

The relationship between workplace boredom, procrastination, work engagement and turnover intention within the South African context

YA Sigauke

 **orcid.org/0000-0002-8800-4676**

Mini-dissertation accepted in partial fulfilment of the requirements for the degree [Master of Commerce in Industrial and Organisational Psychology](#) at North-West University.

Supervisor: Prof LT de Beer

Graduation: June 2021

Student number: 27640663

COMMENTS

The following should be noted:

- The guidelines followed for the editorial style of this mini-dissertation are specified by the South African Journal of Industrial Psychology (SAJIP). Furthermore, the referencing style used in this mini-dissertation follows the format prescribed by the Publication Manual (6th ed.) of the American Psychological Association (APA). These applications are according to the policy of the Programme in Industrial Psychology of North-West University (Potchefstroom) to be used with the APA referencing style in all scientific documents as from January 1999.
- This mini-dissertation is submitted in the form of a research article.
- Additionally, the first chapter is a revised version of the submitted and approved research proposal and is presented in the present tense.
- The chapters each contain separate reference lists.

DECLARATION

I **Yeukai Angeline Sigauke** declare that "The relationship between workplace boredom, procrastination, work engagement and turnover intention within the South African context" 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.



Yeukai Angeline Sigauke
November 2020

AUTHORS' CONTRIBUTIONS AND DECLARATIONS

This research study was designed and carried out by two researchers at North-West University, Potchefstroom Campus. In the table below, the contributions of each researcher are indicated.

Mrs Y A Sigauke	M.Com Industrial Psychology student, co-conceptualiser, responsible for the literature review, the conducting of the research process, the interpretation of the research findings and data, as well as liable for the writing of the research proposal and mini-dissertation.
Prof LT de Beer	Supervisor, statistician, conceptualiser and critical reviewer of the research study.

Furthermore, with this statement, the author and co-author declare and confirm their roles in this research study. This declaration also indicates that all authors are in agreement that the appropriate format was used for the submission of this mini-dissertation at North-West University. All authors are also in agreement that the contents of this research study and any modified version thereof may be used and publicised by an author in peer-reviewed academic journals and/or presented at academic conferences.



MrsYA Sigauke



Prof LT de Beer

DECLARATION OF LANGUAGE EDITOR



17 November 2020

I Ms Cecilia van der Walt hereby declare that I took care of the **editing** of the **mini-dissertation** of **Mrs Yeukai Sigauke** titled ***The relationship between workplace boredom, procrastination, work engagement and turnover intention within the South African context.***

A handwritten signature in black ink, appearing to read 'C. van der Walt', written in a cursive style.

MS CECILIA VAN DER WALT

BA (Cum Laude)

THED (Cum Laude),

Plus Language editing and translation at Honours level (Cum Laude),

Plus Accreditation with SATI

Registration number with SATI: 1000228

Email address: ceciliavdw@lantic.net

Mobile: 072 616 4943

ACKNOWLEDGEMENTS

I would like to give thanks to the following persons for their assistance and support; without them the success of this study would not have been possible:

- The heavenly Father, for the strength to persevere throughout this year. Everything I accomplish is through Him.
- A deepest heartfelt thank you to an exceptional supervisor, Prof Leon de Beer, who provided constant supervision throughout. During this research you were always willing to help. Also, I would not have been able to complete this project without your assistance and commitment. You are such a phenomenal supervisor to work with and I cannot thank you enough for the positive experience.
- To my family, dear husband Coster and son Ashley, words cannot describe how much I appreciate your love, support and encouragement. I will forever remain grateful and blessed to have such a wonderful family.
- A special thank you to my lovely sister Lucia Sigauke. Words fail to even describe how much you are appreciated in everything you do!
- To my dad Chihwa and mom NyaChima, thank you so much for your love and support. You continuously motivated me, and this project would not have been a success without you in my life.
- The language editor Cecilia van der Walt; thank you for the efficient way in which the language editing was done.

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SUMMARY

Title: The relationship between workplace boredom, procrastination, work engagement and turnover intention within the South African context

Keywords: Workplace boredom, procrastination, work engagement, turnover intention, South African work context

Workplace boredom is an international phenomenon that impacts negatively both on employees and organisations. Workplace boredom is increasingly becoming a common occurrence within organisations, and most employees are susceptible to it. Workplace boredom is a serious concern, as it is costly for the organisations. To date, research in South Africa on workplace boredom remains sparse and this study seeks to add to the literature in this regard since the effects of workplace boredom and associated factors have been shown to impact individual and organisational outcomes. Workplace boredom coupled with procrastination and turnover intention has a negative effect on employee motivation. If this is not addressed, it may hold severe implications for organisations.

The general objective is to investigate the direct and indirect relationships between workplace boredom, procrastination, work engagement and turnover intention within the South African context. A quantitative, cross-sectional survey design was utilised to gather data by means of a non-probability sample of various South African employees in the North-West province of South Africa ($n= 328$). Confirmatory factor analysis (CFA) was conducted within a structural equation modelling framework for analysing the data. Discriminant validity between workplace boredom and similar theoretical constructs (procrastination, work engagement and turnover intention) was determined by investigating correlation scores; average variance extracted, as well as shared variance between constructs.

The results showed that workplace boredom had significant positive paths to procrastination and turnover intention. Procrastination, in turn, was found to be negatively related to work engagement, and work engagement was found to be negatively related to turnover intention. Furthermore, procrastination mediated the workplace boredom-work engagement relationship and work engagement mediated the procrastination-turnover intention relationship. Recommendations were made for use in practice and additionally for future research.

OPSOMMING

Titel: Die verband tussen werkplekverveeldheid, uitstel, werkbetrokkenheid en voorneme om die organisasie te verlaat binne die Suid-Afrikaanse konteks

Sleutelwoorde: Werkplekverveeldheid, werkbetrokkenheid, voorneme om die organisasie te verlaat, Suid-Afrikaanse werkkonteks

Werkplekverveeldheid is 'n internasionale fenomeen wat 'n negatiewe impak het op werknemers en organisasies. Werkplekverveeldheid word toenemend 'n algemene verskynsel in organisasies, en die meeste werknemers is vatbaar daarvoor. Werkplekverveeldheid is 'n ernstige bekommernis want dit lei tot groot finansiële uitgawes vir die organisasies. Tot hede is navorsing in Suid-Afrika oor werkplekverveeldheid skaars en hierdie studie poog om tot die literatuur in hierdie verband by te dra aangesien daar aangedui is dat werkplekverveeldheid en geassosieerde faktore 'n negatiewe impak het op individuele en organisatoriese uitkomst. Werkplekverveeldheid gepaardgaande met uitstel en voornemens om die organisasie te verlaat het 'n negatiewe effek op werknemer-motivering. As dit nie onder die loep geneem word nie, kan dit ernstige implikasies vir organisasies inhou.

Die algemene doelwit is om die direkte en indirekte verhoudings tussen werkplekverveeldheid, uitstel, werkbetrokkenheid en voorneme om die organisasie te verlaat binne die Suid-Afrikaanse konteks te ondersoek. 'n Kwantitatiewe, deursnee-ontwerp is gebruik om data in te samel deur middel van niewaarskynlikheidsteekproeftrekking van verskeie Suid-Afrikaanse werknemers in die Noordwes provinsie van Suid-Afrika ($n = 328$). Bevestigende faktoranalise (BFA) is binne 'n strukturele vergelykingsmodel-raamwerk uitgevoer vir die analisering van die data. Diskriminantgeldigheid tussen werkplekverveeldheid en soortgelyke teoretiese konstrakte (uitstel, werkbetrokkenheid en voorneme om die organisasie te verlaat) is bepaal deur korrelasietellings; gemiddelde variansie onttrekking, asook gedeelde variansie tussen konstrakte te ondersoek.

Die resultate het getoon dat werkplekverveeldheid noemenswaardige 'n positiewe, statisties-bedeutende pad na uitstel en voorneme om die organisasie te verlaat volg. Daarenteen is gevind dat uitstel negatief verband hou met werkbetrokkenheid, en dat werkbetrokkenheid negatief

verband hou met voorneme om die organisasie te verlaat. Voorts het uitstel die werkplekverveeldheid-werkberokkenheidverhouding gemedieer, en werkbetrokkenheid die uitstel-‘voorneme om die die werk te verlaat’ verhouding gemedieer. Aanbevelings is gemaak vir toepassing in die praktyk en ook vir toekomstige navorsing.

CHAPTER 1

INTRODUCTION

Introduction

Workplace boredom is common in a wide variety of work settings (Loukidou, Loan-Clarke, & Daniels, 2009). Employees are a valuable resource to every organisation and due to this, organisations attempt to enhance employees' motivation, since workplace boredom is a problem that can affect employee motivation and productivity. Currently, workplace boredom is positioned as an undesirable psychological state that emanates from under-stimulation or underutilisation of individuals' mental and physical ability, demonstrating unchallenging work (Game, 2007; Loukidou et al., 2009). Workplace boredom is also connected to an array of adverse effects, for instance poor employee well-being (Loukidou et al., 2009), low job performance (Watt & Hargis, 2010), frequent absenteeism from work (Wan, Downey, & Stough, 2014), monetary losses (Eddy, D'Abate, & Thurston, 2010), counterproductive behaviour (Bruursema et al., 2011) and increased turnover intentions (Reijseger et al., 2013). Undoubtedly, workplace boredom leads to reduced performance and loss of productivity (Taris, 2006). Hence, workplace boredom can be a serious problem which can regularly have substantial monetary implications for organisations.

This chapter consists of the problem statement concerning workplace boredom, procrastination, work engagement and turnover intention followed by the research questions, research objectives, research hypotheses and research methodology. Lastly, the chapter layout is presented as well as a brief summary of this chapter.

1.1 Problem statement

Employee performance is key to an organisation's success as it contributes to the company's competitive position in the marketplace (Zhang & Venkatesh, 2013). Workplace boredom reflects aspects of an employee's motivation and productivity. Due to bored employees' lack of personal involvement and enthusiasm, they are unmotivated and are likely to put little effort into their jobs, avoid the workplace, leave the organisation when the opportunity arises, and perform lower-quality work (Amabile, 2001). Furthermore, the current local economic climate, in which jobs can be scarce, is likely to increase the pervasiveness of workplace boredom, given that employees may accept other jobs (lower level and type) due to job insecurity and uncertainty about a secure income

(Leonhardt, 2009; Sohail, Ahmad, Tanveer, & Tariq, 2012). Boredom at work therefore, is a hurdle which often bears notable costs for organisations (Watt & Hargis, 2010). To curb substantial costs to organisations resulting from a lack of motivation and productivity, today's organisations compete for a workforce that is highly effective and entirely engaged (Watt & Hargis, 2010). The estimated cost involved has been calculated at over \$750 billion per annum in the United States alone (Malachowski, 2005), and this was more than a decade ago.

Boredom at work is an increasingly prevalent topic of interest in research and organisations (Loukidou et al., 2009). Workplace boredom is widespread, contagious, and experienced by some employees most of the time, at all occupational levels (Teng et al., 2018). However, many universally accepted definitions of boredom exist in the organisational literature. Boredom has also been implicated in strain and uneasiness, with a lack of meaning in an individual's job (Van Tilburg & Igou, 2012). It was found that boredom also occurs in mentally demanding environments (Cummings, Gao, & Thornburg, 2016). This suggests that boredom at work may have adverse consequences both for individuals and organisations. Specifically, boredom-prone employees can exhibit low job performance (Watt & Hargis, 2010), negative affect (Culp, 2006), non-attendance (Brissett & Snow, 1993; Wan, Downey, & Stough, 2014), job dissatisfaction (Spector & Fox, 2010), occupational injuries (Britton & Shipley, 2010), counterproductive behaviours (Bruursema, Kessler, & Spector, 2011), poor engagement (Bakker & Bal, 2010; Steel & Klingsieck, 2016), higher turnover intentions (Hakanen, Schaufeli, & Ahola, 2008; Reijseger et al., 2013), and lower organisational commitment (Kass, Vodanovich, & Callender, 2001), which can all lead to financial losses (Eddy, D'Abate, & Thurston, 2010).

The control-value theory implies that bored workers are unable to manage and appreciate their work due to uninteresting tasks (Pekrun, 2006). Hence, these employees are susceptible to boredom at work. A previous study found that a wide range of workers, 15% to 87%, were likely to occasionally experience boredom at work (Watt & Hargis, 2010). Moreover, a study by Van Hooff and Van Hooft (2017) further revealed that workplace boredom spilled over into the following day via escalating negative attitudes and reduced internal stimulation. Research has also pointed out that the causes of workplace boredom are considerably more complex than merely monotonous tasks (Van Hooff & Van Hooft, 2017). As a result, various jobs are prone to boredom,

regardless of each employee's dispositions. Reijseger et al. (2013) applied the job demands-resources model to examine the circumstances in which workplace boredom becomes apparent and found that it is caused by having fewer tasks at work, which are perceived to be unpleasant and unchallenging. Literature on workplace boredom and its impact within the South African context is scant, leaving a significant gap. As an additional step towards understanding workplace boredom, the current study focuses on the links between workplace boredom and procrastination, considered also in the context of work engagement and turnover intention.

Furthermore, workplace boredom has been found to be associated with procrastination (Metin et al., 2016). Procrastination is a pervasive problem associated with a range of adverse outcomes (Klingsieck, 2013), and is a subject of widespread interest but little research regarding it has been conducted. Procrastination is defined as "a common problem among employees with most having difficulties in initiating or completing tasks and voluntarily delay the course of action despite expecting potential negative consequences" (Klingsieck, 2013, p. 26; Steel & Klingsieck, 2016, p.36). Moreover, procrastination entails deferral of tasks meant to be done in order to attain the desired result (Fernie et al., 2016). When procrastinating, an employee may take part in other activities not intended or expected at work, to avoid accomplishing prioritised tasks that should be the focus (Davis, Flett, & Besser, 2002), and this can be caused by various factors, for example feeling strained or disinterested (D'Abate, 2005). Similar to workplace boredom, procrastination is prevalent among people and nearly all employees procrastinate at some point (Kachgal, Hansen, & Nutter, 2001).

Since procrastination is broad, behavioural avoidance entails unwanted and unnecessary postponement, including lack of timely decisions and prompt action (Steel, 2010). Procrastination occurs when the person prefers to delay when prompt action is possible and preferable (Schouwenburg, 2004). During the action implementation, the person diverts to an alternative course of action (Tice et al., 2001), whilst indirectly voluntarily delaying the original plan. Thus, procrastinators needlessly delay action implementation. Procrastination may also be explained as the wilful moratorium in decision-making when faced with conflicts and choices (Janis & Mann, 1997; Ling et al., 2012). Therefore, people deliberately delay decision-making because they choose other priorities and thereby experience less stress.

Moreover, all employees are susceptible to procrastination and it can be experienced at individual, group and organisational level in any given context (Harju, Hakanen, & Schaufeli, 2014). Procrastination has exorbitant costs (Nguyen, Steel, & Ferrari, 2013), 30 to 40% productivity loss (Lim & Teo, 2006), and poorer performance (Thatcher, Wretschko, & Fridjhon, 2008). Due to employees' procrastination behaviours, poorer performance is the order of the day. However, even though procrastination is considered a pervasive phenomenon, research insights into it in the realm of work remain scarce (Klingsieck, 2013). Specifically, the existing literature on procrastination in the context of South Africa remains scant because procrastination at work has not been given much consideration (DeArmond, Matthews, & Bunk, 2014). Those employees displaying low levels of stimulation lack dedication (Klingsieck, 2013), so it can be expected that procrastination could have a detrimental impact on employee motivation in the form of work engagement for example.

Researchers continuously highlight the significance of work engagement due to its enhancement of workers' productivity and company competitiveness in a turbulent economic climate (Ugwu, Onyishi, & Rodriguez-Sanchez, 2014; Hoole & Bonnema, 2015). Work engagement is defined as a "positive, fulfilling, work-related state of mind characterised by vigour, dedication, and absorption" (Schaufeli, Bakker, & Salanova, 2006, p. 74), and is linked to the favourable organisational outcomes and individual vocational interests (Hoole & Bonnema, 2015). Also, work engagement is a vital measure of the well-being of employees and their capacity to operate optimally to increase productivity and achieve organisational goals.

Furthermore, work engagement has also been shown to lower turnover intentions (Coetzee & Van Dyk, 2018; Mendes & Stander, 2011). This implies a solution to the major problem within organisations currently, specifically the enhancement of performance (Vigoda-Gadot, Eldor, & Schohat, 2013). It has been found that if a company promotes work engagement, approximately 100% return on stock over five years and only 3% voluntary staff turnover is possible (Afriforte, 2018). The importance of work engagement thus is evident, and previous studies have demonstrated its effects on the performance of the organisation and of the employees (including turnover intention) (Coetzee & Van Dyk, 2018).

Turnover intention of employees is the highly dependable and accurate predictor of the actual turnover rate (Afriforte, 2018). Turnover intention is defined as "an individual's conscious desire and deliberate intention to leave their job" (Tett & Meyer, 1993, p. 262). Employees can intend to leave their organisation when they experience frequent workplace boredom as a relief from continuing to perform monotonous or unchallenging tasks (Reijseger et al., 2013; Van Tilburg & Igou, 2012). Employee turnover has significant costs and other negative consequences for organisations. Turnover goes hand in hand with financial costs due to advertising, screening, interviewing, recruiting and training processes involved in replacing those who had left the organisation (Wocke & Heymann, 2012), low morale which translates into lower employee engagement and inevitably hamper the performance of existing employees due to them being overburdened (Kumar & Dhamodaran, 2013).

Moreover, turnover reduces organisational productivity and can result in customer defection; hence employers should frequently attempt to address factors that contribute to employee turnover (Coetzee & Van Dyk, 2018). It is estimated that it costs businesses about 75% to 150% of a worker's annual salary to make (and train) that replacement (Afriforte, 2018), not mentioning the loss of corporate memory (Iverson & Roy, 1994). Thus, employee turnover directly affects the productivity and income of businesses as it takes time for the new employee to completely acclimatise to the work context.

This study aims to investigate direct and indirect relationships of procrastination in the relationship among workplace boredom, work engagement, and turnover intention. The associations between workplace boredom and work engagement have been researched within South Africa (see Van Wyk et al., 2016). However, research on the link between workplace boredom and procrastination as a potential mediating factor in this relationship currently is non-existent. If the indirect effects of procrastination regarding workplace boredom-work engagement relation and work engagement-turnover intention relation are empirically established, potential strategies can be suggested to enhance work engagement in organisations to address the impact of workplace boredom, procrastination, and turnover intention. Hence, the present study could be significant for policymakers, managers, supervisors and organisations at large.

1.2 Research questions

Based on the preceding research problem, the subsequent research questions have been formulated:

- Q1. How is workplace boredom, procrastination, work engagement and turnover intention conceptualised in the literature?
- Q2. What are the direct relationships between workplace boredom, procrastination, work engagement and turnover intention within the South African work context?
- Q3. What are the indirect relationships between workplace boredom, procrastination, work engagement and turnover intention within the South African work context?
- Q4. What recommendations can be made for future research and practice?

1.3 Expected contribution of the study

1.3.1 Contribution to the organisation

The research study could potentially inform organisations about the negative impact of workplace boredom and procrastination on work engagement, which can then result in turnover intention. Furthermore, the outcomes could potentially assist by informing organisations about strategies aimed at improving the organisations to ensure optimum performance, and in so doing decrease the adverse impact of workplace boredom and procrastination on important organisation outcomes. Seen against the background of globalisation and the critical skills shortage, it becomes clear that talent retention is an issue for any organisation's survival, adaptation and competitive advantage (Munro, 2015). The findings of this study can thus, assist management in understanding barriers to work engagement, and the implications of workplace boredom and procrastination for productivity in their organisations, and consequently the capability of management to act on strategic intent.

1.3.2 Contribution to Industrial Psychology

The research questions investigated in the study add to the literature. At this juncture, it is imperative to discuss the gaps that have been highlighted drawing from past studies. Despite workplace boredom as a collective experience for many employees, it has remained relatively understudied (Van Hooff& Van Hooft, 2017). Currently, research evidence on the link of workplace boredom with procrastination as a potential mediating factor in this relationship is non-existent; thus rendering a significant gap in literature. Hence, this research does contribute to the literature by providing insight into the potential direct and indirect relationships of procrastination in the relationship between workplace boredom, work engagement and turnover intention within South Africa.

1.4 Research objectives

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

1.4.1 General objective

The general objective of this study is to investigate the relationships between workplace boredom, procrastination, work engagement and turnover intention within the South African context.

1.4.2 Specific objectives

The specific objectives of this research are:

- To establish how workplace boredom, procrastination, work engagement, and turnover intention are conceptualised in the literature.
- To determine the direct relationships between workplace boredom, procrastination, work engagement and turnover intention within the South African work context.
- To ascertain the indirect relationships between workplace boredom, procrastination, work engagement and turnover intention within the South African work context.
- To make recommendations for future research and practice.

1.5 Research hypotheses

The following hypotheses are presented:

- H_{1a} Workplace boredom has a positive relationship with procrastination.
- H_{1b} Workplace boredom has a positive relationship with turnover intention.
- H₂ Procrastination has a negative relationship with work engagement.
- H₃ Work engagement has a negative relationship with turnover intention.
- H₄ Workplace boredom has an indirect relationship with work engagement through procrastination.
- H₅ Procrastination has an indirect relationship with turnover intention through work engagement.

1.6 Research method

1.6.1 Literature Review

Drawing from the literature, a comprehensive review was given of the constructs: workplace boredom, procrastination, work engagement and turnover intention from a wide variety of sources that were consulted to gather information. No studies could be traced that investigate the link of workplace boredom with procrastination as a potential mediating factor within the South African context. All the recent and relevant sources were utilised by drawing from research engines such as EbscoHost, Google Scholar, PsycArticles, PsycInfo, Science Direct, Business Source Premier, E-journals using the keywords. Several international and local journals, books, and articles in the relevant fields were used such as *European Journal of Work and Organisational Psychology*, *The British Journal of Sociology*, *International Journal of Epidemiology*, *International Journal of Management Reviews*, *The International Journal of Business and Society*, *South African Journal of Industrial Psychology*, *Psychological Reports*, *International Journal of Stress Management*, *South African Journal of Industrial Psychology*, *Journal of Organizational Psychology*, *Journal of Management*, *Journal of Applied Psychology*, *Work & Stress*, *Journal of Developmental Education*, *Journal of Contemporary Research in Business*, *Psychological Bulletin*.

1.6.2 Research design

A quantitative, non-experimental study was implemented, which allows variables to be measured, analysed, and compared. A cross-sectional survey was the particular research design used. The same technique has been used for data collection in some of the recent studies on similar topics (e.g. Van Wyk et al., 2016). The cross-sectional survey design enables a wide survey of part of the total population (Spector, 2019). The present study used the questionnaire as an instrument for collecting data. It was deemed suitable to collect data through a questionnaire completed by respondents at a specific point in time to ascertain the relationships among variables (De Vos, Strydom, Fouché, & Delport, 2012).

1.6.3 Research participants

A non-probability sampling strategy was applied ($n=328$). The sample consisted of South African employees working in various occupations who participated voluntarily. The sample size ($n>300$) was large enough to investigate the relationships among selected variables (Shaughnessy, Zechmeister & Zechmeister, 2003). The participants consisted of South African employees who vary in terms of gender, age, and ethnicity. A convenience sample consists of people who are close and available to the researcher (Ganguli et al., 1998). This often achieves a large sample size by reaching a broad audience. For this current study, the population consisted of all employees with grade twelve (matric) and above to ensure language proficiency to enable them to complete the survey.

1.6.4 Measuring instruments

The measuring instruments used for measuring the variables in this study were the following:

Biographical questionnaire: A biographical questionnaire was used to gather details of the participants' gender, education, and length of employment, language, age, and ethnicity. This data was gathered to enable the researcher to present the general characteristics of the sample so that

the reader can fully consider the composition of the sample and to see that the results can be generalised to the general population.

Workplace boredom was measured using the Dutch Boredom Scale (DUBS), developed by Reijseger et al. (2012). This one-dimensional scale was employed to measure workplace boredom using a 5-point rating scale ranging from 1 (Never) to 5 (Always). The 6 items measured workplace boredom (e.g. “I feel bored at my job” and “It seems as if my working day never ends”). This scale has a reported Cronbach's alpha coefficient of 0.80 and 0.78 (Reijseger et al., 2012; Van Wyk et al., 2016).

Procrastination was measured by means of the Pure Procrastination Scale (PPS) (Steel, 2010); a 12-item scale. The scale consists of three constructs of procrastination – arousal (e.g. “I am continually saying I will do it tomorrow”); avoidance (e.g. “I am not very good at meeting deadlines”); and decisional (e.g. “I delay making decisions until it is too late”). It was scored on the 5-point Likert scale 1 (Never) to 5 (Always). This scale has a reported Cronbach's alpha coefficient of 0.92 (Steel, 2010).

Work engagement was measured using the Ultra-Short Utrecht Work Engagement Scale (UWES-3) (Schaufeli et al., 2017). This measure comprises 3 items that were all scored on a 7-point frequency rating scale which ranges from 0 (Never) to 6 (Always). The Cronbach's alpha coefficients vary between 0.93 and 0.96 (Schaufeli et al., 2017). Only one item from work engagement's key elements (i.e. vigour, dedication, and absorption items) was used to measure the construct (Schaufeli et al., 2017). This current study used one item to measure the three components of work engagement – vigour (“At work, I feel bursting with energy”); dedication (“I am enthusiastic about my job”) and absorption (“I am immersed in my work”). The UWES-3 is a more recent scale with acceptable reliability (Schaufeli et al., 2017).

Turnover intention was measured using one item from the Turnover Scale developed by Sjöberg and Sverke (2000). This single item (“I am actively looking for other jobs”) measured on a 5-point Likert-type scale ranges from 1 (Strongly disagree) to 5 (Strongly agree), in which a high score

shows a stronger intention to leave the job. This item was used as it shows active turnover intention as opposed to merely a passive feeling of wanting to leave the organisation.

1.6.5 Research procedure

Prior to data collection, the researcher obtained formal approval from the Ethics Committee of the Faculty of Economic and Management Sciences (EMS-REC) (Reference number: NWU-00809-19-A4). Permission to collect data in their work environment via email was obtained from the organisations that participated in the study. A total of 400 questionnaires (printed survey booklets) to reduce sampling error were physically distributed to the employees. The questionnaire stated the purpose of the research, which took approximately 10 minutes to complete, and participants were given a maximum of one week to complete it (i.e. five working days). Completed questionnaires were sealed in envelopes and kept safely in a secured box to ensure confidentiality. The box was placed in a communal area which is a central position within the organisation to which everyone had access. Participants were therefore, also able to insert empty booklets to feign participation if they so wished. After data collection, the responses were captured on an Excel spreadsheet, exported to Mplus and then analysed statistically. Information was kept as password-protected files. The completed booklets are safely secured in the supervisor's office locker for a minimum of 5 years and will remain the property of North-West University. Results were disseminated in the form of a master's dissertation, which was made public on the NWU electronic repository upon completion. Furthermore, data may be used for conferences and publication in peer-reviewed academic journals. Any participant that contacts the researchers via e-mail will be given a summary of the study outcomes, when available, if requested.

1.6.6 Statistical analysis

In Mplus 8.4 (Muthén & Muthén, 2019) confirmatory factor analysis (CFA) was conducted first to evaluate whether the measurement model was valid. The CFA will indicate whether the observed indicators (items) adequately loaded onto the suggested factor and gave the variance explained in every item by the latent factors (Brown, 2015). The Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), Square Root Mean Residual (SRMR) and Root Mean Square Error of

Approximation (RMSEA) were considered appropriate to assess the fitness of the CFA model. The admissible values for the CFI and TLI were 0.90 and above, SRMR smaller than 0.08 while for the RMSEA value it was 0.08 and below (Van de Schoot, Lugtig, & Hox, 2012). The Cronbach's alpha coefficients were calculated to investigate the reliability of all the constructs. The alpha and omega reliability coefficients were calculated for the scales. However, a current study has indicated the problematic nature of coefficient alpha and appeal has been raised for other forms of reliability to be established namely, coefficient omega (Peters, 2014).

The generation of a correlation matrix considered the initial relationships among the study variables. The effect sizes of correlation coefficients acceptable were set at 0.30 and above for a medium effect and 0.50 and above for a significant effect (Cohen, 1992). The statistical significance overall was set at the 95% level ($p \leq 0.05$). The discriminant validity between workplace boredom and procrastination was further examined by looking at the average variance extracted (AVE) for each variable respectively and the shared variance amid the two variables according to the stipulated guidelines of Farrell (2010). The shared variance amid the constructs must be smaller than the AVE of each variable for the discriminant validity to exist.

A structural model was set out as conceptually illustrated in Figure 1 below to demonstrate the path coefficients for the relationships specified. In the model, the size and direction of the beta coefficients were regarded to either accept or reject the stated hypotheses. For the indirect relationships, bootstrapping was used resampling option (10 000 draws), generating 95% confidence intervals with a focus on the results for the specific indirect effects. The indirect effect can be considered statistically significant, provided that 95% CI estimates exclude zero.

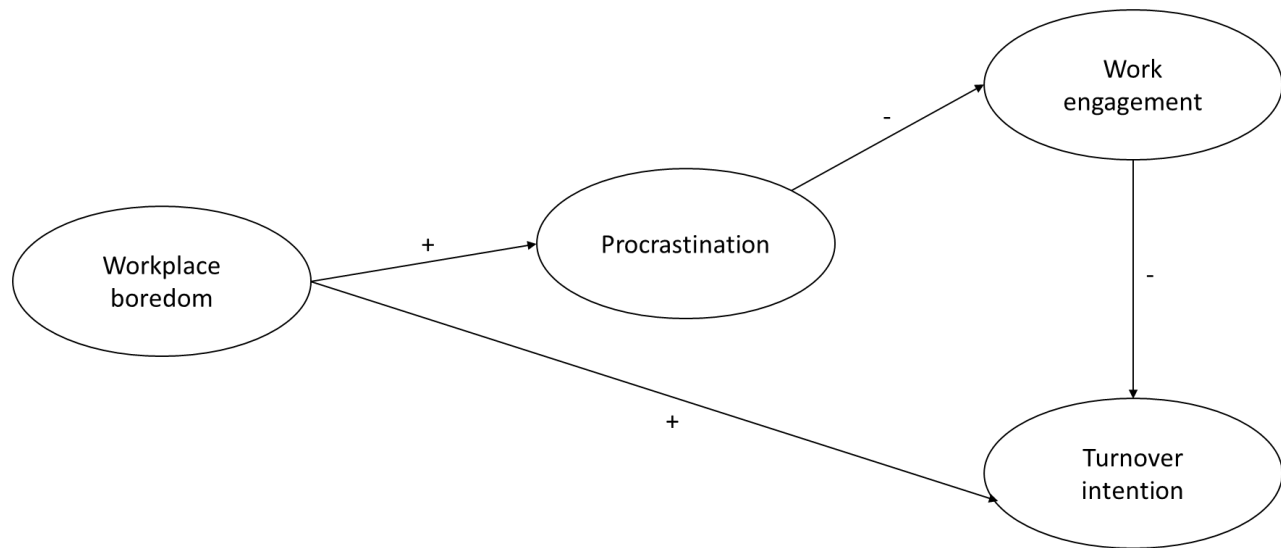


Figure 1. *The conceptual research model.*

1.6.7 Ethical considerations

Ethical clearance was obtained from the relevant ethics committee (Reference: NWU-00809-19-A4). Consideration was therefore given to the ethical aspects as described by Salkind (2012, pp. 85-89). The research was conducted fairly and ethically, protecting the participants from harm by minimising all foreseeable risk(s). The respondents were informed about the purpose of the research. The researcher ensured confidentiality by not collecting their identities and by storing the data in password-protected files. All participation was voluntary; no one was coerced to participate and their right to withdraw at any given moment was explained to them (Ritchie, Lewis, McNaughton-Nicholls, & Ormston, 2014). The questionnaire stated the purpose of the study as research required informed consent on the part of the respondents (Leedy & Ormrod, 2012).

Furthermore, each participant received an envelope for sealing the booklet before returning it. It also allowed participants to deposit empty booklets if they wished to feign participation. Each participant's responses to the survey were kept confidential as only the responsible researcher and supervisor can retrieve the password-protected data folder. The completed survey booklets are safely secured in the supervisor's office locker for a minimum of 5 years and will remain the property of NWU. Lastly, participants needed to know that the results formed part of a group, and that no individual results were reported, and the names of the organisations remained confidential.

Results were disseminated in the form of a master's dissertation, which was made public on the NWU electronic repository upon completion. Furthermore, results will also be shared on appropriate occasions such as conferences and in peer-reviewed academic journals.

1.7 Overview of the chapters

The mini-dissertation was composed of three chapters. Chapter 1 was the introduction which foregrounded the study purpose and objectives. Then Chapter 2 contained the research article which discussed the literature, objectives and results. Lastly, Chapter 3 contained the conclusions drawn, the limitations of the research, and recommendations for practice and future research.

1.8 Chapter summary

Chapter 1 presented the problem statement and the research objectives of the study. Following this, a description was given of the research methodology and the measuring instruments used. Lastly, it presented a brief outline of the chapters to follow.

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CHAPTER 2

RESEARCH ARTICLE

The relationship between workplace boredom, procrastination, work engagement and turnover intention within the South African context

Abstract

Orientation: Workplace boredom is a common occurrence in most organisations. Research in South Africa on workplace boredom is sparse and this study seeks to add to the literature in this regard as the effects of workplace boredom and associated factors have been shown to impact individual and organisational outcomes.

Research purpose: To explore the direct and indirect relationships among workplace boredom, procrastination, work engagement and turnover intention in the South African work context.

Motivation for the study: Workplace boredom, coupled with procrastination and turnover intention, negatively affect employee engagement. If this is not addressed, it may have severe implications for organisations.

Research approach, design, and method: The study used the cross-sectional survey design. A non-probability sample of various South African employees was used ($n= 328$). A structural equation modelling framework was used with confirmatory factor analysis to analyse the data.

Main findings: Results indicated that workplace boredom had significant positive paths to procrastination and turnover intention. Procrastination was negatively related to work engagement and work engagement was negatively related to turnover intention. Furthermore, procrastination mediated the workplace boredom-work engagement relationship and work engagement mediated the procrastination-turnover intention relationship.

Practical/Managerial implications: Organisations should consider the impact of workplace boredom and procrastination on outcomes such as work engagement, turnover intention and other potential adverse effects in organisations. Potential strategies should be explored to enhance work engagement in organisations by addressing workplace boredom and procrastination.

Contribution/Value-add: This study adds to the scant literature available on workplace boredom within the South African context.

Keywords: workplace boredom, procrastination, work engagement, turnover intention, South African work context.

Introduction

Workplace boredom is a widespread phenomenon among employees in every organisation. Consequently, South Africa is no exception and experiences the workplace boredom phenomenon. Researchers have found that workplace boredom is increasingly widespread, common and is experienced across different industries (Teng et al., 2018). Workplace boredom is characterised by lack of interest in tasks on given circumstances, difficulty in concentration and being passive (Reijseger et al., 2013). Boredom often occurs at work and has adverse effects. From research it is evident that the extent of employees experiencing boredom at work at times ranges from 15% to 87% (cf. Watt & Hargis, 2010; Van der Heijden, Schepers, & Nijssen, 2012). Workplace boredom affects employees and the organisation adversely to such an extent that its competitive edge diminishes (Meyer, 2012). Previous studies have shown workplace boredom to be related to adverse consequences for employees (e.g., occupational accidents, distress, dissatisfaction, depressive complaints) and the organisation (e.g., absenteeism, desertion intentions, counterproductive work behaviour, non-productivity and poor performance (Bruursema, Kessler, & Spector, 2011; Fox, 2010; Harju, Hakanen, & Schaufeli, 2014; Kass, Vodanovich, Stanny, & Taylor, 2001; Spector & Reijseger et al., 2013; Van Hooff & Van Hooft, 2014).

A contemporary study indicates that workplace boredom has a behavioural, affective and cognitive element (Reijseger et al., 2013). For instance, bored employees might feel discontented, procrastinate, and partake in distractions as their sense of time is distorted thereby; the importance of boredom in the workplace and its potential costs for firms has increasingly been recognised. Procrastination comprises different components which include avoidance, and arousal. Procrastination is the postponement or delay of major decisions and can be seen as an intentional delay to take prompt action and make important decisions given specified duration when faced with conflicts and choices (Ling et al., 2012; Schouwenburg, 2004). Therefore, procrastination is a type of self-regulatory failure to execute intended work tasks (Nguyen et al., 2013), and in the work context it is putting off work-related action by engaging in non-work-related actions.

Previous research found that the causes of workplace boredom are much more complex than basic task monotony (Van Hooff & Van Hooft, 2017). Reijseger et al. (2013) used the job demands-

resources (JD-R) model to pinpoint the circumstances from which workplace boredom might emanate and established that being uninterested in tasks, passiveness, and incapacity to concentrate resulted in boredom. In accordance with the JD-R theory, employees' well-being is pivoted by the imbalance between job resources and demands at work, which is closely connected to their performance results via psychological processes such as *motivational process* (Schaufeli & Bakker, 2004). This implies encouraging employees to work for pleasure, development, and engagement (Bakker et al., 2010) through satisfying both internal and external human basic necessities with job resources (Bakker & Demerouti, 2012). For an employee to be physically present, but unmotivated to work and his/her potential not being effectively utilised can have negative repercussions for organisations.

Therefore, workplace boredom deserves more attention than it has been given. For organisations, workplace boredom can altogether be counterproductive and non-productive, since it impacts on the performance, motivation and productivity of employees and consequently increases the need to leave, which is costly for the organisation (Markos & Sridevi, 2010; Meyer, 2012). Additionally, previous studies have confirmed the relationship among workplace boredom and other organisational outcomes such as work engagement (Schaufeli & Salanova, 2014), and turnover intention (Harju et al., 2014).

Although workplace boredom is a universal phenomenon and connected to adverse consequences, there are barely any previous studies that have focused on workplace boredom and its adverse outcomes (Teng et al., 2018). This current study aims to investigate the relationships between workplace boredom, procrastination, work engagement and turnover intention and their associated outcomes from the prevalence of workplace boredom across various employees. The results could highlight the detrimental effects workplace boredom and procrastination could have, and therefore lead to potential strategies to curb the effects. By doing so, the study aims to increase our understanding of workplace boredom, and to find potential solutions to lessen its detrimental effects.

Literature review

Workplace boredom

The conventional view of workplace boredom is that the root causes of boredom are repetitive tasks and lack of variety and interest, resulting in chronic boredom (Schaufeli & Salanova, 2014). Workplace boredom is defined as "a negative, affective, motivational state of mind that results from a work environment that has little activity and provides no challenge and pleasure" (Reijseger et al., 2013 p.509). Workplace boredom has been described as an extreme consequence characterised by unstimulating work-related activities. This implies that employees encounter concentration challenges and negativity towards their work (Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010). Workplace boredom results when work tasks are seen to be unchallenging and meaningless (Van Hooff & Van Hooft, 2017; Van Tilburg & Igou, 2012).

Previous studies on boredom have determined that autonomy deficiency, lack of assistance from manager and colleagues (Reijseger et al., 2013); absence of task identity and skill variety (Bruursema, Kessler, & Spector, 2011); and unfriendly or unsupportive work environments (Fisher, 1993; Reijseger et al., 2013) are associated with workplace boredom. Boredom at work as drawn from literature, results from a mixture of low resources and low demands (Reijseger et al., 2013). Jobs that are dull, monotonous and repetitive are frequently mentioned as the main factors that lead to the workplace boredom experience (Fisher, 1991; Reijseger et al., 2013). This kind of job is unchallenging and provides jobholders with low external stimulation; thus it is emphasised as being an underlying cause of workplace boredom. On the other hand, studies (Prinzel & Freeman, 1997; Fisher, 1991) have revealed that boredom may also occur in mentally demanding environments. Although previous researchers have assessed how some characteristics of the job have predicted boredom (Loukidou, Loan-Clarke, & Daniels, 2009), further research is required for a better understanding of which job features are predictors of workplace boredom.

Bored employees lack focus at work, and they may begin to daydream or think about task-unrelated issues (Cummings, Gao, & Thornburg, 2016) and they also tend to display withdrawal behaviours such as working slowly, dealing with non-work activities, and others (Van der Heijden, Schepers,

& Nijssen, 2012; Van Hooff & Van Hooft, 2014). Most studies have reported that workplace boredom has adverse effects. Boredom affects employees' attitudes towards their jobs negatively, and frequent feelings of boredom result in a decrease in performance (Reijseger et al., 2013). Bored employees may feel that time goes by slowly or that the working day never ends; this results in being distracted. Therefore, workplace boredom is a result of unproductivity and counter-productiveness since it involves off-task activities. More so, experiencing boredom at work, results from poor motivation or from jobs that give workers ample time to engage in other activities that do not form part of the job (D'Abate, 2005).

Workplace boredom and procrastination

Employees experiencing boredom at work may push off pending tasks to a later time and do other activities, for example, using the internet and taking excessive breaks (Seçkin, 2018). The degree to which workers engage in trivial activities during work is as a result of their cognitive-motivational engagement at work and can be referred to as procrastination. Procrastination as a construct has not received much publicity (DeArmond, Matthews, & Bunk, 2013). Previous research has indicated that excessive procrastination is linked to adverse effects, for instance, not being well-paid and underemployment (Nguyen, Steel, & Ferrari, 2013), decreased confidence in one's own ability (Steel, 2007), and chronic boredom (Wan, Downey, & Stough, 2014).

Procrastination at work has been described as self-operating failure to carry out expected tasks (Nguyen et al., 2013). Previous research indicated that procrastination was related to being emotionally distant and exhausted (DeArmond et al., 2014), work anxiety (Wan et al., 2014), and poor remuneration (Nguyen et al., 2014). Employees are possibly motivated by positive emotions, taking breaks, and enjoyable activities at work. As such, those employees will be unproductive. An example: at work, procrastination was associated with workplace boredom (Metin et al., 2016) because it is a condition characterised by under-stimulation (Reijseger et al., 2013). Those employees with lessened physical-cognitive energy are not committed to their work. For that reason, they may be actively looking for distractions, for instance, phone usage, surfing the internet, coffee/tea break, or daydreaming. This leads to the assumption that workplace boredom is positively related to procrastination. Hence, the hypothesis that follows is formulated:

H_{1a} Workplace boredom has a positive relationship with procrastination.

Workplace boredom and turnover intention

Past research has found that boredom relates to turnover intention (Reijseger et al., 2013). The term *turnover intention* is used to describe the wilful intent of an employee to leave the organisation (Sui et al., 2015). The reason for researcher's focus on the intent to leave is that an individual's "intention to leave" is a highly accurate predictor of actual turnover (Teng et al., 1993; Jung, 2010). Bogossian et al. (2014) regarded turnover as the occurrence of an individual leaving the organisation or enterprise. Hayes (2017) revealed that a dissatisfied employee would have the idea of turnover, and turnover intention will be the last step before the actual turnover behaviour is acted out. The turnover intention, therefore, presented considerable predictability of the real turnover behaviour (McGilton et al., 2014). Hence, turnover intention describes employees' desire to leave their present job and their aim to find another job in the future.

Kim et al. (2016) argued that turnover intention was the result of being dissatisfied with the job, the idea of seeking employment, and finding another job elsewhere. The turnover of employees has been the centre of researchers' attention since the early 20th century (Hom, Mitchell, Lee, & Griffeth, 2012), because it is costly for organisations. Employees had two choices regarding turnover; either leaving the organisation (organisational turnover) (Hom, 2011), or leaving the occupation (occupational turnover) (Lane, Mathews, & Presholdt, 1988). The retention of highly skilled professional employees has become more complicated when considering the multi-cultural and diverse workplaces represented by South African organisations (Munro 2015). Hence, turnover intention is detrimental to organisations within the South African context due to the critical skills shortage. The scarcity of experienced and qualified employees can have detrimental effects, such as poor workmanship, administration and organisational functioning (Bothma & Roodt, 2012; 2013).

For decades, employees' turnover was resolved by hiring new employees within a given time, which was a significant problem to organisations (Larner, Wagstaff, Thelwell, & Corbett, 2017).

Employee turnover is costly, which can be ascribed to organisations accruing expenses associated with selecting, hiring and training new employees, loss of highly skilled employees and retained knowledge, and unrealised possibility to leave, all lead to different types of withdrawal behaviours (Chang, Wang, & Huang, 2013). For instance, Reijseger et al. (2013) pointed out that a work environment that is under-stimulating, characterised by imbalance between job resources and demands of low levels, can prompt high feelings of boredom. Extreme boredom was also related to high possibilities of leaving. According to Ahmed (2018) the major construct on turnover has only been ‘the intent to leave’.

The prevalence of workplace boredom causes workers to experience job dissatisfaction; hence it is unlikely that they will commit themselves to the job and it can prompt them to leave the organisation (Teng et al., 2018). The following findings support the notion that if employees are demotivated, they do not put in effort as they are not passionate about their work. The more demanding the job, the more they become bored. They will be unable to deal with changes and when challenged, will resort to leaving the organisation. Therefore, it was concluded that boredom can result in turnover intention (Reijseger et al., 2013). Mostly bored employees are unable to value and control their work as a result of monotonous tasks (Pekrun, 2006). Employees will instead opt for courses of action that produces adverse results (Whiteoak, 2014).

Employees' turnover intention with a view to leave the boredom-inducing environment is initiated by the existence of boredom (Reijseger et al., 2013). Teng et al. (2018) ascertained that workplace boredom is positively related to turnover intention. The extent to which employees experience boredom at work determines their level of turnover intention. It can thus, be expected that encountering work-related boredom might lead to having negative attitudes towards the job, and those attitudes may trigger intention to leave. Drawing from literature, the hypothesis beneath is suggested:

H_{1b} Workplace boredom has a positive relationship with turnover intention.

Procrastination and work engagement

Procrastination at work can be defined as “delay of work-related action by engaging in non-work-related actions, with no intention to harm the employer, employee, workplace, or client” (Metin et al., 2016 p.2). Procrastinating employees spend more time on trivial activities. Given this, employees engage in procrastinating behaviours such as instant messaging, longer breaks, browsing on social sites, e-shopping, and playing games (Köse & Metin, 2018; Lenhart, Purcell, Smith, & Zickhur, 2010). Previous studies concluded that procrastinating behaviours are very problematic as chronic procrastinators avoid tasks and deliberately look for distractions. Various researchers found that procrastination is linked to workplace boredom, low level of conscientiousness (Steel, 2012); lower income, exhaustion (Nguyen, Steel, & Ferrari, 2013); emotional detachment (DeArmond, Matthews, & Bunk, 2014); detrimental work behaviours, and underemployment (Metin et al., 2016; Wan, Downey, & Stogh, 2014).

Metin et al. (2018) found a negative relationship between procrastination and work engagement. Engagement of employees as described by Schaufeli and Bakker (2004) is the extent to which they feel passionate about their job and put discretionary effort into doing their work. Individuals with low levels of cognitive-physical energy are not enthusiastic when working, and ultimately lack commitment to their work. The afore-mentioned employees enjoy activities such as chatting or daydreaming. Contrary to this, those engaged are resilient and active, and enjoy working, which might potentially diminish the urge to engage in non-work-related activities (Steel & Klingsieck, 2016). Hence, doing off-work related tasks while at work could affect work engagement negatively, given that work engagement drives performance. This leads to the presumption that procrastination is negatively associated with work engagement. Hence, the following hypothesis is formulated:

H₂ Procrastination has a negative relationship with work engagement.

Work engagement and turnover intention

Alfes et al. (2013) suggested that engaged workers are unlikely to leave their jobs. Employee turnover occurs when an employee intends to leave the current organisation because he/she has found another organisation. Saks (2006) stated that work engagement could be conceptualised as an antecedent to turnover intention, i.e. a negative indicator of turnover intention. Positive energy mostly preoccupies engaged employees (vigour) who are persistently and actively absorbed in their work (dedication and absorption), with no overt room for thinking of leaving their jobs. De Lange et al. (2008) stated that low engagement at work predicted a possibility of identifying and examining factors which might lessen the possibility of transferring to different organisations. The finding was reiterated by the research of Van Schalkwyk et al. (2010) in which it was found that work engagement plays an important role in retaining employees. Also, when employees think of resigning from their job, they more often become more disengaged (Zhang, Tsingan, & Zhang, 2013). Therefore, intention to leave is adversely influenced by work engagement. Hence, the proposition; a negative relationship exists between work engagement and turnover intention, which brings about the following hypothesis:

H₃ Work engagement has a negative relationship with turnover intention.

The potential mediating effect of procrastination in the relationship between workplace boredom and work engagement

Since workplace boredom became apparent as a negative reciprocation to an uninteresting work environment, it can be expected that it would affect employees' attitudes towards their work negatively, and that their overall work engagement would diminish (Reijseger et al., 2013). Research shows that boredom results in a decrease in intrinsic motivation (Gkorezis & Kastritsi, 2017). The workplace boredom-work engagement link implies that workplace boredom impedes productivity, motivation, and well-being (Whiteoak, 2014), which in turn might diminish engagement among employees. The experience of boredom lessens engagement at work (Reijseger et al., 2013). Work engagement is associated with workplace boredom and the two are considered opposites (Warr & Inceoglu, 2012). Reijseger, Schaufeli, Peeters et al. (2012) established that workplace boredom is negatively linked to work engagement; also, this was the case in the South African context (Van Wyk et al., 2016). Hence, workplace boredom gives rise to disengaged

employees, followed by dire performance (Eastwood, Frischen, Fenske, & Smilek, 2012). Highly engaged employees could contribute to a positive working environment (Consiglio, Borgogni, Di Tecco, & Schaufeli, 2016).

Comparably, Schaufeli and Salanova (2014) stated that work engagement is conversely linked to workplace boredom. Resultantly, by demonstrating workplace boredom behaviours, employees might exhibit poor work engagement. Employees encountering boredom more often relate to adverse consequences and withdrawal due to the unfavourable negative condition (Bruursema et al., 2011; Game, 2007). Given this scenario, employees look for temporary relief strategies. They simply procrastinate in doing their work. If the circumstances remain without mitigation strategies from the organisation leadership, it usually incites employees to leave (Liu & Onwuegbuzie, 2012). Thus, it can be expected that by being bored and by procrastinating will result in further decrease of the employee's work engagement. Thus, procrastination may be an important explanatory mechanism in this negative relationship between workplace boredom and work engagement. Research on the link between workplace boredom and procrastination, as a potential mediating factor in this relationship, currently is non-existent. Hence, the hypothesis was formulated:

H4 Workplace boredom has an indirect relationship with work engagement through procrastination.

The potential mediating effect of work engagement in the relationship between procrastination and turnover intention

Work engagement is negatively related to procrastination and turnover intention. Workers that are engaged are likely to be active and resilient and enjoy their work. Thus, they would be less likely to engage in non-job-related tasks, for instance, taking long breaks. In terms of mediation effect, work engagement is anticipated to mediate the indirect relationship between procrastination and turnover intention. Procrastination is described as a self-operated failure to do work and is related to turnover intention (Nguyen, Steel, & Ferrari, 2013).

Unstimulating work environments result in employees becoming less engaged in their work and create time for employees to consider leaving the job (Fisher, 1991; Takawira et al., 2014). Any alternative job becomes more attractive and this leads to an increase in intention to leave. A study performed by Renn, Allen, and Huning (2013) found that procrastination is positively related to turnover. It can therefore be expected that besides procrastinating in the workplace, uncertainty, ambiguity and hurdles that employees may face when they intend to leave, could have a negative effect on their work engagement. Research on the link of procrastination-turnover intention with work engagement as a possible mediating factor in this relationship currently is non-existent. Accordingly, the following hypothesis is proposed:

H₅ Procrastination has an indirect relationship to turnover intention through work engagement.

Research design

Research approach

A quantitative, non-experimental study was performed which allows variables to be measured and analysed, and results to be compared. Thus, the design was considered suitable since participants were not experimented upon, which curbed ethical dilemmas (Mann, 2003). The specific research design used was a cross-sectional survey which is research done for prevalence approximation of result(s) for people at a given moment (Krickeberg, Pham, & Pham, 2012). The same technique has been used for data collection in some of the recent studies on similar topics (e.g. Van Wyk et al., 2016). The cross-sectional survey design enables the researcher to find a wider overview of the sample from the total population (Mouton, 2001). A cross-sectional survey was proper as variables were measured concurrently and allowed evaluation of interconnection among variables (Struwig & Stead, 2001). The research objectives are correlational in nature as they determined the relationships among constructs' (i.e. workplace boredom, procrastination, work engagement and turnover intention).

These types of studies are analytical and descriptive. Therefore, it was considered necessary for the study as it permits for data collection among South African employees in the North-West province and for testing expected hypotheses (Pandis, 2014). The present study used the questionnaire as the tool for collecting data. The method was adjusted and adapted for application in compiling the questionnaires from different sources with admissible cut-offs score of reliability and convergent validity. The design permitted a remarkable sample of employees as part of the research and was suitable for information collection using a questionnaire completed by respondents at a certain point in time to determine the relationships among variables (De Vos, Strydom, Fouché, & Delport, 2012). Accordingly, questionnaire booklets were dispersed for data collection from research participants, and gathered primary data was used.

Research method

Research participants

Table 1 presents a breakdown of the participants in this study.

Table 1

Characteristics of the participants (N = 328)

Item	Category	Frequency	Percentage (%)
Gender	Female	231	70.43
	Male	97	29.57
Education	High school	84	25.61
	Diploma	38	11.59
	Degree	113	34.45
	Postgraduate degree	93	28.35
Race	African	242	73.78
	Asian	1	0.31
	Coloured	11	3.35
	Indian	3	0.91
	White	71	21.65

The final sample consisted of 328 South African employees from the North-West province, which indicated an 82% response rate drawn from the 400 booklets distributed. The average age of respondents was 31.75 (SD=9.08). Most of the participants were female (70.43%) and 29.57%

were male. In terms of race most participants were African (73.78%), followed by white people (21.65%). The majority of the participants had a university degree (34.45%), followed by those with a postgraduate degree (28.35%).

Measuring instruments

The measuring instruments that follow were used to measure the variables in this study:

Biographical questionnaire: a biographical questionnaire was compiled and used to gather data concerning the participants' gender, level of education, length of employment, language, age, and ethnicity. The information was gathered to indicate the general characteristics of the sample so that the reader can fully consider the composition of the sample and establish whether the results are generalisable to the general population.

Workplace boredom was measured by applying the Dutch Boredom Scale (DUBS), developed by Reijseger et al. (2012). This one-dimensional scale was used to measure workplace boredom on a 5-point rating scale ranging from 1 (Never) to 5 (Always). Six items measured workplace boredom (e.g. “I feel bored at my job” and “I tend to do other things during my work”). This scale has a stated Cronbach's alpha coefficient of 0.80 and 0.78 (Reijseger et al., 2012; Van Wyk et al., 2016).

Procrastination was measured by means of the Pure Procrastination Scale (PPS) (Steel, 2010). The PPS is a 12-item scale that measures unwarranted delay. This study used the 12 items scale to measure the three constructs: procrastination arousal (e.g. “I am continually saying I will do it tomorrow”); avoidance (e.g. “I am not very good at meeting deadlines”); and decisional (e.g. “I delay making decisions until it is too late”). It is scored on a 5-point Likert scale ranging from 1 (Never) to 5 (Always). This scale has a noted Cronbach's alpha coefficient of 0.92 (Steel, 2010).

Work engagement was measured using the Ultra-Short Utrecht Work Engagement Scale (UWES-3) (Schaufeli et al., 2017). This measure comprises 3 items that are all scored on a 7-point frequency rating scale ranging from 0 (Never) to 6 (Always). The Cronbach's alpha coefficients vary from 0.93 to 0.96 (Schaufeli et al., 2017). Only one item from each of the building blocks of

work engagement (i.e. vigour, dedication and absorption items) was used to measure the construct (Schaufeli et al., 2017). This current study used three items to measure the three components of work engagement – vigour (“At my work, I feel bursting with energy”); dedication (“I am enthusiastic about my job”); and absorption (“I am immersed in my work”). The UWES-3 is the most recent work engagement scale with acceptable reliability (Schaufeli et al., 2017).

Turnover intention was measured with one item from the Turnover Scale developed by Sjöberg and Sverke (2000). Therefore, the single item (“I am actively looking for other jobs”) measured on a 5-point Likert-type scale that ranges from 1 (Strongly disagree) to 5 (Strongly agree) was used, where a high score connotes a stronger intention to leave the job. This item was used since it more specifically measures *active* turnover intention as opposed to merely a passive feeling of wanting to leave the organisation.

Research procedure

Prior to data collection, the researcher obtained formal approval from the Scientific Committee as well as from the Economic and Management Sciences Research Ethics Committee (EMS-REC) to carry out the study (Reference number: NWU-00809-19-A4). Following this, permission was obtained from organisations that participated in the study, to collect data in their work environments, and they were contacted via email. A total of 400 questionnaires printed survey booklets were physically distributed to the employees. The questionnaire’s front page stated the purpose of the research as well as other important details regarding informed consent. It took roughly 10 minutes to complete the survey, and respondents were given a maximum of one week to complete it (i.e. five working days). The purpose of the study and ethical considerations were explained to participants regarding the voluntary and confidential nature of the research. Furthermore, participants were informed that by no means could they be coerced to participate and on no account would any personal identity be revealed to anyone.

Participants then received the hardcopy questionnaire (booklet) with the study’s fundamental purpose specified on the booklet cover. To ensure confidentiality, completed questionnaires were sealed in envelopes and kept in a secured box which was placed in a communal area at a central

position within the organisation where everyone had access. Participants were therefore, also able to insert empty booklets to feign participation if they so wished. After data collection, the responses were captured on an Excel spreadsheet, exported to Mplus then analysed statistically. Information was stored as password-protected files. The completed questionnaires were kept in a cabinet locked in the office of the supervisor for a minimum of 5 years and will remain the property of North-West University. Results are disseminated in the form of a dissertation, which is made public on the NWU electronic repository on completion. Furthermore, results are also to be shared on appropriate occasions such as during conferences and in peer-reviewed academic journals. Any participant that contacts the researchers via email is given a summary of the study results, when available and if requested. From the sum of 400 survey booklets dispatched, 328 were filled in, giving an 82% response rate.

Statistical analysis

In Mplus 8.4 (Muthén & Muthén, 2019) confirmatory factor analysis (CFA) was conducted first to check whether the measurement model was valid. Secondly, to determine the factorial validity of the constructs in a measurement model with confirmatory factor analysis (CFA). The CFA indicated whether the observed indicators (items) adequately loaded onto the suggested factor and gave the variance explained in each item. The Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), Square Root Mean Residual (SRMR) and Root Mean Square Error of Approximation (RMSEA) were considered to assess the fitness of the CFA model. The values acceptable for the CFI and TLI were 0.90 and above, for the SRMR values were smaller than 0.08, while for the RMSEA values were 0.08 and below (Van de Schoot, Lugtig, & Hox, 2012). The scales Cronbach’s alpha and omega coefficients of reliability were computed, as contemporary study presented the debatable nature of the alpha coefficient and sought different reliability types to be established in research, namely omega coefficient (Peters, 2014).

The correlation matrix was investigated to ascertain the association among the variables. The applied correlation coefficient significance cut-off was 0.30 and higher for medium effect; 0.50 and above for a significant outcome (Cohen, 1992). The 95% level ($p < 0.05$) was set as the overall statistical significance. For the specified relationships, a structural model was set out as

conceptually illustrated in Figure 3 below to demonstrate the path coefficients. In the model, magnitude and sign of the beta coefficients were used to either accept or reject the stated hypotheses. The significance ($p < 0.05$) was used for the betas. For the indirect relationships, bootstrapping was used with a resampling option, generating 95% confidence intervals with a focus on the results for the specific indirect effects. Mediation occurs when the 95% confidence interval (CI) for the estimates of the indirect effect does not include zero.

Results

Factor analysis

All attempts at initial CFA models were unsuccessful as the modelling of the Procrastination factors were either too highly correlated (violated discriminant validity) or resulted in a non-positive definite matrix. Therefore, it was decided to conduct exploratory factor analysis (EFA) with parallel analysis (PA) on the Procrastination items to investigate the potential challenges with the theorised three-factor model in the current sample. Oblique rotation was implemented with the direct oblimin option. Results of the EFA with PA are provided below in Figure 2:

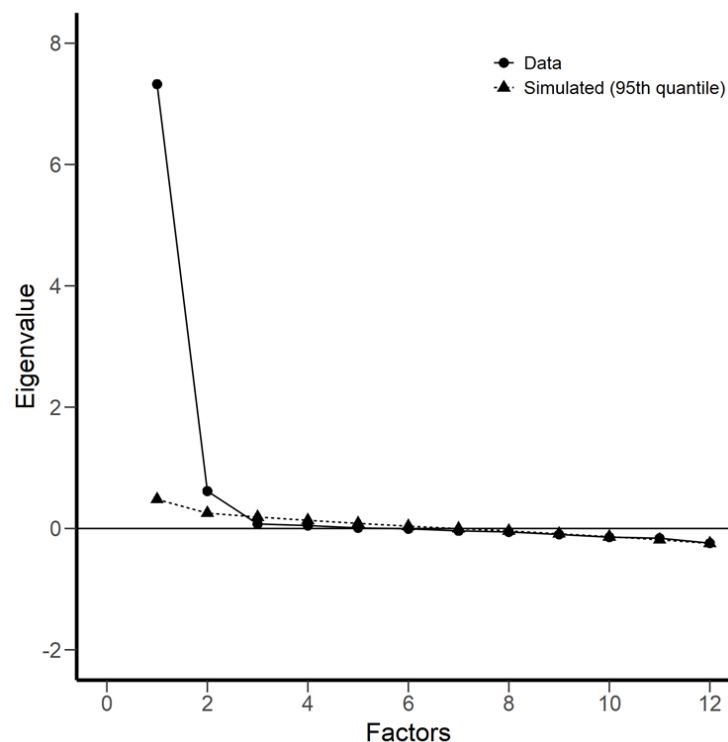


Figure 2. *Screeplot for the EFA with PA*

As can be concluded from Figure 2 above, the parallel analysis revealed only two factors above the randomly generated data line with no third factor above the simulated data line, indicating a two-factor model for Procrastination instead of the hypothesized three-factor model. Table 2 below displays the factor loadings apparent from the analysis. Factor loadings of 0.30 and above were considered significant in the context of the EFA.

Table 2

Factor Loadings

	Factor 1	Factor 2	Uniqueness
Q24	0.898	...	0.357
Q25	0.663	...	0.279
Q26	0.669	...	0.281
Q27	0.564	0.338	0.305
Q28	0.412	0.483	0.324
Q29	...	0.646	0.404
Q30	...	0.911	0.152
Q31	0.481	0.397	0.347
Q32	...	0.877	0.270
Q33	0.871	...	0.361
Q34	0.795	...	0.361
Q35	0.645	...	0.408

Note. Applied rotation method is oblimin.

As reflected in Table 2, two factors for Procrastination were apparent with loadings of above 0.30. However, there were three items that displayed double loadings (Q.27, Q.28 and Q.31). These three items' text appear to tap a 'delaying' aspect of the concept and had to be removed from the respective factors and the two new factors (Factor 1: Decisional; Factor 2: Promptness) were included in the new CFA model as components of Procrastination.

CFA: Model fit and loadings

The new CFA model with the adjusted Procrastination factors was a good fit to the data: CFI = 0.95, TLI = 0.94, SRMR = 0.056. The standardised item loadings as well as the correlations for this model are presented below:

Table 3

Standardised loadings for the latent factors

Factor	Item	Loading	S.E.	<i>p</i>	<i>R</i> ²
Workplace Boredom					
	Q18	0.78	0.03	0.001	0.61
	Q19	0.87	0.02	0.001	0.76
	Q20	0.76	0.03	0.001	0.58
	Q21	0.81	0.02	0.001	0.66
	Q22	0.84	0.02	0.001	0.70
	Q23	0.46	0.05	0.001	0.21
Procrastination: Decisional					
	Q24	0.78	0.03	0.001	0.61
	Q25	0.89	0.02	0.001	0.78
	Q26	0.90	0.02	0.001	0.82
	Q33	0.79	0.03	0.001	0.63
	Q34	0.83	0.02	0.001	0.69
	Q35	0.81	0.02	0.001	0.65
Procrastination: Promptness					
	Q29	0.82	0.03	0.001	0.68
	Q30	0.95	0.01	0.001	0.90
	Q32	0.87	0.02	0.001	0.75
Work Engagement					
	Q6	0.66	0.04	0.001	0.43
	Q7	0.85	0.03	0.001	0.72
	Q10	0.86	0.03	0.001	0.73
Turnover Intention					
	Q16	1.00	0.00	0.001	1.00

Notes: S.E. = Standard error; All *p*-values < 0.001; Turnover Intention operationalised as a latent composite based on one item.

As illustrated in Table 3 above, all the items had significant loadings (*p*-values=0.001) with their corresponding latent variables. Most of the loadings (λ) were above 0.70 and the lowest loading

was that of workplace boredom ($\lambda = 0.46$). The item with the highest factor loading was procrastination, specifically promptness item Q.30 (“I am continually saying I’ll do it tomorrow”); ($\lambda = 0.95$; S.E. = 0.01; $p=0.001$). These were items with the highest explained variance ($R^2 = 1.00$) and ($R^2 = 0.90$) respectively. The lowest loading was for workplace boredom item Q.23 (“At my work, there is not so much to do”); ($\lambda = 0.46$; S.E. = 0.05; $p = 0.001$ and $R^2 = 0.21$).

Correlations, average variance extracted (AVE), and reliabilities

Table 4

Correlations, AVE and composite reliability for the latent variables

Variables	AVE	1	2	3	4
1. Workplace Boredom	0.59	(0.89)			
2. Procrastination: Decisional	0.70	0.81 ^b	(0.93)		
3. Procrastination: Promptness	0.78	0.84 ^b	0.78 ^b	(0.91)	
4. Work Engagement	0.63	-0.78 ^b	-0.63 ^b	-0.65 ^b	(0.83)
5. Turnover	n/a	0.72 ^b	0.60 ^b	0.57 ^b	-0.62 ^b

Notes: Composite reliability coefficients in brackets on the diagonal; All correlations statistically significant $p < 0.001$; a = Medium effect size; b = Large effect size; n/a = Not applicable

As demonstrated in Table 4 above, all correlations were significant with large effect sizes. However, the directions of the correlational relationships differed. Workplace Boredom was positively related to the two components of Procrastination, Decisional ($r = 0.81$) and Promptness ($r = 0.84$). Workplace Boredom was negatively associated with Work Engagement ($r = -0.78$), but positively related to Turnover Intention ($r = 0.72$). Work Engagement was negatively correlated with Turnover Intention ($r = -0.62$), Decisional ($r = -0.63$) and Promptness ($r = -0.65$).

In terms of the AVE, it can clearly be seen that all the variables had values of above 0.50, indicating that more than 50% of the variance is explained in the respective factors (Farrell, 2010; Hair, Ringle, & Sarstedt, 2011). Furthermore, the composite reliabilities of all the factors were above the cut-off point of 0.70 and were therefore accepted to have internal consistency (Litwin, 1995).

Based on the validity of the measurement model, the structural paths were put onto the model to estimate a structural model. This structural model included indirect effects and was bootstrapped 10,000 times to generate bias corrected 95% confidence intervals.

Structural model: Direct paths and indirect paths

Table 5

Regression results for the structural model

Structural path: Direct paths	β	S.E.	p	Result
Workplace Boredom → Procrastination: Decisional	0.83	0.02	0.001	Significant
Workplace Boredom → Procrastination: Promptness	0.91	0.02	0.001	Significant
Workplace Boredom → Turnover Intention	0.45	0.05	0.001	Significant
Procrastination: Decisional → Work Engagement	-0.24	0.09	0.013	Significant
Procrastination: Promptness → Work Engagement	-0.54	0.09	0.001	Significant
Work Engagement → Turnover Intention	-0.17	0.06	0.006	Significant

Notes: β = beta coefficient; S.E. = Standard error; p = Two-tailed statistical significance

The path outcomes indicated that all direct path hypotheses were supported; thus all structural paths were statistically significant with $p < 0.05$. Workplace Boredom displayed significant positive path associations with Procrastination: Decisional ($\beta = 0.83$, S.E. = 0.02; supporting H_{1a}), Procrastination: Promptness ($\beta = 0.91$, S.E. = 0.02; supporting H_{1a}) and Turnover Intention ($\beta = 0.45$, S.E. = 0.05; supporting H_{1b}). Both Procrastination factors had statistically significant negative path relationships with Work Engagement: Decisional ($\beta = -0.24$, S.E. = 0.09; supporting H_2) and Promptness ($\beta = -0.54$, S.E. = 0.09; supporting H_2). Lastly, Work Engagement had a significant negative path to Turnover Intention ($\beta = -0.17$, S.E. = 0.06; supporting H_3).

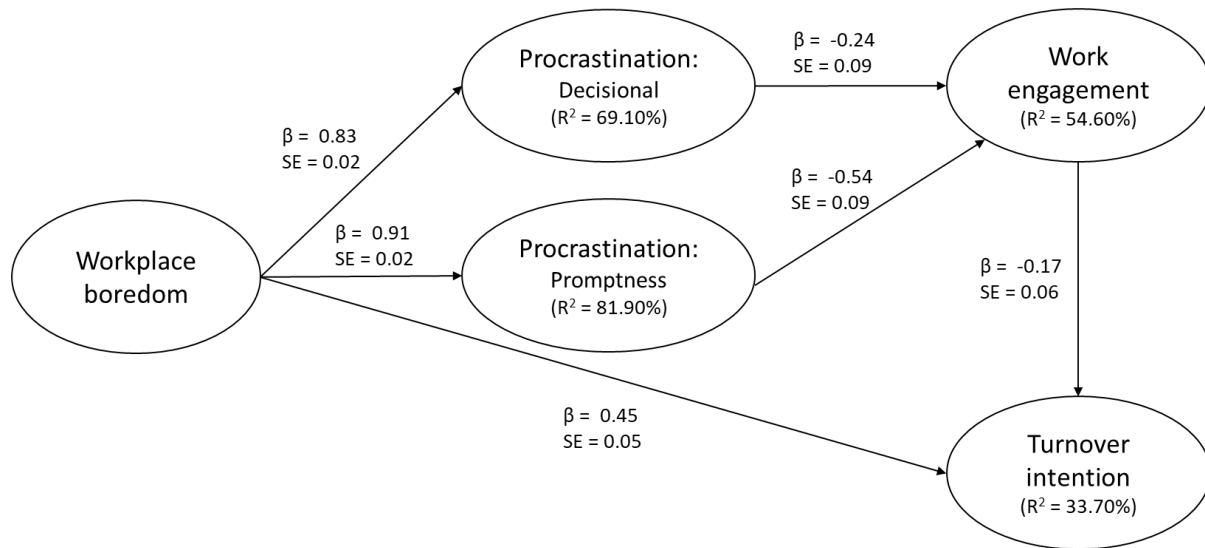


Figure 3. *The final structural model with standardised direct paths included.*

In terms of the indirect relationships in the model: Procrastination: Promptness had a significant indirect link to Turnover Intention through Work Engagement (Estimate = 0.09; 95% CI [0.03, 0.16]) and the same was the case for Procrastination: Decisional (Estimate = 0.04; 95% CI [0.01, 0.11]). Furthermore, Workplace Boredom showed a significant negative indirect relation to Work Engagement through both Procrastination: Decisional (Estimate = -0.20; 95% CI [-0.36, -0.04]) and Procrastination: Promptness (Estimate = -0.49; 95% CI [-0.67, -0.32]).

Discussion

Outline of the results

The purpose of this current study was to examine the relationships between workplace boredom, procrastination, work engagement and turnover intention within the South African context. The outcomes supported all five hypotheses of the study. Firstly, results showed workplace boredom is positively related to procrastination. However, in this study a different procrastination construct emerged, i.e. three types were expected but there were only two types of procrastination, namely, decisional and promptness according to the data. *Decisional* procrastination can be described as a

cognitive process associated with deliberate delay of starting or finishing tasks by creating justifiable and logic reasons (Ferrari, 2010). *Promptness* procrastination is the behavioural intention involving postponing a task (Ferrari, 2012). Therefore, this two-factor conceptualisation does have grounds within the literature.

Workplace boredom had a positive path to both procrastination *promptness* and *decisional*. Therefore, the experience of workplace boredom contributes to employee procrastination at work. This finding is supported by a study that found that workplace boredom was related to procrastination (Metin et al., 2016); thus, implying under-stimulation (Reijseger et al., 2013). Low-stimulated employees are not devoted to work; hence, more likely distracted from work and could perform off-task activities such as instant texting or having long breaks. This is supported by a study conducted by Metin et al. (2018) in which it was established that procrastinating employees spend a significant amount of work hours on non-work-related activities. D'Abate (2005) found that procrastination is caused by various factors, for example, feeling strained or disinterested. This result supported H_{1a} .

In terms of the link between workplace boredom and turnover intention, results revealed a significant positive direct relationship between the two (supporting H_{1b}); thus, implying that the more boredom an employee experiences at work, the more likely that employee is to leave the job. This is supported by studies which have also found that workplace boredom results in an increase in intention to leave in contexts outside South Africa (Harju, Hakanen, & Schaufeli, 2014; Kass et al., 2001; Mann, 2017). According to Fisher (1991) unstimulating work environments create free mental time for employees to think about leaving the job. Hence, the more employees experience boredom, the more they may intend to leave the job. The results indicated that extremely bored employees displayed greater turnover intention.

Additionally, the results also revealed a negative path between procrastination and work engagement (supporting H_2). This implies that procrastinators are likely to be less engaged in their work. The more procrastination experienced by the employees the less they are engaged in their work. This means that employees with high energy levels and mental resilience (i.e., engaged employees) (Schaufeli & Bakker, 2003) are not as distracted while working. This result is

supported by the literature as Metin et al. (2018) found that procrastination is negatively associated with work engagement.

Work engagement was found to be negatively related to turnover intention (supporting H_3). This indicates that work engagement lessens the active turnover intention strategies of the employee. Previous research supports the notion that a motivational condition implied in the engagement of employees (Schaufeli et al., 2002) could assist them to be driven in changing the situation at work rather than contemplating leaving the organisation (Coetzee & Van Dyk, 2018).

The study outcomes showed that procrastination mediated the relationship between workplace boredom and work engagement (supporting H_4). Workplace boredom had a significant negative indirect relationship to work engagement through decisional and promptness procrastination. Research has reported that workplace boredom results in a decrease in intrinsic motivation (Gkorezis & Kastritsi, 2017). Previous research on the relationship between work-related boredom and work engagement found that workplace boredom is detrimental to the well-being and productiveness of employees (Whiteoak, 2014). It shows that the existence of boredom at work reduces work engagement (Reijseger et al., 2013) and that the mediating effect of procrastination is likely to be a mechanism through which this occurs. Thus, H_4 was supported.

This current study investigated the mediating role of work engagement in the procrastination-turnover intention relationship. The results showed that procrastination had a significant indirect association to turnover intention through work engagement. Our findings contributed a new understanding to the procrastination discourse by revealing that work engagement suppressed procrastination and the link with participants' intentions to leave. Thus, increased work engagement mitigated the detrimental effect of procrastination on the intention to leave. In this regard, Storm and Rothman (2003) pointed out that work engagement serves as a buffer, which may simplify the cushioning effect of work engagement on procrastination-turnover-intention link. Hence, the procrastination-work engagement-turnover intention relationship results encourage the need to nurture the work engagement of employees. This entails that procrastination lessens their sense of vigour, dedication and absorption; thus leading to elevated intention to leave.

Practical implications

The results have important implications for employee functioning and organisational retention practices. Organisations might consider boredom at work and tactics to curb the damaging impact on work engagement. Managers ought to be informed about the potential cushioning effect of work engagement on the procrastination-turnover intention relationship and of procrastination on the workplace boredom-work engagement link. They should implement plans to foster employees' work engagement and deal with the adverse effects of workplace boredom, procrastination and turnover intention at work (cf. Einarsen et al., 2009; Matthews et al., 2000). Past research has shown the importance of challenging job demands and job resources (such as opportunities to learn) for optimal work engagement levels, and organisations should strongly consider this as a starting point in addressing work engagement levels (De Beer et al., 2013; Reijseger et al., 2013). Not only will this potentially address workplace boredom but also work engagement. However, the importance of context should never be underestimated as employees to a certain job are more prone to boredom and procrastination as opposed to others, indicating the need for creative solutions.

Limitations of the study

This study has limitations which should be acknowledged. Firstly, the cross-sectional design limits us to make causal and associations' interpretations. Thus, researchers can make use of longitudinal data to further validate the results (Taris & Kompier, 2006). However, we made use of cross-sectional data because it provides proof of relationships among different constructs and for those relationships winnow out alternative explanations (Spector, 2019).

Secondly bias is attached to self-report questionnaires. Research participants completed a self-report questionnaire, which might rapidly increase associations among variables due to variance attributable to the measurement method (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Some

constructs such as procrastination are difficult to operationalise. Also, utilising self-reported variations from the norm is a suitable explanation (e.g., Krause & Freund, 2014). Nonetheless, Spector (2006) asserted that self-report measurements have not exactly and spontaneously escalated relations between constructs. The use of self-report questionnaires to investigate prevalence of workplace boredom and procrastination is reasonable; because they are subjective and might not be measured by other means.

Finally, the data was collected by means of non-probability sampling. Hence, the sample was not a total representation of South African employees. It is important to consider that even though findings were drawn from a sample made up of various workers within South Africa it should still not be generalised across occupational groups and need to be interpreted with care.

Conclusion

The study findings depicted that workplace boredom is positively related to procrastination. Results showed that workplace boredom also has a positive direct relationship with turnover intention. The outcomes portrayed a negative association between procrastination and work engagement. Also, work engagement was shown to be negatively correlated with turnover intention. Furthermore, the mediation model suggests that procrastination mediated the indirect association between workplace boredom and work engagement. A significant indirect relation was found between procrastination and turnover intention past work engagement. The results showed the vital role of work engagement in minimising turnover intention and repercussions of procrastination on employees' engagement and voluntary exit from the organisation initiated by workplace boredom. Work engagement is crucial in cushioning negative consequences of procrastination on turnover intention and is essential for retaining skilled employees and enhancing productivity and profits in the present unstable economic environment.

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CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Conclusions, Limitations and Recommendations

This chapter serves to outline the conclusions regarding the results of the study that are aligned to the general and specific objectives. Furthermore, the study limitations are also presented, as well as the recommendations for practice and future research.

3.1 Conclusions

Although workplace boredom is common in a wide variety of work environments, empirical research is relatively limited. Workplace boredom has received little attention from contemporary researchers (Tsai, 2016). Different views on workplace boredom exist in literature, but not much is known about workplace boredom and its consequences within the South African context. Thus, it can be said that study findings may contribute to the understanding of workplace boredom and shed light on future studies that will be conducted in the South African context. Given the fact that workplace boredom has a negative effect on both individual and organisational outcomes, it is vital for organisations to take boredom into account as an organisational problem (Reijseger et al., 2013). Hence, the general objective of the research was to explore the relationships among workplace boredom, procrastination, work engagement, and turnover intention in the work context of South Africa.

Firstly, the specific study objective was to determine how workplace boredom, procrastination, work engagement, and turnover intention are conceptualised in the literature. *Workplace boredom* is seen “as a negative state of mind that emanates from a work context that is characterised by unpleasant and unchallenging few tasks” (Reijseger et al., 2013, p. 26) or an emotional state which occurs when work situations or tasks are perceived to be meaningless and unchallenging (Van Hooff & Van Hooft, 2017; Van Tilburg & Igou, 2012).

Procrastination is all about deliberate and voluntary delay, be it decisional or promptness (Steel, 2010). Hence, procrastination could be irrational behaviour voluntary delay of some intended course of action and realising its disadvantage (Steel & Klingsieck, 2016). Procrastination is complex and includes cognitive and behavioural aspects. This study found a two-component model

of procrastination. Specifically, *decisional* procrastination which is a cognitive process associated with deliberate delay of starting or finishing tasks by creating justifiable and logic reasons (Ferrari, 2010). *Decisional* is measured by items such as “*I am continually saying I’ll do it tomorrow*”. Then the second component, *promptness*, is the behavioural intention involving postponing a task which shows lack of planning (Ferrari, 2012). *Promptness* is measured by items such as “*I don’t get things done on time*”.

Work engagement on the other hand, a popular research construct, has been defined as “a positive and fulfilling work-related state of mind, which is characterised by the components vigour, absorption and dedication” (Schaufeli, Bakker, & Salanova, 2006, p.74). Finally, *turnover intention* is described as the deliberate and intentional action of wanting to exit from the organisation (Tett & Meyer, 1993). Moreover, Ghayyur and Jamal (2012) also indicated that turnover is based on an intention to voluntarily leave from an organisation. This objective was achieved by comprehensively outlining the literature in the previous chapter of the manuscript.

The second study objective was to determine direct relationships between workplace boredom, procrastination, work engagement and turnover intention in accordance with the conceptual research model within the South African work context. In line with the literature, results of this study showed that workplace boredom is positively related to procrastination and turnover intention (Harju, Hakanen, & Schaufeli, 2014; Reijseger et al., 2013). Additionally, results showed that procrastination was significantly and negatively related to work engagement (Metin et al., 2016). Similarly, work engagement was significantly and negatively related to turnover intention (Seçkin, 2018). Thus, bored employees are prone to procrastinate, to be disengaged and will likely leave their jobs. These results were in line with previous peer-reviewed studies.

The third objective was to ascertain the indirect relationships between workplace boredom, procrastination, work engagement and turnover intention. Procrastination mediated the indirect association between workplace boredom and work engagement while work engagement mediated the indirect association between procrastination and turnover intention. Current evidence showed that bored employees at work will be less engaged (Reijseger et al., 2013; Van Hooff & Van Hooff, 2017). Therefore, employees are vulnerable to experience boredom at their work (Teng et al.,

2018). If the situation remains in the absence of corrective measures from the managers, this ultimately forces individuals to resort to leave (Liu & Onwuegbuzie, 2012).

Lastly, the final study objective was to make recommendations for practice and future research. This objective was fulfilled and is presented in the subsequent sections of the paper.

3.2 Limitations

Despite its theoretical contributions, this study also has several limitations. Firstly, the data used in this study was cross-sectional. The constructs were measured simultaneously. Although the associations can be investigated, it is difficult to deduce root causes. The research relied on previously reviewed literature in formulating the hypotheses; the design limitation remains inconclusive without longitudinal data.

All measures were of a self-report nature, meaning that subjective interpretations do differ, which can impact on this study's entire results. Subjective phenomena such as boredom and procrastination heightened the likelihood of receiving biased responses. Still, Spector (2019) argues that the widespread use of cross-sectional design with self-report scales is held in low esteem. Cross-sectional design was used to provide evidence for relationships among variables and sheds light on explanations of causal relationships.

The data was gathered by means of convenience sampling which is a non-probability method. The sample comprised various employees. Hence, it is expected to not reflect the population. This resulted in underrated correlations among the variables. Also, because participation was voluntary, some sectors may be over-represented in our sample while others were under-represented, and results may not be representative of the total population.

Notwithstanding the aforesaid limitations, the results of the study supported all the hypotheses. However, careless generalisation of the results is cautioned.

3.3 Recommendations

3.3.1 Recommendations for practice

Workplace boredom is problematic since workers as well as organisations are negatively impacted by the construct (Harju et al., 2016). The findings of this study are significant to the organisation while the outcomes connect workplace boredom to several negative effects such as decreased work engagement through procrastination and an increased intention to leave (Harju, Hakanen, & Schaufeli, 2014). Thus, organisations should consider strategies aimed at improving their performance to function optimally by assessing the aspects that make their employees dissatisfied and in so doing reduce the negative effects of boredom and procrastination in order to achieve their strategic intent.

With regard to curbing workplace boredom, this study stresses the importance of creating something instead of doing nothing that could be useful to both the individual and the organisation (Bakker et al., 2012). Combating boredom includes simple and practical things such as creating opportunities to be creative, motivated, challenged enough, and finding meaning in their job (Van Hooff & Van Hooft, 2014; Wrzesniewski & Dutton, 2001). In fact, job resources such as autonomy, support from managers and co-workers, task identity, skill variety, friendly and supportive work environment – interventions that have proactively been put in place by management (Reijseger et al., 2013) – can all assist in addressing workplace boredom.

Job crafting is essentially about employees increasing resources and seeking challenges in their jobs in order to motivate themselves at work hence, in the present study, job crafting is being recommended as an effective way for employees to gain resources that protect them from workplace boredom, increase their work engagement, and help them to accumulate further job resources to maintain their well-being over time (Tims, Bakker, & Derks, 2012). From a practical point of view, it will be advisable for organisations to see whether job crafting would have an impact on employee motivation beyond daily or weekly effects. Drawing from the work of Lally and Gardner (2013), we suggest that to yield more lasting effects, job crafting should be cultivated into a workplace habit and becomes the norm. If organisational culture enables employees to

constructively reflect upon and respond to their affective cues, such as early signals of boredom, they may automatically adapt their work behavior. Thus, fostering a climate that encourages employees to address the causes of boredom instead of suppressing the emotion, can improve their personal growth, professional development and work performance.

As mentioned earlier, workplaces that contain insufficient resources and demands may increase boredom, which might eventually lead employees to engage in irrelevant tasks. Therefore, organisations should consider uncover possible benefits ensuing from underload such as innovation and job crafting. Additionally, job redesign and job enrichment strategies can also be considered to enhance motivation by increasing meaning, learning and development (Parker, 2014). Job redesign or enrichment initiatives including use of breaks, shorter shifts, alternating activities etc. should always be considered as the first option in attempting to reduce the incidence of boredom at work. Organisations should measure workplace boredom and consider strategies to counter its negative effects on organisational outcomes, including work engagement as discussed in this study.

Organisations benefit from engaged employees who fully immerse themselves in their work (Kahn, 1992), whereas bored employees are more likely to disengage from investing their resources into their work. Therefore, employees should be granted the opportunity to increase their challenges at work to sustain their well-being and to avoid becoming bored in their jobs. For instance, enabling employees to volunteer for projects that interest and challenge them could actually give their well-being and work performance a new boost. Whether it is adding a challenging aspect to one's job (e.g. new tasks or approach), or adopting a novel work role (e.g. from a cashier to a sales person), the action should emerge from individual motivation to better make use of one's capabilities. Previously, Schaufeli (2015) showed that engaging leaders, who connect, strengthen and inspire their co-workers, indirectly enhance levels of engagement by increasing co-workers' job resources, as bored employees may lack the energy needed to undertake proactive behaviors. In such situations, employees might benefit from supervisor coaching, support, encouragement to craft their jobs, or some other activating intervention to break the vicious cycle of passiveness, and to turn negative loss cycles into positive ones.

It is important to consider job complexity and employee capabilities in their current positions as a way to address workplace boredom challenge. Employee boredom coping levels and strategies could provide a valuable tool in helping organisations to identify low boredom-copers and offer them individualized solutions. Thus, in the short term, individuals could be trained in the use of more constructive boredom coping techniques, regardless of their susceptibility to boredom. Much more research is needed before it is possible to specify exactly which strategies would be most useful, and clearly training would require tailoring to suit specific contexts. However, the emphasis should be on encouraging the use of engagement styles of coping, characterised by increased task involvement and innovativeness (Game, 2007).

Furthermore, to avoid procrastination, this study emphasises the importance of daily effort. Procrastination might transform into a debilitating habit when left unchecked (Klingsieck, 2013). To solve the procrastination problem, it is vital to accept its existence to stop it from persisting. Procrastination can be reduced by being organised, setting specific, measurable, attainable, realistic and timely goals (Metin et al., 2016). Also, employees must set deadlines for completion of tasks within a specified period of time and create schedules. Employees are encouraged to be more outcome-orientated and to bear in mind that time is the most valuable resource; hence it must not be wasted (Rozental et al., 2017). On the other hand, organisations should use incentives to appraise and motivate employees (Fernie et al., 2017). Therefore, this study presents a viable strategy to prevent employees from becoming bored; not to be procrastinators and to enhance their work engagement. The findings highlight the importance of managing workplace boredom and procrastination as they demonstrate benefits for sustaining work engagement and limit intention to leave.

The negative consequences of procrastination have led to the development of various intervention programs and to the publication of numerous self-help books to overcome procrastination. The works written by research psychologists (e.g., Ferrari, 2010; Steel, 2012) indicate that procrastination is primarily a self-regulation failure and an impulse-related issue. Therapeutic strategies in overcoming procrastination pertain to techniques of cognitive restructuring (to tackle negative cognitions), relaxation exercise (to tackle negative affect), time restriction, and, paradoxical interventions (Steel & Klingsieck, 2016). Most trainings aiming at overcoming

procrastination foster strategies concerning self-management such as goal setting, time management, planning, monitoring, and creating the right environment for working. Procrastination can decrease the productivity and performance of the organisation. The effects of work related procrastination were discussed. So organisations can use the results of this study to enhance effective work engagement. Also, this may help in the design and evaluation of strategies to overcome procrastination.

To foster a working environment that maintains a reasonable turnover rate, it is key to know that each organisation differs. Management ought to be aware of normal causes of employee turnover, which include low employee morale, poor management or lack of leadership qualities, lack of promotions and career direction, monotonous tasks, underpay and undesirable benefits, bullying, lack of communication, lack of supervisory support and recognition, and employees feeling unvalued and disrespected (Anjum & Muazzam, 2018). This can be done by implementing regular, valid surveys which will in time create organisational norms to measure against. Organisations should also consider employee retention strategies.

Therefore, to minimise employee turnover, organisations need to stimulate employment growth and advancement so as to avoid demoralising workers who have aspirations for greater responsibilities and climbing the ranks; to encourage engagement; to address uncertainties and provide strong leadership (Coetzee & Van Dyk, 2018). If these are observed, employees are unlikely to leave and look for opportunities elsewhere. The labour market is competitive; thus it is important to benchmark compensation as a way of retaining employees, as compensation is the strongest reason employees have for leaving the job (Oosthuizen et al., 2016). Continuous training and development, work-life balance and organisation culture can reduce unwanted turnover and provide a stable workforce, which ultimately reduces considerable costs.

The study revealed workplace boredom as a factor which exerts an influence on procrastination, lowers work engagement and heightens turnover intention among South African employees. To resolve this problem, organisations need to implement strategies aimed at eradicating workplace boredom such as creating meaningful and stimulating work environments, incorporating advanced technologies and examining task intricacy and worker competence (Teng et al., 2018; Van Wyk et

al., 2016). Even though the boredom problem rests unresolved in South Africa, organisations need to eliminate the pervasive effects of workplace boredom prior to the occurrence of drastic turnover problems. Because the devastating effects of workplace boredom, procrastination and turnover on the profit performance of the organisations are generally not known and inadequately emphasised, it is imperative for every manager to contribute to the organisation by endeavouring to increase productivity and render a valuable contribution to the economy.

3.3.2. Recommendations for future research

For future research it is advised to contemplate using a longitudinal approach to further substantiate these research outcomes. Specifically, future studies should implement longitudinal or experimental designs that can possibly more accurately test causality among the variables (Taris & Kompier, 2006). The longitudinal approach enhances an understanding of the relations among variables on the predictive power overtime.

Although the participants were heterogeneous in nature and stemmed from different occupations, we used a convenience sample. Considering that this can possibly hinder the generalisability of the results, respondents were from various South African sectors and ethnic groups. Therefore, additional exploration is necessary with a much larger population to examine the phenomenon *workplace boredom*. Future studies should include more occupational groups to further validate workplace boredom using different sampling strategies such as quota (as a non-probability) and stratified random sampling (as probability).

Another recommendation is to use actual turnover rather than the intention to turnover as used in the current study. However, according to literature factual proof exists that the two are correlated (Cho & Lewis, 2012). Nonetheless, utilising the actual turnover makes stronger causal relationships workplace boredom, procrastination, work engagement and turnover.

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