

Research article

DIGITAL DISTRACTIONS IN THE WORKPLACE: EXPLORING CYBERLOAFING IMPACT ON EMPLOYEE BEHAVIOUR AND INNOVATION

Divya, and Mahabir Narwal

Abstract. Cyberloafing is a new phenomenon. As a result of extensive internet and technology use in the workplace throughout the digital era, the practice of cyberloafing has emerged. With the advent of communication technologies, there is a continuous usage of the internet, mobile devices, and computer devices at the workplace. The online activities have been increasing every day. Therefore, in the present study, an attempt has been made to gather information about cyberloafing and its effects on employee behaviour. The purpose of this study is to know in which type of cyberloafing activities employees are engaged and how these cyberloafing activities impact employee behavioural factors (such as recovery, development, addiction and deviance) and innovative work behaviour. For this purpose, data were collected from public sector employees and private sector employees from the educational as well as healthcare sectors residing in Haryana. The data were collected from 150 respondents through questionnaires and analysed by using structural equational modelling SEM-PLS. The study is based on the concept considering cyberloafing as a multidimensional construct that includes cyberloafing activities (social, informational, virtual and leisure) and cyberloafing behaviour (recovery, development, deviance and addiction). The findings of the study indicate that cyberloafing activities have a significant positive impact on employee innovative work behaviour. The present research findings are beneficial for organisations to be aware of cyberloafing activities in which employees are engaged and cyberloafing behaviour which companies are interested to know. This study has important implications for organisations looking to adapt to new technologies and efficiently control cyberloafing behaviours in the digital world.

Keywords: cyberloafing; cyberslacking; innovative work behaviour; workplace internet leisure browsing; employee behaviour.

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1. Introduction

Cyberloafing is defined as multidimensional construct includes loafing activities such as social, leisure, virtual and informational activities and cyberloafing behaviour in the form of recovery, development, deviant and addiction [1]. The influence of communication technologies on our social structures, individual behaviours, and cultural outputs has expanded every aspect of our life. Our workplaces are now heavily reliant on the internet thanks to the development of communication technology. Due to the availability of the Internet, the workplace environment has changed to be more flexible, open, and autonomous. ICT has also revolutionised how people work across all industries, increasing productivity and efficiency. Organizations must be more innovative than ever before if they want to compete in the competitive market of today. It was noted that to complete the task, firms make an effort to support employees, advance, and display evidence of improvement to provide strong and effective results [2]. Due to client and commercial centre globalisations, the majority of cutting-edge associations struggle to survive. Hence, in the current competitive workplace environment, inventive job conduct is unquestionably essential for associations to survive and grow [3–5].

The internet is currently being utilized for a broad spectrum of virtual activities, including social interactions, information retrieval, recreational, and educational purposes. In the modern workplace, it is nearly indispensable to operate without a computer and internet connection, emphasizing the importance of understanding cyberloafing—a widely recognized activity that leads employees to spend prolonged periods at work. Numerous researches have explored the phenomenon of cyberloafing. Some studies have focused on eliminating or reducing it [6], while others seek to comprehend the behaviour to strike a harmonious balance between productivity and the needs of employees [7]. Additionally, certain investigations have concentrated on identifying the primary causes [8] or consequences of cyberloafing. Some studies delve into specific cyberloafing behaviours, discussing whether they should be encouraged, discouraged, or addressed in other ways. Despite the predominant emphasis on its negative repercussions, some studies suggest potential benefits associated with cyberloafing. They claim that engaging in online hobbies can foster flexible learning environments and original thought [9]. Employees who indulge in mild cyberloafing do not believe what they are doing is improper, according to arguments supporting it, and the majority of them justify their behaviour by pointing out that everyone else does it too [9].

By taking into account behavioural aspects and the effects of loafing on creative work behaviour, we will analyse how cyberloafing affects employee behaviour in this study. Innovative businesses like Google and Facebook encourage its staff to be creative at work [10]. Therefore, the aim of this study is to determine whether or not employee innovation at work is positively impacted by cyberloafing. The goal of the current study is to determine whether engaging in cyberloafing exercises can help people better understand how to engage in innovative work behaviour, or how cyberloafing influences employee behaviour in terms of psychological aspects and innovative work behaviour. This study will serve as a base for future research as well. Workplaces continue to evolve in the digital age; the study of cyberloafing becomes imperative for organizations striving to maximize productivity and employee engagement.

2. Literature Review

2.1. Cyberloafing and employee cyberloafing behaviour

Cyberloafing classified as four distinct activities that specify how people can use web sources. These include social skills (like use of internet to communicate with friends or co-workers), informational skills (like using the internet to gather information), leisure skills (like using the internet to keep busy), and virtual/emotional skills (like using the internet to engage in virtual activities like gambling and dating/chatting) [11]. The fictitious informational capability is closely related to modern workplace conduct-related practices, for instance, progress, learning new things and using fresh strategies or techniques. Cyberloafing is the practice of using the Internet for purposes not related to business. It is widely regarded as "undesired work conduct" (CWB) in the workplace, but scientists haven't given it much thought, especially when it comes to how cyberloafing affects productive outcomes like innovative work behaviour [12].

There is a favourable association found between online behaviour and behavioural characteristics. They concluded that cyberloafing has a favourable effect on employee behaviour as shown by skill acquisition, relief from workplace stress, and development of ideas [12]. A positive and significant relationship was found between cyberloafing activities and employees' cyberloafing behaviour [13]. The conclusion is that cyberloafing has a beneficial and significant impact on employee behaviour, as demonstrated by the development of new skills, the ability to manage stress at work, the generation of ideas, increased interest in work, and the rejuvenation of attention span. It was observed that cyberloafing leads to the growth of creativity, fosters a learning environment, and changes the working environment [14].

In earlier research, it was observed that using the internet as a short break can be rehabilitation behaviour [15]. The word "cyberloafing" refers to the usage of online resources for personal purposes: "personal web usage", "cyberslacking", WILB, "problematic internet use" and "Internet addiction" are just a few of the terms researchers have proposed for personal internet use while at work [16-21]. Some activities associated with cyberloafing at work include using messengers, chatting with friends and family, shopping online, playing online casino games, watching live sports, playing games, handling personal financial transactions, browsing investment websites, monitoring stock exchanges, and posting reviews of goods and services [22]. Cyberloafing gives workers a break from their jobs and helps them perform better when they get back to work after a break [23]. It was found that engaging in online activities can help people break up monotonous workdays, reducing stress and changing psychological mood [24]. There are studies on the effect of demographic and staff variables on cyberloafing [25].

Employees' perception that the Internet has shifted work to home as well as personal activities to the workplace is another frequently mentioned excuse. The internet has made it more difficult to differentiate between work and non-work [26]. Due to this, it is crucial to realise that most employees are unaware of the harmful impacts of cyberloafing, even though research on its economic effects is astounding and demonstrates just how expensive it is. Cyberloafing among employees reduces productivity by 30–40%. Incorporating safety

measures can be as subtle as directing computer activity toward hallways instead of walls to improve visibility [27]. In addition to these minor safety measures, many businesses have implemented strict internet usage controls or offered management training [28]. As a result, it is evident that researchers should endeavour to comprehend cyberloafing behaviour and produce useful management suggestions to lessen its negative consequences while maintaining the benefits of its positive outcomes. Based on the literature review provided above, the following hypothesis is formulated:

H1: Cyberloafing have significant impact on employee cyberloafing behaviour.

2.2. Cyberloafing and innovative work behaviour

Several internal and external components that induce this behaviour have been discovered in studies conducted to find a solution to the issue [29, 30]. With the experiments it was shown that cyberloafing has a multifaceted structure [1]. Original work at work, deliberate innovation, concept introduction, and application are referred to as innovative work behaviour. Innovation behaviour for people at work is seen as a major pillar for organisational high performance in a group or inside a company for the aim of performance development [31], a phenomenon that combines creativity with innovative work behaviour. Employees must possess the necessary skills to create not just for their advancement and development but also for solving problems innovatively [31]. Positive deviant behaviour is known as innovative work behaviour [32]. "Positive deviance" means doing things a bit differently from what everyone else is doing, but in a good and respectable way [33].

In other words, regardless of the results, positive deviant behaviour must be admirable and emphasise deeds with honourable intentions. The most noteworthy discovery was that cyberloafing activities, which are considered bad deviant behaviour, actually foster positive deviant behaviour like employee creativity and innovative work practices [10]. The businesses that can innovate and adapt to shifting environmental conditions will succeed and innovation is frequently cited as one of the key factors determining development, change, and difference [34]. So, innovation might be viewed in this sense. Innovation is characterised as the creation of business models, management methods, approaches, and organisational structures that are essential to an organization's survival, in addition to new goods or services [35].

One of the most effective ways to boost an organization's potential to innovate is to increase employee creativity and their capability to come up with novel ideas, or innovation behaviour. Managers who wish to succeed in the face of workplace uncertainty and increased global competition must assess their workers in this way. Human capital is the basis for innovation. An innovative work role is one in which new ideas are intentionally produced, promoted, and put into practice to benefit a group [31]. The process begins with problem identification, followed by solution discovery and implementation inside the organisation [36]. The ability to take the lead on new tasks, ideas, procedures, and combinations is known as innovative work behaviour [37]. As shown by the related literature, several studies examine the relationships between innovative work behaviour and variables like demographics, personality traits, organizational justice, psychological contracts, and intrinsic motivation. This behaviour makes it easier to be at the forefront of creating new products, going into unexplored markets,

inventing creative processes, and combining things in novel ways [37] and characterising innovative work behaviour [38]. Employee creativity is the key competency needed to achieve this habit [39]. Yet, innovative work behaviour encompasses more than just the ability to come up with fresh ideas; it also includes doing so. This is because creativity is merely the capacity to do so [40]. Although creativity is only the ability to come up with new ideas, creative conduct also includes putting these ideas into practice, giving it a more comprehensive definition than creativity [40]. Many researches have been done on the associations between innovative work behaviour and a variety of various elements, such as demographics, personality, organisational justice, psychological contract, and intrinsic motivation. The relationship between cyberloafing and innovative work behaviour was explored in this study, and the claim that it "had a favourable effect on innovative work behaviour" was put to the test. The following hypothesis can be formed in light of the literature mentioned above:

H2: Cyberloafing have significant impact on employee innovative work behaviour.

3. Research Methodology

In this study in order to examine the role of cyberloafing to predict the employee behaviour two validated scales were used cyberloafing questionnaire that covers the cyberloafing activities (social, informational, virtual and leisure) and the cyberloafing behaviours that covers the behavioural factors such as recovery from work, learn new skills that shows the consequences in the form of recovery, deviant, development and addiction) [1]. On the other side, cyberloafing activities discuss loafing in terms of its effects on either positive or negative employee behaviour. Cyberloafing for development, as a way to learn new things and hone existing skills, as well as for recovery, or as a way to ease discomfort and have a beneficial effect on one's health, are examples of positive behaviours. Negative behaviour, on the other hand, refers to troublesome and ingrained behaviour [41]. It includes addictive behaviour and deviant behaviour that decreases productivity [42]. Given that cyberloafing is associated with seeking and self-improvement (both online and in printed sources); the majority of scientifically recognised IWB scales should show a strong correlation between cyberloafing and innovative work behaviour [1; 31].

In general, it was discovered when exploring the scale for this study that the same questions, such as self-improvement, wandering, and seeking to learn new abilities, were present in both the IWB scale and the cyberloafing scale [12]. Previous research has also demonstrated that social and informational ability and activity are reliable predictors of workplace cyberloafing and that these factors have a strong internal consistency with creative work behaviour. The questionnaire was also normalized by the author, and its validity and reliability were reported as optimal for the evaluation of cyberloafing in a Persian-speaking population [1]. The study's target population consists of all Haryana employees. After reviewing the literature, it was noted that cyberloafing behaviour is observed among lecturers, teachers and nurses working in the healthcare sector but the number of such studies is scarce. Furthermore, scarce is the number of studies related to cyberloafing related to this region. Studies were mainly done on banking employees. So, this research builds on the existing literature and brings some new aspects related to cyberloafing. Respondents included employees mainly working in the healthcare and educational sectors. Employees of private and public organisations who have

access to the Internet at work are referred to as the target population. The respondent group for data collection includes all employees of the chosen organizations, regardless of their rank (but with access to the Internet at work). Employees of the public and private sectors provided the information. In total, 150 questionnaires were distributed, 75 per each organisation. The participants had to fill out a questionnaire with information about their demographics and online behaviours. Purposive sampling was chosen as the sample strategy for this study. Sample size calculation for this study utilized G-power version 3.1.9.4. With a power of 0.95 and an effect size of 0.15, the determined sample size for testing the model with four predictors is 129. Furthermore, to meet the suggested minimum threshold of 100 samples for structural equation modelling via partial least squares (PLS-SEM) [54], the research took a precautionary approach, collecting data from 150 respondents to mitigate any potential challenges stemming from a smaller sample size. For this study, structural equation model (SEM) with a PLS technique and the SmartPLS 4 programme. Partial least square is the preferred strategy when researchers are mainly focusing on prediction and the theory development [43].

3.1. Use of CB- SEM over PLS-SEM

In early 1980s, SEM (structural equation modelling) appeared in the literature on marketing [44]. Sewall Wright developed the model of path analysis in 1920s [45]. CB-SEM is a widely preferred method for rejecting and accepting the theories by testing the hypothesis. It is mainly used where normal distributed data and the large sample size is present [43; 46–48]. In business and marketing the use of PLS-SEM is increasing as it maximizes the latent constructs (dependent) of the explained variance [43]. The variance-based PLS SEM is a good preference where objective of research is predicted and assumptions of CB-SEM cannot be met [43, 48]. If objectives of the research are theory development and theory prediction, then SEM is used. Whereas for confirmation and testing the theory, co-variance-based SEM is appropriate [46; 48]. Specifically, Smart PLS Version 4 and bootstrap replication (5,000 replications) were utilised to evaluate the measurement and structural model. To examine the role of variables and when the sample size is small, partial least square SEM is suitable. SEM is accepted in HRM and organizational behaviour [51]. It examines the variance of different constructs with key constructs [55]. PLS-SEM structural equation modelling is accepted in the field of human resource management [56].

Table 1. Rule of thumb: Partial Least Square SEM or Covariance based SEM

Structural model	Covariance-based SEM (CB-SEM) is good for non-recursive models whereas partial least square SEM comprises many indicators and constructs and is also good for complex models.
Characteristics of data	Large data will provide similar results in PLS-SEM and CB-SEM. PLS-SEM is good for low sample sizes.
Research objectives	The partial least square structural equation model is good for identifying key constructs and exploratory research/existing theory extension. Covariance-based SEM is useful where the objective is to confirm and test a theory.

Source: developed by the authors.

3.2. Normality of data

One of the major reasons to prefer PLS-SEM over the CB- SEM is the normality of the data. K-S test and Shapiro-wilk test was used to check the normality of the data and all the values are significant below 0.05 it symbolizes that the data is not normal. CB-SEM requires normality of data shown in Table 2. Hence, it was followed by the non-parametric technique for the further measurement of the data and for modelling.

Table 2. Tests of Normality

	Where are you employed	Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Maintain social network	govt/psu	0.202	75	0.00	0.897	75	0.00
	Private	0.240	75	0.00	0.891	75	0.00
Find news	govt/psu	0.256	75	0.00	0.871	75	0.00
	Private	0.200	75	0.00	0.894	75	0.00
Listen to and possibly save music	govt/psu	0.185	75	0.00	0.866	75	0.00
	Private	0.164	75	0.00	0.903	75	0.00
Shop online	govt/psu	0.201	75	0.00	0.866	75	0.00
	Private	0.154	75	0.00	0.910	75	0.00
Search for social support	govt/psu	0.199	75	0.00	0.873	75	0.00
	Private	0.187	75	0.00	0.857	75	0.00
Express opinion	govt/psu	0.173	75	0.00	0.908	75	0.00
	Private	0.182	75	0.00	0.894	75	0.00
Save a game	govt/psu	0.339	75	0.00	0.695	75	0.00
	Private	0.291	75	0.00	0.733	75	0.00
Play gambling game	govt/psu	0.482	75	0.00	0.444	75	0.00
	Private	0.448	75	0.00	0.474	75	0.00
Extend social network	govt/psu	0.203	75	0.00	0.909	75	0.00
	Private	0.189	75	0.00	0.900	75	0.00
Search information	govt/psu	0.230	75	0.00	0.816	75	0.00
	Private	0.245	75	0.00	0.821	75	0.00
Play an online game	govt/psu	0.362	75	0.00	0.674	75	0.00
	Private	0.367	75	0.00	0.653	75	0.00
Chat online	govt/psu	0.205	75	0.00	0.860	75	0.00
	Private	0.153	75	0.00	0.898	75	0.00
Recover from work	govt/psu	0.183	75	0.00	0.911	75	0.00
	Private	0.178	75	0.00	0.916	75	0.00
Avoid work tasks	govt/psu	0.262	75	0.00	0.802	75	0.00
	Private	0.272	75	0.00	0.800	75	0.00
Learn new skills	govt/psu	0.233	75	0.00	0.813	75	0.00
	Private	0.200	75	0.00	0.877	75	0.00
Follow developments on sites	govt/psu	0.176	75	0.00	0.912	75	0.00
	Private	0.177	75	0.00	0.913	75	0.00
Take a rest	govt/psu	0.201	75	0.00	0.909	75	0.00
	Private	0.175	75	0.00	0.916	75	0.00
Avoid thinking of work tasks	govt/psu	0.258	75	0.00	0.839	75	0.00

	Private	0.219	75	0.00	0.861	75	0.00
Develop myself	govt/psu	0.213	75	0.00	0.847	75	0.00
	Private	0.184	75	0.00	0.882	75	0.00
Visit one or multiple sites daily	govt/psu	0.204	75	0.00	0.890	75	0.00
	Private	0.197	75	0.00	0.890	75	0.00
Relax	govt/psu	0.200	75	0.00	0.909	75	0.00
	Private	0.220	75	0.00	0.900	75	0.00
Postpone work tasks	govt/psu	0.277	75	0.00	0.784	75	0.00
	Private	0.232	75	0.00	0.839	75	0.00
Acquire abilities	govt/psu	0.246	75	0.00	0.855	75	0.00
	Private	0.163	75	0.00	0.903	75	0.00
Visit one or multiple sites out of habit.	govt/psu	0.234	75	0.00	0.882	75	0.00
	Private	0.191	75	0.00	0.896	75	0.00
Creating new ideas for difficult issues.	govt/psu	0.237	75	0.00	0.855	75	0.00
	Private	0.191	75	0.00	0.902	75	0.00
Searching out new working methods, techniques, or instruments.	govt/psu	0.255	75	0.00	0.860	75	0.00
	Private	0.215	75	0.00	0.891	75	0.00
Generating original solutions for problems.	govt/psu	0.246	75	0.00	0.871	75	0.00
	Private	0.197	75	0.00	0.898	75	0.00
Mobilizing support for innovative ideas.	govt/psu	0.235	75	0.00	0.881	75	0.00
	Private	0.223	75	0.00	0.881	75	0.00
Acquiring approval for innovative ideas	govt/psu	0.228	75	0.00	0.886	75	0.00
	Private	0.189	75	0.00	0.889	75	0.00
Making important organizational members enthusiastic about innovative ideas.	govt/psu	0.232	75	0.00	0.883	75	0.00
	Private	0.162	75	0.00	0.891	75	0.00
Transforming innovative ideas into useful applications.	govt/psu	0.273	75	0.00	0.868	75	0.00
	Private	0.186	75	0.00	0.890	75	0.00
Introducing innovative ideas into the work environment in a systematic way.	govt/psu	0.269	75	0.00	0.860	75	0.00
	Private	0.202	75	0.00	0.900	75	0.00
Evaluating the utility of innovative ideas.	govt/psu	0.217	75	0.00	0.862	75	0.00
	Private	0.154	75	0.00	0.905	75	0.00
a. Lilliefors Significance Correction							

Source: developed by the authors.

Additionally, the convergent validity, discriminant validity of all the essential criteria given was evaluated [49]. After fulfilling the necessary criteria statistical significance is checked that shows the loafing activities have an impact on the behavioural factor and the innovative work behaviour. All the validated scale was taken from the existing literature. For the measurement of the cyberloafing activities and their consequences (employee cyberloafing behaviour), the scale was used that includes cyberloafing activities (social, informational, virtual and leisure) and employee cyberloafing behavioural factors (recovery, development, deviance and addiction) [1]. In this study, employees' innovative work behaviour is also measured by using the validated scale given by [31] and is also considered positive deviant behaviour [32]. Janssen scale consists of the 9-item scale that highlights and measures the

IWB in three ways i.e., idea realisation, idea promotion and idea generation [31]. Three components are used in this study: Cyberloafing activities, includes 4 activities (social, informational, leisure, virtual); Employee cyberloafing behaviour, includes four behaviours (deviance, addiction, recovery, development); Innovative work behaviour, measured in 3 ways idea realization, idea promotion and idea generation.

4. Findings and Results

The profile of the sample is provided in Table 3.

Table 3. Profile of Sample

Demographic characteristics	Description	Percentage (%)
Age	Below 20	0%
	20-40	82.7%
	40-60	16.7%
	Above 60	0.6%
Qualification	Undergraduate	26.7%
	Postgraduate	46.0%
	Doctorate	23.3%
	Others	4.0%
Resident	Rural	19.3%
	Urban	70.7%
	Semi-urban	10%
Occupation	Healthcare	50%
	Educational	50%
Sector	Public	50%
	Private	50%

Source: developed by the authors.

4.1. Reliability Statistics

Reliability statistics are significant since they verify that the study's goal and hypothesis were met and that the conclusions are supported by the study. Table 4 represents reliability statistics for cyberloafing activities, cyberloafing behaviour and innovative work behaviour.

Table 4. Reliability Statistics

Constructs	Cronbach's Alpha (α)	Items
Cyberloafing activities	0.850	12
Behaviour Factors	0.854	12
Innovative work Behaviour	0.943	9

Source: developed by the authors.

4.2. Convergent Validity

Items loading, the CR of each scale, and the average variance retrieved for each construct are used to evaluate convergent validity. The standardised values of loadings should be greater than 0.7 and AVE values should be higher than 0.5 [49; 44]. Table 5 shows the convergent

validity of the constructs CB-cyberloafing behavioural factors, IWB-innovative work behaviour, Cyberloafing activities- informational, leisure, social, and virtual.

Table 5. Convergent Validity

Lower order constructs Cyberloafing activities	Employee behaviour factors	Cronbach's alpha	Composite reliability (rho a)	Composite reliability (rho c)	Average variance extracted (AVE)
	CB	0.854	0.859	0.881	0.382
	IWB	0.943	0.951	0.952	0.687
Cyber		0.850	0.860	0.881	0.386
Informational		0.616	0.653	0.790	0.559
Leisure		0.764	0.774	0.867	0.687
Social		0.713	0.716	0.839	0.636
Virtual		0.604	0.607	0.791	0.558

Source: developed by the authors.

As the model is formative-reflective after converting the lower constructs (social, informational, virtual, leisure) into higher order construct i.e. cyberloafing activities, Table 6 shows the composite reliability and the average variance extracted (AVE) of the dependent variable.

Table 6. Cronbach alpha, Composite Reliability, AVE

Dependent variable	Cronbach alpha	CR (rho a)	CR (rho c)	AVE
CB	0.818	0.845	0.87	0.536
IWB	0.943	0.945	0.952	0.688

Source: developed by the authors.

4.3. Discriminant Validity

The technique used to extract the pair-wise correlation among the components is used to evaluate discriminant validity i.e. the method of comparing correlation with extracted variance [44]. When diagonal values in the relevant rows and columns are significantly greater than those of the off-diagonal elements, the discriminant's validity is confirmed. The AVE values for each factor are squared to produce the diagonal values. Table 7 below displays the values. Here the diagonal values are higher CB= 0.732 and IWB=0.829, which fulfils the Fornell and Larcker criteria.

Table 7. Discriminant Validity

Variables	CB	IWB
CB	0.732	
IWB	0.715	0.829

Source: developed by the authors.

Table 8 reveals the model fit values that depict the model fitness and the establishment of the relationship between the constructs. Here the SRMR value is below 0.08 and the NFI value is near 0.9, which indicates the good model fitness of the constructs.

Table 8. Model fit values

	Saturated model	Estimated model
SRMR	0.068	0.167
d_ULS	0.882	5.27
d_G	0.471	0.611
Chi-square	375.964	449.441
NFI	0.816	0.78

Source: developed by the authors.

Smart-pls4 was used to apply the bootstrapping process to test the suggested hypotheses. Bootstrapping is a non-parametric method that enables investigating the statistical significance of structural models such as model fit, path modelling, and R-square. Also, the Bootstrapping technique determines the value of the standardised Root mean square (SRMR) to access the model fitness. A perfect match is defined as a value of less than 0.08 for the SRMR, which has a range from 0 to 1 [50].

Figure 1 illustrates how cyberloafing directly affects employee behaviour and innovative work behaviour. It indicates a favourable significant impact on employee behavioural factors ($\beta=0.475$, $P=0.00<0.01$) and innovative work behaviour ($\beta=0.512$, $P=0.00<0.01$).

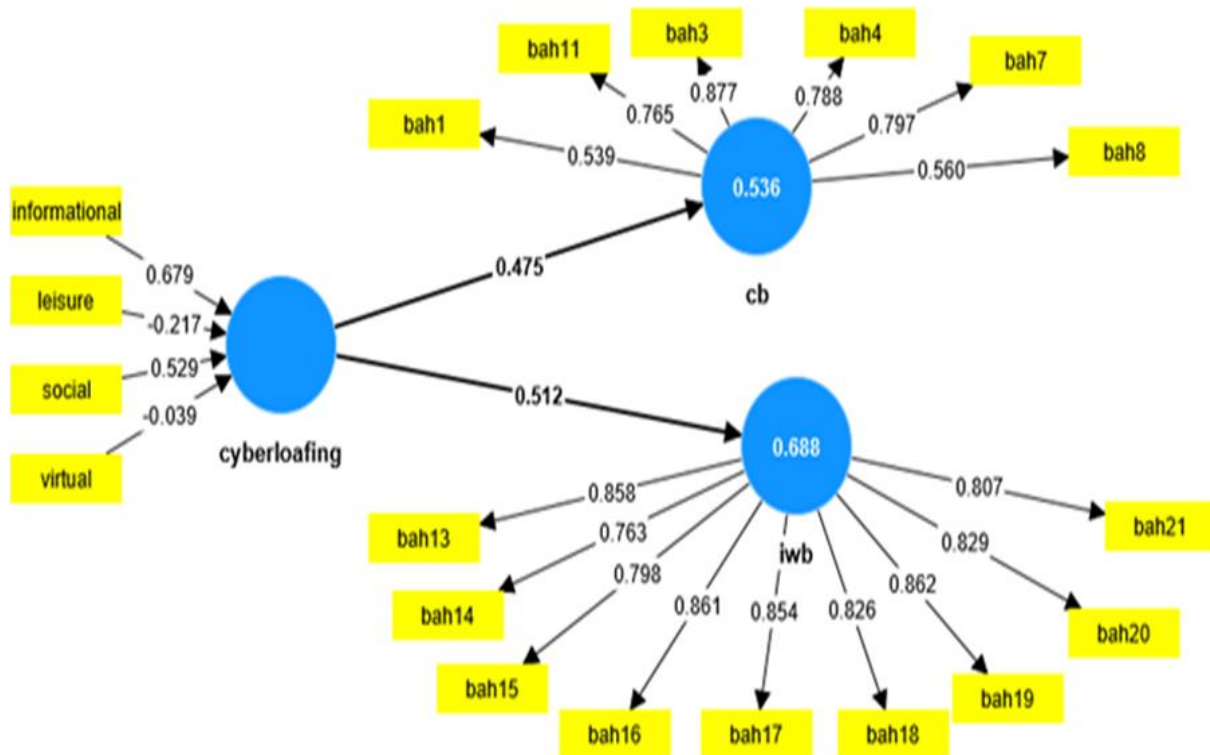


Figure 1. Sem-model

Source: developed by the authors.

The importance of the path coefficients is demonstrated by the breadth of the path lines. The findings suggest that employees, who engage in cyberloafing activities significantly affect their ability to recover from work, acquire talents, learn new skills, keep up with advances, improve themselves, and visit both single and numerous websites. Additionally, workers engaged in cyberloafing activities, which have an impact on their innovative work behaviour in a manner comparable to that of other employee behavioural aspects, such as coming up with fresh solutions for complex problems, looking for new ways to work, implementing innovative ideas in the workplace, coming up with new solutions for problems, getting support for creative ideas, getting approval for those ideas, making key members of the organization excited about new ideas, turning these ideas into practical applications, introducing them into the workplace in an organized way, and checking how useful they are.

4.4. Predictive Accuracy

The value of R-square was determined using the PLS-Bootstrapping approach in order to forecast the precision of the suggested hypothesis. Employee behavioural factors and innovative work behaviour are endogenous variables in the current study with R² values of 0.226 and 0.262, respectively. For behavioural factors and innovative work behaviour, the Q-square values are 0.167 and 0.214, respectively. The structural model's predictive relevance is established because the values of Q-square are greater than zero. The effect size lies between medium to large 0.15 to 0.35 shown in (table 9) [50].

Table 9. Latent variable prediction

	Q²predict	R²	R-square adjusted	Effect size
CB	0.167	0.226	0.220	Medium
IWB	0.214	0.262	0.257	Medium

Source: developed by the authors.

The bootstrapping procedure also calculates f-square. The size of the f-square value shows the substantial impact of the latent variable on the dependent variable (employee cyberloafing behaviour and IWB). In the current study, the effect size of f-square varies from medium to large (table 10). The values fall between 0.15 to 0.35 [50].

Table 10. F-square values

	CB	Cyberloafing	IWB
CB			
Cyberloafing	0.291		0.356
IWB			

Source: developed by the authors.

Table 11 revealed that loafing activities have a positive and significant impact on employee cyberloafing behaviour ($p < 0.05$, $\beta = 0.475$) and the r square value is 0.226. Similarly, cyberloafing has a positive significant impact on innovative work behaviour ($p < 0.05$, $\beta = 0.512$) and the r square value is 0.262.

According to the results, employees mainly engaged in informational, social and virtual activities that have a significant impact on the employee cyberloafing behaviour such as

recovering from work, acquiring abilities, learning new skills, following the development on the sites, to develop themselves and to visit one or multiple sites daily that shows addiction behaviour. As shown in the results, employees engaged in cyberloafing to create new ideas, search for new working methods, generate original solutions for problems, and mobilise support. Mainly employees are engaged in cyberloafing activities that highlight the three main factors of the employee innovative work behaviour (idea realization, idea promotion and idea generation). Findings further reveal that the informational function and social function are the most positive predictors of employee behavioural factors as well as innovative work behaviour. This result supported by the earlier study proved that social and informational activities are positively associated with the behavioural factors and the employee innovative work behaviour [12, 52,53].

Table 11. Path coefficients (β), T values, P values

Variables	Beta coefficients(β)	Sample mean(M)	Standard deviation (STDEV)	T-statistics (O/STDEV)	P-value
Cyberloafing-> Employee cyberloafing behavioural factors	0.475	0.5	0.079	5.986	0.000
Cyberloafing-> Iwb	0.512	0.529	0.068	7.583	0.000

Source: developed by the authors.

This study supports hypothesis 1 that cyberloafing activities have a significant positive impact on employee cyberloafing behaviour and hypothesis 2 that cyberloafing activities have a significant positive impact on employee innovative work behaviour.

5. Conclusions

Based on the study's findings, it can be concluded that the majority of employees engage in online activities, particularly social and informational online activities, which have a significant impact on employee cyberloafing behaviour in terms of behavioural aspects recovery from work, learn new skills, to develop themselves, to acquire abilities along with this it also shows the addiction behaviour in employees such as they use internet for regularly follow development on sites and they have habit to visit one or multiple sites.

Cyberloafing have positive significant impact on the innovative work behaviour of employees in terms of idea realization, idea promotion and idea generation. As shown in model social and informational cyberloafing is positively associated with behavioural factors and innovative work behaviour. From these results, it can be concluded that employee involvement in social and informational cyberloafing has a positive impact on employee innovative work behaviour rather than leisure and virtual activities.

In this study, cyberloafing activities/behaviours are observed among employees working in the public or private sector. From this study, it is concluded that employees are using the Internet for social and informational purposes that have a significant impact on their cyberloafing behaviour in the form of development as well as addiction to the Internet and it also impacts their innovative work behaviour (comes under positive deviant behaviour) means

employees distract from their work for some positive purpose because they feel rejuvenated after involving in some kind of online/digital activities. In today's scenario, it is not possible to avoid cyberloafing completely at the workplace or anywhere. As employees' social and informational activities lead to their addiction as well as to their development, there is a requirement that employees working in organizations should be aware of this because when their informational activities on the Internet turn into social activities or vice versa and reach a certain level, cyberloafing turns into a negative phenomenon.

In addition, this study was conducted in a specific region (Haryana) and with a limited sample. In future, research can be extended to other regions of India and outside the country and can be done in other settings with different samples by considering some other factors associated with cyberloafing. Hence, the results may vary in different samples. This study extends the previous studies done in a foreign context and serves as a base for the future research as well. Organisations might encourage staff members to participate in online interactions and exploration that are in line with the organisation's objectives given the wide range of cyberloafing activities available. By using the Internet as a hub for innovation, information exchange, and cooperative learning, this strategy makes the most of the digital world. To examine employee patterns of digital involvement, data analytics techniques could be used. This can give organisations information about the particular kinds of cyberloafing behaviours that are most prevalent, allowing them to customise interventions and policies. This study examined cyberloafing impact on behaviour, tied to virtual economy digital realm.

The results of the current study make a substantial contribution to the literature already in existence that is similar to this study [12]. Additionally, it might be discovered that not all forms of cyberloafing are unhealthy. Social and informational cyberloafing allow workers to take a break, pick up new skills, recover from work, and rejuvenate themselves for their development goals.

A comprehensive literature search discovered scarce studies that discuss the benefits of cyberloafing at work. The literature that has already been written focuses on identifying the drawbacks of cyberloafing. Due to the limited research on the positive outcomes of cyberloafing, this study predominantly focuses on cyberloafing activities as indicators of employee behavioural characteristics and their impact on innovative work behaviour. This research introduces a fresh and significant element to the literature on innovative work behaviour (IWB) and cyberloafing. The study's findings revealed that social and informational cyberloafing demonstrated strong internal consistency, except for leisure-related cyberloafing concerning innovative work behaviour.

According to the study, there is a statistically significant relationship between employee innovative work behaviour in the digital space and online browsing habits. With the help of this research, organisations may better understand the exact digital activities that employees engage in and the accompanying behavioural patterns that affect their job. By being aware of these digital dynamics, businesses may develop strategies to leverage cyberloafing as a venue for encouraging innovative work practices, enhancing the digital environment to boost employee engagement and productivity. Overall, this research suggests a variety of implications that affect business policy, workplace culture, digital strategy, and employee development programmes in addition to employee conduct. It highlights the dynamic

interaction between employee performance and digital activities, providing opportunities for businesses to embrace digital engagement to promote innovation and effectiveness.

Overall, this research reveals a variety of ramifications that go beyond employee behaviour and have an impact on corporate policy, workplace culture, digital strategy, and employee development programmes. It highlights the dynamic interaction between digital activities and employee results, providing opportunities for businesses to use digital engagement to boost innovation and efficiency. Understanding why employees engage in particular cyberloafing activities can be improved by applying behavioural economics concepts to the digital sphere. Designing incentives and nudges to promote more productive online behaviours can benefit learning in the field of virtual economics. Create and implement online productivity solutions that let staff members keep track of and manage their online activities. These solutions might offer in-the-moment feedback, demonstrating to staff members how their Internet habits fit in with their professional objectives.

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