

Investigating cyberloafing, organisational justice, work engagement and organisational trust of South African retail and manufacturing employees

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Mini-dissertation submitted in partial fulfilment of the requirements for the degree *Magister Commercii* in **Industrial Psychology** at the Potchefstroom Campus of the North-West University

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November 2016

COMMENTS


The reader is reminded of the following:

- The editorial style as well as the references referred to in this mini-dissertation follow the format prescribed by the Publication Manual (6th edition) of the American Psychological Association (APA). This practice is in line with the policy of the Programme in Industrial Psychology of North-West University (Potchefstroom Campus) to use the APA style in all scientific documents as from January 1999.
- The mini-dissertation is submitted in the form of a research article.

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I, Adéle Oosthuizen, hereby declare that **Investigating cyberloafing, organizational justice, work engagement and organizational trust of South African retail and manufacturing employees** is my own work and that the views and opinions expressed in this work are my own.

Furthermore, I declare that the contents of this research study will not be submitted for any other qualification at any other tertiary institution



Adéle Oosthuizen

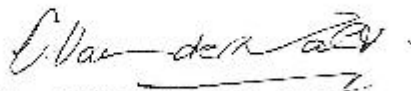
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12 November 2016



I, Ms Cecilia van der Walt, hereby confirm that I took care of the editing of the mini-dissertation of Ms Adèle Oosthuizen titled *Investigating cyberloafing, organisational justice, work engagement and organisational trust of South African retail and manufacturing employees.*



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ACKNOWLEDGEMENTS

Commit your work to the LORD and your plans will be established. - Proverbs 6:3

I can do all things through Him who strengthens me. - Philippians 4:13

- I wish to express my gratitude to the following individuals in my life, for the support and guidance over the past two years. Without you this study would not have been possible:
- First and foremost, my heavenly father who provided me with strength, insight and perseverance throughout my studies, when I needed it most you took over. Everything I have accomplished is because of Him.
- To my parents, words cannot express how much your support, encouragement, love and patients are appreciated. Thank you for your unconditional love and always believing in me. I am grateful to be blessed with parents that are dedicated to my success in life.
- My sister and closest friend, Renate Oosthuizen, thank you for your patience and your support. Words cannot describe how blessed I am with you in my life.
- To Elandré Vos, my boyfriend and best friend, I am truly blessed to have you in my life. Thank you for your constant love and motivation especially during the tough times over the last 3 years. Thank you for always believing in me and standing by my side every step of the way.
- To the rest of my family and friends. I appreciate everyone's input and assistance throughout my studies. A special thanks to Riaan Steyn, Joané van der Merwe, Tim Sterne and Linette Erasmus. I am honoured to have people like you in my life. Thank you for late night conversation and your unconditional support and motivation.
- Thank you to Mr Gerhard Rabie, my study leader, for your patience, commitment and support. Furthermore, thank you for the guidance and encouragement to ensure the success of this study.
- Dr Leon de Beer, my co-supervisor, thank you for the guidance, support and dedication through this study. Thank you for assisting me with the statistical analysis of this study and being available at any time when I needed advice or assistance.
- Thank you to the organizations that were willing to invest their time and resources to participate in this study. A special thank you to all the participants for contributing to this study. Without your participation it wouldn't have been possible.
- Lastly, my manager, Prue Mashiloane. Thank you for all your support, advice and insight. This journey wouldn't have been the same without you, I will be forever grateful to you.

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OPSOMMING

Titel: Onderzoek kuber-leeglêery, organisasiegeregtigheid, werksbetrokkenheid en organisasievertroue van Suid-Afrikaanse kleinhandel- en vervaardigingswerknemers

Sleutelwoorde: kuber-leeglêery, organisasievertroue, werksbetrokkenheid, organisasiegeregtigheid, teenproduktief, werkgedrag.

Kuber-leeglêery verwys na die manier waarop werknemers hulle organisasie se internet gebruik vir nie-werkverwante aktiwiteite. Beperkte navorsing oor die verhoudings tussen kuber-leeglêery, organisasiegeregtigheid, werksbetrokkenheid en organisasievertroue bestaan tans binne die Suid-Afrikaanse konteks.

Die doel van hierdie studie was om vas te stel hoe kuber-leeglêery, organisasiegeregtigheid, werksbetrokkenheid en organisasievertroue met mekaar verband hou onder Suid-Afrikaanse kantoorwerknemers in die kleinhandel en vervaardigingssektore. 'n Kwantitatiewe dwarsdeursnit navorsingsbenadering is in die studie gevolg. Die navorsingsinstrumente was geadministreer op 'n gerieflikheidsstreekproef ($N=224$) in die kleinhandel en vervaardigingssektore.

Die resultate het daarop gedui dat organisasiegeregtigheid positief verwant is aan organisasievertroue, en dat organisasievertroue 'n positiewe verwantskap het met werksbetrokkenheid. Daar was verder gevind dat werksbetrokkenheid 'n negatiewe verhouding met kuber-leeglêery het. Dit het aan die lig gekom dat organisasievertroue 'n bemiddelaar tussen organisasiegeregtigheid en werksbetrokkenheid is. Resultate het ook aangedui dat werksbetrokkenheid 'n bemiddelende rol gespeel het in die verhouding tussen organisasievertroue en kuber-leeglêery.

Die studie stel voor dat organisasies daarop moet fokus om organisasiegeregtigheid en organisasievertroue te verbeter. Die studie het aanbevelings vir praktiese en toekomstige navorsing gemaak om organisasies en navorsers in hierdie opsig te help.

SUMMARY

Title: Investigating cyberloafing, organisational justice, work engagement and organisational trust of South African retail and manufacturing employees

Keywords: Cyberloafing, organisational trust, work engagement, organisational justice, counterproductive work behaviour.

Cyberloafing is seen as the prevailing manner, in which employees use the organisations' internet access to engage in non-work-related activities, which reduce productivity and have other negative consequences. Limited research exists on the relationships between cyberloafing organisational justice, work engagement and organisational trust within the South African context.

The main objective of this study was to investigate how cyberloafing, organisational justice, work engagement and organisational trust are related to one another among South African office workers in the retail and manufacturing industry. A quantitative cross-sectional research approach was utilized within this study. Furthermore, the measuring instruments were administrated to a convenience sample (N=224) from the manufacturing and retail industries.

The results indicated that organisational justice was positively related to organisational trust and organisational trust was positively related to work engagement. Additionally, work engagement had shown to have a negative relationship to cyberloafing. Organisational trust was further revealed to be a mediator between organisational justice and work engagement. Further to this it was established that work engagement played a mediating role in the relationship between organisational trust and cyberloafing.

It is therefore suggested that organisations focus on increasing perceived organisational justice and organisational trust. Additionally, this study provided recommendations for practical and future research to assist organisations and researchers

CHAPTER 1
INTRODUCTION

Introduction

This mini-dissertation investigated the relationships between cyberloafing, organisational justice, work engagement and organisational trust of South African retail and manufacturing employees. This chapter comprises a problem statement, research objectives (both general and specific) as well as the expected contribution of the study. This chapter further explains the research method utilised and sets out the chapter division.

1.1. Problem statement

Throughout the 21st century, advances in technology have changed the manner in which organisations are conducting business (Tapia, 2006). The internet is seen to be one of those advances (Messarra, Karkoulian & McCarthy, 2011) and has become an essential tool in the daily work-life of employees (Griffiths, 2010). The internet provides employees with increased access to information, which in turn leads to knowledge that is valuable for both the employees and the organisation (Seymour & Nadasen, 2007). Therefore, the internet holds various benefits such as increased employee performance, reducing expenditure and diminishing production cycle time (Henle & Blanchard, 2008; RuningSawitri, 2012). However, the use of the internet can have a darker side (Kim, Del Carmen Triana, Chung & Oh, 2015) and internet use has been labelled a double-edged sword (Li, Sarathy, Zhang & Luo, 2014).

Specifically, the internet can provide employees with the means and opportunity to loaf during official work hours without being physically absent or the loafing being blatantly visible (Wagner, Barnes, Lim & Ferris, 2012). Cyberloafing is thus when employees engage in nonwork-related activities during work hours, such as: sending and checking personal emails, browsing the internet for non-work topics, updating social media profiles, downloading music or movies, as well as doing personal online shopping (Sai'd Ibrahim Al-Shuaibi, Subramaniam & Shamsudin, 2014). These specific behaviours are more formally known under the umbrella term cyberloafing and holds negative consequences for the organisation (Sai'd Ibrahim AlShuaibi et al., 2014). Cyberloafing has also been referred to as cyber slacking, cyber slouching, junk computing, online-loafing (Ugrin, Pearson & Odom, 2008) and internet deviance (Schaupp, 2012). Lim (2002, p. 677) formally defined cyberloafing as 'any voluntary act of employees' using their companies' internet access during office hours to surf non-job-

related 3 Web sites for personal purposes and to check (including receiving and sending) personal email as misuse of the internet'. Cyberloafing is therefore a form of counterproductive work behaviour (also known as deviant workplace behaviour) (Rana & Punia, 2014), since it can be considered as the unproductive use of company time and resources which prevents employees from completing their duties (Lim, 2002). Therefore, counterproductive work behaviour concentrates on the behaviour and not the consequences thereof (Hitlan & Noel, 2009). Cyberloafing is considered to be independent from organisational policies, because whether or not policies restrict internet access, the use of the internet for non-work-related activities will remain cyberloafing (Askew, 2012).

Cyberloafing can have both positive and negative consequences. Positive consequences include provide relief from boredom, fatigue and stress (Malhotra, 2013; Ozler & Polat, 2012). Research further showed that cognitive resources may be recovered along with an increase in creativity, employee wellbeing, and job satisfaction when browsing websites for non-work-related purposes (Malhotra, 2013; Askew, 2012; Ozler & Polat, 2012). However, cyberloafing holds negative consequences for the organisation such as problems with information systems and data security, e.g. network overload, system performance deprivation, hacking, as well as spyware and virus contamination due to visits to unauthorised web pages and downloading (Kim et al., 2015). In addition, cyberloafing can also attract potential legal liabilities such as harassment and copyright infringement claims (Restubog et al., 2011), as any such potential troubles will be traced to the internet protocol (IP) addresses of the organisation. However, the influence of the internet in the workplace is a domain that is relatively unexplored within organisational behaviour research (Lieberman, Seidman, Mckenna & Buffardi, 2011), and research in South Africa is limited.

It is estimated that between 30% and 40% productivity loss can be linked to cyberloafing (Lim, 2002; Lim & Teo, 2005; de Lara, 2007), which costs the United States of America (USA) between \$54 billion (Jia, Jia & Karau, 2013) and \$178 billion annually (Wang, Tian & Shen, 2013). This is due to employees in the USA spending up to an average of 1.7 hours a day cyberloafing (Lieberman et al., 2011), while the Asia Pacific region spends an average of 4.2 hours a week and China an average of 5.6 hours a week cyberloafing (Wang et al., 2013). These statistics show that cyberloafing is a prevalent global phenomenon with productivity and cost implications for individuals and organisations and it is therefore important to understand the behaviour and its antecedents. Little research has, however, been conducted regarding this

issue, particularly within the South African context where internet access had increased from 2 400 000 users in 2000 to 24 909 854 users in 2014 which is significant growth over the last 14 years (Internet World Stats, 2014).

Kim and Byrne (2011) stated that employees' tendency to engage in cyberloafing is driven by internal processes (self-control and procrastination) and also when employees perceive that they are not treated fairly by the organisation; thus indicating a motivational issue. Counterproductive work behaviour and organisational justice is concerned with employees' perception regarding the treatment they receive at work; whether it is considered fair or unfair (Chang & Smithikrai, 2010). Organisational justice refers to the reaction of employees to the perceived (un)fair treatment they receive from the organisation (Jamaluddin, Ahmad, Alias & Simun, 2015). Research has identified three main forms of organisational justice: 1) distributive justice, 2) procedural justice and 3) interactional justice (Chang & Smithikrai, 2010). Distributive justice refers to the employee's perception regarding the fair distribution of organisational resources (Srivastava, 2009) and the outcomes they receive in relation to their input as well as the output and input of others. Organisations must therefore ensure that employees are rightfully compensated for their efforts (Ahmad & Jamaluddin, 2009). Procedural justice is concerned with the individual's perceptions whether the processes to achieve the desired outcomes are fair across the organisation (Chang & Smithikrai, 2010). Interactional justice is concerned with the interpersonal aspect of the organisation, i.e. whether the interpersonal treatment and communication the employees receive from managers can be considered fair (Chang & Smithikrai, 2010). Kim et al. (2015) indicated that recent studies cast doubt on whether it is beneficial to focus solely on the effects of a specific type of justice. Suggesting that research should therefore rather focus on the overall justice concept which envelops all of the previous justices described (Kim et al., 2015).

Ahmad and Jamaluddin (2009) reported that counterproductive work behaviour is negatively related to organisational justice, suggesting that employees may be more prone to engage in counterproductive work behaviour when organisational injustice is perceived. Organisational justice has been identified as an antecedent of cyberloafing and it is therefore expected that organisational injustice increases cyberloafing (Rajah & Lim, 2011). Previous studies have found that cyberloafing could emerge from perceived procedural, distributive and interactional injustice (Lim, 2002). Lim (2002) further indicated that when employees perceive organisational injustice, the metaphor of the ledger is used by employees as a neutralization

strategy, to justify deviant behaviour. This ‘ledger’ is used to rationalise deviant behaviour through self-perceived ‘credits’ that have been accumulated due to good work behaviour in the past – indicating the self-belief that the organisation ‘owes’ them for something (Lim, 2002) and that their behaviour thus is justified. Taking this aforementioned information into account it was expected that organisational justice will be negatively related to cyberloafing.

The perception of unfairness can result in mistrust, due to the employees feeling that they have been treated unjustly compared to, for example, other employees (Saunders & Thornhill, 2003). Farndale, Hope-Hailey and Kelliher (2011) emphasized that it is necessary to have justice and trust within an organisation in order to achieve the desired performance outcomes. Trust has an impact on employees’ readiness in accepting organisational decisions (Lowry, Posey, Bennett & Roberts, 2015) and can be improved through mutual interaction with the parties involved (DeConinck, 2010). Trust is therefore an important aspect of social exchange (DeConinck, 2010). The widely accepted definition of trust is that of Rousseau, Sitkin, Burt and Camerer (1998, p. 395) who define trust as ‘a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviours of another’. Considering trust, however, from an organisational point includes the expectations employees have regarding business relations and behaviours (Mase & Tyokyaa, 2014). In order to measure trust the employee’s perception regarding genuineness, equity and integrity needs to be taken into account (Farndale et al., 2011). Employees are more inclined to behave in a manner that is beneficial to the organisation if they have the perception that the organisation can be trusted and has their best interests at heart. Colquitt, Scott and LePine (2007) have indicated that trust has a positive effect on counterproductive work behaviour; thus leading to a decrease in counterproductive work behaviour. It can therefore be posited that organisational trust may have a negative relationship with cyberloafing behaviours at work. Those employees who do not trust the organisation will more likely be demotivated (Agarwal, 2014) and may engage in counterproductive work behaviour as a result (Lowry et al., 2015).

Furthermore, organisations and academic researchers focus their attention on work engagement due to the importance of the relationship for the individual and its organisations (Agarwal, 2014). Schaufeli, Salanova, González- Romá and Bakker (2002, p. 74) defines work engagement as ‘a positive, fulfilling work-related motivational state of mind characterized by vigour, dedication and absorption’. The main features of work engagement are high involvement and energy as well as having self-perseverance and enthusiasm during work-

related activities and responsibilities (Schaufelli et al., 2002; Bakker & Demerouti, 2008; Chung & Angeline, 2010). According to Den Hartog and Belschak (2012), employees who display higher levels of work engagement are more dedicated to their organisation and display personal initiative. Thus, they are unlikely to be engaged in counterproductive work behaviour. Research has shown that there is a negative relationship between work engagement and cyberloafing activities (e.g. e-mailing) (Schings, 2009). However, van Doorn's (2011) findings contradicted this; he found that there is no relationship between cyberloafing and work engagement – which may have been due to the type of cyberloafing activities that were evaluated. This study investigated a potential link between work engagement and cyberloafing within the South African context. South Africa was chosen because there has been an increase in internet access (Internet World Stats, 2014) and a comprehensive literature study showed that limited research regarding cyberloafing has been conducted.

Ahamed, Hassan and Hashim (2013) stated that organisational trust has a positive effect on workplace behaviour and attitudes such as work engagement and commitment. However, if work engagement is not managed correctly it can result in serious repercussions such as low commitment and performance as well as high burnout levels and distrust (Lin, 2010). Employees will therefore be more involved in their work tasks by investing their time, energy and talent when they trust the organisation (Heine, 2013; Agarwal, 2014). Ugwu, Onyishi & Rodríguez-Sánchez (2014) explains the relationship between organisational trust and work engagement by using the social exchange theory. The theory proposes that individuals who have received a service are more likely to show their appreciation by returning a service (Blau, 1964). Employees will therefore display their trust to the organisation by being more engaged when the organisation is perceived as being trustworthy (Ugwu et al., 2014). Agarwal (2014) stated that when employees perceive that they are treated fairly, they would more likely be engaged. Organisational trust is therefore an important aspect surrounding work engagement. Katou (2015) examined the relationship between organisational justice, trust and employee reactions (work engagement, motivation, job satisfaction, organisational citizenship behaviour and commitment); the results suggested that organisational trust mediates the relationship between organisational justice and work engagement. Additionally, Moliner, Martínez-Tur, Ramos, Peiró and Cropanzano (2008) found a positive relationship between procedural justice, interactional justice and work engagement.

Although all the above-mentioned constructs are related to each other, the relationship between cyberloafing, organisational justice, organisational trust and work engagement has not yet been researched together within the South African context. Figure 1 represents the research model of this study and provides a visual presentation of the relationships investigated.

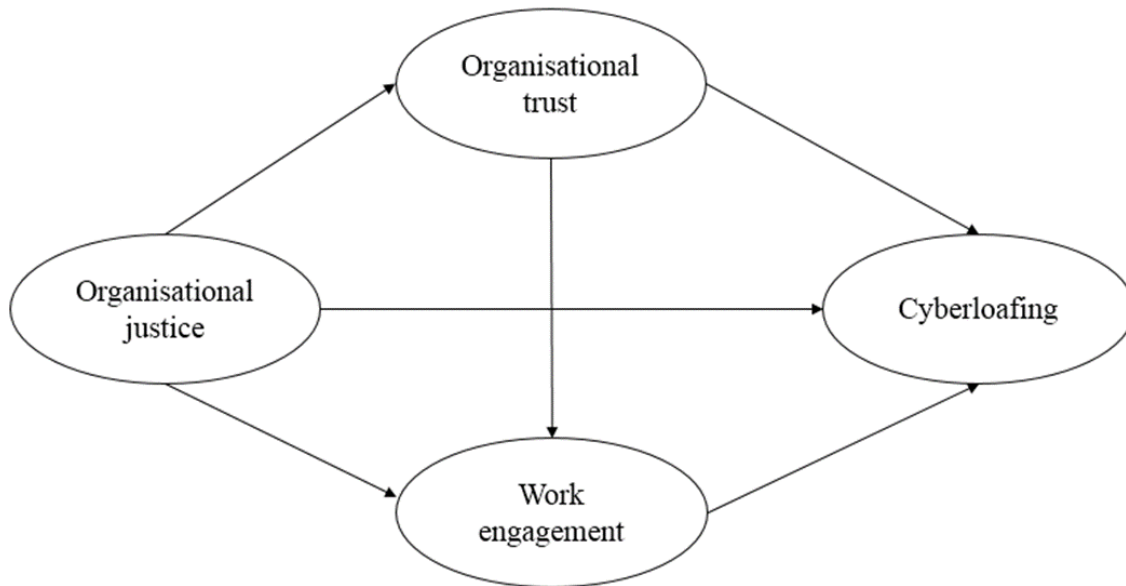


Figure 1. *The research model*

1.2. Research questions

- How are cyberloafing, organisational justice, work engagement and organisational trust conceptualised within literature?
- What are the relationships between cyberloafing, organisational justice, work engagement and organisational trust amongst office workers in South Africa?
- Does organisational trust mediate the relationship between organisational justice and cyberloafing amongst office workers in South Africa?
- Does work engagement mediate the relationship between organisational justice and cyberloafing amongst office workers in South Africa?
- What recommendations can be made for future research and practice?

1.3. Expected contribution of the study

It was expected that this study would contribute to the individual, organisations and industrial/organisational psychology literature in the following manner:

1.3.1. Contribution for the individual

Research has shown that the individual's perception of justice and trust within the organisations, as well as their level of work engagement, are related to their tendency to engage in cyberloafing or counterproductive work behaviour (Colquitt et al., 2007; Schings, 2009; Rajah & Lim, 2011). In addition, this results in a reduction of their productivity. Therefore, by creating an awareness of the factors that influence their cyberloafing activities and their perception of their organisation, organisations can implement interventions that will increase employee trust and motivation which will result in more productive employees.

1.3.2. Contribution for the organisation

As technology (such as the internet) becomes more accessible in the workplace, it is unlikely that cyberloafing will be less prominent in the future (Blanchard & Henle, 2008). Cyberloafing is considered multi-faceted behaviour which holds negative consequences for organisations (Blanchard & Henle, 2008). These consequences include a loss in productivity and legal implication or decrease in competitiveness (Beugré & Kim, 2005). Therefore, a growing need exists to understand this phenomenon and the factors (e.g. work engagement and trust) that contribute to it. Understanding these factors will enable organisations to implement strategies or interventions that will offset the consequences of cyberloafing.

1.3.3. Contribution to literature

Cyberloafing is a relatively new concept and the extent thereof is still unclear; the reason for engaging in cyberloafing needs to be explored (Kidwell, 2010; van Doorn, 2011). Further to this, limited research exists regarding how cyberloafing, organisational justice, organisational trust and work engagement are related within the South African context. This study contributed to the literature by providing a clearer understanding of cyberloafing and filling the gaps existent in this regard.

1.4. Research objectives

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

1.4.1. General objective

The general objective of this research was to investigate the relationship between cyberloafing, organisational justice, work engagement and organisational trust among South African retail and manufacturing employees.

1.4.2. Specific objectives

The specific objectives of this research were

- To determine how cyberloafing, organisational justice, work engagement and organisational trust are conceptualised within the literature.
- To determine the relationship between cyberloafing, organisational justice, work engagement and organisational trust amongst office workers in South Africa.
- To determine whether organisational trust mediates the relationship between organisational justice and cyberloafing amongst office workers in South Africa.
- To determine whether work engagement mediates the relationship between organisational justice and cyberloafing amongst office workers in South Africa.
- To make recommendations for future research and practice.

1.5. Research hypotheses

- H_{1a}: A negative relationship exists between cyberloafing and organisational justice.
- H_{1b}: A positive relationship exists between organisational justice and organisational trust.
- H_{1c}: A positive relationship exists between organisational justice and work engagement.
- H₂: A negative relationship exists between cyberloafing and organisational trust.
- H_{3a}: A negative relationship exists between cyberloafing and work engagement.
- H_{3b}: A positive relationship exists between organisational trust and work engagement.
- H₄: Work engagement mediates the relationship between organisational justice and cyberloafing.
- H₅: Organisational trust mediates the relationship between organisational justice and cyberloafing

1.6. Research design

1.6.1. **Research approach**

For purposes of this study, a quantitative research design was used. According to Williams (2007) it is the main aim of quantitative research to confirm, explain or predict relationships between variables as well as to create generalisations to contribute to a theory. Within quantitative research there are three types of designs that can be used, namely: descriptive, experimental and causal comparative. Descriptive research, evaluates the situation by identifying characteristics of a phenomenon and investigating the relationship between variables (Williams, 2007; Hopkins, 2008). Experimental research determines causality by examining interventions implemented within a group and the results thereof (Williams, 2007; Hopkins, 2008). Lastly, with the causal comparative design, the researcher evaluates the effect the independent variable has on the dependent variable. Additionally, this also provides the researchers with knowledge of the relationship between the independent variables (Williams, 2007). Specifically, a cross-sectional design was utilized, which is the collection of data at a single point in time and examines differences within the target population (de Vos, Strydom, Fouché & Delpont, 2011). This study used primary data and the data were analysed using appropriate statistics.

1.6.2. Literature review

In phase one, a complete review of the literature was conducted with regard to cyberloafing, organisational justice, work engagement and organisational trust. Relevant articles and books published between 2005 and 2015 were used. The literature was gathered utilizing computer searches and consulting databases which included: Ebscohost, Emerald, GoogleScholar, JSTOR, LexisNexis, Sabinet References, SAePublications, Scopus, ScienceDirect, ProQuest and Web of Science. Additionally, literature was accessed through North-West University's library services. The keywords such as counterproductive work behaviour, trust, work engagement, organisational justice, procedural justice, distributive justice, interactional justice and cyberloafing as well as the different labels of cyberloafing were used. The relevant journals consulted included; *Computers in Human Behavior*, *Work & Stress*, *International Journal of Human Resource Management*, *Journal of Applied Psychology*, *Journal of Business Research*, *CyberPsychology & Behaviour*, *Personnel Review*, *Journal of Organisational Behavior*, *Journal of Workplace Learning*, *Journal of Work and Organisational Psychology*, *Procedia Social and Behavioral Sciences*, *Journal of Leadership & Organisational Studies*, *Human Resource Management Review*, *Journal of Management History*, *Information Systems Journal*, *Behaviour & Information Technology*, *International Journal of Advance Research in Computer Science and Management Studies*, *Journal of Research in Personality*, *American psychologist*, *Journal of Business Ethics*.

1.6.3. Research participants

For purposes of this study, office workers within the retail and manufacturing industry were available. Because the study focused on cyberloafing it was an important requirement that the participants made use of a computer with internet access as a means to complete their work duties. A convenience non-probability sampling method was utilized by means of which, participants were selected based on their availability within the identified organisations in South Africa (de Vos et al., 2011). A minimum sample size of 200 employees was required for the study (Liang & Yang, 2014); participants would differ in terms of characteristics such as gender, age, race and language.

1.6.4. Measuring instruments

Biographical Questionnaire: A biographical questionnaire was employed by means of which characteristics were determined, namely: age, gender, ethnicity, home language, household status and education levels of the participants. The information gathered from this questionnaire was used for descriptive statistical purposes.

Cyberloafing was measured by using a self-reporting cyberloafing scale that was developed by Blanchard and Henle (2008). This scale was adapted from Lim's (2002) cyberloafing scale. The adapted scale consisted of 22 items (e.g. 'Checked non-work-related email' and 'Visited newsgroups or bulletin boards'). The participants had to indicate how frequently they have engaged in the cyberloafing activities over a period of a month. The instrument used a five-point Likert-type scale that ranged from 'Never' (1) to 'A great deal' (5). Blanchard and Henle (2008) found a Cronbach's alpha coefficient of 0.84 for this scale.

Organizational trust was measured by utilising the trust scale initially developed by Gabarro and Athos (1976) and adapted by Robinson (1995). The scale measured to what extent employees trust their organisations. The instrument consisted of seven items (e.g. 'I can expect my employer to treat me in a predictable and consistent manner' as well as 'My employer is always reliable'). A five-point Likert-type scale was used which ranged from 'Strongly disagree' to 'Strongly agree'. A study by Mey, Werner and Theron (2014) – with a sample of 278 professional and white collar employees from several organisations in the Eastern Cape, South Africa – found a Cronbach's alpha coefficient of 0.86 for organisational trust.

Overall organizational justice was measured using the Perceived Overall justice scale (POJ) developed by Ambrose and Schminke (2009). The instrument comprised six-items and measured overall organisational justice, of which an example statement is: 'Overall, I'm treated fairly by my organisation'. The instrument used a seven-point Likert-type scale ranging from 'strongly disagree' (1) to 'strongly agree' (7) Kim et al. (2015) found a Cronbach's alpha coefficient of 0.85 for this scale. Organisational justice was also measured by means of a three-item instrument developed by van der Vliet and Hellgren (2002). Items included: 'I feel that my employer treats me fairly,' and 'I find that my employer behaves fairly towards me.' A five-point Likert-type scale was used ranging from strongly disagree to strongly agree. In a

study investigating the talent retention of trainer and learners, Chidyamakono (2010) found a Cronbach alpha scale of 0.90 for this scale.

Work engagement: The Utrecht Work Engagement Scale (UWES) was utilised to measure work engagement (Schaufeli et al., 2002). The scale consisted of 17 items and measured three dimensions. The three dimensions measured are Vigour (6 items, e.g. ‘When I get up in the morning, I feel like going to class/work’), Dedication (5 items, e.g. ‘I’m enthusiastic about my study/job’) and Absorption (6 items, e.g. ‘When I’m studying/working, I forget everything around me’). A seven-point frequency scale was applied to score the UWES which ranged from 0 (Never) and 7 (Every day). Naidoo and Martins (2014) obtained a Cronbach alpha coefficient of 0.87 for vigour, 0.89 for dedication and 0.85 for Absorption among a sample of information and communication technology employees within a South African organisation.

1.6.5. Research procedure

Once approval had been obtained from the Faculty Ethics Committee, the management of retail and manufacturing organisations in South Africa was approached to participate in the study. The retail industry is characterised by selling goods or services to customers for either personal or household use (Statistics South Africa, 2012). Additionally, the manufacturing industry refers to developing new products from raw material, substances or components (Statistics South Africa, 2012). Once permission had been obtained, an informed consent form and a letter with all the important information regarding the study was sent to all the participants. After the participants had provided consent to participate, they received a booklet as questionnaire or link to an online questionnaire. This choice depended on every individual organisation’s preference. The participants were allowed two weeks to complete the questionnaire and a reminder was sent a week prior to the collection date. To further ensure anonymity and confidentiality, the participants sealed their booklets in an envelope before collection. When the data collection process was complete, the data was captured and the analysis started. Participation in this study was voluntary and the results and the participants were dealt with anonymously and confidentially.

1.6.6. Statistical analysis

The statistical analysis for this study was conducted with Mplus 7.31 (Muthén & Muthén, 2015). Structural equation modelling (SEM; with confirmatory factor analysis) was used in order to test the proposed model (Brown, 2015). SEM was used to evaluate multiple relationships simultaneously and provide various fit indices to determine how accurately the model portrayed the proposed relationships between the latent factor constructs and observed variables (Weston & Gore, 2006). The mean and variance adjusted weighted least squares estimation method was used (WLSMV) due to the ordered categorical nature of the data and as this estimation method has been shown to perform well on samples of 200 and larger (Rhemtulla, Brosseau-Liard & Savalei, 2012). The following fit indices were assessed to determine how the model fits with the data: Comparative fit index (CFI; ≥ 0.90), Tucker-Lewis index (TLI; ≥ 0.90) and the root mean square error of approximation (RMSEA; ≤ 0.08) (Hooper, Coughlan & Mullen, 2008).

Confirmatory factor analysis (a measurement model) was estimated to determine the factor structure of the observed variables from the measuring instruments (Blunch, 2008). Cronbach's alpha reliability coefficients (α) were calculated for all the constructs in order to ascertain their internal consistency. Values of 0.70 and above are considered acceptable. In addition, the measurement model was used to determine the correlations between latent constructs. Specifically, correlation coefficients were considered to have medium practical effect size for values of 0.30 and above and large practical effect size for values of 0.50 and above (Cohen, 1992).

Then structural regressions were added to the measurement model in order to create the structural model, i.e. the expected relationships between the constructs, as hypothesized, were specified between the constructs as regressions. The direction and statistical significance of the beta coefficients were used in order to support or reject the hypotheses. Similarly, all parameters in the model had an alpha level of 0.05 to be considered significant ($p < 0.05$).

Furthermore, a mediation analysis was conducted to determine the significance of indirect effects between the variables (H4-H5). Bootstrapping was utilised in order to test whether an indirect or direct relationships existed between the variables organisational justice, organisational trust, work engagement and cyberloafing. Bootstrapping resamples the data by

drawing from it multiple times (10 000 replications in this study) to create an empirical image of the sampling distribution regarding the indirect effects with 95% confidence intervals (Hayes, 2009). If the indirect effect is significant (and the 95% confidence interval does not cross zero) a mediating effect exists.

1.6.7. Ethical considerations

For this study to be successful, it was conducted in an ethical and fair manner. Hence informed consent was obtained from all the participants (de Vos et al., 2011). Informed consent stipulated that the participants agreed to take part in the study, that their participation was voluntary and that they could withdraw from the study at any point in time (de Vos et al., 2011) if they so wished. The researcher ensured that no harm would be inflicted on any participants and that they would be treated with respect and dignity. Furthermore, all participants' information was dealt with anonymously and confidentially (de Vos et al., 2011). Before the study could commence, the research proposal was submitted to the Faculty's Ethics Committee for approval.

1.7. Overview of chapters

The chapters in this mini-dissertation are presented as follows:

Chapter 1: Introduction.

Chapter 2: Research article.

Chapter 3: Conclusions, limitations and recommendations.

1.8. Chapter summary

This chapter consisted of the problem statement, research objectives and contribution of the study, research questions and research hypotheses. Lastly, the research method and measuring instruments were discussed.

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CHAPTER 2
RESEARCH ARTICLE

Investigating cyberloafing, organisational justice, work engagement and organisational trust of South African retail and manufacturing employees

Abstract

Orientation: A deeper understanding of cyberloafing, organisational justice, work engagement and organisational trust will create opportunities for organisations to decrease the consequences of cyberloafing by implementing preventative strategies and interventions.

Research Purpose: The main objective of this study was to explore the relationships between cyberloafing, organisational justice, work engagement and organisational trust amongst South African office workers in the retail and manufacturing industry.

Motivation for the Study: Cyberloafing is seen as the prevailing manner in which office employees use their work time to engage in non-work-related activities, this holds multiple negative consequences for organisations. Additionally, limited research exists on how cyberloafing is related to organisational justice, organisational trust and work engagement within the South African context.

Research Design, Approach and Method: A quantitative research design was utilised to collect data. The questionnaire was administered to a convenient sample within the South African retail and manufacturing industry (N=224). The data were analysed using descriptive statistics, Cronbach's alpha coefficients, structural equation modelling methods and bootstrapping.

Main Findings: Organisational justice was positively related to organisational trust and organisational trust was positively related to work engagement. Additionally, work engagement related negatively to cyberloafing. Organisational trust was further revealed to be a mediator between organisational justice and work engagement. At the same time work engagement played a mediating role in the relationship between organisational trust and cyberloafing.

Practical/managerial Implications: Organisations can implement strategies and interventions to ensure and enhance perceptions of organisational justice and fairness which could improve trust levels to achieve higher work engagement and ultimately decrease cyberloafing behaviour improving productivity.

Contribution/value-add: This study contributes to the literature by including organisational justice, organisational trust, work engagement and cyberloafing in one structural equation model. The research revealed that when employees perceive their organisations as being fair, organisational trust will increase and lead to an increase in work engagement levels, which will ultimately reduce cyberloafing behaviour.

Keywords: Cyberloafing, organisational trust, work engagement, organisational justice, counterproductive work behaviour.

Introduction

The optimisation of employees by means of technology has become an important issue for organisations (Baturay & Toker, 2015). The potential impact the internet may have within an organisation is a research area in organisational behaviour which is relatively unexplored (Lieberman, Seidman, McKenna & Buffardi, 2011). Technology such as computers and the internet has become synonymous with daily organisational operations (Baturay & Toker, 2015). The internet is considered the most powerful tool that influences the manner in which one communicates, works and unwinds (Lim & Chen, 2009). Employees now have the ability to work smarter, increase their work tempo and consequently their productivity (Al-Shuaibi, Shamsudin & Subramaniam, 2013). Malhotra (2013), however, states that the implementation of new technology such as the internet in organisations may lead to new types of problems. One of these problems being the fact that employees are now provided with the opportunity to engage in a new form of counterproductive work behaviour (CWB) which is often referred to as cyberloafing (Lim, 2002). Cyberloafing refers to the use of company internet during work hours to engage in non-work-related activities (Lim, 2002). Cyberloafing differs from traditional loafing at work; it enables employees to engage in personal activities, while creating the illusion of being hard at work (Jia & Jia, 2015). Cyberloafing is described as the most prevalent manner in which employees waste time at work (Askew, Buckner, Taing, Ilie, Bauer & Coover, 2014; Jia & Jia, 2015).

Internet misuse such as cyberloafing does not only take time, it exposes an organisation to various risks that are potentially costly (Tillemans, 2011). The International Data Corporation specified that between 30% and 40% of employees use their organisation's internet for nonwork-related tasks (Li, Sarathy, Zhang & Luo, 2014) and that 30% of companies have terminated employees for cyberloafing behaviour (Lieberman et al., 2011; Al-Shuaibi et al., 2013). Kemp (2016) stated that 26.84 million out of South Africa's 54.73 million inhabitants have access to the internet. This is either through desktop or mobile connections and represents 49% of South Africans that spend an average of 4 hours and 54 minutes a day on the internet. Furthermore, statistics showed that there are 13 million active social media users with a 24% growth in active users since January 2014 (Kemp, 2016). Jan Laubscher, the CEO of Keyscore, indicated that the impact of cyberloafing on South African companies has not been estimated.

However, it may cost them millions of rands (Benjamin, 2011). This indicates that cyberloafing is a prevalent threat within South African organisations.

Most modern organisations have become more performance oriented (Manzoor, Hassan & Arif, 2014). It is therefore important that negatively impacted organisations should research the factors influencing their bottom line (Ozler & Polat, 2012). Researchers suggested that it would be beneficial to focus on understanding the motives behind engaging in cyberloafing rather than attempting to entirely eliminate the occurrence of cyberloafing (Krishnan, Lim & Teo, 2010; Blanchard & Henle, 2008; Askew et al., 2014). This approach assists in balancing employee needs and productivity (Askew et al., 2014).

Various reasons can be listed for employees engaging in cyberloafing. These reasons relate to personality and situational and organisational factors (Ozler & Polat, 2012). Lim (2002) mentions that cyberloafing is seen to be an escape mechanism, especially when job demands exceed job resources. In addition, Liberman et al. (2011) refer to the fact that employees participate in cyberloafing when interest in and engagement with their work are lacking, or simply because their co-workers cyberloaf. Another popular motivator for cyberloafing is organisational justice. Organisational justice refers to the perception of fairness between organisations and their employees (Lim, 2005). Studies have indicated that when employees perceive that organisational injustice has occurred, they tend to retaliate in order to restore justice by engaging in cyberloafing behaviour (Lim, 2002; Ahmad & Jamaluddin, 2009; de Lara, 2009).

DeConinck (2010), states that justice and trust are aspects of the social exchange theory, which is introduced by the fair treatment of employees. Blau (1964) points out that social exchange refers to 'the voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others' (p. 91). Thus, if an employee perceives that he/she is treated fairly, the social exchange relationship will strengthen and in turn increase trust between the employer and employee (DeConinck, 2010). The aforementioned authors therefore link organisational trust and organisational justice. In addition, when an employee perceives his/her organisation as being fair (show justice), it results in an increase in trust which in turn leads to improved work engagement (Agarwal, 2014). Work engagement refers to the situation in which an employee is passionate about his/her work and workplace (Hassan & Jubari, 2010). It is perceived as a positive experience (Sonnetag, Mojza, Binnewies & Scholl,

008); therefore, when employees display high levels of work engagement they tend to have more positive experiences (Sonnetag et al., 2008). Such employees are therefore less likely to engage in cyberloafing.

The main purpose of this study was to test a structural model to provide an understanding of the relationship between cyberloafing, organisational justice, organisational trust and work engagement. Additionally, cyberloafing mainly occurs in an office environment (O'Neill, Hambley & Chatellier, 2014). Hence this study was guided by understanding cyberloafing tendencies among office workers in the South African workplace.

Literature review

Cyberloafing

Cyberloafing is a prevalent form of CWB when employees retaliate against the organisation by deliberately decreasing their work contribution (Jia, Jia & Karau, 2013). Robinson and Bannet (1995) divided CWB into two dimension on a continuum, minor to serious and interpersonal to organisational. These dimensions form four quadrants labelled production (minor; organisational), property (serious; organisational), political deviance (minor; interpersonal) and personal aggression (serious; interpersonal) (Blau, Yang & Ward-Cook, 2006). Most researchers categorise cyberloafing as production deviance, due to the impact it has on employee productivity and organisational cost (Lim, 2002; Ozler & Polat, 2012). Production deviance refers to behaviours that infringe on organisational norms through low quality and quantity of completed work (Hollinger & Clark, 1982).

Research has further shown that cyberloafing may be either destructive or constructive for organisations. It is destructive due to the negative consequences it holds. These negative consequences include loss of employee time and resources, as well as disciplinary actions, problems with system security and functionality. In addition, cyberloafing may lead to lawsuits, specifically when confidentiality is breached and harassment occurs. All these consequences have vast financial repercussions associated with them (Lim, 2002; Blanchard & Henle, 2008; Henle & Blanchard, 2008; Malhotra, 2013).

Cyberloafing comprises activities which lead to the unproductive use of company time (Ozler & Polat, 2012). These activities include browsing, sending emails, online gaming, watching videos, gambling, online shopping, social media activities, engaging in illegal activities, pornography sites, downloading and posting non-work-related information, as well as generating additional income (Lim, 2002; Henle & Blanchard, 2008; Sheikh, Atashgah & Adibzadegan, 2015). Some employees think that certain activities only take a few seconds. However, these seconds accumulate and become an immense threat to the organisation (Lim & Teo, 2005). Lim (2002) therefore defines cyberloafing as ‘any voluntary act of employees using their companies’ internet access during office hours to surf non-job-related Web sites for personal purposes and to check (including receiving and sending) personal e-mail as misuse of the internet’ (p. 677).

Based on an extensive literature review, it was discovered that there is one commonly used cyberloafing measure. While testing this measure two factors were discovered which were labelled ‘browsing activities’ and ‘emailing activities’ (Lim, Teo & Loo, 2002). The items used were combined in one scale (Blau et al., 2006). In 2006, Blau et al. (2006) added another factor dubbed ‘interactive’. The three factors were renamed e-commerce, information research and personal communication (Ozler & Polat, 2012). At a later stage Blanchard and Henle (2008) found that cyberloafing ranges from minor (recreational purposes) to serious (gambling and pornography) forms. Van Doorn (2011), however, measured cyberloafing in four factors, namely development behaviour, recovery behaviour, deviant behaviour, addiction behaviour.

The aforementioned research reveals that cyberloafing research has been approached from different angles, which leads to the use of different terminology and definitions. These terminologies refer to cyber slacking, cyber slouching, problematic internet use, internet addiction and internet abuse (see table 4) (Ozler & Polat, 2012; Baturay & Toker, 2015). Despite all the differences in terminology they all agree that internet access within organisations are being misused for non-work-related activities (Weatherbee, 2010; Ozler & Polat, 2012; Al-Shuaibi et al., 2013).

In order to understand employees' tendencies to cyberloaf, individual and organisational factors should be investigated (Malhotra, 2013). This study therefore focuses on the mediating relationship between organisational justice, which is an organisational factor, as well as organisational trust and work engagement which are all individual factors (Al-Shuaibi et al., 2013).

Organisational justice as an antecedent to cyberloafing

Organisational justice is considered a psychological construct. It is based on employees' perceptions of whether they are treated fairly by their organisations and the way in which their work is affected by the manner in which their work is impacted (Moorman, 1991; Rae & Subramaniam, 2008). When unfair treatment is repeated, it is viewed as organisations being disrespectful towards their employees (Rae & Subramaniam, 2008).

Adams (1965) first conceptualised organisational justice as distributive justice. A study by Thibaut and Walker (1975), solving conflict in third-party procedures, expanded the concept by adding the procedural justice dimension. Bies and Moag (1986) added the interactional justice dimension. It was later suggested that interactional justice be subdivided into interpersonal and informational justice (Greenberg, 1990; Colquitt, 2001). Interpersonal justice refers to how individuals are treated while informational justice is concerned with how information is communicated (Srivastava, 2009).

Although different opinions have been aired as to whether interactional justice should be seen as informational and interactional justice, distributive, procedural and interactional justice are the three widely recognised types of organisational justice (Katou, 2013). *Distributive justice* is the perception of the fairness of how resources are distributed (salaries, promotions, selection, succession planning, seniority and status) (Mey, Werner & Theron, 2014). Distributive justice stems from the equity theory that refers to fairness by comparing contribution and outcomes to those of other employees (Adams, 1965). Low performance, dissatisfaction, high turnover and absenteeism are often associated with distributive injustice (Hansen, Byrne & Kiersch, 2013). *Procedural justice* is concerned with the fairness of organisational decision making procedures and whether decisions are consistent and justified (Katou, 2013; Mey et al., 2014). Employees' dissatisfaction is usually focussed on the organisation, which is linked to cognitive, affective and behavioural responses. However, when

employees are involved in the process, job satisfaction is reduced (Srivastava, 2009; Katou, 2013). *Interactional justice* refers to the employee's perceptions and reactions in terms of communication within the organisation and the manner in which they are treated with concern, dignity and respect (Katou, 2013; Mey et al., 2014). Dissatisfaction is usually linked to the employee-supervisor relationship (Katou, 2013), which results in a lack of commitment and negative feelings towards supervisors (Srivastava, 2009). Heponiemi et al. (2011) stated that there are two main motivations for organisational justice to be essential a) organisational justice is connected to wellbeing, attitudes and employee productivity and b) it is a safeguard between unfavourable factors and their negative influences.

Employees often use neutralisation techniques to justify engaging in cyberloafing (Lim, 2005; Rajah & Lim, 2011). Neutralisation techniques are referred to as *a priori* rationalizations, used by employees to justify their counterproductive behaviour. In Lim's (2005) study, the metaphor of ledger was used as a neutralisation technique; employees accumulate good credits and use it to justify engaging in cyberloafing. Lim (2002) explained individuals' tendencies to cyberloaf by suggesting that neutralisation techniques mediate cyberloafing and organisational justice. This is based on the social exchange theory, organisational justice and neutralisation (Polzer-Debruyne, 2008). Within the exchange relationship, justice is seen as the input by the organisation or supervisor and the employee's reactions (Cohen-Charash & Spector, 2001).

Previous studies found that organisational justice influences employees' cyberloafing behaviour (Lim, 2002, 2005; Blau et al., 2006; Ahmad & Jamaluddin, 2009). Page (2015) and Restubog et al. (2011), however, found that organisational justice was not strongly related to cyberloafing. This inconsistency was investigated within the current study. Ambrose and Schminke (2009) further indicated that when an employee experiences or reacts to injustice within his/her organisation, it is generally focussed on their overall experience of injustice and not necessarily based on a specific injustice type. Overall, justice perception is impacted through receiving feedback from the organisation, various organisational practices and the perception of the employee (Cohen-Charash & Spector, 2001). Research has found that overall justice is related to each of the forms of organisational justice. Therefore it can be said that overall justice can be used to accurately explain the attitudes and behaviours of employees in terms of organisational justice (Schminke, Arnaud & Taylor, 2015). Ambrose and Schminke (2009) stated that by investigating overall justice, a holistic view will be gained of organisational justice in organisations.

Based on the aforementioned research, the current study suggested that overall organisational justice and cyberloafing are negatively related. Thus, when employees perceive injustices to occur in their organisation it is likely that they will engage in cyberloafing.

The mediating relationship between organizational justice and cyberloafing through organizational trust

Conceptualising organisational trust is a rather daunting task since the literature consists of various definitions and types thereof with each having its own influence on behaviour (see table 2) (Farndale, Hope-Hailey & Kelliher, 2011). From the various definitions there are certain elements which are constant. These elements include; 1) the positive expectations in another party to act generously, 2) the involvement of a willingness to become vulnerable and 3) a degree of dependence on another party exists, since the one party's actions has an impact on the other's outcomes (Ugwu, 2009). The most recognised definition of trust, which is also used in this study, was presented by Rousseau, Sitkin, Burt and Camerer (1998). They defined organisational trust as 'a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviours of another' Rousseau et al. (1998, p. 395).

Organisational trust is an important factor in the success of daily operations and is based on the interactions with various groups within the organisation (DeConinck, 2010; Katou, 2013; Komodromos, 2013). In this challenging economic environment South Africa finds itself (StatsSA, 2016), trust within organisations is essential to uphold performance and competitiveness (Ugwu, 2009). The majority of research recognises that integrity, consistency, loyalty, openness and competence are the five underlining dimensions of organisational trust (Dietz & Hartog, 2006; Bagraim & Hime, 2007; Ugwu, 2009; Fourie, 2011). In 1991, Butler added five elements, namely fairness, promise fulfilment, availability, receptivity and overall trustworthiness.

When employees believe that their organisation will behave in a manner that is favourable and not harmful, organisational trust is likely to increase (Lowry, Posey, Bennett & Roberts, 2015). Furthermore, if there is a strong link between the goal, norms, values and beliefs of the organisation and employees, the probability exists that organisational trust will be higher

(Ugwu, 2009). Employees invest their talent, energy and time towards reaching organisational goals and vulnerable towards the organisation (Agarwal, 2014). Thus, if there is a lack of trust in organisations, employees won't be willing to fully engage in their work functions, since they will feel they have been betrayed (Agarwal, 2014).

Organisational trust is a prominent factor when determining whether employees have the tendency to engage in CWB (Alias, Mohd Rasdi, Ismail & Abu Samah, 2013; Lowry et al., 2015). Therefore it can be said that when organisations have gained their employees' they are more likely to strive to achieve the organisation's goals (Alias et al., 2013). Consequently, when there is a lack of trust, employees will engage in cyberloafing (Alias et al., 2013) and in so doing, influence their performance (Fourie, 2011). Sunday (2014) stated that organisational justice and organisational trust can be seen as causes of CWB, because employees reciprocate negative treatment with negative behaviour.

Organisational trust encourages justice and fairness within organisations (Komodromos, 2013). Agarwal (2014) discovered that procedural and interactional justice has a positive relationship with trust. Other studies have found that distributive and procedural justice is directly related to organisational trust (Cohen-Charash & Spector, 2001; DeConinck, 2010; Wong, Wong & Ngo, 2012), whereas Aryee, Budhwar and Chen (2002) and Katou (2013) have found that all three forms of organisational justice have an impact on organisational trust. Additionally, Farndale et al. (2011) and Mey et al. (2014) discovered that a positive relationship exists between organisational trust and perceived organisational justice. The current study investigated the mediating effect between organisational trust, organisational justice and cyberloafing.

Work engagement as mediator in the relationship between organizational justice and cyberloafing

Research on work engagement has become an important topic within industry (Rothmann & Rothmann, 2010). Environmental and individual factors are considered to be determinants of work engagement (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). Furthermore, individuals who function optimally and add in improving the organisation's interest usually portray high work engagement (Lin, 2010; Diedericks, 2012).

Work engagement is considered in three ways in literature. Kahn (1990, p. 694) refers to engagement as the 'harnessing of organisational members' selves to their work role by which they employ and express themselves physically, cognitively and emotionally during role performance'. Mashlach and Leiter (1997) considered work engagement dimensions as the opposites of the three burnout dimensions. These constructs are independent and negatively related to one another (Chughtai & Buckley, 2008, 2011). Lastly, the most recognised perspective used within this study was brought forth by Schaufeli, Salanova, González-Roma and Bakker (2002). This perspective defines work engagement as 'positive, fulfilling, workrelated state of mind that is characterized by vigour, dedication and absorption' (Schaufeli et al., 2002, p. 74). Vigour refers to having exceptional levels of energy and cognitive resilience while devoting more time to one's work tasks irrespective of any difficulties. Dedication is often characterised by having enthusiasm, motivation, meaning, pride and challenge in one's work. Absorption is showed by being completely content with and concentrated on one's work. Therefore, engaged employees are passionate, dedicated and hardworking (Schaufeli et al., 2002).

There are four reasons why engaged employees have high performance ratings. These reasons relate to the experience of positive feelings, the improvement in overall health (psychological and physical), the creation of personal and job resources and the influence on others' employment levels (Bakker, Schaufeli, Leiter & Taris, 2008). Work engagement is further seen as a persistent affective-cognitive state which is not concerned with a specific occurrence, behaviour or person (Schaufeli et al., 2002). Employees who experience high levels of work engagement generally complete tasks successfully and have better relationships with their organisation, which enhances positive attitudes as well as behaviours (Hassan & Jubari, 2010). In contrast, low work engagement is likely to decrease productivity. Additionally, these employees find their work fascinating, meaningful, positive and revitalising (Wang, Lu & Siu, 2015). Research, however, indicates that disengagement leads to distrust, burnout and low productivity (Lin, 2010; Ugwu, Onyishi & Rodríguez-Sánchez, 2014). Therefore, when organisational trust is high employees will be more engaged. Engaged employees are dedicated to their work because they find pleasure in it and demonstrate a willingness to go beyond what is expected (Heine, 2013).

Limited research exists regarding the relationship between organisational justice and work engagement. Studies found conflicting results (Hassan & Jubari, 2010; Inoue et al., 2010; Kim, del Carmen Triana, Chung & Oh, 2015). Therefore this study aims at clarifying this relationship and suggests that a mediating relationship exists between organisational justice, work engagement and cyberloafing.

Katou (2013, 2015) further found that a mediation effect between organisational justice, organisational trust and employee reactions (includes work engagement). This indicates that when organisational justice is visible, organisational trust will develop and lead to a high level of work engagement. Organisational justice is seen as an antecedent of work engagement (Ugwu et al., 2014). Previous studies indicated that work engagement were positively and significantly related to distributive justice, procedural justice and interactional justice (Moliner, Martínez-Tur, Ramos, Peiró & Cropanzano, 2008; Hassan & Jubari, 2010; Inoue et al., 2010; Agarwal, 2014). Therefore, when employees perceive that they are treated fairly, they will have a positive attitude towards their jobs and organisations, thus, being more engaged (Moliner et al., 2008). Employees will be more driven and involved when they perceive that organisational justice is present (Inoue et al., 2010). In contrast, Hassan and Jubari (2010) and Saks (2006) found that procedural and distributive justice was not significantly related to work engagement.

In addition, research has found a positive link between organisational trust and work engagement (Chughtai & Buckley, 2008; Lin, 2010; Heine, 2013; Agarwal, 2014; Ugwu et al., 2014). Although only procedural and interactional justice was measured, Agarwal (2014) discovered that organisational trust mediates the relationship between organisational justice and work engagement. Lin (2010) suggested that trust between the organisation and employees foster employees that are more dedicated, innovative and energized. When an organisation fails to keep promises employees would feel the organisation failed them, which leads to a decrease in trust and work engagement (Lin, 2010).

Chughtai and Buckley (2011) state that if supervisors display care, concern, respect and support towards their subordinates a sense of obligation is developed among employees to respond to these actions with positive behaviours and attitudes. This may involve greater vigour, dedication and absorption (work engagement) (Chughtai & Buckley, 2011; Agarwal, 2014) or counterproductive work behaviour if employees feel that the organisation is unjust or can't be trusted (de Lara, 2009). Additionally, employees with low engagement may engage in CWB

in retaliation against an unfavourable work environment (Ariani, 2013). Koopmans et al. (2014) found a moderate positive correlation between counterproductive work behaviour and overall work engagement as well as a weak to moderate negative correlation between counterproductive work behaviour and work engagement sub scales. This suggests that when low levels of work engagement are present, employees will engage in cyberloafing.

Based on the aforementioned overview of the literature, this study hypothesised that:

H_{1a}: A negative relationship exists between organisational justice and cyberloafing.

H_{1b}: A positive relationship exists between organisational justice and organizational trust.

H_{1c}: A positive relationship exists between organisational justice and work engagement

H₂: A negative relationship exists between organisational trust and cyberloafing.

H_{3a}: A negative relationship exists between work engagement and cyberloafing.

H_{3b}: A positive relationship exists between work engagement and organisational trust.

H₄: Work engagement mediates the relationship between organisational justice and cyberloafing.

H₅: Organisational trust mediates the relationship between organisational justice and cyberloafing.

Research method

Participants

The population of this study was South African office workers within the retail and manufacturing industry who use their organisations' internet access as part of their daily work operations. For purposes of this study a convenience non-probability sampling method was applied. By means of this method participants were selected based on their availability to the researcher (Bryman & Bell, 2015). An electronic link to the survey was sent to office workers in various organisations, 224 participants responded. This represents a response rate of 41%. All the questionnaires were workable and were analysed.

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

Table 1 *Characteristics of the participants (N=224)*

Item	Category	Frequency	Percentage (%)
Gender	Male	124	55.40
	Female	100	44.60
Race	Black	62	27.70
	White	125	55.80
	Coloured	16	7.10
	Indian	18	8.00
	Asian	3	1.30
Household	Single (living alone)	42	18.80
	Married/living with partner	13	5.80
	Divorced/separated	156	69.60
	Living with parents	13	5.80
Education	Grade 12	102	45.50
	Degree (Graduate or Honours)	84	37.50
	Diploma	21	10.70
	Postgraduate degree	14	6.30
Home Language	Afrikaans	88	39.30
	English	78	34.80
	Sepedi	15	6.70
	Sesotho	7	3.10
	Setswana	5	2.20
	siSwati	3	1.30
	Tshivenda	1	0.40
	isiNdebele	1	0.40
	isiXhosa	6	2.70
	isiZulu	13	5.80
	isiTsonga	6	2.70
	Missing System	1	0.40

This sample comprised 224 participants with 55.40% male and 44.60% female participants, from organisations within the retail and manufacturing industries. The majority of the participants were white (55.80%), followed by black participants (27.70%), coloured (7.1%), indian (8%) and asian (1.3%).

In terms of households most participants were divorced/separated and contributed to 69.60% of the sample. Furthermore, 45.50% of the participants had a grade 12 qualification and 37.50% had a university degree. The remaining participants had a diploma (10.7%) or postgraduate degree (6.3%). The prevalent home language spoken was Afrikaans (39.30%), followed by English (34.80%).

Data collection

Prior to distributing the survey, permission was obtained from the participating organisations and data were collected over a four-week period. An email with the necessary information regarding the study and an electronic link to the survey were sent to potential participants. A follow-up email was sent after one week and another after two weeks. Anonymity of participants was ensured by not asking for any information by which the participants could be identified. Participation was voluntary in nature and no incentives were provided to participants for participating in the study.

Measures

Cyberloafing

Blanchard and Henle's (2008) adapted version of Lim's (2002) self-reporting cyberloafing scale was utilised to measure cyberloafing. The scale consists of 22-items of which 'Checked non-work-related email' and 'Visited newsgroups or bulletin boards' are examples. A five-point Likert-type scale ranging from 'Never' (1) to 'A great deal' (5) was used. A Cronbach's alpha coefficient of 0.84 for this scale was obtained by Blanchard and Henle (2008). Restubog et al. (2011) obtained a Cronbach's alpha coefficient of 0.94 for this self-reporting scale. The aforementioned study investigated the role of self-control between organisational justice and cyberloafing among 238 employees and their co-workers.

Organizational Trust

The Trust scale that was developed by Gabarro and Athos (1976) and adapted by Robinson (1995) was used to measure trust. The instrument consists of seven items (e.g. ‘I can expect my employer to treat me in a predictable and consistent manner’ as well as ‘My employer is always reliable’.) The instrument used a five-point Likert-type scale ranging from ‘Strongly disagree’ to ‘Strongly agree’. Mey et al. (2014) found a Cronbach alpha of 0.86 in a study among professional and white-collar employees in the Eastern Cape, South Africa.

Organizational Justice

The Perceived Overall Justice scale (POJ) developed by Ambrose and Schminke (2009) was used. The instrument contains six items (e.g. ‘In general, the treatment I receive around here is fair’). A seven-point Likert-type scale was used and ranged from ‘Strongly disagree’ (1) to ‘Strongly agree’ (7). Furthermore, item POJ2 and POJ6 were reverse scored. In a study regarding job insecurity, organizational justice and employees’ performance an alpha coefficient of 0.84 was found (Wang, Lu & Siu, 2015). Additionally, when also investigating a mediating effect of work engagement from uncertainty management theory perspective a 0.84 Cronbach’s alpha coefficient was obtained (Wang, Lu & Siu, 2015).

Work engagement

Work engagement was measured by using the Utrecht Work Engagement Scale (UWES) developed by Schaufeli et al. (2002). The scale consists of 17 items and measures the three dimensions of work engagement; Vigour (6 items; e.g. ‘When I get up in the morning, I feel like going to class/work’), Dedication (5 items; e.g. ‘I’m enthusiastic about my study/job’) and Absorption (6 items; e.g. ‘When I’m studying/working, I forget everything around me’). The instrument used a seven-point frequency scale ranging from 0 (Never) to 7 (Everyday). Storm and Rothmann (2003) found a Cronbach alpha coefficient of 0.78 for Vigour, 0.89 for Dedication and 0.78 for Absorption. The study was performed on 2 396 police employees across South Africa.

Statistical analysis

The statistical analysis was conducted with Mplus 7.31 (Muthén & Muthén, 2015). The study utilised structural equation modelling to test the research model. The mean and variance adjusted weighted least square estimation method was used (WLSMV), which is suitable for categorical data analysis (Rhemtulla, Brosseau & Savalei, 2012).

Specifically confirmatory factor analysis was further used to determine the factor loadings of the observed constructs in a measurement model. The goodness of fit was determined by examining the following fit indices: Comparative fit index (CFI; ≥ 0.90), Tucker-Lewis index (TLI; ≥ 0.90) and the root mean square error of approximation (RMSEA; ≤ 0.08) (Cudeck & Browne, 1993). The reliability of the instruments was determined by means of Cronbach's alpha. Values of 0.70 and above were considered acceptable for the Cronbach's alpha coefficients (Struwig & Stead, 2001). Additionally, correlations were determined between the latent constructs. The practical significance for correlation coefficients were viewed to be a medium practical effect if the values were 0.30 and above, and large practical effect if the values were 0.50 and above (Cohen, 1992). Structural regressions were then used to determine the direction and statistical significance of the beta coefficients, which were used to investigate hypotheses H_{a1} – H_{3b}. The parameters of the model were set at an alpha level of 0.05 ($p < 0.05$).

Further to this, to investigate hypothesis 4 and 5, a mediation analysis was conducted through bootstrapping. Bootstrapping was set a 10 000 resampling draws and used to determine the indirect and direct relationships between the constructs. Confidence intervals were set considered at 95% upper and lower bound, with significant indirect effects not crossing zero.

Results

Measurement models: Fit, reliability and correlations

The CFA results indicated that the measurement model was an adequate fit to the data (CFI = 0.94; TLI = 0.93; RMSEA = 0.05). Interpretation of the model results therefore continued without any post-hoc modifications to the model. Table 2 below presents the means, standard deviations and correlation matrix for the study variables with the Cronbach's alpha coefficients on the diagonal in brackets for each construct.

Table 2 *Reliabilities and correlation matrix for the latent variables*

Variables	Mean	SD	1	2	3	4
1. Organizational justice	27.53	4.75	(0.73)			
2. Organizational trust	22.29	2.06	0.59* ^b	(0.82)		
3. Work engagement	43.96	8.39	0.26* ^a	0.44* ^a	(0.89)	
4. Cyberloafing	38.25	9.75	-0.01	-0.05	-0.21*	(0.93)

Notes: SD = standard deviation; mean and SD based on total scores; Cronbach's reliability coefficients in brackets on the diagonal; * = correlation statistically significant $p < 0.01$; a = medium practical effect; b = large practical effect

All the Cronbach's reliability coefficients were above the cut-off threshold ($\alpha \geq 0.70$), demonstrating acceptable internal consistency for all of the factors. Specifically, the lowest value was for organisational justice ($\alpha = 0.73$) and the highest value for the cyberloafing factor ($\alpha = 0.93$). In terms of the correlational relationships between the variables, the correlation matrix showed that cyberloafing was negatively correlated with work engagement ($r = -0.21$). The results, however, showed no significant correlations between cyberloafing with either organisational justice or trust ($p > 0.05$). Furthermore, organisational justice was positively correlated with both organisational trust ($r = 0.59$; large practical effect) and work engagement with a borderline medium practical effect size ($r = 0.26$). Organisational trust positively correlated with work engagement ($r = 0.44$; medium practical effect). Organisational justice was therefore positively correlated to organisational trust and work engagement and a positive correlation was found as expected.

Structural model fit and regression results

In accordance with the research hypotheses (H_{1a} - H_{3b}), regression paths were added to the final measurement model. The structural model was considered an acceptable fit to the data (CFI = 0.92; TLI = 0.92; RMSEA = 0.05). The results of the regressions are presented in table 3 below.

Table 3 *Regression results for the structural model*

Structural path	β	S.E.	p	Result
Organisational justice → Organisational trust	0.57	0.04	0.001	Significant
Work engagement → Cyberloafing	-0.23	0.07	0.001	Significant
Organisational trust → Work engagement	0.41	0.07	0.001	Significant
Organisational justice → Work engagement	0.02	0.07	0.801	Not significant
Organisational justice → Cyberloafing	0.03	0.08	0.651	Not significant
Organisational trust → Cyberloafing	0.03	0.08	0.680	Not significant

Notes: β = Beta coefficient; S.E. = Standard error; p = Two-tailed statistical significance; $p < 0.001$

Organisational justice had a positive predictive relationship to organisational trust ($\beta = 0.57$, S.E. = 0.04, $p = 0.001$; supporting H_{1b}). Furthermore, a statistically negative predictive relationship was found between work engagement and cyberloafing ($\beta = -0.23$, S.E. = 0.07, $p = 0.001$; supporting H_{3a}). Organisational trust predicted work engagement positively ($\beta = 0.41$, S.E. = 0.07, $p = 0.001$; supporting H_{3b}). Therefore, collectively, all the predictive validity hypotheses (H_{1b} , H_{3a} , H_{3b}) were supported. However, H_{1a} , H_{1c} and H_2 were rejected). Figure 1 presents the predictive regression relations between cyberloafing, organisational justice, organisational trust and work engagement.

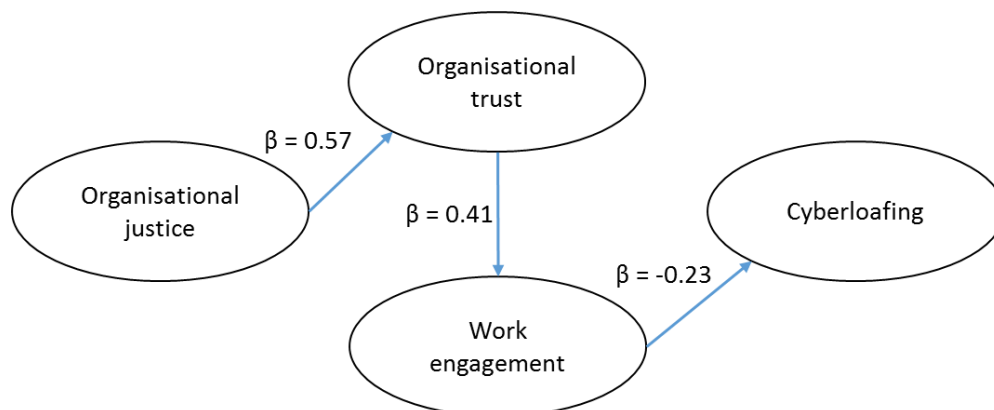


Figure 2. *Structural model with significant regressions*

Indirect effects

Based on the significant regression results (as can be seen in figure 1) two potential indirect effects (mediation models) existed, i.e. i) the mediating role of organisational trust in the relationship between organisational justice and work engagement and ii) the mediating role of work engagement in the relationship between organisational trust and cyberloafing. It is important to note that no direct relationships existed in this model to the mediated outcome – indicating only the potential for full mediating factors (indirect-only) and not partial (complementary mediation models) (Zhao, Lynch & Chen, 2010). A positive indirect effect of 0.24 from organisational justice to work engagement was found with work engagement as mediator ($p < 0.001$; 95% CI [0.14, 0.34]). Furthermore, work engagement was found to be a mediator in the relationship between organisational trust and cyberloafing, but this estimate was negative, indicating that organisational trust can reduce the occurrence of cyberloafing – but only through work engagement. Neither of these two relationships had any direct effects to their respective outcome variables, indicating that potential hidden relationships were presented in the model and did not exist if not for the mediators. Further, no significant effects were found for cyberloafing, consequently Hypotheses 4 and 5 are rejected.

Discussion

The main objective of this study was to investigate the relationships between cyberloafing, organisational justice, work engagement and organisational trust amongst office workers within the retail and manufacturing industry. The literature review that was conducted revealed that these constructs have not been researched together in a single study. This research further provided a more in-depth understanding of the relationships that exist between these four constructs.

Summary of findings

The first objective was to determine the relationship between organisational justice, organisational trust, work engagement and cyberloafing. The results showed that organisational justice had no direct relationship with cyberloafing or work engagement; therefore H_{1a} and H_{1c} were rejected. The reason for this may be related to the exchange relationship where organisational justice is evaluated by the behaviour of the organisation, supervisor and employee (Cohen-Charash & Spector, 2001). Organisations may therefore treat its employees fairly but they still continue to engage in cyberloafing. This might be attributed to the unfair treatment they receive from other stakeholders such as their supervisors and co-workers. Additionally, limited research exists on the relationship between organisational justice and work engagement. These conflicting results, therefore assist other researchers. In this study employees might have felt that they were treated unfairly by their organisation. However, the nature of their work did not challenge or fascinate them. This resulted in high work engagement levels (Wang et al., 2015). Furthermore, most studies that found a relationship between organisational justice and work engagement measured organisational justice separately, which suggests that only certain factors are perceived to be unfair and not the entire organisation (Hassan & Jubari, 2010; Inoue et al., 2010).

Additionally, no relationship was indicated between organisational trust and cyberloafing, which led to the rejecting of H_2 . Previous studies found a negative relationship between organisational trust and CWB; therefore employees may engage in other forms of CWB and not only in cyberloafing to retaliate against their organisation (Alias et al., 2013; Lowry et al., 2015). The potential reason for the result may also be that cyberloafing has become an organisational norm (Page, 2015) or that it is a constructive distraction to relieve stress and restore energy (Lim & Chen, 2012). This shows that although employees believe that their employer has their best interest at heart, they will still engage in cyberloafing behaviour.

As expected, the results indicated that a positive relationship existed between organisational justice and organisational trust, which supports H_{1b} . This finding is supported by previous research from Farndale et al. (2011) and Mey et al. (2014) who found a positive relationship between organisational trust and perceived justice. These studies measured overall organisational justice. They further suggested that when employees perceive their organisations to be fair they will display higher levels of trust in management and the

organisation. Previous research has also found a positive relationship between organisational trust and procedural, distributive and interactional justice (Cohen-Charash & Spector, 2001; Aryee et al., 2002; DeConinck, 2010; Wong et al., 2012; Katou, 2013; Agarwal, 2014). Organisational justice types are therefore linked to overall organisational justice.

The last objectives were to determine if whether organisational trust mediates the relationship between organisational justice and cyberloafing and further, to determine whether work engagement mediates the relationship between organisational justice and cyberloafing. The current study, however, did not find these mediating relationships; therefore rejecting H₄ and H₅. These inconsistencies can be explained by employees trusting their organisations and feeling that they are being treated fairly. The employees, however, engage in cyberloafing behaviour due to a low workload demand, boredom or because their work is not challenging enough and not due to a lack of trust or justice. (Page, 2015). Furthermore, the current study investigated overall justice and not the three types of justice separately, which has found procedural, interactional and distributive justice to be related to work engagement (Hassan & Jubari, 2010; Inoue et al., 2010). The participants may further experience injustice related to a procedure that is associated with a specific type of justice, which is not measured in this study, but influences work engagement levels. Additionally, employees may retaliate against distrust or unfair treatment by engaging in another form of counterproductive work behaviour and not necessarily cyberloafing specifically.

Although the researcher did not explicitly hypothesise mediating relationships between organisational justice, work engagement or organisational trust and cyberloafing – these were also tested. The results revealed that there was indeed a significant mediating relationship between organisational trust, work engagement and cyberloafing, indicating that work engagement is the mechanism by means of which cyberloafing is suppressed when organisational trust is perceived. This also makes intuitive sense; when employees are engaged in their work they are less likely to be busy with non-work activities. The results also showed that there was a mediating relationship between organisational justice and work engagement through organisational trust. This indicates that when employees perceive their organisations to be fair, trust towards the organisation will increase, which will in turn lead to engaged employees. These relationships are consistent with previous research which found that organisational trust and work engagement are related (Chughtai & Buckley, 2008; Lin, 2010; Heine, 2013; Agarwal, 2014; Ugwu et al., 2014). This research also supports H_{3b}. Furthermore,

Ariani (2013) and Koopmans et al. (2014) found a negative relationship between work engagement and CWB, which also supports H_{3a}. CWB is seen as the umbrella term under which cyberloafing is classified; hence it can be concluded that a negative relationship exists between cyberloafing and work engagement. This indicates that when employees feel that their organisations cannot be trusted, they will become disengaged, which then leads to higher cyberloafing tendencies. It can therefore be concluded that evidence exists that cyberloafing behaviour will negatively influence the productivity of the employees.

Practical implications

This study provides evidence that employee perceptions are important in the interest of preventing cyberloafing behaviours within South African organisations. Consequently organisations should focus on the perceptions of their employees regarding organisational justice and trust, since these two constructs influence employees' work engagement levels, which have been found to suppress cyberloafing behaviours.

Our results provide empirical support for greater fairness when it comes to decisions and procedures. Organisations might consider monitoring systems to address cyberloafing as well, but scholars have suggested that having a cyberloafing monitoring system in place can have the reverse intended effect and decrease organisational trust and work engagement, which in turn influences employee morale and productivity negatively (Gumbus & Grodzinsky, 2006). However, it is also necessary to consider other factors that can impact cyberloafing, such as demographic, employee boredom, job dissatisfaction, self-regulation, intrinsic motivation and personality factors (Ozler & Polat, 2012; Jia & Jia, 2015; Kim et al., 2015). Furthermore, the specific role and workload of an employee can have an influence on cyberloafing behaviour (Holguin, 2016).

Limitations and direction for future research

Limitations to this study are related to data collection and analysis process. The first limitation might be the manner in which the cyberloafing construct was measured. For example, cyberloafing was measured by a self-reported questionnaire; objective information might have provided a more accurate reflection of the participant's internet usage behaviour. However, such data were unavailable for this study.

It is further possible that common method bias influenced the correlations between the constructs. External validity (generalizability) can also be viewed as a possible limitation. External validity refers to how the interpretations and results can be generalised (Polit & Beck, 2010). This study was conducted within two sectors only, therefore research should focus on other sectors in order to generalise the outcomes to the entire South African population. Furthermore, the sample size may have had a potential impact on the strengths of the relationships. Another limitation relates to the manner in which organisational justice was measured. This study measured overall organisational justice; therefore excluding the three types of organisational justice. Furthermore, the study could extend the measurement of organisational trust to the other types of organisational trust such as supervisory trust. By focusing on a specific population more definite conclusion and customised initiatives could be developed.

Lastly, a cross-sectional research design was used in this study, which had an impact on exploring casual relationships between constructs. It is suggested to conduct a longitudinal design to determine the causal effect between the constructs (Rindfleisch, Malter, Ganesan & Moorman, 2008). These recognised limitations can assist future researchers in defining future studies. Additionally, limited research exists regarding the motivation behind cyberloafing. Future research can therefore explore the relationship between cyberloafing and motivation.

Conclusion

This study presented evidence of the relationships between organisational justice, organisational trust, work engagement and cyberloafing. Specifically, when organisations are perceived to be fair it increases organisational trust which then leads to a higher level of work engagement and consequently reduces the occurrence of cyberloafing behaviour. Organisations should therefore not neglect employees' perceptions of fairness and trust; they should consider interventions to decrease unfair behaviour towards employees and to build employees' trust and engagement levels.

Table 4 *Cyberloafing terminology*

Labels	Definition
Cyber- slacking	‘The overuse of the internet in the workplace for purposes other than work’ (Whitty & Carr, 2006, p 237).
Personal Web usage	‘Voluntary online Web behaviours during working time using any of the organisation’s resources for activities outside current customary job/work requirements’ (Anandarajan, Devine & Simmers, 2004, p 63).
Internet addiction	‘A psychological dependence on the Internet, regardless of the type of activity once logged on’ (Kandell, 1998, p. 12).
Cyberloafing	‘any voluntary act of employees’ using their companies’ internet access during office hours to surf non-job related Web sites for personal purposes and to check (including receiving and sending) personal e-mail as misuse of the internet’ (Lim, 2002, p. 677).
Cyber slouching	‘Many employees use the Internet occasionally and harmlessly for short personal tasks, such as checking a sports score or a stock price’ (Urbaczewski & Jessup, 2002, p 80).
Junk computing	‘The use of information systems in a way that does not directly advance organizational goals’ (Guthrie & Gray, 1996, p.24).
Non-work-related computing (NWRC)	‘An employee’s usage of organizational IS resources for personal purposes during or after working hours’ (Wong, Lee & Lim, 2005, p 441).

Table 5 *Definitions of trust*

Contributing researcher	Definition
Bromiley and Cummings, (1995, p. 303)	‘an individual’s belief or a common belief among a group of individuals that another individual or group (a) makes good-faith efforts to behave in accordance with any commitments both explicit and implicit, (b) is honest in whatever negotiations preceded such commitments and (c) does not take excessive advantage of another even when the opportunity is available’.
Creed and Miles (1996, p. 17)	‘The specific expectation that another’s actions will be beneficial rather than detrimental and the generalised ability to take for granted, to take under trust, a vast array of features of the social order’.
Doney, Cannon and Mullen (1998, p. 604)	‘A willingness to rely on another party and to take action in circumstances where such action makes one vulnerable to the other party’.
Lin (2010, p. 517)	This study defines organizational trust as ‘employees’ willingness at being vulnerable to the actions of their organization, whose behaviour and actions they cannot control’.
Fukuyama (1995, p. 26)	Defined trust as ‘the expectation that occurs within a community of regular, honest and cooperative behaviour, based on commonly shared norms on the part of other members of that community’.
Bhattacharya, Devinney and Pillutla (1998, p. 462)	‘Trust is an expectancy of positive (or nonnegative) outcomes that one can receive based on the expected action of another party in an interaction characterized by uncertainty’.
McAllister (1995, p. 25)	Interpersonal trust as ‘the extent to which a person is confident in and willing to act on the basis of, the words, actions and decisions of another’.
Mayer & Gavin 2005, p. 874)	‘The willingness to be vulnerable to another party when that party cannot be controlled or monitored’.

Schoorman, Mayer and Davis (2007, p. 712)	'The willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trust or, irrespective of the ability to monitor or control that other party'.
Lewicki, McAllister and Bies (1998, p. 439)	Trust is "confident positive expectations regarding another's conduct".
Rousseau et al. (1998, p. 395)	'A psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviours of another'.
Van den Akker, Heres, Lasthuizen and Six (2009, p. 105)	'A psychological state comprising the positive expectation that another party will perform particular actions that are important to one, coupled with a willingness to accept vulnerability which may arise from the actions of that other party'.
Gaborro (1978, p. 294)	'Trust has been defined or operationalized in the literature in many deferent ways including the level of openness that exists between two people, the degree to which one person feels assured that another will not take malevolent or arbitrary actions and the extent to which one person can expect predictability in the other's behavior in terms of what is 'normally' expected of a person acting in good faith'
Moorman, Zaltman and Deshpande (1992, p.315)	Trust 'as a willingness to rely on an exchange partner in whom one has confidence'

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CHAPTER 3
CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Conclusions, Limitations and Recommendations

This chapter will cover the conclusions, limitations and recommendations for organisations and researchers.

3.1. Conclusions

Research on cyberloafing has been neglected in the South African context. During an extensive literature review, no research was found regarding the relationship between cyberloafing, organisational justice, work engagement and organisational trust in one model. The present study therefore contributed to a deeper understanding of the cyberloafing phenomenon by investigating how it is influenced in the context of organisational justice, organisational trust and work engagement. Research suggests that cyberloafing behaviour is an increasing problem and holds various negative implications for organisations (Lieberman, Seidman, Mckenna & Buffardi, 2011; Restubog et al., 2011). Organisations should therefore consider investing in combating cyberloafing behaviour. The findings of this study will assist organisations in developing strategies and interventions to reduce the impact cyberloafing behaviour has on the organisation's bottom line.

The general objective of this study was to investigate the relationship between cyberloafing, organisational justice, work engagement and organisational trust. This objective was achieved by focusing on the specific objectives of this study which will be discussed below.

The first objective was to conceptualise cyberloafing, organisational justice, work engagement and organisational trust. The in-depth literature review presented in Chapter 2 of this dissertation achieved this objective. The literature review revealed that all the constructs are related directly and indirectly, and that it is important to investigate the relationships between these constructs and the possible negative impact these constructs may have on organisations.

The second objective of this study was to determine the relationship between cyberloafing, organisational justice, work engagement and organisational trust, amongst office workers in South Africa. The results of this study indicated that a positive practically significant regression relationship exists between organisational justice and organisational trust ($\beta = 0.57$). Previous studies revealed that procedural, interactional and distributive justice are related to organisational trust (Cohen-Charash & Spector, 2001; Aryee, Budhwar & Chen, 2002; DeConinck, 2010; Wong, Wong & Ngo, 2012; Katou, 2013; Agarwal, 2014). Additionally, Farndale, Hope-Hailey and Kelliher (2011) and Mey, Werner and Theron (2014) found that organisational trust is positively related to perceived organisational trust.

Furthermore, a positive relationship between organisational trust and work engagement ($\beta = 0.41$) was found. These results are consistent with previous research in which a positive relationship was found between work engagement and perceived justice (Hassan & Jubari, 2010; Inoue et al., 2010). Additionally, results revealed that cyberloafing and work engagement are negatively related to each other ($\beta = -0.23$). This study suggests that cyberloafing behaviour increases when employees perceive the organisation as being unfair and that organisational trust will then decrease, which will lead to low levels of work engagement. Koopmans et al. (2014) and Alias, Mohd Rasdi, Ismail & Abu Samah (2013) indicate that work engaged is negatively related to counterproductive work behaviour, the umbrella term under which cyberloafing is classified.

The third objective was to determine whether organisational trust mediates the relationship between organisational justice and cyberloafing amongst office workers in South Africa. Additionally, the fourth objective was to determine whether work engagement mediates the relationship between organisational justice and cyberloafing amongst office workers in South Africa. The findings of this study concluded that there were no mediating relationships with cyberloafing. The reason for this may be that previous studies measured organisational justice components separately and not overall justice as in the current study. Employees may perceive their organisation overall to be fair. However, there may be certain components of justice or procedures that are considered to be unfair. Additionally, employees may engage in cyberloafing for reasons unrelated to organisational justice. The results, however, revealed that organisational trust acts as the mediator between organisational justice and work engagement. When organisations are fair, organisational trust will increase, which will then have the effect that work engagement levels will increase. This suggests that when employees

perceive their organisations to be fair in its processes, they would tend to trust the organisation more and will be willing to go the extra mile. Additionally, research revealed that organisational trust and work engagement are related (Chughtai & Buckley, 2008; Lin, 2010; Heine, 2013; Agarwal, 2014; Ugwu, Onyishi & Rodríguez-Sánchez, 2014) and that work engagement are negatively related to CWB. It can therefore be said that work engagement is related to cyberloafing (Ariani, 2013; Koopmans et al., 2014). This research showed that work engagement is a mediator between organisational trust and cyberloafing. This mediating relationship indicates that a trusting work environment fosters high levels of work engagement which will in turn reduce the occurrence of cyberloafing behaviour. When employees feel that the organisation has its employees' best interest at heart, the employees will be willing to go beyond what is expected of them and not want to harm the organisation.

Lastly, the fifth objective was to make recommendations future research and practice. This objective was achieved and presented in chapters 2 and 3 (the current chapter) of this dissertation. The findings of this study will assist organisations in developing and implementing strategies and interventions to decrease cyberloafing by increasing organisational justice and trust which could ultimately increase productivity and address CWB.

3.2. Limitations

Every research study holds limitations and it is necessary to be aware of these limitations to be able to interpret the findings in that context and to direct future research. The first limitation of this research study relates to self-report measures. Cyberloafing is generally measured by the self-reported measure that was developed by Lim (2002) and Blanchard and Henle (2008). The limitation of using a self-reported measure is that participants may not report their true behaviour, which could influence the strength of the relationships (Blanchard & Henle, 2008). To minimise this risk the study created a trusting relationship by ensuring that the participants' identities remained anonymous and that participation was voluntary – regrettably no objective data were available to consider along with the self-report data. Therefore common method bias is a possible limitation. Common method bias occurs when the same method is used to measure correlations between constructs, usually with self-reported surveys. Researches often assume that when using this measurement method inflates relationships. Spector (2006), however, indicated that common method bias does not necessarily inflate correlations, but can attenuate correlations. Additionally, external validity can also be a limitation within this study. External

validity is the generalisation of the results (Polit & Beck, 2010) and since only two sectors were measured within this study, inferences made cannot be generalised to the South African population.

The smaller sample size and low response rate potentially influenced the significance of the relationships. The next limitation of this study is that overall organisational justice was measured and not the various types of organisational justice, even though research does support measuring overall justice (Cohen-Charash & Spector, 2001; Kim, del Carmen Triana, Chung & Oh, 2015). Lastly, a cross-sectional research design was used within this study. A cross-sectional research design is an objective design by means of which data is collected at one point in time (Struwig & Stead, 2001; de Vos, Strydom, Fouche & Delpont, 2012). This limited the interpretations of the results as this research design prevents exploring causality

3.3. Recommendations for future research

From this study several recommendations can be made for future research. Researchers can use objective information to provide an accurate reflection of cyberloafing usage behaviour. This information could include internet usage at work and thus how much time is spent on non-work-related websites. Furthermore, to strengthen the confidence in results, it is recommended that a larger sample size is used to replicate the current findings.

Additionally, future research in South Africa should measure organisational justice separately by measuring the components procedural, distributive, interpersonal justice. Strategies and intervention can therefore be tailored to focus on the specific processes that are perceived by participants to be unfair. Moreover, the measurement of trust should not be limited to organisational trust, but extended to specific types of trust such as supervisory trust. Researchers should further focus on a specific population to develop more accurately combats the occurrence of cyberloafing behaviour within that industry. To improve external validity future research should focus on various sectors to be able to generalise the results. Lastly, it is suggested that a longitudinal approach should be utilised to verify the findings. This approach will assist in determining the causal relationships between these constructs and provide a deeper understanding of the influence these constructs have over a time period.

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