

Developing a Practical Nomological Framework on Cyber loafing and Job performance for the Global Apparel Manufacturing Sector by Identifying Research Gaps

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ABSTRACT

The purpose of this article is to identify current research gaps on cyber loafing and job performance in the apparel manufacturing sector and to develop a Nomological framework for the same. This review adopted Callahan's (2014) Six W's and "Five C" characteristics proposed for systematic reviews. This review enclosed articles from 2002 to 2022 in the field of cyber loafing and job performance. Altogether 252 articles were reviewed and a sample of the most relevant are noted herein. The review has recognized three major gaps related to cyber loafing and job performance in the apparel manufacturing sector. Theories used are conservation of resources and social exchange that are linked to cyber loafing and job performance respectively. This review is limited to highlighting gaps that exist in the extant research and to the development of a Nomological framework. However, there is an extensive scope for testing this model empirically in global apparel manufacturing contexts and it is especially valuable where apparel manufacturing is an industry that contributes to the national economy. The identification of gaps and the model developed is an important contribution to future investigations on cyber loafing and job performance in the selected sector as it is linked to the fashion industry globally. This review contributes to the existing body of knowledge on human resources management (HRM) as cyber loafing is a phenomenon that is said to impact employee performance negatively.

Keywords – Apparel Manufacturing Sector, Cyber loafing, Information Communication Technology, Job Performance

INTRODUCTION

Cyber loafing is a concept that was popularized by Lim (2002). Although it was initially highlighted in New York Daily newspaper, it became a concept that needs exploring after it was highlighted as an activity that employees engage in to deviate from work-related activities while at work. Hoonakker (2014) noted that ICT has infiltrated many modern work settings making it an indispensable tool to perform work in organizations. Many scholars have noted that ICT-enabled work environments have created an open platform for employees to use the internet for non-work-related activities at will (Oravec, 1999; Lim, 2002; Askew, 2012; Andreassen et al. 2014; Aghaz & Sheikh, 2016; Zhong, et al., 2022). As such scholars endeavour to expand the knowledge of cyber loafing and its impact on work performance whilst employers are seeking avenues to harness the full potential of employees mitigating engagement in cyber loafing.

Job performance is a concept that has been looked at from different perspectives as it is considered the key outcome that employers are expecting from employees. Murphy and Kroecker (1988) identified it as task performance as it has a direct bearing on the tasks of employees. Scholars have acknowledged that job performance is an important construct as it directly affects productivity, organizational performance and competitive advantage. O'Boyle *et al.* (2011) claimed that job performance would entail the performance of

a broad set of activities together with cooperating with others and carrying out some group tasks. With a broad and fairly inclusive description, Viswesvaran and Ones (2000) postulated that job performance is directly connected to achieving organizational objectives, thus making it very important for the survival of the organization.

Job performance has been a phenomenon that has undergone scrutiny for some time and scholars have given it varying definitions over the past decades (Murphy & Krockner, 1988; Borman & Motowidlo, 1997; Viswesvaran & Ones, 2000). Further, it has several dimensions such as task, context, adaptive performance and counterproductive behaviour (Koopmans, et al. 2014). Notwithstanding these efforts to explain the construct from all possible angles, it has not failed to be impacted by many phenomena that were alien in the past yet prevalent in work settings today. One such phenomenon is Information Communication Technology (ICT) which has embraced work settings primarily to improve the efficiency and performance of individuals (Dayet al.,2012; Batane & Ngwako, 2017; Sinha & Larisson, 2021). Researchers have acknowledged that ICT is playing an important role to improve individual performance in organizations (Oravec, 1999; Anandarajan et al., 2006; Oravec, 2002; Aghaz & Sheik, 2016). There are others, however, who have noted that ICT also serves as an impediment to job performance (Lim, 2002, Anandarajan & Simmers, 2004; Lim & Teo, 2005; Lim & Chen, 2009). This is because the internet offers an ideal platform for employees to engage in behaviours which appear to be innocuous yet extremely damaging to organizations such as misuse of bandwidth, employee sexual harassment, paedophile grooming as well as online infidelity (Joinson, 2005; Cheng et al.,2008; Stalans & Finn, 2016). Stalans and Finn (2016) further posited that committing crimes using the internet can be detrimental to the organization as it is likely to drag the organization into direct conflict with the laws of countries. Lim (2002) noted internet abuse in organizations is production deviance as it is provided for work. Deliberating on internet abuse in organizations Martin et al. (2010) suggested it to be time banditry as it is robbing time using the internet for non-work activities. This deviation from work while at work is termed as cyberloafing (Lim, 2002) and it is a recent phenomenon identified as a serious issue for organizations. Interestingly, LaPlante (1997) noted that the time used on the internet was mainly to perform non-work related activities and suggested that this is close to 90%, which is a serious concern for employers. The gravity of this form of abuse is a concern now for organizations albeit it was not thought as harmful to this extent previously.

Cyber loafing and job performance have been an area many researchers have explored periodically due to their importance in modern work contexts. Work settings today are ICT enabled which has allowed employees an opportunity to loaf in cyberspace during work hours. Cyber loafing activities are not confined to the office computers but could be individual devices such as smartphones and tablets (Bock & Ho, 2009). According to a literature review conducted by Syedet al. (2020), there are mixed findings related to cyber loafing and job performance. Sao et al. (2020) posited that cyber loafing has a positive impact on job performance and suggested that internet loafing affords individuals an opportunity to explore new grounds and improve their learning related to their expertise. However, others have indicated that cyber loafing can be detrimental to organizations for various reasons. Blanchard and Henle (2008) posited that cyber loafing in organizations can reduce employee productivity by as much as 40 percent and will cost companies a lot of money. Further, Razaliet al. (2019) claimed that the seriousness of cyber loafing is extensive as it is difficult to detect when and how employees engage in cyber loafing because it can occur surreptitiously.

The main objective of this study is to uncover the gaps that exist in the current literature related to cyber loafing and job performance in the apparel manufacturing sector. Although there have been numerous studies related to this area, studies related to this specific sector seem to be lacking as it was thought to be manual labour and the opportunities to loaf in cyberspace are limited. However, in the recent past, ICT integration in the apparel manufacturing sector has increased to speed up the processes, improve efficiency and improve labour productivity for those who are not engaged in machine operations, which goes beyond activities such as designing, merchandising, marketing to meet customer requirements (Markides & Anderson, 2006; Varukolu & Park-Poaps, 2009). As such, determining gaps in this area is timely. Gaps

visible in this area are population, knowledge and empirical.

The apparel industry is a labour-intensive global industry characterized by a relatively low fixed capital investment that is highly competitive with a high demand for superior quality (Forza & Vinelli, 2000; Hassler, 2003; Scott, 2006; Gazzola et al., 2020). The industry evolved as an art and underwent many technical changes. Technological advancements in the industry have promoted computerized equipment, improving areas such as pattern making, cutting, 3D scanning and automation (Baily, 1993; Forza & Vinelli, 2000; Nayak & Padhye, 2015). The apparel manufacturing industry broadly handles two varieties of clothing: outer and inner clothing. This has made the manufacturing process very complex. This sector makes a major contribution to the national economies of many countries (Nayak & Padhye, 2015) and today most of them are Asian countries such as China, Bangladesh, Vietnam, Sri Lanka, Cambodia and Pakistan due to low manufacturing costs.

LITERATURE REVIEW

This section describes the current research available related to cyber loafing and job performance concepts. The current research related to the area indicates that cyber loafing impacts job performance both negatively and positively. Some scholars have identified cyberloafing to be having a positive impact on job performance (Oravec, 2002; Anandarajan et al., 2006; Askew, 2012; Sheikh & Aghaz, 2016). Researchers such as Lim, 2002, Lim & Teo, 2005, Lim, & Chen, 2009 and Andreassen et al. 2014 suggested that cyber loafing while at work is a hindrance to the job performance of individuals in organizations.

This review is focusing on the impact of cyber loafing on job performance in the apparel manufacturing sector which is scantily evidenced thus far. The extant research related to ICT and the apparel manufacturing sector essentially focuses on the use of ICT for the improvement of sustainability, e-business applications to improve customer relationship management, gain competitive advantage, improve marketing capabilities, product development and to enhance performance (Falk, 2005; Setiowati et al., 2015; Avadanei et al., 2020; Pan et al., 2020; Wijewarbdhana et al., 2020)

The Concept of Cyber loafing

Scholars have defined cyber loafing based on the context of their research. The following table depicts various definitions of the concept of cyber loafing.

Table 1: Definitions of Cyber loafing

Author and year	Definition	Context
Lim (2002)	Any voluntary act of employees using the internet facilities provided by the organization during office hours to surf non-job related Web sites for personal purposes and to send and receive e-mails.	Employed individuals with internet facilities in Public sector and Private sector organizations in Singapore
Lim & Teo (2005)	The act of employees using their company's internet facilities for personal purposes during work hours at the office	Internet savvy working adults with minimum degree level qualifications working in the IT, manufacturing service and finance from the private and public sector organizations in Singapore

Blau, Yang & Ward-Cook (2006)	Misuse of the internet	Medical technologists in the USA
Anandarajan et al. (2006)	Discretionary online web behaviour during working time using any of the organization's resources for activities outside customary job and work requirements	Top level, middle level, lower level managers, professionals and administrators from different organizations in the USA.
Blanchard & Henle (2008)	Employees non-work related use of the company provided email and the internet while at work	Employed MBA students from a variety of industries in the USA coming from a variety of ethnic groups
Askew, et al. (2014)	Set of behaviours at work in which employees engage in electronically mediated activities, specifically using the internet that supervisors do not consider as job related	Student and non-student employees working with a computer from various ethnic groups in the US in different organizations
Oosthuizen et al. (2018)	Any voluntary act using the internet facilities provided by the company, during office hours to surf on non-job related websites for personal use and to check, send and receive personal emails.	Office workers on the retail and manufacturing sector in South Africa
Sao, et al. (2020)	Actions of employees of using the internet for non-office work related activities or personal use during their working hours while pretending to do their official work	Employees from manufacturing, IT/e-commerce, real estate, retail and education in India.
Rajput & Parimal, (2020)	Unproductive use of technologies at work.	Manufacturing and service sectors in India
Usman, et al. (2021)	Surfing of organization's internet for personal, non-work related purposes such as checking headlines, online shopping, personal emailing, online gambling, accessing pirated materials and watching pornographic videos during office hours.	Manufacturing and service industries in Pakistan

Source: Researcher 2023

The world has observed an exponential growth of ICT in work environments to increase productivity (Koay et al. 2017). Anandarajan et al. (2000) noted that many businesses have embraced the internet as a potential tool to improve productivity to gain a competitive edge. Against this backdrop, the internet has become a useful tool to improve communication between individuals, to disseminate information and a platform to allow individuals to engage in activities such as gaming, watching movies and download materials that are not related to work (Anandarajan et al. 2000). This tool once thought to be a game changer in work settings has now become a hindrance to employers due to non-work-related activities (Mahatanankoon et al. 2004). These activities were broadly identified as cyberloafing by Lim (2002) who posited that the internet is a tool that can be beneficial and detrimental to organizations based on activities individuals engage in. Sao et al. (2020) identified this form of discretionary use of the internet as goldbricking, as individuals engage in these personal web uses while pretending that they are engaged in work. According to the researcher, these activities range from using social media, shopping online, reading news and blogs, sending and receiving personal emails, job searching and playing online games. Hafizh and Sumadhinata (2022) suggested that cyberloafing is inappropriate use of the internet at work and this may include activities that have no relevance to work even during his/her free time after work. What is inferred is that if someone chooses to

use the office internet for non-work related activities at work, it is cyberloafing. Anandarajan et al. (2006) noted that cyberloafing can include surfing pornographic material, online gaming and downloading music which are detrimental activities individuals engage in while at work. This infers that all cyberloafing activities are not harmful to the organization.

Considering cyberloafing activities from a broader perspective Aybas and Güngör (2020) identified numerous types of cyberloafing activities such as visiting websites such as news, sports, entertainment, pornographic, instant messaging and chatting, downloading non-work-related material, seeking employment, shopping, gaming, and sending and receiving emails while at work. This classification of cyberloafing activities is similar to Lim and Teo (2005). Aybas and Güngör (2020) suggested that cyberloafing is deviant behaviour that is detrimental to the organization and identified two dimensions of the same as browsing and emailing. This notion was previously promoted by Lim (2002) in his pioneering study on cyberloafing. Robinson and Bennett (1995) noted it as voluntary behaviour which violates organizational norms and threatens the well-being of the organization and its members and it is costly to the organization. Ozler and Polat (2012) classified cyberloafing to be minor and major and noted minor activities to be online shopping, engaging in social media, searching for employment, sending and receiving personal emails, and downloading materials that are not related to work. The major activities were identified as gambling, downloading pornographic materials and illegal music. These classifications are somewhat similar to what Mastrangelo et al. (2006) identified as non-productive and counterproductive cyberloafing.

Aghaz and Sheikh (2016) indicated that cyberloafing is proven to be an antidote for job burnout, which is prevalent in the knowledge-intensive work sectors. Similarly Sao et al. (2020) posited that cyberloafing has a positive impact as it plays an important part in the recovery process of employees. Further, the researchers argued that cyberloafing serves as a tool to augment one's skills and abilities while it promotes the generation of new ideas, which can be an important part of modern-day work requirements. These positive effects of Cyberloafing were also identified by Oravec (2002) who suggested that it will serve as a tool to make employees more productive. Although the researcher was not using the term cyberloafing he termed it as online recreation. However, other researchers claimed that cyberloafing can be a mixed blessing despite its being advocated as deviant behaviour (Lim, 2002). Discussing the positives and negatives of cyberloafing, Syed et al. (2020) posited that using social networking sites while at work has a positive impact on career improvements by way of collaborating and communicating with others who are known and unknown. Further, it was suggested that cyberloafing can impact employees and the organization both positively and negatively (Syed et al., 2020).

Some other scholars have attempted to qualify the extent to which cyberloafing should be allowed (Lim & Chen, 2009; Askew, 2012). Lim and Chen (2009) promoted the idea that little cyberloafing is better for employee performance. Studying the impact of cyberloafing on employee emotions, it was noted that cyberloafing can serve as a coping strategy for negative emotions (Andel et al. 2019). Although this claim is close to the suggestion of Aghaz and Sheikh (2016), it is unique as it has qualified the duration and the type of cyberloafing that can be considered useful. It was noted that general browsing activities are not harmful as previously suggested but emailing can be harmful to the individual and the organization as it is more deliberate than browsing (Lim, 2002; Ng & Wiemer-Hastings; Koay & Soh 2019). Askew (2012) also suggested that cyberloafing might not have serious consequences if it is not done frequently. The preceding discussion indicates that cyberloafing is broadly a deviation from work while at work, however, considering the nature of modern work environments and the tools available to make an employee productive, cyberloafing appears to be an inevitable deviation that organizations ought to be cautious of and manage.

Concept of Job Performance

The construct of job performance, although very regularly discussed, seems to get different interpretations based on the nature and the context of its execution. The following table depicts some of the definitions

scholars have given over the years.

Table 2: Definitions of Job Performance

Author and year	Definition	Context
Darmawan et al. (2020)	Is the achievement of work of employees in terms of tasks and responsibilities, adjusted by the company, through his/her efforts to fulfill objectives of the organization	State owned company in West Java, Indonesia
Jayaweera (2015)	Behaviour or activities that are performed with the intention of achieving the organizational objectives.	Hotel workers from a Hotel chain in the United Kingdom
Koopmans et al. (2014)	Behaviours or actions that are related to the goals and objectives of the organization.	Experts from various professional backgrounds such as researchers, managers, human resources managers and occupational health professionals in the Netherlands.
Wu et al. (2019)	Behaviours that indicate endeavours to achieve organizational standards and predetermined project objectives together with achieving organizational goals	Construction project managers within the Chinese construction industry
Na-Nan et al. (2018)	Display of behaviours of employees at work which delivers the outcomes expected by the organization in terms of job quality, job quantity and job time	Auto parts assembly line workers in Thailand.
Chenget al, (2007)	Achievement of work outcomes of each function of a job within a specific period of time	Contractors, clients, and subcontractors in the construction industry Hong Kong.
Ali-Hassan, et al. (2015)	Activities carried out in a dependable manner which consists of routine performances and of innovative performances	A large multinational Information technology companyUSA.
Limon &Nartgün (2020)	Behaviours and outcomes produced by an employee that are related to the job	Primary, secondary and High school teachers in Turkey
Karatepet al. (2006)	The level of productivity of an employee in relation to his/her peers on number of behaviours and outcomes that are related to the job	Frontline hotel employees in Cyprus
Ngwenya&Pelser (2020)	Results of work performed by an employee in terms of quality and quantity when looking at the responsibilities provided by the organization	Employees from eight (8) manufacturing companies in Zimbabwe

Source: Researcher 2023

As far back 1980s Murphy and Krockner (1988) attempted to define it as task performance as the execution of a task in a job was considered important. The disparity between the types of jobs and their performance

requirements in the past and today is vividly highlighted by Autor (2019). The researcher attributes these changes to technological advancements and their application in work environments which have made the boundaries of life and work blurred (Karjalainen, 2023). Viswesvaran and Ones (2000) noted that job performance is an important construct as human resources management functions are geared to improve individual job performance to improve organizational performance. Hassan and Ogunkoya (2014) posited that individual job performance is likely to change over time based on the nature of the job, individual performance and measures of the same as it may change based on temporal variables. Borman and Motowidlo (1997) noted that there are two important dimensions of job performance, i.e. task performance and contextual performance. Task performance are activities performed related to the technical core of the job whilst contextual performance was more to do with prosocial and organizational citizenship behaviours.

Borman et al. (2014) claimed that personality variables and ability are likely to predict task and contextual performance. In their research, the researchers confirmed that ability primarily predicts task performance whilst personality tends to predict contextual performance. Bergman et al. (2008) suggested that job performance is necessarily an outcome of the cognitive abilities of a person. Here the argument was that mere learning is not sufficient as the incumbent of a job is likely to encounter novel situations as such should have the ability to draw similarities between novel experiences and past experiences and draw solutions to such problems. Further, Bergman et al. (2008) noted that albeit contextual performance is not related to the technical core of the job yet it remains vital for successful job performance and cognitive abilities too will matter for contextual performance. Shmailan (2016) posited that job performance is carrying out observable tasks and complying with a given standard. Autor (2019) claimed that job performance and expectations have changed drastically with technology and its integration with how people work. This has not only impacted the efforts of individuals and expectations of the organizations but also the society at large. Darmawan et al. (2020) postulated that job performance is important as the success of the organization is dependent on it. Further, the researcher noted that employee attitude and competence will also play a role in job performance.

Although there seems to be a serious effort to explore the relationship between cyberloafing and job performance in the global context as ICT has embraced many industries, there seem to be a dearth of research in some contexts. One such area has been the apparel manufacturing sector. Albeit the apparel manufacturing sector has not been researched adequately as an ICT integrated sector, it plays a vital role as an important high valued industry around the world (Nayak & Padhye, 2015; Gazzola et al. 2020). Exclusive studies related to the impact of cyber loafing on job performance in the apparel manufacturing sector seem to be limited, thus far although other studies related to the apparel manufacturing sector are available. As such there are gaps in terms of research related to context-specific studies on cyberloafing and job performance in the apparel manufacturing sector (refer Table 3). Further, studies related to the apparel manufacturing sector do exist but they are on different perspectives and not on job performance. For example, there are studies on how ICT can lead to strategic innovation for organizations (Markides & Anderson, 2006; Varukolu & Park-Poaps, 2009; Adeoti et al., 2020). Hence, thus far there are no studies in this context and it is accepted that ICT enabled work environment predisposes individuals to cyber loafing (Lim, 2002; Askew et al., 2014; Aybas & Güngör, 2020).

Table 3: A Sample of Specific Studies related to Cyberloafing and Job Performance

Author(s) and year	Context/Sample	Conclusion
Bock & Ho, (2009)	Salaried office employees from multinational organization in financial services, manufacturing, pharmaceutical, technology and education industries in Singapore.	The more time spent on cyber loafing lower the job performance

Ramayah, (2010)	Employees from Penang Free Trade zone with access to the internet in Malaysia.	Personal web use will lead to work inefficiency and thus poor job performance
Andreassen et al. (2014)	Managerial and non-managerial employees from diverse organization in the Netherlands	Cyber loafing has a negative impact on Self-reported work performance although very slightly
Aghaz & Sheikh (2016)	Employees from the knowledge intensive sector in Iran.	Cyber loafing was found to be an antidote for job burnout in turn it improved job performance.
Derin & Gökçe (2016)	Employees from various jobs who are with minimum qualification of a high school diploma up to a doctoral degree of a state university of Turkey	Cyber loafing has a negative impact on job performance.
Koay et al. (2017)	ICT employees working in the special economic zone in Malaysia	Cyber loafing has no impact on Job performance.
Saleh et al. (2018)	Managers and directors of mid-size and large companies located in Saudi Arabia.	Cyber loafing has a positive impact on employee productivity
Sao et al. (2020)	Employees from ICT/E-Commerce, manufacturing, retail, real estate and education in India.	Cyber loafing has a positive impact on job performance
Kularathne & Senevirathne, (2021)	Non-Managerial employees from private sector banking Industry in Sri Lanka	Cyberloafing has a negative impact on employee performance
Shaddiq et al. (2021)	Employees from consulting, Information communication, Financial and legal in Bantul regency in Indonesia.	Cyber loafing can have a positive impact on exhaustion hence can positively impact job performance.

Source: Researcher 2023

When observing the contexts within which studies on cyber loafing and job performance are available it is apparent that there are no studies related to the apparel manufacturing sector. It is also visible that there is no empirical research available in this area currently. Hence, testing a conceptual model between the constructs of cybe rloafing and job performance in the apparel manufacturing sector is substantial as existing gaps can be addressed with that. This conceptual framework will encourage future researchers to explore this area quantitatively and qualitatively identifying the relationships within apparel manufacturing and in other contexts that are yet to be explored that have embraced ICT to improve work performance.

Theories linked in developing a Nomological framework

Conservation of Resources Theory

This theory was promoted by Hob foll (1989) in which the researcher suggested that individuals are prone to safeguard and acquire resources they value. Oravec (1999) noted that playing games on the net (a form of cyber loafing) can help alleviate stress generated in the modern work environment. Hobfoll (2001) claimed that the behaviour exhibited in a stressful situation is meant to conserve resources. Albeit this theory is used in the literature related to stress it has also been used in organizational behavioural studies and motivation (Halbesleben et al., 2014).In their description related to the conservation of resources theory, Halbesleben et al. (2014) identified resources as objects, conditions, states and other things people value.It is

posited that stress is an effect that is promoted within work environments that are ICT-enabled (Aghaz & Sheikh, 2016). Andel, et al. (2019) also proposed that cyberloafing acts as a mechanism to eliminate stressful situations in the workplace and even recoup lost energy and achieve job satisfaction. It is noted that individuals are likely to engage in cyberloafing to relieve stress and conserve their resources for better performance (Saoet al., 2020). Denoting circumstances of stress the researchers suggested that stress is a response to a scenario that poses a threat to or depletion of resources. Under such circumstances, the initial response is to limit losses. Based on the fundamentals of the conservation of resources theory, action taken to deviate from what is being done is an attempt to conserve and protect resources. Accordingly, cyberloafing can be considered an effective mechanism to alleviate mental strain when jobs are complex and demanding, effectively conserving one's resources. This particular claim seems to have been grounded in the conservation of resources theory as deviating from work to engage in recreational activity to alleviate stress due to high work demand. Hence, these assertions indicate how conservation of resource theory plays out in circumstances that are detrimental to the individual to recuperate from stress and regain energy. This theory emanates from job demands-resources model introduced by Bakker and Demerouti as identified by Hobfoll (2018).

Social Exchange Theory

This theory originated from Homan's (1961) thinking of social behaviour as an exchange and it is a major theoretical perspective in social psychology (Emerson, 1976). Emerson (1987) further noted that Homans was mainly concerned with the understanding of how humans connected with the social system and suggested that nothing can emerge from social groups that cannot be explained by the proposal about individuals as individuals, together with a particular condition that happens to be interacting at the time. Hence, social exchange is the exchange of activity either intangible or tangible and rewarding or costly between at least two persons. Blau (1986) noted that social exchange is the voluntary actions of individuals who are motivated by the returns they are expected to receive and typically receive from others. Aryee, et al. (2002) found that there is an important relationship between organizational justice and job performance. The researchers noted that when there is high organizational justice it is reciprocated with a high level of performance. Davies and Gould-Williams (2005) indicated that positive exchange results in give-and-take individual responses. This postulation was supported by Jayawardana and O'Donnell (2010) who claimed that job enrichment of production employees in the apparel manufacturing sector by providing them autonomy at work had made them reciprocate by reducing absenteeism and reducing production rejects. Yin (2018) posited that employee engagement is to exchange benefits with the organization in specific forms, and employees are expected to generate different influencing outcomes according to the degree to which they psychologically expect their job engagement could receive organizational rewards. The relationship between trust and employee performance had been earlier supported by many scholars using the social exchange model (Konovsky & Pugh, 1994; Pillai et al., 1999; Aryee et al., 2002; Begley et al., 2006). Further, Chen and Wei (2020) found that high leader-member exchange was reciprocated with high employee performance. Linking these assertions to a cohort of highly engaged employees to meet set targets in a complex work environment, one can propose that their job performance is reciprocal to what they receive in return from the organization, thus a social exchange. The strength of employee reciprocity would be dependent on the robustness of what employees receive from the organization as an equitable exchange. Hence, it appears that reciprocation takes place as an exchange in work settings as mutual reinforcements.

RESEARCH METHODOLOGY

The methodology adopted for this study is a systematic review of literature related to cyberloafing and job performance. According to Goyal and Kumar (2021), systematic reviews can be of several types. Among these structured reviews based on methods, theories and constructs are popular (Rosado-Serrano et al. (2018). Goyal and Kumar (2021) further postulated that the systematic review method is well-suited for a

critical survey of extant research on a selected subject. Callahan (2014) noted that the synthesis of existing literature in the form of a review of a given phenomenon is vital to improving evidence-based decision-making. Further, Booth et al. (2012, as cited in Callahan, 2014) claimed that literature reviews are important as they help identify gaps in knowledge about a particular phenomenon. As such, the systematic review prescribed by Callahan (2014) was considered an appropriate methodology to identify the gaps related to cyberloafing and job performance.

Hence, this review is expected to shed light on the existing gaps related to cyberloafing and job performance in an area where research seems to be scanty or non-existent. To enhance the potency of the literature review the Six W's i.e. who, when, where, how, what and why, proposed by Callahan (2014) were considered together with "Five C" characteristics, namely, concise, clear, critical, convincing and contributive, to improve the rigor of the review. Refer to Table 4.

Table 4: Components of Literature Review Method

Who	The authors of the article were central in the review
When	The literature was collected within a period of eight months. The selected articles are from 2002 to 2022.
Where	The relevant artifacts were collected using scholarly journals, books and conference papers related to cyber loafing, cyber slacking, internet misuse, internet abuse, social media use, personal internet use, job performance and cyber loafing and job performance, apparel manufacturing, global fashion industry, garment manufacturing, industrial economics, global apparel sector and Integrated manufacturing.
How	Articles and conference papers were collected using a snowball method
What	A mixture of articles found were based on the subjects of cyberloafing, job performance, cyberloafing and job performance, academic performance, innovative work behaviour, innovative performance, internet addiction, counterproductive work behaviour, social media use, positive internet browsing, communication technology demands, social networking, personal internet use, apparel industry, fashion industry, lost in cyberspace, cyberslacking, internet deviance, Technology adoption in the apparel industry, employee productivity, student engagement. A total collection of 300 articles were browsed and 105 were kept and others were discarded. The discarded artifacts are not directly relevant to cyberloafing, job performance, but related to ICT adaptation in education, Internet based sexual harassment, internet gambling, ICT adaptation in industries etc.
why	The selected articles were considered to be the most relevant for the identification of the existing gaps related to cyberloafing, job performance and the apparel manufacturing sector.

Source: Adapted from Callahan (2014)

Callahan (2014) further denoted the 'five Cs' as an approach to improve the rigour of the review. As such, Callahan (2014) identified these characteristics as concise, clear, critical, convincing and contributive. Conciseness was referred to as a synthesis derived from a broad array of articles to address a particular dilemma or question i.e. a gap that warrants a specific answer. Firstly in terms of conciseness, the review presented herein is to decipher gaps in terms of cyber loafing and job performance in the apparel manufacturing sector was taken from an array of articles over twenty year period and the most relevant were selected and presented in the form of a synopsis. Secondly, clearness is referred to as clarity of the process of collecting "data" from a large array of literature available. Towards this Callahan's (2014) 'what' was used to ensure clarity of the selection. Thirdly, critical is the criticality of the review which integrates the positionality of the author presenting the assumptions, values and beliefs of the author, exposing the hidden knowledge. To ensure criticality for this Callahan's (2014) 'why' was used to ensure proper reasoning is

given for the review. Fourthly, the review should be convincing by novel arguments with a convincing rationale for an existing issue with appropriate justifications (Callahan, 2014). The selection of the existing gaps within the current research is highlighted to present the novelty of the study. Fifthly Callahan (2014) with the last “C” for contributive, noted that the review must be able to be contributive to the body of knowledge and rigorous reviews extend or create a new theory. This review is expected to contribute to the current knowledge as the gaps presented herein are new and unknown thus far in the apparel manufacturing sector specifically. This review opted for online search using databases such as Google Scholar, Research Gate, Sage journals, Springer, Science Direct, Taylor and Francis and Emerald.

Overall, a mixture of scholarly articles was selected for this review depicted in table 5 given below.

Table 5: A Sample of journals reviewed from 2002 to 2022

Journals/conference papers	Number of Articles	References
Journal of Organizational Behavior	1	Lim (2002)
Business Strategy Series	1	Ramayah (2010)
Comprehensive psychology	1	Andreassen, Torsheim & Pallesen (2014)
Communication of the ACM	1	Bock & Ho (2009)
International Journal of Advanced Studies in Social Science & Innovation (IJASSI)	1	Palladan (2018)
Online Journal of Arts, Management and Social Sciences (OJAMSS)	1	Olajide, Abdu & Abdul-Quadir (2018)
Computers in Human behaviour	3	Zhong <i>et al.</i> (2022), Askew <i>et al.</i> (2014), Liberman <i>et al.</i> (2011),
International Journal of Recent Technology and Engineering (IJRTE)	1	Sao <i>et al.</i> (2020)
International symposium on Technological Management and Emerging Technologies	1	Quoquabet <i>al.</i> (2015)
Procedia – Social and Behavioral Sciences	1	Derin & Gökçe (2016)
Global Business and Organizational Excellence	1	Rahmanet <i>al.</i> (2022)
Journal of Asian Finance, Economics and Business	1	Shaddiq, <i>et al.</i> (2021)
Journal of Leadership & Organizational studies	1	Askew <i>et al.</i> (2019)
Academy of Management	1	Witt & Andrews (2017)
Economies through Innovation and Knowledge Management: Theory & Practice	1	Ahmed & Jamaluddin (2009)
Journal of Strategic information systems	1	Hasan, Nevo & Wade (2015)
Cyberpsychology and behaviour	4	Anandarajanet <i>al.</i> (2006), Eastinet <i>al.</i> , (2007), Greenfield & Davis (2002), Mastrangeloet <i>al.</i> , (2006)
Personal Web use in the work place	1	Anandarajanet <i>al.</i> (2004)
Revista Argentina de Clínica Psicológica	1	Aybas & Güngör (2020)
New technology work and employment	1	Coker (2011)
Research in occupational stress and well being	1	Day <i>et al.</i> (2015)
Contemporary educational technology	1	Dursunet <i>al.</i> (2018)

Computers and Education	1	Feng <i>et al.</i> (2019)
South African journal of information management	1	Ferreira & Du Plessis (2009)
Journal of computer mediated communication	1	Garret & Danziger (2008)
Journal of workplace learning	1	Griffiths (2010)
Journal of employment counselling	1	Griffiths (2003)
Fair Value: Jurnal Ilmiah Akuntansi dan Keuangan	1	Hafizh & Sumadhinata (2022)
International Journal of Biomedical Research	1	Tagurumet <i>al</i> (2017)
Journal of work place rights	1	Ivarsson & Larsson (2011)
Behaviour and information technology	2	Lim & Chen (2009), Chavanet <i>al.</i> (2022)
Internet research	1	Limet <i>al.</i> (2020)
South African journal of Human Resources management	1	Oosthuizenet <i>al.</i> (2018)
Sage Open	1	Park, <i>et al.</i> (2021)
Management Decision	1	Parveen <i>et al.</i> (2016)
Journal of organizational behaviour review	1	Simsek & Simsek (2019)
Journal of advances management sciences and information systems	1	Syed <i>et al.</i> (2020)
Journal of business research	1	Wu <i>et al.</i> (2020)

Source: Researcher 2023

Identification of gaps in developing a Nomological framework

Gap1: Knowledge gap: Impact of Cyberloafing on Job Performance in the Apparel Manufacturing Sector

Müller-Bloch and Kranz (2015) identified the knowledge gap to be where no knowledge exists in a particular domain but is available in other domains. In the extant research related to cyberloafing and job performance, scholars have attempted to look at the phenomenon from different industries but not in the apparel manufacturing sector. With the coining of the term cyberloafing, Lim (2002) viewed it as a production deviance that takes place resulting from organizational injustice. The cohort sampled for this study was working adults with internet facilities at work in the manufacturing, ICT, service, and finance industries and not in apparel. Andreassen *et al.* (2014) on the other hand selected a large sample from a group of employed readers of newspapers in Norway. In this study, the researcher found that using social media, which are considered cyberloafing, sites impact job performance negatively. Cyberloafing and job performance were also studied in the Sri Lankan private banking sector indicating that it impacts the job performance of such employees. Bock and Ho (2009) posited that non-work related internet use while at work negatively impacted employee productivity in organizations. The sample for the study was collected from employees of the financial, manufacturing, technological, educational and pharmaceutical sectors and not apparel. Hafizh and Sumadhinata (2022) suggested that cyberloafing does not have a significant impact on job performance. This study was conducted using employees from a company in the fashion industry and not apparel manufacturing. Studying the impact of personal web use, while at work on employee performance Ramayah (2010) using a sample of employees from Penang free trade zone in Malaysia, claimed that personal web use will lead to inefficiency thus leading to poor employee performance. Rahman *et al.* (2022) indicated that cyberloafing had a positive impact on the innovative behaviour of employees in

work performance of employees in industries such as consulting, financial, and legal and IT services. Viewing the impact of cyberloafing on employee productivity, Saleh et al. (2018) posited that cyberloafing for educational purposes is likely to see an improvement in educational activities however; if cyberloafing is restricted in organizational setting employee productivity is likely to improve further. The study was based in mid-sized and large companies which are multinational and conglomerates related to chemicals, Oil, trading in Saudi Arabia and the sample was taken from managers and directors. Sao et al. (2020) claimed that cyberloafing has a positive impact on employee performance as it is likely to help employees to recover from work, learn new skills, develop oneself by acquiring new skills and regaining span of attention. The sample for the study was taken from industries such as ICT, manufacturing (not indicated), real estate and education. Similarly, Koay et al. (2017) indicated that cyberloafing does not impact employees in the ICT sector. The above studies indicate that there are hardly any studies related to cyberloafing and job performance in the apparel manufacturing sector in any part of the world thus far. As such a knowledge gap is evident from the above review of the literature.

Gap2: Empirical gap: Impact of Cyberloafing on Job Performance in the Apparel Manufacturing Sector

An empirical gap is a gap that exists when there is no research related to the area available from an empirical approach (Miles, 2017). Empirical research related to cyberloafing and job performance in the apparel manufacturing sector between 2002 and 2022 seems to be lacking as most of the studies related to cyberloafing and job performance are on general manufacturing, IT, financial, legal, consulting and free trade zone employees (Lim & Teo, 2005; Ramayah 2010; Aghaz & Sheikh, 2016; Oosthuizen et al., 2018). Saleh et al. (2020) considering a sample of 250 managers and directors from 20 companies, postulated that cyberloafing indeed impacts work performance negatively, however, it is likely to improve educational performance. Lim (2002) studied a sample of 188 employees who have access to the internet for work purposes and concluded that cyberloafing negatively impacts job performance. Employees sampled came from private and public sector organizations and not the apparel manufacturing sector. Ali-Hassan et al. (2015) considering a sample of 307 employees employed in a multinational ICT company concluded that hedonic use of social media while at work has a direct negative impact on the routine performance of employees albeit it positively contributes to the development of social ties while mitigating innovative performance. Deliberating on cyberloafing and task performance Askew (2012) with a sample of 447 subordinates and 147 supervisors from various companies, claimed that cyberloafing does not have a serious influence on task performance unless it is done frequently and for a long time. Further, Aybas and Gungor (2020) using a sample of 209 noted that cyberloafing does not impacts the academic performance of academicians. Feng et al. (2019) studying a sample of 92 undergraduate students from a university concluded that Facebook and internet usage negatively impacted academic performance. Ferreira and du Plessis (2009) posited that online social networking has an impact on employee productivity. Researchers looked at a sample of 89 permanent faculty management employees. Research conducted by Greenfield and Davis (2002) with samples of 224 and 300 employees from various organizations concluded that the use of the internet while at work for cyberloafing had a negative effect on employee productivity. Boonjing and Chanvara suth (2017) using a sample of 400 professionals using mobile phones to interact with someone while working noted that such behaviour had a weak impact on job performance. What is interesting about this conclusion is that the sample selected is not a specific group of professionals; instead, they are from different occupations. Güğərçin (2020) claimed that cyber slacking impacts job performance in terms of lower productivity. The researcher used a sample of 252 white-collar workers from the manufacturing sector using ICT for work-related purposes. However, these manufacturing industries have not been identified clearly in this study. The sample of research presented above is an indication that research related to cyberloafing and job performance has not been focused on the employees in the apparel manufacturing sector albeit they are also a leading group whose jobs have been ICT enabled. As such there appears to be an empirical gap related to research on cyberloafing and job performance in the apparel manufacturing sector.

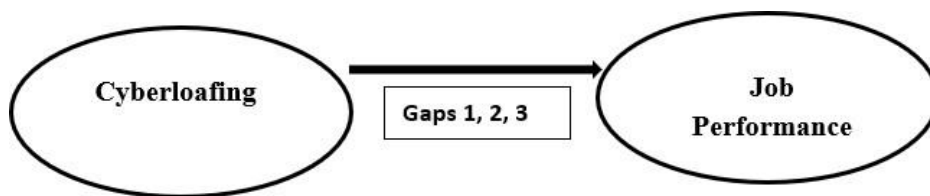
Gap3: Population gap: Cyberloafing and job performance in the apparel manufacturing sector

Miles (2017) identified the population gap to be a group that has been underserved in terms of research. This is so as this particular group is said to be under-researched and no explicit evidence is available at present. It appears that the apparel manufacturing sector has been omitted although it is well known that the sector has been ICT enabled for some time. Research by Dinget al. (2011) claimed that the application of ICT is likely to help companies in the apparel sector to meet the long-term strategic objective and gain a competitive advantage. Forza and Vinelli (1997) posited that ICT can enable the apparel manufacturing industry to improve their quick response strategy and gain competitiveness within the industry. Pal and Yasar (2020) indicated that the internet in the apparel manufacturing sector has resulted in rapid changes in the operational environment of the industry. It was noted that ICT is considered a catalyst to supply chain information-sharing ability in the industry. Gartner and Stillman (2001) claimed that ICT connectivity is important to prevent conflicts related to channels and to coordinate with external parties. Setiowatiet al. (2015) indicated that ICT integration has improved the marketing capabilities of companies in the apparel manufacturing sector. Pan et al. (2020) posited that the integration of ICT in the apparel sector has increased its performance exponentially. Researchers made these confirmations referring to the garment manufacturers in China. Avadanei et al. (2020) claimed that ICT integration has worked successfully in the training and development of personnel required for the industry. Similarly, Falk (2005) noted that the integration of ICT in the garment manufacturing industry has improved productivity gains. Past research indicates that ICT has gained a foothold in the apparel sector helping it to gain improved productivity and improve its business processes (Markides & Anderson, 2006; Varukolu & Park-Poaps, 2009; Wijewardhanaet al., 2021). Further, current studies on cyberloafing and job performance have been mainly in industries such as consulting, manufacturing, education, finance, legal, retail, IT etc. without the apparel manufacturing sectors (Lim, 2002; Lim & Teo, 2005; Blau et al., 2006; Anandarajanet al.,2006; Oosthuizen et al., 2018; Sao et al, 2020). Many studies have claimed the industry is already ICT enabled yet no viable evidence related to cyberloafing and job performance is available leading to an under-served population in research, thus a population gap. As such research related to this will be a major contribution to existing literature.

Developing a Nomological framework

The Nomological framework presented below is the representation of all three gaps noted above in the literature review, namely, knowledge, empirical and population gaps related to cyberloafing and job performance in the apparel manufacturing sector.

Figure 1. Gaps 1, 2, and 3



Source: Researcher 2023

LIMITATIONS

This study is limited to the revelation of the current research gaps in the global apparel manufacturing sector and the development of a Nomological framework. Empirically testing this model is likely to reveal the

potential to bring about significant changes to approaches in managing human resources to harness the full potential of employees in this industry, which is a vital contributor to the national economies of many Asian countries.

CONCLUSIONS

This study is an endeavour to illuminate the existing gaps and to develop a Nomological framework on the relationship between cyberloafing and job performance in the global apparel manufacturing sector. As highlighted, the extant research on the above relationship is confined to contexts such as education, banking, information technology, manufacturing and a few others, leaving out the apparel manufacturing sector, which is ICT-enabled to improve speed, quality, customer convenience and other processes to gain a competitive edge and improve organizational performance. Notwithstanding the impeding effects of cyberloafing on job performance lack of research in the said area has decelerated progress in addressing some HRM-related issues in this sector. However, empirically testing this conceptual model in the said area is a definite contribution to HRM literature, thus driving progress forward.

RECOMMENDATIONS

Future research can be directed to test this Nomological framework empirically to determine the true impact of cyberloafing on job performance in the global apparel manufacturing sector. Further, research can be directed towards comparative studies between various manufacturing sectors using this Nomological framework to reveal how cyberloafing is likely to impact job performance in those industries. This can be further improved by incorporating mediating and moderating variables such as personality traits, psychological strain or any other variable and empirically testing the same in the global apparel manufacturing and other sectors to ascertain how ICT-enabled modern work environments impact job performance. Such explorations will add significant knowledge to the current HRM literature in the future.

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