplace boredom indicated that such research is yet to be done and that the current study will bring new insights to this relationship.

Therefore, this study investigates the relations between engaging leadership, basic needs satisfaction, work engagement and workplace boredom within the South African mining industry.

## Literature review

### **Deconstructing engaging leadership**

Research regarding engaging leadership is few and far between, and various scholars have developed different theories on the matter. First termed "nearby" leaders, Alban-Metcalfe and Alimo-Metcalfe (2007) mainly based the concept of engaging leadership on Shamir's (1995) study

on the impact of social distance between charismatic leaders and their followers. General outcomes predicted between “closer” leaders and followers included a greater amount of information available concerning the leader which is likely to leave the follower less ignorant about the leader, more understanding towards complex situations and being able to be more evaluative of the leader (Shamir, 1995).

Due to the closer proximity between the leader and the follower, trust depends on the follower’s assessments of the integrity and reliability of the leader’s interactions (Shamir, 1995). It was also argued that followers identify better with a close leader that provides the subordinates with attention, approval and recognition which results in immediate rewards and is directly linked to the followers’ well-being (Shamir, 1995). Evidently, the process of influencing depends on the distance between leaders and followers which strongly relates to the leader’s hierarchical level (Antonakis & Atwater, 2002). With this in mind, Alimo-Metcalfe and Alban-Metcalfe (2001, 2005, 2006) argued for a post-heroic era of leadership that encourages a more inclusive style of leadership.

Accordingly, integrity, openness, transparency and genuinely caring and recognising others’ value are core trademarks of “nearby” transformational or engaging leaders, emphasising that these leaders are attuned to ethical principles (Alban-Metcalfe & Alimo-Metcalfe, 2013). Engaging leaders are able to unite followers through a joint vision in which empowerment and potential of the followers are stimulated by strategic thinking (Alban-Metcalfe & Alimo-Metcalfe, 2013). Moreover, engaging leaders also find the development of subordinates important and care for their well-being (Alban-Metcalfe & Alimo-Metcalfe, 2013).

Focusing on different leadership styles and contexts, Dulewicz and Higgs (2005) also identified an engaging leadership style that seems to be similar to Alimo-Metcalfe and Alban-Metcalfe’s conceptualisation. They added that engaging leaders are focused on radical change within a transformational context where high levels of engagement and commitment of followers are encouraged. Hofstelt-Kopperud, Martinsen and Wong-Humborstad (2014), found that followers’ perception of the leader matters most, since work engagement through transformational leadership was only evident when the leader came across as transformational to the followers. Therefore, they

concluded that ‘engaging’ leaders are in the ‘eyes of the beholders’ (Hofslett-Kopperud et al., 2014).

Schaufeli’s (2015) version of engaging leadership, also the focus of this study, was developed by initially wanting to further the job demands-resources model by integrating leadership into it. Currently, leaders are under immense pressure to deal with complicated and demanding tasks and behaviours in order to be effective in their roles (Byrne et al., 2014). Supporting this notion, Schaufeli (2015) explained that engaging leaders provide employees with enough organisational, work and developmental resources to lessen the effect of their organisational demands and to regulate their job demands – in line with the JD-R model. Engaging leaders also ensure that employees’ social resources are fulfilled by making an effort to connect with their subordinates. In short, it was argued that leaders are responsible for balancing their subordinates’ job demands and job resources, therefore the direct and indirect effects of engaging leadership on work engagement and burnout were investigated, mediated by job resources and demands (Schaufeli, 2015).

Schaufeli (2015) ultimately arrived at engaging leadership by utilising the components of the self-determination theory (cf. Deci & Ryan, 2000). The reasoning behind the conceptualisation of engaging leadership includes that employees’ feelings of control are likely to increase when supervisors provide them with opportunities to personally contribute to organisational decision-making. Employees are likely to feel competent when their supervisors delegate challenging and important tasks to them. Belongingness among employees is encouraged when a supervisor values and encourages team work and the strengthening of interpersonal relationships within work groups. Therefore, engaging leadership is rooted in the psychological theory of motivation since it is based on the fulfilment of the three basic psychological needs, namely autonomy, competence and relatedness (Schaufeli, 2015).

Therefore taking the premises on which engaging leadership is based, namely the JD-R model and SDT, engaging leadership in the context of this study, can be defined as: “leaders, who inspire, strengthen, and connect their followers” (Schaufeli, 2015, p. 456).

## Engaging leadership and transformational leadership

According to Derue, Nahrgang, Wellman and Humphrey (2011), leadership scholars are mostly slated for developing leadership theories without investigating these new theories' validity in comparison to existing leadership theories' validity. Considering the above mentioned, it appears that engaging leadership and transformational leadership share many similarities. Therefore the origins, nature and components of transformational leadership should also be reviewed in order to distinguish between the similarities and differences of the two styles of leadership.

Burns (1978), introduced transformational leadership and initially stated that leaders who inspire their followers with their vision to act not only in their own best interest, but beyond that, can be considered to be transformational leaders. Bass (1985) took interest in this style of leadership whereby transformational leadership formed a part of his multi-factorial leadership theory. According to the multi-factorial leadership theory, leaders' behaviours could be assigned to one of three types of leadership, namely: transformational-, transactional- or laissez-faire leadership (Bass, 1985; Blanch, Gil, Antino & Rodríguez-Munoz, 2016).

Transformational leaders influence their followers in such a way that the values, beliefs and attitudes of followers are transformed to perform better than their own expectations (Yukl, 1989). These leaders are able to involve their followers to work together towards organisational goals through charismatic influence (Bass, 1985). Transformational leaders' effects encompass individual levels and extends to team and organisational levels (Searle & Barbuto, 2013), where higher task performance, organisational citizenship behaviour and innovative behaviour have been evident (Ng, 2017).

The behaviours of transformational leaders consist of four factors which include: i) inspirational motivation, ii) idealised influence, iii) individualised consideration and iv) intellectual stimulation (Bass, 1985). *Inspirational motivation* involves boosting followers' motivation to aim for higher standards of performance by being optimistic about future plans and communicating to followers the importance of collective goals (Bass, 1985; Bono & Judge, 2004; Ng, 2017). *Idealised influence* is depicted by the leader exuding confidence, being a role model and emphasising the

importance of ethical behaviour (Bono & Judge, 2004; Ng, 2017). In turn, this can lead to fiercely loyal followers (Ng, 2017). Idealised influence and inspirational motivation are also viewed as the charismatic half of transformational leadership (Tims et al., 2011). Functioning as a coach or mentor by tending to followers' individual needs refers to *individual consideration* (Tims et al., 2011). Whereas *intellectual stimulation* concerns the encouragement of new ways of thinking and finding solutions (Ng, 2017), challenging the follower to look at problems from other perspectives rather than only accepting traditional approaches (Tims et al., 2011).

It appears that engaging leadership may share aspects of inspirational motivation and individualised consideration from transformational leadership since engaging leaders inspire and strengthen their followers. However, engaging leadership seems to differ from transformational leadership regarding intellectual stimulation and idealised influence (Schaufeli, 2015). Due to the possible overlap in distinguishing aspects between engaging- and transformational leadership, yet the clear emphasis on factors not shared between the two leadership styles, determining the discriminant validity would shed light on both the leadership styles. Campbell and Fiske (1959) stated that discriminant validity is used to show that factors of a certain variable do not correlate too highly with another variable from which it should be different. According to Schaufeli (2015), the social bonding or connecting aspect of engaging leadership sets it apart from transformational leadership.

*Hypothesis 1:* Engaging leadership and transformational leadership show discriminant validity.

### **Self-determination theory and need satisfaction**

The self-determination theory (SDT; Ryan & Deci, 2000a), is a macro-theory that entails motivation, optimal functioning and is essentially part of the positive psychology movement (Deci & Vansteenkiste, 2004). SDT postulates that individuals are inherently inclined towards psychological growth and personal well-being in accordance with the fulfilment of their basic psychological needs (Deci & Ryan, 2008). Furthermore, these psychological needs are innate

irrespective of an individual's gender, well-being or culture and cannot be learned (Deci & Vansteenkiste, 2004).

Motivation is the fundamental, underlying concept of SDT insofar as the three innate psychological needs are satisfied, namely: the need for autonomy, the need for competence and the need for relatedness (Klumpfer, 2015). The degree to which these needs are fulfilled determines one's level of proactivity, psychological well-being and positive self-development (Deci & Vansteenkiste, 2004; Klumpfer, 2015). The *need for autonomy* is associated with freedom in making one's own choices and directing one's own behaviour in accordance with one's willingness regardless of self-initiated actions or a response to actions requested from others (Chirkov, Ryan, Kim & Kaplan, 2003). The *need for competence* is fulfilled when one feels adequate to handle tasks and the environment in an effective manner (Deci & Ryan, 2002). The *need for relatedness* concerns the sense of wanting to integrate and belong to a group. It involves connecting with and being accepted by others which excludes the realisation of a certain outcome and is solely based on the sense of having relations with others and feeling secure (Deci & Ryan, 2002).

The need for autonomy and competence is fundamental to both intrinsic and extrinsic motivation whereas the need for relatedness is considered significant to motivation in relation to the situation (Deci & Ryan, 2002). Intrinsic motivation occurs when an individual partakes and enjoys the activity due to the activity, whereas extrinsic motivation entails behaviour that is motivated by external factors such as giving one praise (Howard, Gagné, Morin & Van den Broeck, 2016), and does not relate to the nature of the matter itself (Klumpfer, 2015). Extrinsic motivation varies on the degree to which the behaviour or activity is autonomous (Ryan & Deci, 2000a; Ryan & Deci, 2000b). Extrinsic behaviour can be regulated in terms of the degree that the person starts to identify and enjoy an activity and starts to assimilate it with the self. This self-determined process is known as internalisation (Ryan & Deci, 2000b). Extrinsic motivation is categorised into external regulation (motivation is due to being pressured, rewarded or trying to prevent or avoid negative consequences), introjected regulation (being motivated to please others or doing something out of feelings of guilt), identified regulation (when identifying with an activity in order to reach a certain goal and/or the activity is acceptable to others), and integrated regulation (when one can associate one's values with the activity) (Deci & Ryan, 2002; Klumpfer, 2015).

Specifically pertaining to this study, need satisfaction's role as mediator is of great importance. Need satisfaction has been utilised in association with factors of employees' well-being (Van den Broeck, Vansteenkiste, De Witte, Soenens & Lens, 2010) as well as a dependent variable in relation to leadership such as Schaufeli's (2015) study. As discussed below, each of the characteristics of engaging leadership is expected to enhance the individual factors of need satisfaction which would lead to overall need satisfaction among employees (Schaufeli, 2015). This increased need satisfaction acts as a vessel towards better employee well-being (Deci & Ryan, 2000) of which work engagement and workplace boredom are factors of (Sulea et al., 2015). Alternatively, the lack of engaging leadership would expectedly influence need satisfaction negatively which would lead to higher workplace boredom and lower levels of work engagement. Utilising need satisfaction as a mediator lends more credibility to the measurement model and can provide more insight to the relationships under investigation.

### **Engaging leadership and need satisfaction**

According to SDT, work functioning among employees occurs in accordance to the extent to which their work environment would fulfil their basic psychological needs (Deci & Ryan, 2000). Leaders are an essential part of employees' work environment and is responsible for satisfactory conditions that would contribute to the fulfilment of employees' basic psychological needs (Chiniara & Bentein, 2016). Multiple scholars have linked leadership to basic need satisfaction of employees. Servant leadership was also positively linked to basic need fulfilment which in turn led to greater individual performance (Chiniara & Bentein, 2016). Also utilising basic need satisfaction as a mediating variable, Leroy, Anseel, Gardner and Sels (2015), found that authentic leadership positively influenced work role performance.

As alluded to earlier, it is also expected in this study, that engaging leadership is positively related to the fulfilment of employees' basic psychological needs. Engaging leaders inspire their followers with their strategies and allow followers to be a part of the decision-making process. Engaging leaders also provide their followers with enough freedom to contribute to future plans which in turn makes them feel valued. Based on this premise, it is expected that engaging leadership predicts follower autonomy (Schaufeli, 2015). Furthermore, engaging leaders strengthen their followers by

delegating tasks to them and motivating them to reach their goals. In entrusting challenging tasks to followers, followers feel that their leader believes in their abilities and this will enhance their feelings of competence (Schaufeli, 2015). Moreover, when engaging leaders encourage team work among employees; followers feel that they are part of a group since they provide opportunities for followers to work closely together which strengthen interpersonal bonding. By establishing a strong sense of belonging among followers, engaging leadership is positively linked to relatedness (Schaufeli, 2015).

Bearing this reasoning in mind, it is expected that followers' basic psychological needs for autonomy, competence and relatedness will be satisfied by engaging leadership.

*Hypothesis 2: Engaging leadership has a positive relationship with need satisfaction.*

### **Engaging leadership and work engagement**

Many have made the link between leadership and work engagement as leaders work with followers every day and affect them directly (Gözükara & Şimşek, 2015). Support, motivation, inspiration and effective management influence the way in which followers experience challenges, involvement and satisfaction (Tims et al., 2011; Gözükara & Şimşek, 2015). Evidently, support motivation, inspiration and effective management also influence followers' work engagement (Tims et al., 2011; Gözükara & Şimşek, 2015). Berdarker and Pandita (2014) stated that employee engagement should be one of organisational leaders' top priorities as it is crucial in determining organisational effectiveness, innovation and competitiveness.

Work engagement has gained momentum in recent years as a focal point in studies, especially after Schaufeli and Bakker (2004) linked job resources and work engagement through the job demands-resources model. Job resources aid in reducing the effects of job demands, making it easier to achieve work goals and encourage personal development (Schaufeli & Bakker, 2004). The process whereby job resources increase work engagement which contributes to positive organisational outcomes such as lower turnover, is called the motivational process (Schaufeli & Bakker, 2004).

Many scholars utilise Schaufeli, Salanova, Gonzalez-Roma and Bakker's (2002) definition of work engagement as, "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption" (p. 74). Vigour is described by high levels of energy, being willing to put effort into work tasks and persisting in spite of difficulties (Schaufeli & Bakker, 2004). Dedication is explained as feeling important or of value, being enthused and inspired by one's work, being proud of the work that one does and being challenged by work tasks (Schaufeli & Bakker, 2004). Absorption has been compared to 'flow' and entails high levels of concentration and being engrossed in work tasks without realising how quickly time has gone by (Schaufeli & Bakker, 2004).

Through utilising the JD-R model, Schaufeli (2015) argued that engaging leadership serves as a resource for employees which in turn increases work engagement. The direct relationship between engaging leadership and work engagement was also explained. Dedication and absorption can be spurred by engaging leaders who inspire and strengthen (encouraging freedom and responsibility) their followers. Since engaging leaders truly want to connect with their followers it could lead to higher levels of vigour due to constant encouragement and support from leaders which can boost follower effort and persistence (Schaufeli, 2015). Therefore, it is expected that engaging leadership will not only have an indirect influence, but will also directly influence followers' work engagement.

*Hypothesis 3: Engaging leadership has a positive relationship with work engagement.*

### **Engaging leadership and workplace boredom**

Workplace boredom has often been referred to as an opposite of work engagement (Salanova, Del Líbano, Llorens & Schaufeli, 2014). Both workplace boredom and work engagement have been linked to employee well-being (Harju, Hakanen & Schaufeli, 2016). Where work engagement can be seen as a state of activation and pleasantness, workplace boredom can be found on the opposite side as a low arousal and more neutral state (Pekrun et al., 2010), associated with tiredness and drowsiness (Balzer, Smith & Burnfield, 2004).

Boredom has often been connected to monotony, repetitiveness, fatigue, depression and dissatisfaction (Balzer et al., 2004). The most popular conceptualisation of boredom is probably that of Fisher (1993) which defines boredom as “an unpleasant, transient affective state in which individuals feel an extreme lack of interest in their current activity” (p. 3). Moreover, one’s work environment seems to play a significant role in workplace boredom. Mikulas and Vodanich (1993) stated that an unstimulating environment enhances low arousal and dissatisfaction, ultimately contributing to workplace boredom. It is therefore surprising that there is a lack of studies that investigate leadership as a strategy to reduce workplace boredom.

The presence of engaging leadership will likely lessen workplace boredom due to engaging leaders’ characteristics of inspiring, strengthening and connecting having a paradoxical effect on the causes of workplace boredom, such as unchallenging work tasks, a lack in social interaction and an uninspiring workplace (Martin, Sadlo & Stew, 2006). As a result, it is predicted that engaging leadership will negatively influence workplace boredom.

*Hypothesis 4:* Engaging leadership has a negative relationship with workplace boredom.

### **Need satisfaction and work engagement**

The connection between need satisfaction and work engagement has often been argued from a well-being perspective (e.g. Silman, 2014). Moreover, work engagement is an important antecedent of employee well-being (Schaufeli, Taris & Van Rhenen, 2008). Supporting this, Van Beek, Hu, Schaufeli, Taris and Schreurs (2012), found that the fulfilment of autonomy, competence and relatedness will likely lead to optimal functioning and well-being which is evident through measuring work engagement. Rasskazova, Ivanova and Sheldon (2016), compared the self-determination theory with Maslow’s theory of needs. After replacing the three higher-level needs of Maslow with the three psychological needs based on SDT to investigate the effect on worker outcomes, they found that Maslow’s lower level needs and the three psychological needs of SDT contributed to employee well-being through organisational commitment and work engagement (Rasskazova et al., 2016).

Timms and Brough (2013) stated that work engagement can be explained by both the JD-R model and by the fulfilment of basic psychological needs (SDT). Moreover, Van den Broeck, Vansteenkiste, De Witte and Lens (2008), also provided evidence that need satisfaction mediates the relationship between job resources and work engagement. In accordance with SDT, employees who are able to complete their work tasks demonstrate their levels of competence, work relationships illustrate relatedness whereas being able to take one's own decisions in how one would proceed with a certain project shows employee autonomy (Timms & Brough, 2013).

Furthermore, Timms and Brough (2013) also demonstrated how SDT directly relates to the vigour and dedication dimensions of work engagement. Vitality has been explained as being driven by meaning and purpose within SDT and related to vigour since a meaningful and satisfying job is likely to be energising. Furthermore, eudemonic well-being within SDT shares similarities with dedication since one is likely to be dedicated due to being satisfied and proud of one's work, and that one's work provides a sense of purpose and meaning (Timms & Brough, 2013).

Supporting this, extrinsic and intrinsic work value orientations were compared with regard to predicting positive work outcomes such as dedication, vitality and job satisfaction as well as negative work outcomes such as emotional exhaustion and turnover intention (Vansteenkiste, Neyrinck, Niemiec, Soenens, De Witte & Van den Broeck, 2007). It was found that intrinsic work value orientations predicted better positive work outcomes such as vitality and dedication, compared to employees being extrinsically orientated (Vansteenkiste et al., 2007).

The positive influence of basic need satisfaction on work engagement seems apparent. Satisfied psychological needs instil a sense of energy (Lens & Vansteenkiste, 2006) and motivation (Van den Broeck et al., 2008). Therefore, need satisfaction directly relates to vigour whereas motivation likely influences not only vigour, but also absorption and dedication.

*Hypothesis 5: Need satisfaction has a positive relationship with work engagement.*

## **Need satisfaction and workplace boredom**

As with work engagement and burnout, workplace boredom has also been categorised as a form of well-being (Sulea et al., 2015). In a study investigating work engagement, boredom and burnout among students through personality traits and basic need satisfaction (Sulea et al., 2015), it was reasoned that unsatisfied needs are related to loss of energy (Lens & Vansteenkiste, 2006) and emotional exhaustion (Vansteenkiste et al., 2007). Results indicated that unfulfilled needs increase levels of boredom and burnout. Interestingly, results also showed that the need for relatedness was unrelated to boredom (Sulea et al., 2015). Furthermore, it was also brought to light that there are seemingly no other studies available on the relationship between need satisfaction and boredom (Sulea et al., 2015). The frustration of need satisfaction holds negative effects such as lower commitment, performance and well-being (Van den Broeck et al., 2008). Moreover, basic need frustration enhances emotional exhaustion, psychosocial complaints, organisational counter-productive work behaviour and negatively influences work engagement and life satisfaction (Van den Broeck, Sulea, Vander Elst, Fischmann, Iliescu & De Witte, 2014). Based on these premises, it is expected that basic need satisfaction will result in decreased workplace boredom.

*Hypothesis 6:* Need satisfaction has a negative relationship with workplace boredom.

## **Potential indirect effects**

Need satisfaction has been used as a mediating variable previously (e.g. Chiniara & Bentein, 2016; Leroy et al., 2015; Sulea et al., 2015; Van den Broeck et al., 2008). Either basic needs have been fulfilled by a specific variable which resulted in the increase of another variable or need satisfaction has been thwarted by a variable leading to a negative association. This has usually been studied by investigating the environmental effects and/or job characteristics on need satisfaction in order to obtain insights into employees' well-being (Van den Broeck, Vansteenkiste, De Witte, Soenens & Lens, 2010).

Employees' psychological and professional functioning have been studied through need satisfaction by either investigating positive work environmental elements that enhance need

satisfaction or negative environmental factors that inhibit need satisfaction (Trépanier et al., 2015). Leadership can be viewed as a significant role within the employee work environment. According to Deci, Ryan, Gagné, Leone, Usunov and Kovnazheva (2001), the leadership styles that managers present in terms of satisfying employee needs can be advantageous to insights pertaining to motivational influence.

Baard, Deci and Ryan (2004) found that supervisors who supported their employees through granting them autonomy, stimulated employee need satisfaction whereby higher need satisfaction resulted in increased work performance. In the same light, it is expected that engaging leadership will have a positive relationship to work engagement through the fulfilment of employees' needs.

*Hypothesis 7: Need satisfaction mediates the relationships between engaging leadership and work engagement.*

Conversely, unwanted outcomes are the end product of employees being exposed to environments that prevent growth (Van den Broeck et al., 2014). Thus, in contrast with work engagement, workplace boredom is expected when employees are not exposed to engaging leadership with their basic needs remaining unfulfilled.

*Hypothesis 8: Need satisfaction mediates the relationship between engaging leadership and workplace boredom.*

## **Research design**

### Research approach

Since numerical data was required for the current study, a quantitative research approach was followed (Williams, 2007). The current research design entails a non-experimental, cross-sectional design as the independent variable was not manipulated (Price, 2012) and the data were collected from different individuals during the same time period (Belli, 2009). Furthermore, a cross-sectional approach is beneficial for speed and affordability (Sedgwick, 2014).

## Research method

### **Research participants**

Table 1 presents a breakdown of the participants comprising the sample.

Table 1

Characteristics of the participants ( $n = 361$ )

| <b>Item</b>             | <b>Category</b>      | <b>Frequency</b> | <b>Percentage (%)</b> |
|-------------------------|----------------------|------------------|-----------------------|
| Age category (in years) | 18 – 24              | 15               | 4.20                  |
|                         | 25 – 34              | 160              | 44.30                 |
|                         | 35 – 44              | 116              | 32.10                 |
|                         | 45 – 54              | 54               | 15.00                 |
|                         | 55 – 64              | 13               | 3.60                  |
|                         | 65+                  | 0                | 0.00                  |
|                         | Missing values       | 3                | 0.80                  |
| Gender                  | Male                 | 250              | 69.30                 |
|                         | Female               | 104              | 28.80                 |
|                         | Missing values       | 7                | 1.90                  |
| Race                    | African              | 245              | 67.90                 |
|                         | White                | 95               | 26.30                 |
|                         | Coloured             | 2                | 0.60                  |
|                         | Indian               | 5                | 1.40                  |
|                         | Missing values       | 14               | 3.90                  |
| Education               | High school          | 182              | 50.40                 |
|                         | Diploma              | 95               | 26.30                 |
|                         | Degree               | 68               | 18.80                 |
|                         | Post-graduate degree | 11               | 3.00                  |
|                         | Missing values       | 5                | 1.40                  |

Non-probability, convenience sampling was collected from employees ( $n = 361$ ) within the mining industry. The majority of the sample consisted of participants aged between 25 and 34 years (44.30%). The participants were also predominantly male (69.30%). Concerning racial ethnicity, 67.90% of the participants were African people, 26.30% White people, 0.60% Coloured people

and 1.40% were people of Indian descent. Participants also indicated their highest level of education whereby most participants attended high school (50.4%) and the remainder of the sample obtained a tertiary qualification (48.1%).

## **Measuring instruments**

**Biographical questionnaire:** In order to quantify the data concerning the research participants' background, a short, self-developed biographical questionnaire was utilised. No personal identifiable information was asked. Only participants' age, gender, ethnicity and education were requested.

**Engaging leadership:** Schaufeli's (2015) Engaged Leadership Scale was included as a measurement instrument to measure participants' engaging leadership. The scale consists of 12 items and makes use of a five point Likert scale ranging from "Completely disagree" (1) to "Completely agree" (5). Strengthening (e.g. "My supervisor encourages team members to develop their talents as much as possible"), connecting (e.g. "My supervisor encourages collaboration among team members"), empowering (e.g. "My supervisor encourages team members to give their own opinion"), and inspiring (e.g. "My supervisor is inspiring") are included as subscales, each comprising of three items. Concerning the scale's reliability, Cronbach's alpha coefficients were above 0.70 (Schaufeli, 2015).

**Transformational leadership:** The Transformational Leadership scale of Rafferty and Griffin (2004) was utilised which comprises of 15 items which are measured by a five point Likert scale ranging from "Completely disagree" (1) to "Completely agree" (5). Examples of the items include "My supervisor challenges me to think about old problems in new ways" and "My supervisor commends me when I do a better than average job". The Cronbach's alpha reliability exceeded 0.70 (Rafferty & Griffin, 2004).

**Need satisfaction:** The Work-Related Basic Need Satisfaction scale was utilised to measure participants' need satisfaction at work (Van den Broeck et al., 2010). Moreover, the three basic needs based on SDT were measured, namely autonomy which consists of four items (e.g. "If I

could choose, I would do things at work differently), competence, consisting of four items (e.g. “I really master my tasks at my job”), and relatedness which comprises of six items (e.g. “I often feel alone when I am with my colleagues”). Overall, the measure entails 16 items which are measured with a five point Likert scale ranging between “Totally disagree” (1) to “Totally agree” (5). Cronbach’s alpha reliability has shown this scale to be reliable as all three needs had coefficients of above 0.80 (Van den Broeck et al., 2010). Within the South African context, the Cronbach’s alpha coefficients for all three needs were satisfactory, ranging between 0.78 – 0.86 (Rothmann, Diedericks & Swart, 2013).

**Work engagement:** The 9-item Utrecht Work Engagement Scale (UWES-9) was utilised (Schaufeli, Bakker & Salanova, 2006). The scale makes use of a seven point Likert scale which ranges from “Never” (0) to “Always” (6). The subscale includes vigour (e.g. “At my work, I feel strong and vigorous”), dedication (e.g. “I am enthusiastic about my job”) and absorption (e.g. “I am immersed in my work”) of which each consists of three items. The reliability of the scale has been proven with Cronbach’s alpha coefficients varying from 0.85 to 0.92 (Schaufeli et al., 2006). Satisfactory Cronbach’s alpha coefficients were found for all subscales within the South African context, ranging between 0.72 – 0.90 (Mendes & Stander, 2011; Janse van Rensburg, Boonzaier & Boonzaier, 2013).

**Workplace boredom:** The Dutch Boredom Scale (DUBS; Reijseger, Schaufeli, Peeters, Taris, Van Beek & Ouweneel, 2013) which was recently validated in South Africa (Van Wyk, De Beer, Pienaar & Schaufeli, 2016), was used to measure participants’ workplace boredom. The DUBS comprises of six items that are measured by a five point Likert scale which varies from “Never” (1) to “Always” (5). An example of an item is “At work, time goes by very slowly”. The Cronbach’s alpha coefficient of 0.80 proved the DUBS to be reliable (Reijseger et al., 2013). Within the South African context a Cronbach’s alpha coefficient of 0.78 was found for the scale (Van Wyk et al., 2016).

## **Research procedure**

Various stakeholders were contacted in order to gain permission to enter the targeted mines and distribute the hardcopy questionnaire booklets. The booklets were provided to employees who agreed to participate after the researcher explained the purpose of the study as well as the terms of confidentiality, anonymity and voluntary participation. Participants were provided two weeks to complete the booklets. Participants were advised to seal their completed booklets within envelopes that were provided to them to further ensure confidentiality. After all of the booklets had been gathered, the data was captured in an Excel spreadsheet and anonymised in order for the statistical analysis thereof to commence. All of the booklets were taken to the associated university in order to be safely stored.

## **Statistical analysis**

To conduct the statistical analyses of this study Mplus 7.4 was used (Muthén & Muthén, 2015). In terms of  $H_1$ , a test for discriminant validity was conducted between the engaging- and transformational leadership latent variables in an initial model where the correlation remained unconstrained and then compared to a model in which the correlation was constrained to unity ( $r = 1.00$ ) with the DIFFTEST option in Mplus. A non-significant chi-square comparison ( $p \geq 0.05$ ) would indicate that the constrained model was a better model compared to the unconstrained model – and that discriminant validity did not exist between the two variables.

Furthermore, structural equation modelling was used to analyse the relationships between the variables ( $H_2 - H_8$ ) within the structural model (Figure 1; Pallant, 2001). Parameters were estimated by use of weight least squares mean- and variance adjusted (WLSMV) estimation as a method of testing goodness-of-fit along with other measures such as the: Comparative fit index (CFI; Bentler, 1990), Tucker-Lewis Index (TLI; Tucker & Lewis, 1973), and the root mean squared error of approximation (RMSEA; Steiger, 1989), to ensure evidence of the goodness-of-fit (Cowan, 1998). Satisfactory criterion values of 0.90 or above were considered acceptable for CFI and TLI (Van de Schoot, Lugtig & Hox, 2012), whereas RMSEA values of 0.08 or lower were considered for fair to good fit (Browne & Cudeck, 1993). The reliability of the variables were

calculated by using both Cronbach's alpha coefficients and composite reliability coefficients - as it has been shown that Cronbach's alpha coefficient is problematic (Revelle & Zinbarg, 2009; Terry & Kelley, 2012). Effect sizes of  $r = 0.30-0.49$  (medium effect) and  $r \geq 0.50+$  (large effect) were considered to be practically significant regarding correlations between variables (Cohen, 1988; Steyn, 2002).

Regression paths were added in accordance to the hypotheses. The significance, direction and size of beta coefficients were taken into account (Peterson & Brown, 2005), when interpreting the results to support or reject hypotheses. Moreover, indirect relationships were tested by means of bootstrapping which calculates 95% confidence intervals for the indirect effects (Rucker, Preacher, Tormala, & Petty, 2011). Overall statistical significance for all parameters was set at the 95% level ( $p \leq 0.05$ ; Babbie & Mouton, 2001).

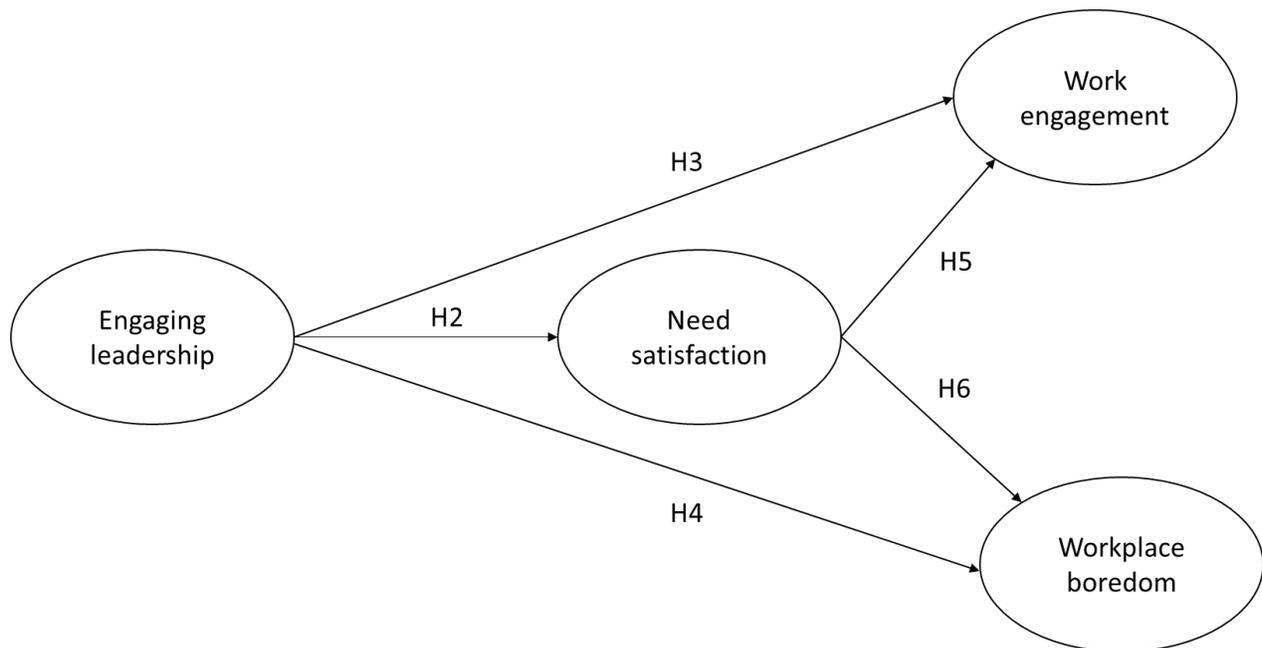


Figure 2. *The structural model with the regression hypotheses indicated.*

### **Ethical considerations**

Research had only commenced once ethical clearance was given to the researcher (Ethics number: EMSMHW16/05/19-01/01). Throughout the course of the study, care has been taken to perform all actions in an ethical manner. The implications of all actions have been considered by the

researcher since every decision and action possibly holds some extent of moral implications (Kreitner & Kinicki, 2010). An important factor for the researcher was to establish rapport and to build a relationship based on trust with the participants in order for them to complete questionnaires as honestly as possible and to feel comfortable to ask any questions that they may have regarding the research (O’Leary, 2004). The best interests of the participants were always held into account by ensuring that participation took place voluntarily, that an informed consent process was adhered to, treating participants with respect, complying with terms of privacy and confidentiality, and preventing any harm from occurring to participants (O’Leary, 2004). The completed questionnaires were counted, captured and safely stored away to fulfil the terms surrounding confidentiality (Foxcroft & Roodt, 2009).

## **Results**

### **Discriminant validity: Engaging- and transformational leadership**

Engaging- and transformational leadership were both best operationalised comprising items based on the total score of each aspect of the construct, as indicators of the respective latent factors (see Table 2 - factor loadings). The test for discriminant validity with the DIFFTEST option, Mplus compared two models: i) where the correlation between engaging- and transformational leadership remained unconstrained, and ii) where the correlation between the two variables was constrained to unity (1.00). The result of the chi-square difference test was significant ( $p < 0.001$ ), indicating that the model in which engaging- and transformational leadership was constrained to unity was not a better model – supporting H<sub>1</sub>. However, it should still be noted that a large positive correlation existed between the constructs ( $r = 0.88$ ; large effect), indicating a significant overlap ( $R^2 = 77.44\%$ ).

### **CFA measurement model: Fit and item loadings of the research model**

The full measurement research model, fit the data well (CFI = 0.94; TLI = 0.94; RMSEA = 0.08).

Table 2 below presents the factor loadings for the items for the latent variables in the measurement model.

Table 2

*Standardised loadings for the latent factors*

| <b>Factor</b>                  | <b>Item</b> | <b>Loading</b> | <b>SE</b> | <b><i>p</i></b> | <b><i>R</i><sup>2</sup></b> |
|--------------------------------|-------------|----------------|-----------|-----------------|-----------------------------|
| Engaging leadership            | str         | 0.84           | 0.02      | 0.001           | 0.71                        |
|                                | con         | 0.98           | 0.02      | 0.001           | 0.96                        |
|                                | emp         | 0.85           | 0.02      | 0.001           | 0.72                        |
|                                | ins         | 0.87           | 0.02      | 0.001           | 0.76                        |
| Need satisfaction: Autonomy    | auto1       | 0.77           | 0.03      | 0.001           | 0.59                        |
|                                | auto2*      | -0.21          | 0.05      | 0.001           | 0.04                        |
|                                | auto3       | 0.72           | 0.03      | 0.001           | 0.52                        |
|                                | auto4*      | -0.60          | 0.04      | 0.001           | 0.36                        |
|                                | auto5       | 0.75           | 0.03      | 0.001           | 0.56                        |
| Need satisfaction: Competence  | comp1       | 0.71           | 0.04      | 0.001           | 0.50                        |
|                                | comp2       | 0.77           | 0.04      | 0.001           | 0.59                        |
|                                | comp3       | 0.78           | 0.03      | 0.001           | 0.61                        |
|                                | comp4       | 0.83           | 0.03      | 0.001           | 0.69                        |
| Need satisfaction: Relatedness | relate1     | 0.83           | 0.04      | 0.001           | 0.69                        |
|                                | relate2*    | -0.31          | 0.06      | 0.001           | 0.10                        |
|                                | relate3     | 0.34           | 0.06      | 0.001           | 0.12                        |
|                                | relate4     | 0.63           | 0.04      | 0.001           | 0.40                        |
|                                | relate5*    | -0.59          | 0.04      | 0.001           | 0.35                        |
|                                | relate6*    | -0.33          | 0.06      | 0.001           | 0.11                        |
| Workplace boredom              | bored1      | 0.58           | 0.05      | 0.001           | 0.34                        |
|                                | bored2      | 0.95           | 0.05      | 0.001           | 0.90                        |
|                                | bored3      | 0.59           | 0.06      | 0.001           | 0.35                        |
|                                | bored4      | 0.52           | 0.05      | 0.001           | 0.27                        |
|                                | bored5      | 0.50           | 0.06      | 0.001           | 0.25                        |
|                                | bored6      | 0.30           | 0.07      | 0.001           | 0.09                        |
| Work engagement                | eng1        | 0.48           | 0.04      | 0.001           | 0.23                        |
|                                | eng2        | 0.60           | 0.03      | 0.001           | 0.36                        |
|                                | eng3        | 0.64           | 0.04      | 0.001           | 0.41                        |
|                                | eng4        | 0.79           | 0.02      | 0.001           | 0.62                        |
|                                | eng5        | 0.55           | 0.04      | 0.001           | 0.30                        |

|                                  |             |      |      |       |      |
|----------------------------------|-------------|------|------|-------|------|
|                                  | eng6        | 0.85 | 0.02 | 0.001 | 0.72 |
|                                  | eng7        | 0.89 | 0.02 | 0.001 | 0.79 |
|                                  | eng8        | 0.41 | 0.04 | 0.001 | 0.17 |
|                                  | eng9        | 0.83 | 0.03 | 0.001 | 0.69 |
| Need satisfaction (Second order) | autonomy    | 0.94 | 0.02 | 0.001 | 0.88 |
|                                  | competence  | 0.75 | 0.03 | 0.001 | 0.56 |
|                                  | relatedness | 0.81 | 0.04 | 0.001 | 0.66 |

Notes: SE = Standard error; All  $p$ -values < 0.001; \* = reversed item

All of the items loaded significantly on their respective factors and the latent factors explained a significant amount of variance in all of the corresponding. The standard errors of the estimates for the items were also relatively small (between 0.02 and 0.07), indicating accuracy of the estimation process. Moreover, the second-order factor for Need satisfaction also performed well.

### Reliability coefficients and correlation matrix for the study variables

Table 3 presents the reliability estimates and correlations between the latent variables.

Table 3

#### *Reliabilities and correlation matrix for the latent variables*

| Variables              | $\rho$ | 1                  | 2                  | 3                  | 4                  | 5                  | 6                  | 7      |
|------------------------|--------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------|
| 1. Engaging leadership | 0.94   | (0.93)             |                    |                    |                    |                    |                    |        |
| 2. NS: Relatedness     | 0.70   | 0.60 <sup>b</sup>  | (0.74)             |                    |                    |                    |                    |        |
| 3. NS: Competence      | 0.86   | 0.56 <sup>b</sup>  | 0.61 <sup>b</sup>  | (0.83)             |                    |                    |                    |        |
| 4. NS: Autonomy        | 0.76   | 0.70 <sup>b</sup>  | 0.76 <sup>b</sup>  | 0.71 <sup>b</sup>  | (0.77)             |                    |                    |        |
| 5: NS (Second-order)   | 0.88   | 0.74 <sup>b</sup>  | 0.81 <sup>b</sup>  | 0.75 <sup>b</sup>  | 0.94 <sup>b</sup>  | n/a                |                    |        |
| 6: Workplace boredom   | 0.75   | -0.34 <sup>a</sup> | -0.39 <sup>a</sup> | -0.37 <sup>a</sup> | -0.46 <sup>a</sup> | -0.49 <sup>a</sup> | (0.80)             |        |
| 7. Work engagement     | 0.87   | 0.52 <sup>b</sup>  | 0.63 <sup>b</sup>  | 0.58 <sup>b</sup>  | 0.73 <sup>b</sup>  | 0.77 <sup>b</sup>  | -0.52 <sup>b</sup> | (0.90) |

Notes:  $\rho$  = Composite reliability; Cronbach's reliability coefficients in brackets on the diagonal; All correlations statistically significant  $p < 0.001$ ; a = Medium practical effect; b = Large practical effect

As can be seen all of the variables had acceptable Cronbach's alpha and composite reliability values ( $\alpha$  &  $\rho \geq 0.70$ ). In terms of correlations, Engaging leadership was positively correlated with all components of need satisfaction (large effect sizes) and also the second-order factor created for

need satisfaction ( $r = 0.74$ ; large effect). Engaging leadership was also negatively correlated with workplace boredom ( $r = -0.34$ ; medium effect) and positively correlated with work engagement ( $r = 0.52$ ; large effect). Similarly, the components of need satisfaction and the second-order factor for it were all negatively correlated with workplace boredom (medium effect sizes) and positively correlated with work engagement (large effect sizes). Finally, workplace boredom and work engagement were negatively correlated ( $r = -0.52$ ; large effect). Therefore, all correlations were in the directions expected and provided initial support for  $H_2$ - $H_6$ .

### Structural model fit and regression results

Regression paths were added to the measurement model in line with the study hypotheses, and the following was found: The model was also a good fit to the data (CFI = 0.93; TLI = 0.93; RMSEA = 0.06). The results of the regressions are given in Table 4 and Figure 3 below.

Table 4

#### *Regression results for the structural model*

| Structural path                         | $\beta$ | SE   | $p$  | Result          |
|-----------------------------------------|---------|------|------|-----------------|
| Engaging leadership → Need satisfaction | 0.74    | 0.04 | 0.00 | Significant     |
| Engaging leadership → Work engagement   | 0.06    | 0.11 | 0.52 | Not significant |
| Engaging leadership → Work boredom      | -0.11   | 0.09 | 0.12 | Not significant |
| Need satisfaction → Work engagement     | 0.86    | 0.08 | 0.00 | Significant     |
| Need satisfaction → Workplace boredom   | -0.53   | 0.11 | 0.00 | Significant     |

Notes:  $\beta$  = beta coefficient; SE = Standard error;  $p$  = Two-tailed statistical significance

The regression analysis revealed that some of the hypotheses were supported and some were rejected. Specifically, engaging leadership had a direct positive relationship to need satisfaction ( $\beta = 0.74$ , SE = 0.04; supporting  $H_2$ ), but no direct significant relationship to either work engagement ( $\beta = 0.06$ , SE = 0.11; rejecting  $H_3$ ) or workplace boredom ( $\beta = -0.11$ , SE = 0.09; rejecting  $H_4$ ). However, need satisfaction showed a positive path relationships to work engagement ( $\beta = 0.86$ , SE = 0.08; supporting  $H_5$ ) and a negative relationship to workplace boredom ( $\beta = -0.53$ , SE = 0.11; supporting  $H_6$ ).

Regarding  $H_7$  and  $H_8$ , the two potential mediating effects were possible and warranted further investigation. The first proposed indirect effect was from engaging leadership to work engagement through need satisfaction. Results from bootstrapping resampling (5 000 draws) (cf. Rucker et al., 2011), showed that this indirect relationship was significant (Estimate = 0.63 95% CI [0.48, 0.85], SE = 0.09;  $p < 0.001$ ) – supporting  $H_7$ .  $H_8$  proposed an indirect relationship from engaging leadership to workplace boredom through need satisfaction - this relationship was also supported (Estimate = -0.39 95% CI[-0.57, -0.26], SE = 0.09;  $p < 0.001$ ). Both of the indirect effects' confidence intervals did not include zero – supporting both hypotheses. These results supported an indirect-only mediation model (more traditionally known as a full mediation model; Zhao, Lynch & Chen, 2010) as the direct relationship from engaging leadership to both work engagement and workplace boredom were not significant, but through need satisfaction the relationships existed.

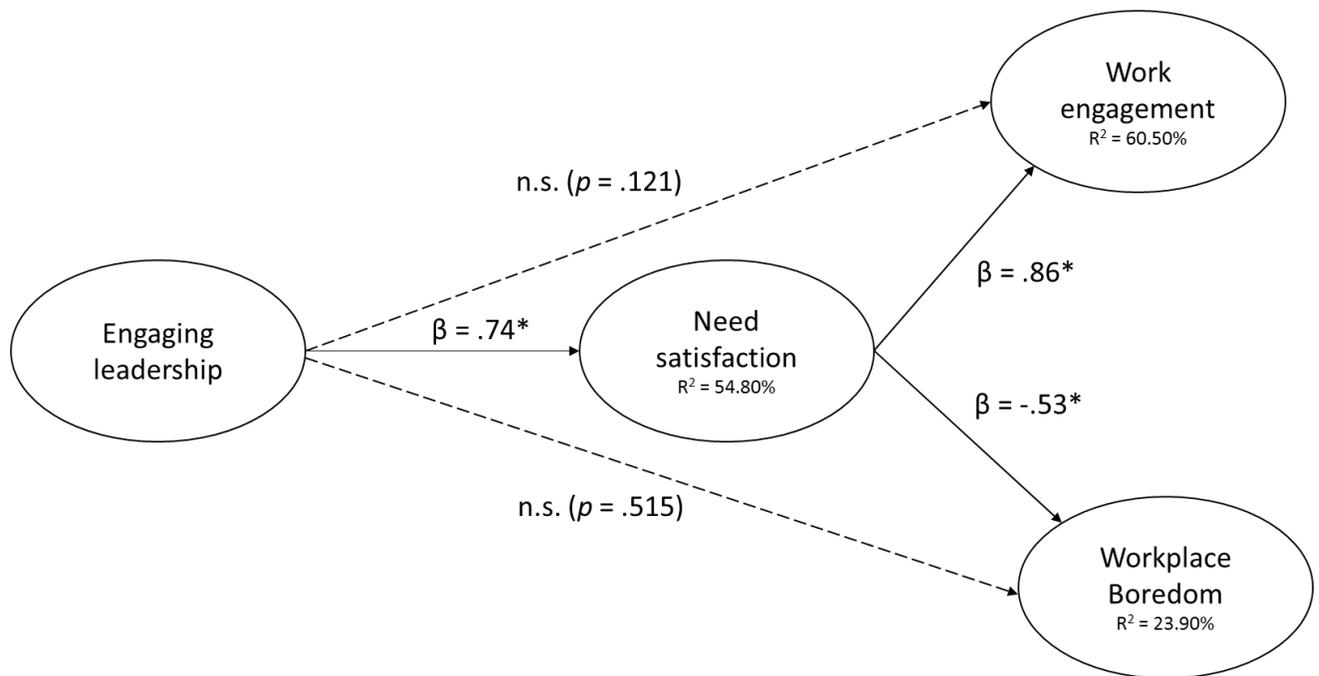


Figure 3. *The structural model with regression results.*

## Discussion

### Outline of the results

The current study sought to investigate the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom within a mining environment. Leadership within the South African mining industry has been and still is in the spotlight due to community unrest, especially since the unfortunate Marikana incident in 2012 (Twala, 2012). Furthermore, South Africa's political instability and overall economic decline (Stats SA, 2017), needs to be addressed. Research on leadership can provide vital insights as it impacts on employee motivation, wellbeing and organisational effectiveness (Clarke, Butcher & Bailey, 2004). More specifically, the study serves as an extension of Schaufeli's (2015) engaging leadership research by including need satisfaction, workplace boredom and work engagement.

Since engaging leadership is argued to have similarities with transformational leadership, discriminant validity was tested to determine the extent of statistical differentiation.  $H_1$  was supported as discriminant validity was supported by a significant ( $p < 0.001$ ) chi-square difference test, although it should be noted that significant overlap exists between the two styles of leadership. This could be explained with Schaufeli's (2015) assertion that although these leadership styles are very similar, the major difference between engaging- and transformational leadership is that engaging leadership emphasises the bond between the leader and subordinate(s) and does not focus on intellectual stimulation and idealised influence as reiterated in transformational leadership.

Regarding the remaining hypotheses,  $H_2$  was supported since engaging leadership is significantly related to need satisfaction. Moreover, engaging leadership showed a positive relationship with each of the three individual work-related needs, namely autonomy, competence and relatedness. This is not surprising as the relationship between leadership and need satisfaction has been studied before. For example, Bass and Riggio (2006) stated that leadership that entails support, setting a good example and the empowerment of followers is more likely to fulfil the needs of employees. Furthermore, engaging leadership has been argued to have a positive relationship with all three components of need satisfaction: (1) as engaging leaders inspire followers with plans and provide

them with the freedom to contribute in their own way, thus enhancing the autonomy of followers, (2) they strengthen their followers through providing support and resources which amounts to competent followers, and (3) they connect with their followers and encourage work relations between co-workers whereby they elevate relatedness among followers (Schaufeli, 2015). The results of the current study support these assertions.

Unlike most other leadership studies that have shown a significant direct relationship between leadership and work engagement (e.g. Cheng, Chang, Kuo & Cheung, 2014; Engelbrecht, Heine & Mahembe, 2016; Sarti, 2014; Van Dierendonck, Stam, Boersma, De Windt & Alkema, 2014), the current study found a non-significant relationship between engaging leadership and work engagement, rejecting  $H_3$ . Interestingly, this result is similar to that of Schaufeli's (2015) study which also rejected a direct effect of engaging leadership on work engagement. Similarly, as with work engagement,  $H_4$  was also rejected as no significant direct relationship was found between engaging leadership and workplace boredom. This unexpected outcome can perhaps be explained in the context of the non-significant relationship that has been found between engaging leadership and burnout (cf. Schaufeli, 2015), seeing as workplace boredom is also placed in contrast with work engagement. However, this indicates the potential effect of mediating variables in the relationship between engaging leadership and outcomes. That is, perhaps followers do not view leadership, specifically engaging leadership, in direct relation to work engagement and workplace boredom. Instead they might perceive leadership in relation to several other factors such as well-being (Tafvelin, Armelius & Westerberg, 2011), job characteristics (Piccolo, Greenbaum, Den Hartog & Folger, 2010), motivation (Chaudhry, Javed & Sabir, 2012; Thoonen, Slegers, Oort, Peetsma & Geijsel, 2011), and need satisfaction (Van den Broeck et al., 2010) which in turn affect work engagement and workplace boredom.

Significant direct relationships between need satisfaction and work engagement and need satisfaction and workplace boredom were found. In line with other motivational and well-being studies (Rasskazova et al., 2016; Sulea et al., 2015),  $H_5$  was supported, indicating a significant positive relationship between need satisfaction and work engagement as satisfaction of basic needs is an energising state that improves well-being among employees which can include aspects such as work engagement (Ryan & Deci, 2000b).  $H_6$  was supported as a significant negative relationship

between need satisfaction and workplace boredom exists due to unsatisfied needs which can lead to negative aspects associated with well-being, such as workplace boredom (Ryan & Deci, 2000b).

As for the indirect relationships in the model, both H<sub>7</sub> and H<sub>8</sub> were supported, indicating that engaging leadership had significant indirect relationships to work engagement and workplace boredom through need satisfaction. Specifically, a significant, positive relationship was found between engaging leadership and work engagement mediated by need satisfaction (supporting H<sub>7</sub>), and a significant, negative relationship was found between engaging leadership and workplace boredom through the fulfilment of employees' basic needs (supporting H<sub>8</sub>). As mentioned previously, need satisfaction is usually placed as a mediator in investigating the effects on employees' well-being (Van den Broeck et al., 2010). Again, this is supported by previous research indicating that engaging leadership fulfils employees' basic needs which in turn encourages optimal growth and improves employee well-being, thereby increasing work engagement and thwarting workplace boredom among employees (Ryan & Deci, 2000b). The mediating relationships tested in the current study also shares resemblances to Schaufeli's (2015) study. Although Schaufeli (2015) did not utilise need satisfaction and workplace boredom as variables, job demands and –resources also mediated the relationships between engaging leadership and work engagement, and engaging leadership and burnout. Parallel to Schaufeli's (2015) study, the current study only showed significant indirect relationships regarding engaging leadership and no support for the hypothesised direct relationships.

### Practical implications

The results support the notion that engaging leadership is based on the premise of SDT whereby these leaders inherently add to followers' work-related needs. By supporting followers' needs, positive work outcomes such as work engagement will increase and negative outcomes such as workplace boredom will likely decrease. In turn additional benefits may become apparent, such as: higher levels of self-fulfilment, self-esteem, confidence and lower levels of stress and emotional exhaustion can be expected due to an increase in employee well-being (Alimo-Metcalfe et al., 2008).

In view of the positive outcomes that engaging leadership contribute to employees and the organisation, leadership development courses and leadership coaching that target engaging leadership characteristics should be considered as an intervention within organisations (Ramchunder & Martins, 2014). This can be perceived as an investment in the organisation's human capital as engaging leadership qualities foster a healthy workplace and retains talent within the organisation (Snyder & Lopez, 2002), leading to sustainable employability (Schaufeli, 2015).

### Limitations and future recommendations

There are some limitations that need to be considered when interpreting the results and in making future recommendations. The current study utilised a cross-sectional survey design. The use of longitudinal designs better warrants the causality of relationships. Furthermore, a number of limitations have been associated with the use of self-report measures (Nel, Stander & Latif, 2015), suggesting that other methods of measurement can also be considered. Lastly, the data was gathered from the mining industry which restricts generalisation of the results to other populations.

Concerning future research, gaps within the literature have been identified since engaging leadership, as conceptualised by Schaufeli (2015), only recently emerged as a new type of leadership. Echoing Schaufeli's (2015) limitations, employees' perceptions of leadership were measured and not leadership behaviours by leaders themselves. Hence, future studies of engaging leadership can be measured by non-followers. Moreover, the connection between leadership and boredom has not been properly established within the literature and boredom within itself has not received enough attention (Van Hooff & Van Hooft, 2016).

The current measurement model can be expanded to include more predictive dimensions of work-related well-being such as occupational stress and job satisfaction (Rothmann, 2008). Another alternate is to include burnout and workaholism as dimensions of well-being within the measurement model (Schaufeli et al., 2008). Other avenues of exploration are to determine the fit of the current model within the JD-R model, essentially linking need satisfaction and job demands and –resources (Schaufeli, 2015).

## Conclusion

The relationships between engaging leadership, need satisfaction, work engagement and workplace boredom were investigated. Walumbwa, Avolio and Aryee (2011) stress the importance of leadership studies within Africa as most leadership studies originate from developed countries. Not only does the current study provide insights into leadership, it specifically provides views into leadership within the mining industry, a significant contributor to the South African economy. Results indicated that engaging leadership fulfils employees' basic needs which in turn leads to increased work engagement and lower levels of workplace boredom, through need satisfaction. Ultimately, the evidence suggests that engaging leadership positively contributes to employee motivational states (Schaufeli, 2015). As part of the organisation's strategies to set employees at ease while still remaining competitive, encouraging an engaging leadership style should be considered as an intervention.

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## **CHAPTER 3**

### **CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS**

## **Conclusions, Limitations and Recommendations**

The conclusions and findings with regards to the general and specific objectives of this research are presented in this chapter. This is followed by the limitations of the study as well as the recommendations that organisations could consider and recommendations concerning future research.

### 3.1 Conclusions

Although leadership studies can be found in abundance, leadership studies will always be popular, not only due to history, but also due to factors such as transformation, restructuring and globalisation (Denton & Vloeberghs, 2003) – the ever changing world of work. This is especially true for the South African mining industry as the country's economy depends heavily on it (Alden & Schoeman, 2013). Leadership within the mining industry is facing major challenges, including: organisational restructuring, downsizing and community demands (Denton & Vloeberghs, 2003; Farrell, Hamann & Mackres, 2011). According to Kuada (2010), there is evidence that relationship-centred leadership styles are better suited for cultures that do not prefer high power distance between leaders and followers, value individualism and are focused on their internal environment. Schaufeli (2015) developed engaging leadership that is formulated by the concepts of the self-determination theory (SDT). Engaging leadership is defined as “leaders, who inspire, strengthen, and connect their followers” (Schaufeli, 2015, p. 456). This leadership style encourages meaningful relationships, freedom in making decisions and ensuring that employees are well equipped to perform their duties (Schaufeli, 2015). The current study aimed to add to leadership literature abroad and within the South African mining industry by determining the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom. This was done by addressing both the specific objectives and the hypotheses.

The first objective was to determine how engaging leadership, need satisfaction, work engagement and workplace boredom are conceptualised according to the literature. Granting that engaging leadership has been defined by a few scholars (see Alban-Metcalfe & Alimo-Metcalfe, 2013; Dulewicz & Higgs, 2005; Hofstett-Kopperud, Martinsen & Wong-Humborstad, 2014), this study

utilised Schaufeli's (2015) conceptualisation of engaging leadership. Engaging leadership is essentially found in the principles of SDT and the JD-R model, whereby Schaufeli (2015) termed it as leaders who inspire their followers with visions and plans for the future, strengthen their followers by allowing them to make autonomous decisions, and connect their followers by urging group collaboration. Congruent to this, need satisfaction is based on SDT as developed by Deci and Ryan (2000). SDT is a motivational theory that explains that there are certain conditions that stimulate people's growth and well-being (Deci & Ryan, 2002). These conditions concern the fulfilment of basic psychological needs, namely competence (which concerns feelings of effectiveness and showing one's capacity to do tasks), relatedness (which refers to the connectedness one has with others through interactive caring), and autonomy (which concerns behaviour and decision-making based on one's own interests and values) (Deci & Ryan, 2002). Work engagement is popularly defined as, "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption" (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002, p. 74). Whereas workplace boredom is placed in contrast to work engagement and is often defined as "an unpleasant, transient affective state in which individuals feel an extreme lack of interest in their current activity" (Fisher, 1993, p. 3).

The second objective was to determine the discriminant validity of engaging leadership and transformational leadership. It was argued that engaging leadership does not entail idealised influence and intellectual stimulation, although the concept shares inspirational motivation and individualised consideration with transformational leadership (Schaufeli, 2015). Therefore, the discriminant validity between the two styles of leadership was tested. Discriminant validity was evident as a significant ( $p < 0.001$ ) chi-square difference was found, supporting  $H_1$ . However, the two leadership styles did share a significant overlap. It could be that engaging leadership shares the two aspects of transformational leadership, namely idealised influence and intellectual stimulation that Schaufeli (2015) originally excluded from the conceptualisation of engaging leadership and/or transformational leadership does entail social bonding within its four aspects.

The third objective was to determine the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom - as set out in hypotheses two to six. The hypothesis that engaging leadership has a positive relationship with need satisfaction,  $H_2$ , was

supported. This was expected as engaging leadership itself is based on the premises of SDT (Schaufeli, 2015). Other leadership studies also found that leadership in general has a direct, positive relationship with need satisfaction. Interestingly, Marescaux, De Winne and Sels (2013) did not measure the relationship between leadership and need satisfaction, although they focused on the influence of soft HRM approaches on need satisfaction. Soft HRM approaches focus on the humane side of employees and on managing employees with personal consideration (Marescaux et al., 2013). This echoes the social bonding and individualised consideration of engaging leadership and its positive influence on need satisfaction.

As engaging leadership is based on SDT and can be seen as a resource providing followers with organisational-, work-, developmental- and social resources (Schaufeli, 2015), it was expected that engaging leadership will have a positive relationship with work engagement ( $H_3$ ). Similar to Schaufeli's (2015) results,  $H_3$  was rejected. Schaufeli (2015) argued that followers might not view their leaders in direct relation to work engagement. Transformational leadership and work engagement have been shown to have a direct, positive relationship (e.g. Song, Kolb, Lee & Kim, 2012). Perhaps engaging leadership is not directly linked to work engagement as it lacks idealised influence and intellectual stimulation, found in transformational leadership. Another possible reason could be the research participants' cultural background in relation to how they perceive leadership. In a comprehensive literature review of leadership in Africa, Kuada (2010) has included that many scholars believe that culture should be viewed in relation to leadership as leadership styles are bound to specific cultures and culture provides a setting in which certain behaviours are acceptable. Within the African context, studies seem to lean more towards paternalistic styles of leadership in which hierarchy among age groups is important (Blunt & Jones, 1997; Ifeoma & Jude, 2017). The paternalistic style of leadership involves the leader acting in a strict, fatherly manner (Ifeoma & Jude, 2017). Since the research sample consists mainly of young Africans it could explain why they do not view engaging leadership in direct relation to performance-related outcomes such as work engagement and workplace boredom, but rather paternalistic leadership.

Since boredom is caused by under-stimulation (Schaufeli & Salanova, 2014), it was argued that engaging leaders who inspire their followers would result in lower boredom among employees.

Therefore, the presence of engaging leadership was expected to have a direct, negative relationship with workplace boredom ( $H_4$ ). However, as with  $H_3$ ,  $H_4$  was also rejected. Once again, a similar argument concerning the rejection of  $H_3$  could be made for  $H_4$ . Since workplace boredom is also associated with job characteristics such as repetitiveness (O'Hanlon, 1981) and engaging leadership lack the intellectual stimulation found in transformational leadership (Bass, 1985; Schaufeli, 2015), it could be reasoned that engaging leadership focuses more on the leader-follower relationship than being task-oriented which neglects the job characteristic side of workplace boredom.

As SDT is primarily a theory of motivation by fulfilling the needs for competence, relatedness and autonomy, it is presumed that need satisfaction will have a positive influence on employees' work performance and well-being (Meyer & Gagné, 2008; Ryan & Deci, 2000). Hence, SDT will positively affect work engagement. A direct, positive relationship was found between need satisfaction and work engagement, supporting  $H_5$ , in line with various other studies (see Schreurs, Van Emmerik, Van den Broeck & Guenter, 2014; Van den Broeck, Vansteenkiste, De Witte & Lens, 2008). Likewise, when employees' basic needs are not satisfied it could lead to lower levels of well-being among employees (Milyarskaya, Philippe & Koestner, 2013), of which boredom is perceived as an aspect of well-being (Schaufeli & Salanova, 2014). The results indicated that need satisfaction does have a significant, negative relationship with workplace boredom, supporting  $H_6$ . Interestingly, of all the needs, autonomy seemed to have the most influence on both work engagement and workplace boredom.  $H_5$  and  $H_6$  agrees with studies that have associated need satisfaction with outcomes concerning employee well-being. Consequently, these results also emphasise how important it is to fulfil employees' needs in terms of autonomy, competence and relatedness when considering well-being interventions within organisations. Additionally, basic need satisfaction based on SDT can be studied in relation to the job demands-resources model as it would provide more comprehensive insights and avenues to explore (Schaufeli, 2015).

Objective four was to determine if need satisfaction mediates the relationship between engaging leadership, work engagement and workplace boredom. Thus investigating the purported indirect relationships of engaging leadership to both work engagement and workplace boredom through need satisfaction. Results from bootstrapping showed that need satisfaction facilitated an indirect

effect for both the relationship between engaging leadership and work engagement (supporting H<sub>7</sub>) and the relationship between engaging leadership and workplace boredom (supporting H<sub>8</sub>). Recent research has shown that, need satisfaction is often utilised as a mediator (e.g. Gillet, Colombat, Michinov, Pronost & Fouquereau, 2013; Schreurs et al., 2014; Van den Broeck et al., 2008), and is frequently placed as a link towards well-being (e.g. through burnout). This is due to fulfilled basic needs acting as an initiator to the integration towards well-being or thwarted needs resulting in ill-being (Chen et al., 2015). Thus, the degree to which employees experience well-being depends on the extent to which their basic needs are fulfilled (Slemp & Vella-Brodrick, 2014). As engaging leadership is based on the concepts of basic needs and does not emphasise intellectual stimulation as with transformational leadership (Schaufeli, 2015), it could be suggested that engaging leadership and need satisfaction should be utilised together in models order to relate to other important work outcomes, that is, need satisfactions appear to act as an important explanatory (or potentially confounding) variable when considering the dynamics of relationships between these variables. For example, even though H<sub>3</sub> and H<sub>4</sub> were rejected, the introduction of need satisfaction acts as a potential explanatory variable for such relationships to exist.

### 3.2 Limitations

The limitations of this study are typical to most limitations found in quantitative studies that utilise cross-sectional designs. Since the current study utilised a cross-sectional design, the data was gathered during a single period in time which limits causal inference (Levin, 2006). The research participants were restricted to the mining industry within South Africa. Further research could include other samples to evaluate the generalisability of the current findings (Leroy et al., 2012). Therefore, careless generalisation of the results is cautioned. Additional longitudinal studies could support the relationships found between the variables with greater confidence (Leroy, Palanski & Simons, 2012). Self-report questionnaires have also been reported to limit findings as it can cause error in measurement due to common method biases (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). Some sources of method biases include social desirability, leniency biases, consistency motif, implicit theories, acquiescence biases, mood state and the transient mood state of respondents (Podsakoff et al., 2003). Future research could investigate other sources of measurement to restrict common method variance.

As with many other leadership studies, the current study did not specifically target supervisors or management to assess leadership behaviours (Schaufeli, 2015). Due to convenience sampling of research participants, only perceptions of leadership were measured. It is recommended that future research extend the current findings by including the measurement of leadership behaviours by participants in positions of leadership.

### 3.3 Recommendations

#### **3.3.1 Recommendations for practice**

Despite engaging leadership not having a direct influence on employee outcomes (namely, work engagement and workplace boredom), engaging leadership through need satisfaction makes a vital contribution towards employee motivation and well-being. Marques (2013), reminds organisations that employees' perceptions of leaders have changed from charismatic and extraverted to being motivating and having empathy, with an emphasis on soft skills. It is recommended that organisations focus on employee motivation and well-being by considering engaging leadership and need satisfaction as well-being interventions. Insight into the relationships between engaging leadership, need satisfaction, work engagement and workplace boredom can enhance organisational and employee outcomes in various ways. Since engaging leadership focuses on the social bond between leaders and followers, organisations could consider leader mentoring (Denton & Vloeberghs, 2003). Mentorship enhances followers' autonomy through facilitation and empowerment from their leaders and positively influences aspects of follower need satisfaction (Denton & Vloeberghs, 2003).

Therefore, organisations should consider establishing engaging leadership training which focuses on the awareness and importance of the fulfilment of basic needs, namely autonomy, competence and relatedness in employees. Moreover, autonomy seems to have a greater influence on well-being and organisations can consider implementing interventions that promote autonomy among employees. As increased need satisfaction can lead to higher levels of well-being and performance among employees (Van den Broeck et al., 2008), soft HRM practices that tap into basic need satisfaction could be considered as to manage employees in a humane manner that would result in

empowered and trusting employees (Marescaux et al., 2013). Furthermore, leadership training and development should not be limited to management (Fairhurst & Connaughton, 2014). Organisations should contemplate including both formal and informal leaders when providing leadership training in order to instil the leadership behaviours wanted as a culture among employees (Alban-Metcalfe & Alimo-Metcalfe, 2007; Fairhurst & Connaughton, 2014). This is likely to lessen power distance between leaders and followers (Shamir, 1995), and make daily leadership behaviours more perceptible to employees (Alban-Metcalfe & Alimo-Metcalfe, 2007).

A phenomenon that is underestimated in organisations is workplace boredom. Workplace boredom can have detrimental effects on organisations due to consequences such as poor performance and intentions to leave the organisation (Schaufeli & Salanova, 2014). Workplace boredom also has a negative impact on employees' health and safety due to the increased likelihood of incidents and accidents (Schaufeli & Salanova, 2014). Therefore, the adoption of a more engaging leadership style in organisations could be a potential intervention towards the prevention of workplace boredom as it is especially important to production-related industries where safety is a main concern, such as the mining industry (Whiteoak & Mohamed, 2016).

Despite the limitations of this study, the results support the majority of the hypotheses and are valuable, as it provides important information for organisations and future researchers on engaging leadership within the South African context.

### **3.3.2 Recommendations for future research**

The lack of research on the variables highlighted in the current study adds to its uniqueness and contribution. In general, there is a lack of research concerning engaging leadership (Schaufeli, 2015) and workplace boredom (Mael & Jex, 2015), and future research concerning these topics should consider longitudinal designs to establish more causal evidence. Moreover, leadership studies often include the extent of leader-follower relationships by investigating team level perspectives, providing insight to leadership on multiple levels (see Braun, Peus, Weisweiler & Frey, 2013; Tuckey, Dollard & Bakker, 2012). Therefore, future studies concerning engaging leadership could also consider investigating variables from a multilevel perspective by including

team perceptions of their leader which will enable researchers to consider within- and between-level variance.

Moreover, future leadership studies could also investigate how engaging leadership differs from and/or share similarities with other leadership styles. For instance, empowering leadership includes the motivation of followers to lead themselves (Tuckey et al., 2012) which resonates with the strengthening component of engaging leadership. Servant leadership could also be compared to engaging leadership as servant leaders encourage followers to reach their full potential through the encouragement of conceptual skills and personal development (Liden, Wayne, Liao & Meuser, 2014). Again, this seems to resonate with the strengthening aspect of engaging leadership.

Extended research of not only engaging leadership and workplace boredom, but need satisfaction and work engagement can result in further insights concerning employee well-being and organisational outcomes. As workplace boredom and work engagement are the only dimensions of well-being included in the current model, future research could analyse the effects of need satisfaction on other dimensions of well-being such as burnout and workaholism to ensure a more comprehensive model of work-related well-being (Schaufeli & Salanova, 2014).

Lastly, the current findings showed discriminant validity between engaging leadership and transformational leadership, although there were significant overlaps between the two constructs. It is possible that the magnitude of the two dimensions of transformational leadership that are included in engaging leadership (inspirational motivation and individualised consideration) are more significant than initially expected. Future research could investigate the specific overlaps in conceptualisation and determine whether engaging leadership should be established as a leadership style in its own right or added as a supplementary dimension of transformational leadership.

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