

# EXAMINING THE ANTECEDENTS AND CONSEQUENCE OF SMARTPHONE LOAFING AT WORKPLACE: TESTING A MODERATED SEQUENTIAL MEDIATION MODEL

## <sup>1\*</sup>Fouzia Hadi Ali, <sup>2</sup>Aban Abid Qazi, <sup>3</sup>Sadia Farooq, <sup>4</sup>Shamaila Gull

<sup>1</sup>Assistant Professor, Hailey College of Commerce, University of the Punjab, Lahore, Pakistan.

\*Corresponding Email: fozia.hcc@pu.edu.pk

<sup>2</sup>PhD Scholar and Assistant Director, ORIC, University of the Punjab,

Lahore, Pakistan. Pakistan. Email: qazi.aban@gmail.com.

<sup>3</sup>Assistant Professor, Hailey College of Commerce, University of the Punjab,

Lahore, Pakistan. Pakistan. Email: sadia.hcc@pu.edu.pk

<sup>4</sup>Assistant Professor, Institute of Business Information Technology,

University of the Punjab, Lahore, Pakistan. Pakistan. Email: shamaila.gull@ibitpu.edu.pk

ARTICLE INFO	ABSTRACT	
Article History: Received: 12 Aug 2019 Revised: 19 Oct 2019 Accepted: 05 Jan 2020 Available Online: 31 Mar 2020	The growing use of smartphones at workplaces necessitates investigating it reasons and consequent effects on employees' task performance. Moreover, thi paper proposes three hypotheses to test a sequential model that elucidates both the antecedents and consequences of cyberloafing activities through smartphones. Multiple sampling designs are used to collect the data through a	
<i>Keywords:</i> Job Stress, Job Burnout, Smartphone Loafing, Task Performance, Self-control <i>JEL Classification:</i> O26, O30	questionnaire. The sample size is 750 with a response rate of 92%. A structured questionnaire is used by adapting items for each construct from different established instruments available in the literature. The findings reveal that job stress creates cynicism among the employees that induces them to indulge in smartphone loafing that proves to be detrimental to their task performance. However, if employees self-regulate their counterproductive behavior, it tends	
	to mitigate the negative impact on their task performance. This paper provides substantial theoretical and practical implications for HR managers to devise policies to reduce smartphone loafing activities.	

© 2020 The authors, under a Creative Commons Attribution-Non-Commercial 4.0

#### 1. INTRODUCTION

The electronic media has grown fast, and smartphones are playing a pivotal role in its growth. Moreover, globally each year billions of people are buying smartphones that show an overwhelming upward trend of smartphone users (Statista, 2017). Furthermore, Statista (2017) shows a rising trend of worldwide smartphone users since 2014 and also predicts a sharp increase of 0.55 billion from 2017 till 2020. Additionally, while smartphone users are growing fastly, it has also increased the usage of the internet in smartphones. According to the latest survey report in 2017, 3.448 billion people are active mobile internet users globally, Kemp (2017). The usage of the internet has made various applications available in most of the smartphones. Such applications include online gaming, shopping, and many others. Nowadays, smartphone loafing (SL) is an emergent counterproductive behavior (Sheikh, Atashgah, & Adibzadegan, 2015), so due to the rise in the use of smartphones at the workplace, this behavior has become a nascent terrain that requires inquiry. It can be argued that although the emergence of the internet and mobile technology helps to increase employee's efficiency, it also provides them a way to escape from work tasks. Moreover, the excessive use of smartphones can not only become a threat to individual performance, but it may also prove detrimental to the overall performance of the organization. Such a deviant behavior related to the use of smartphones at the workplace has been conceived from a theory presented by Vitak et al. (2011) who defines the use of the internet (either personal or organization) for non-work related activities such as cyberslacking (commonly known as cyberloafing CA).

## 2. LITERATURE REVIEW

While gathering information relating to cyberloafing, many studies are available during the years 2011-2017. Out of these studies, some link to the motivators or antecedents of cyberloafing; while few belong to the consequent behavior (Çınara & Karcıoğlub, 2015; Derin & Gökçe, 2016; Gokçearslan, Mumcu, Laman, & Çevik, 2016) and the mediating role of cyberloafing. Moreover, the literature relating to the antecedents of CA is assessed from four different perspectives. These perspectives are behavioral (Aghaz & Sheikh, 2016; Askew et al., 2014); control

mechanism, e.g. (Glassman, Prosch, & Shao, 2015; Rahimnia & Mazidi, 2015); descriptive (Henle & Blanchard, 2008; Vitak et al., 2011) and demographic (Baturay & Toker, 2015; Yılmaz, Yılmaz, Öztürk, Sezer, & Karademir, 2015).

Among all the antecedents, job stress (JS) is considered to be the primary reason to involve in CA, and while stress aggravates, it becomes more chronic and turns into burnout (Aghaz & Sheikh, 2016) that can hinder task performance (TP). However, while studying such connectivity, previous literature mostly provides insight from a contextual perspective. For instance, in the past, most studies primarily focus on knowledge-intensive workers. Due to the ease in access to internet facilities, the employees now have more chances to cyberloaf. However, with an excessive rise in the use of smartphones, there is a need to examine cyberloafing as a deviant behavior irrespective of the knowledge or non-knowledge intensive sector. Therefore, the present study aims to propose and empirically examine the negative influence of JS on TP through a sequential mediation of burnout and Smartphone Loafing (SL), which is the most common cyberloafing activity nowadays. Besides this, the present study also testifies this relationship with the moderating role of self-control. This moderating effect can provide an insight that if the employees themselves control smartphone loafing (as a counterproductive work behavior), it can mitigate the negative impact on task performance and can suggest that a deviant behavior can be acceptable for the organizations if employees realize that they should self-control their behavior (Restubog et al. 2011). The findings of the survey can significantly contribute to the existing body of knowledge as it identifies the factors that implicate a negative relationship between JS and TP.

The concept of 'cyberloafing' activities (CA) have emerged from the literature relating to workplace loafing, which is a counterproductive/deviant workplace behavior that most organizations are facing since inception (Lim, 2002). A report by Malachowski (2005) identifies the most common loafing behaviors among employees. He reveals that most of the employees indulge in workplace loafing through the excessive use of the internet (cyberloafing) and by socializing with co-workers (non-cyberloafing). In the past, restrictions to access different websites through the local area network (LAN) were imposed by the organizations. However, now with the rise in the use of smartphones, the organizations are facing difficulty in controlling CA. Lim and Teo (2005) were the first to introduce CA and they define it as the usage of organizational internet for personal reasons. Researchers have used the same definition until 2010. Then Vitak et al. (2011) reconceptualized CA as the usage of the internet, either personal or organizational, during work hours. The idea of CA presented by Vitak is more close to the current situation. As nowadays the ease in the availability of smartphones and internet connections has created challenges to curtail CA. So the present study proposes to examine the impact of Smartphone loafing (SL), which is a broader term than mobile phone loafing (ML) on task performance. The reason to identify the differentiation between SL and ML as a more prevalent type of CA is that the former has many additive functionalities that are more addictive (Salehan & Negahban, 2013). Moreover, due to the challenge of incapacity to curtail SL, this study proposes to shift back to the psychological and emotional side of the employees that can comprehend the reasons for increased CA.

Lin, Lin, and Cheng (2013) describe job stress (JS) as the physical, psychological, or emotional effect on the employees who are involved in a particular job. It occurs due to the discrepancy between the employees' capacity to perform a task and address workplace demands. Job burnout (JB) refers to a psychological state termed as an emotional or interpersonal stressor that the individuals face for a more extended period. Such a state of mind influences employees' work performance, organizational performance, and relationship with clients (Swider & Zimmerman, 2010). In the past, the literature suggests different models of burnout, such as proposed by Zischka & Fox (1983). However, among these models, a three-stage model of JB as proposed by Maslach (1993), is commonly cited. Therefore, the present study considers the three-stage model that characterizes JB as emotional exhaustion, cynicism, and reduced personal accomplishment. According to the three-stage model of burnout, emotional exhaustion refers to a state of emotional draining, and a lack of physical ability for the individuals to perform an assigned task (Aghaz & Sheikh, 2016). This state surfaces when the employees are unable to exert necessary efforts and energy to complete the assigned task at the workplace. The second characteristic of JB is cynicism; it refers to the 'individual negative feelings towards his/her job, peers, and clients' (Hurrell, Nelson, & Simmons, 1998). The sense of cynicism arises when employees are enquired about the integrity or sincerity of their peers or clients. The third feature of JB is the reduced personal accomplishment that refers to a lack of positivity among individuals (Aghaz & Sheikh, 2016). Such individuals are full of negativity and are profoundly dissatisfied with his/her life and job (Maslach & Jackson, 1981). So in light of the above discussion, the present study tries to examine all the dimensions of JB individually.

Additionally, Cooper, Argyris, and Starbuck (1997) claim that JS is the primary psychological strain that develops JB. So we can infer that JB can be a consequence of the chronic state of JS (Hobfoll & Shirom, 2001). Moreover, Maslach, Schaufeli, and Leiter (2001) claim that burnout is a response to prolonged emotional and

interpersonal stressors. There are workplace stressors such as workload, job norms, and expectations, staff conflict, administration, international relationships, and role stress that consistently linked to JB (Hu & Cheng, 2010; Lin et al., 2013). Furthermore, Miller, Zook, and Ellis (1989) assert that workload and role stress consistently correlate with emotional exhaustion. So based on the above argument, the current study assumes that prolonged work stressors such as workload, role stress, conflict with peers and administration lead to chronic JS that, in turn, positively influences all the three dimensions of JB (emotional exhaustion, cynicism, and reduced personal efficacy).

The recent literature identifies that employees are more involved in cyberloafing activities (CA) due to a high level of emotional exhaustion, reduced personal accomplishment and cynicism (Aghaz & Sheikh, 2016; Sheikh et al. 2015). Aghaz and Sheikh (2016), reveal that JB has a positive and highly significant impact on CA. So the current study proposes to examine whether employees who face JB are more likely to involve in CA. Moreover, employee performance (EP) refers to the 'scalable actions, behaviors, and outcomes that are linked with and contribute to organizational goals' (Viswesvaran & Ones, 2000). Many indicators are available that are capable of measuring such as objective indicators (i.e., sales output) and subjective ratings by supervisors. Moreover, extant literature is available that suggests several stand-alone dimensions of employee performance, such as task performance (TP), Organizational Citizenship Behavior (OCB), and creative performance (Campbell, 1990; Reaves, 2015; Viswesvaran & Ones, 2000). The present study focuses only on the ability of the employee to perform the task appropriately if he indulges in SL. TP refers to the employee proficiency to complete an assigned task, mentioned in the job description (Borman, White, Pulakos, & Oppler, 1991; Campbell, 1990).

Recently, Liu (2016) reveals that to avoid job-related problems such as emotional draining or lack of selfefficacy, employees tend to involve in those activities that give them temporary relief. Smartphones and economical internet packages provide an easy way to get away from workplace problems. Employees who spend most of the time on the internet by using smartphones do not pay much attention to their assigned task that in turn, negatively influences their ability to perform. Limited literature is available that suggests a self-regulation method to induce the employees to minimize their counterproductive work behavior such as SL. In their study, Restubog et al. 2011 reveal those employees with low self-control will persuade them to cyberloaf more. However, this study proposes that if employees are already engaged in SL, their self-control (SC) can work as a catalyst to mitigate the negative influence of SL on TP.

#### 2.1 Rationale of the study

Even though there are detrimental effects of counterproductive work behavior such as SL on TP caused due to prolonged stress (i.e., JB), still an understanding of the factors remain limited that may mitigate the adverse impact of SL on TP, e.g., self-regulation method. Therefore, both practitioners and scholars need research that (1) establishes the sequential mediation link of JB and SL between the relationship of JS and TP, and (2) access the moderation effect of self-control (i.e., self-regulation method) between SL and TP.

## 2.2 Hypothesis Development

Based on the above discussion, the following hypotheses are presented.

 $H_1$ : JS has a significant indirect impact on TP through the sequential mediation of emotional exhaustion and SL moderated by SC.

**H<sub>2</sub>:** JS has a significant indirect impact on TP through the sequential mediation of cynicism and SL moderated by SC.

 $H_3$ : JS has a significant indirect impact on TP through the sequential mediation of reduced personal efficacy and SL moderated by SC.

## 2.3 Conceptual Framework

The current study aims to examine the sequential mediation of JB and SL between the relationships of JS on TP, respectively. The reason to explore the variables sequentially is to create logical connectivity among variables. Maslach et al. (2001) claim that prolonged stress leads to an increase in JB among employees that, in turn, induce employees to involve in CA (Aghaz & Sheikh, 2016). However, there a missing sequential link among them. So this study proposes to examine the connectivity of JS with JB that induces the employees to involve in SL. Consequently, employees who engage in SL tend to affect TP; however, self-control (SC) can moderate this effect. The proposed relationship is shown below in Figure 1.



Fig.1. Conceptual Model

## 3. METHOD

#### 3.1 Research Design

The present study follows a post-positivistic research design. Purposive sampling is applied to choose employees of the non-knowledge intensive sector while to select employees of knowledge-intensive sector snowball sampling is used. The rationale to choose both knowledge and non-knowledge sector employees is that unlike in the past, much consideration was given to the knowledge-intensive workers (Aghaz & Sheikh, 2016) while this study aims to investigate the cyberloafing activities beyond context.

#### 3.2 Sample

The sample consists of knowledge and non-knowledge intensive sector employees. Organization for Economic Corporation and Development (OECD) define industries as knowledge-intensive who heavily rely on professional knowledge such as education, health, technology, manufacturing, finance, and insurance. Whereas the operations of the non-knowledge intensive sector mainly based upon the monotonous task, e.g., post-office, barbershops, shopping malls. Besides this, the rationale to choose both knowledge and non-knowledge sector employees are that unlike in the past, much consideration was given to the knowledge-intensive workers (Aghaz & Sheikh, 2016) while this study aims to investigate the cyberloafing activities beyond context. Since the total population of knowledge and non-knowledge sector employees was unknown, so the sample size was calculated using the available online free calculator with a 95% level of significance and a 5% margin of error (https://www.surveysystem.com/sscalc.htm).

For data collection through the sample size formula, 384 respondents are appropriate for data collection. Pedhazur, 1997, p. 207 suggests subject to variable ratios of 15:1. So as the constructs in the questionnaire consisted of 50 items (see Table 1 below), so a multiple of 15 equals 750. So the sample size was 750. Based on the calculated sample size (i.e., 750), 375 questionnaires were administered to knowledge-intensive sector employees through snowball sampling. Moreover, the remaining 375 questionnaires were distributed purposively to the employees of the non-knowledge intensive sector. Out of 750 distributed questionnaires to both knowledge and non-knowledge intensive sector employees, only 691 were able to answer the questions entirely with a response rate of 92%. The demographic characteristics show that the majority of respondents were male (84.9%), and 15.1 % were females. Moreover, most of them fall between the age of 18 to 30 years of age (59%), then followed by 31 to 45 years of age (33%). Only 8% of the respondents were age 46 years or above.

Demographics		Number of Respondents	Percentage	
		N	%	
Gender				
	Male	587	84.9	
	Female	104	15.1	
Age				
	18-30 Years	408	59	
	31-45 Years	228	33	
	45 Years and Above	55	8	

#### Table 1. Demographic Characteristics

## 3.3 Measures

A total of 50-items are used to collect data that were adapted from different sources. Table 2 below indicates the items employed in this study and the source of items relating to the variables. Some items were removed from each construct for which the outer loadings were low. Moreover, Table 2 below shows the values calculated through the Smart PLS-SEM Bootstrapping procedure. The values include Average Variance Extracted (AVE), and Composite Reliability (CR) for each construct. These indicators (such as AVE and CR) are used to measure the convergent validity of the instrument and the consistency of the items in the instrument.

**Table 2.** Instrument Details, Mean, Convergent Validity, and Composite Reliability

	No.			Convergent	Composite
Variables	of Items	Instrument Item Sources	Mean	Validity	Reliability
	of items			AVE	CR
RPE	5		3.536	0.442	0.792
С	5	(Maslach & Jackson, 1983)	2.532	0.536	0.852
EE	7		2.864	0.522	0.884
JS	4	(Lait & Wallace, 2002)	2.885	0.505	0.803
SC	3	(Scott, 1965)	3.208	0.386	0.715
TP	3	(Dyne & LePine, 1998)	3.748	0.556	0.833
SL	3	(Lim & Teo, 2005)	2.779	0.351	0.755
Note AVE - at		uturated. CD - commonite nelishilite			

*Note.* AVE = average variance extracted; <math>CR = composite reliability.

Table 2 above also shows the sources of measures. Moreover, Table 1 above indicates that the values of AVE and CR are higher than 0.40 and 0.70 respectively (Chin, Peterson, & Brown, 2008; Hair, Hult, Ringle, & Sarstedt, 2014) which means that all the constructs follow the convergent validity assumptions and the items used to tap constructs are reliable.

<b>T</b> 11 3	D' ' ' '	X7 1º 1º
Table 3.	Discriminant	Validity

Discriminant Validity	HTMT Ratio
C RPE	0.165
C EE	0.587
C JS	0.723
C SL	0.425
С ТР	0.320
RPE EE	0.161
RPE JS	0.232
RPE SL	0.187
RPE TP	0.562
EE JS	0.676
EE SL	0.307
EE TP	0.168
JS SL	0.373
JS TP	0.179
SL TP	0.243

Note: HTMT = Hetrotrait Monotrait

After calculating convergent validity, discriminant validity was tested to confirm that each construct in the model measures a different concept. Researchers recommend using a heterotrait-monotrait ratio of correlations (HTMT) for discriminant validity (Hair, Hult, Ringle, & Sarstedt, 2017; Henseler, Ringle, & Sarstedt, 2015). Table 3 above reveals that all the constructs follow discriminant validity as all the values of the HTMT ratio are less than 0.90.

#### 3.4 Procedure

As an ethical consideration, firstly, signatures on the informed consent sheet were solicited from the respondents. An introductory statement in the questionnaire described a brief account of the study, and surety relating to the confidentiality and privacy of their responses was also mentioned. Questionnaires were administered purposively to eight non-knowledge intensive organizations with a higher degree of public dealing. For the knowledge-intensive sector, employees of 40 software houses were chosen through a snowball sampling technique (list attached in Appendix A). Out of 750 respondents, only 651 were able to respond to the entire questionnaire with a response rate of 92%. For statistical analysis, SPSS and PLS-SEM are used.

## 4. **RESULTS**

For examining the proposed hypotheses bootstrapping procedure was applied using Smart PLS-SEM. Bootstrapping is a nonparametric procedure that allows examining the statistical significance of the structural models such as model fit, path modeling, and R2. For the purpose of testing the model fitness, PLS-SEM calculates the value of Standardized Root Mean Square (SRMR). The calculated value of SRMR was 0.08, which is considered a good fit (Hu & Bentler, 1999). Figure 2 below shows the model extracted through the bootstrapping procedure.



Figure 2 above shows the indirect impact of JS on TP through the sequential mediation of JB (emotional exhaustion, cynicism, and reduced personal efficacy) and smartphone loafing with a moderating effect of self-control. The findings reveal that JS has a highly significant negative direct impact on TP ( $\beta$ = -0.146, p=0.000<0.01)00. Moreover, the indirect effect reveals that JS leads to effect positively on the three dimensions of JB (i.e. EE:  $\beta$ =0.521, p=0.000<0.01, C ( $\beta=0.543$ , p=0.000<0.01), and RPE ( $\beta=0.152$ , p=0.000<0.01). Interestingly, among the dimensions of JB, C has a highly significant positive influence that leads to SL, i.e.,  $\beta$ =0.278, p=0.000<0.01 while EE shows a significant positive effect on SL, i.e.,  $\beta$ =0.096, p=0.040<0.05. In contrast RPE shows no effect on SL i.e.  $\beta$ =0.076, p=0.088>0.05. Furthermore, when employees tend to indulge in smartphone loafing, it proves detrimental and puts a highly significant negative impact on TP, i.e.,  $\beta$ = -0.146, p=0.000<0.01. However, if the employees exercise an element of self-control while using smartphones, such a control mechanism can enhance TP positively  $\beta$ =0.096, p=0.011<0.05. Therefore, these results suggest that if employees are continuously under job stress that outgrows into emotional exhaustion and cynicism. Employees having emotional exhaustion and cynicism will lead them to indulge in smartphone loafing in order to reenergize or replenish their energies. This counterproductive work behavior through SL proves detrimental to their task performance. However, if the employees tend to self-control their counterproductive behavior by indulging in smartphone loafing activities in a controlled manner, this will enhance their task performance positively. Additionally, the present study aims to testify to the moderated sequential mediated

model. The bootstrapping procedure is used to test the three hypotheses that propose to prove the specific indirect effects of JS on TP. The results are shown in Table 4 below.

		Model Details	
Hypotheses	Indirect Effects $\beta$	P-values	Mediation
H1: Sequential Mediators: EE and SL JS->TP H2: Sequential Mediators: C and SL	1.722	0.086	No
JS->TP	2.928	0.004*	Partial
H <sub>3</sub> : Sequential Mediators: RPE and SL JS->TP	1.114	0.266	No

 Table 4.
 Specific Indirect Effects of Moderated Sequential Mediated Model

*Note.* \* significant at 0.05 level of significance;  $\beta$ =path coefficients

Table 4 above shows the specific indirect effects of JS on TP. Based on the above results H1 and H2 are rejected. This means that EE and RPE do not sequentially mediate with SL between the relationship of JS and TP moderated by SC. While only cynicism (C) and SL sequentially mediate between JS and TP moderated by SC. This means that when employees are under job stress, they become pessimistic relating to their work and tend to indulge in counterproductive behavior such as smartphone loafing which in turn reduces their task performance. However, if such cynical employees tend to self-control their counterproductive behavior such as SL, this can improve their TP. Thus, H2 is confirmed. Additionally, the bootstrapping procedure calculates R2 to assess the predictive accuracy of the proposed hypotheses. The value of R2 (coefficient of determination) refers to the amount of combined variance as explained by exogenous variables, into an endogenous variable. In the current study, endogenous variables, i.e., EE, C, RPE, SL and TP have values of R2 0.270, 0.294, 0.021, 0.121 and 0.162 respectively. In addition to R2 values, PLS-SEM also calculates the value of Stone-Geisser Q2 value (Geisser, 1974; Stone, 1974) to cross-validate the predictive relevance of individual endogenous variables. Table 5 below discusses the predictive accuracy (R2) and cross-validated predictive relevance (Q2) for the structural model. The values of Q2 for EE, C, RPE, SL and TP are 0.132, 0.142, 0.007, 0.038 and 0.084 respectively. As the values of Q2 are > Zero, so this establishes the predictive relevance of the structural model. Moreover, the effect size of the Q2 is small.

	Predictive	Predictive	
Variables	Accuracy	Relevance	
	$R^2$	$Q^2$	Effect Size
Emotional Exhaustion	0.270	0.132	Small
Cynicism	0.294	0.142	Small
Reduced Personal Efficacy	0.021	0.007	Small
Smartphone Loafing	0.121	0.038	Small
Task Performance	0.162	0.084	Small

**Table 5.** Results of the Bootstrapping Procedure

Note. Small Effect Size:  $0 < Q^2 < 0.15$ ; Medium Effect Size:  $0.15 < Q^2 < 0.35$ ; Larger Effect Size:  $0.35 < Q^2$ 

#### 5. DISCUSSION

The current study aimed to investigate the mediating role of JB (EE, RDE, and C) and SL between the relationship of JS and TP, with the moderation effect of SC between SL and TP. Results show that when JS is prolonged for a more extended period, then it converts into emotional exhaustion, reduced personal efficacy, and cynicism. The retention of emotional exhaustion and cynicism motivate employees to involve in counterproductive behavior as an avoidance coping strategy, i.e., smartphone loafing. Moreover, employees tend to involve in smartphone loafing to avoid work stress that, in turn, decreases their work performance. However, the presence of individual self-regulation possesses the ability to mitigate the negative consequences of smartphone loafing on employees' performance. Moreover, the finding of the moderated-mediation partially supports the hypotheses formulated. The results reveal that JS tends to intensify cynicism (only one dimension of JB) that induce employees to involve in SL and consequently reduces TP. However, SC moderates the negative impact of SL on TP by mitigating the negative intensity. In light of these findings, we can infer that employees may be under JS due to work stressors such as work overload, role ambiguity, etc. (Larson, 1985; Robinson & Bennett, 1995). Moreover, a prolonged state of JS would create a state of burnout in the form of cynicism (Hobfoll & Shirom, 2001; Maslach et al., 2001). This means that job stress creates cynicism among the employees that induces them to deviate from their work. This

deviance can be observed through the high use of smartphones. Additionally, the excessive use of smartphones will induce employees to escape from situations where they feel stressed out. Such an avoidance strategy adopted by the employees will prove detrimental to their task performance. So it can be inferred that when employees indulge in excessive use of smartphones during work hours, it decreases their ability to perform the assigned task efficiently. However, the findings also reveal that if employees self-regulate their deviant behavior by inculcating a drive to control the excessive use of smartphones, this can prove to remove its negativity and can enhance task performance positively.

## 5.1 Limitations

The findings of this study significantly contribute theoretically and practically in the existing body of knowledge. Still, it is not free from limitations. The limitation relates to the generalizability of results employees of non-knowledge and knowledge-intensive employees. The surveys can be carried out in different work settings such as hospitals, universities, and many others. The second limitation relates to self-reporting biases. To overcome self-reporting biases, future researchers can use cross-lagged models or randomized control trials to examine the proposed model.

#### 5.2 Implications and Future Directions

The results of the current research significantly contribute to the existing theory by identifying the missing link of sequential mediation of JB and SL between the impact of JS and TP, respectively. The results of the present study claim that JS is not a stand-alone predictor for reducing employee performance. Moreover, it also reveals that the intensity of JS that turns into a dimension of burnout, i.e., cynicism. So, due to cynicism, employees tend to involve in SL. In the current scenario, SL becomes a significant threat to the organizations that lead to a decrease in TP. However, if self-control can be in some way inculcated among the employees, the outcome can become positive. So the findings of the current study have a significant contribution as it identifies the missing sequential mediation link between the effect of JS and employee performance. Moreover, the findings of the study implicate to revisit the traditional methods to control SL that were fully adopted by restricting internet access at the workplace or applying proxies. Moreover, the management should understand that employees indulge in SL due to a behavioral disorder. Furthermore, in the current scenario, when the availability of smartphones and internet usage is increasing at a fast pace, then it is not possible to control the SL by imposing restrictions on employees. For this purpose, human resource managers need to revise managers need to design a work environment that motivates workers to involve in their assigned task enthusiastically.

Furthermore, the findings of the current study suggest the following recommendations to human resource (HR) managers and policymakers:

- HR managers need to revise the characteristics of the job and design job descriptions in such a way that it explains the role of employees. Moreover, job description design with the ambition that employees understand the importance of their active participation in the assigned task to achieve organizational goals.
- Lack of trust among workers creates a problem in raising voice against work-related issues that, in turn, induce employees to involve in deviant behaviors such as cyberloafing. HR managers and policymakers need to establish platforms where employees feel free to discuss all the job-related issues that in turn, increase trust among employees.
- HR managers need to work on creating a flexible work environment. The recognition of employees' needs tends to reduce deviant behaviors among employees and in turn, increases employee motivation that enhances work performance.
- HR managers need to devise policies that can create a culture of "No Use of SmartPhones" as according to the Social Learning Theory, many employees cyberloaf more when they perceive that their co-workers are indulged in the same type of activities (Liberman et al., 2011).
- Employees tend to involve in SL so that to revitalize or reenergize themselves as an opportunity to recover from the intensity of workload (Ivarsson & Larsson, 2011). So this proposition requires the HR managers to create an environment that vitalizes the work environment for the employees in the organization.

The findings of the current study strongly recommend that the current managerial strategies are insufficient to deal with a significant ongoing organizational threat in the form of deviant behavior, i.e. cyberloafing through smartphones. The results of the current research suggest that both managers and researchers bring innovations in managerial practices that help in decreasing the severity of SL among the employees.

The present study uses TP as a measure of employee performance. So in the future other factors such as employee creativity and innovation can be used to measure employee performance. The reason to consider the effect of SL on factors such as employee creativity and innovation is that upon discussion with some supervisors during the focus group discussion, they had an opinion that they are not bothered about whether employees are involved in SL or not, as far as the assigned tasks are accomplished. However, many organizations require innovative ideas from their employees to be more productive. So this raises doubts as to whether an employee is merely considered productive through task accomplishment. Therefore, future researchers should examine the same model with different aspects of employee performance. Moreover, the same conceptual model can be tested over time through a longitudinal design with interventions as to the measures taken to induce employees to self regulate their deviant behaviors.

#### 5.3 Conclusion

The study explored the reasons for and consequences of deviant behavior such as smartphone loafing. For this purpose, it proposed to test the connection of job stress with performance through the sequential mediation of job burnout and smart loading behavior with the moderating role of self-control. The results reveal that when job stress transforms into its chronic form which is burnout, the employees tend to involve in deviant behavior that may deteriorate their performance. However, when employees self regulates their deviant behavior, this can not only help to replenish their deteriorated energies but can also enhance their level of performance. Thus the expected downturns of deviant behavior of employees can be transformed into positive outcomes on their performance through self-control.

## REFERENCES

- Aghaz, A., & Sheikh, A. (2016). Cyberloafing and job burnout: An investigation in the knowledge-intensive sector. *Computers in Human Behavior*, 62, 51-60.
- Askew, K., Buckner, J. E., Taing, M. U., Ilie, A., Bauer, J. A., & Coovert, M. D. (2014). Explaining cyberloafing: The role of the theory of planned behavior. *Computers in Human Behavior*, *36*, 510-519.
- Barclay, D. W., Thompson, R., & Higgins, C. (1995). The Partial Least Squares (PLS) approach to causal modeling: Personal computer use as an illustration. *Technology Studio*, 2(2), 285-309.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Baturay, M. H., & Toker, S. (2015). An investigation of the impact of demographics on cyberloafing from an educational setting angle. *Computers in Human Behavior*, 50, 358–366.
- Borman, W. C., White, L. A., Pulakos, E. D., & Oppler, S. H. (1991). Models of supervisory job performance ratings. *Journal of Applied Psychology*, 76 (6), 863-872.
- Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In
   M. D. Dunnette & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (2nd ed., Vol. 1). Palo Alto, CA: Consulting Psychologists Press.
   Chicago: Rand-McNally
- Chin, W. W., Peterson, R. A., & Brown, S. P. (2008). Structural equation modeling in marketing: Some practical reminders. *Journal of Marketing Theory and Practice*, 16(4), 287–298.
- Çınara, O., & Karcıoğlub, F. (2015). The relationship between cyberloafing and organizational citizenship behavior: A survey study in Erzurum/Turkey. *Procedia - Social and Behavioral Sciences*, 207, 444 – 453.
- Cooper, C., Argyris, C., & Starbuck, W. H. (1997). The Blackwell Encyclopedic Dictionary of Human Resource Management. Cambridge, MA: Blackwell.
- Davies, M., Musango, J. K., & Brent, A. C. (2016). A systems approach to understanding the effect of Facebook use on the quality of interpersonal communication. *Technology in Society*, 44, 55-65.
- Derin, N., & Gökçe, S. G. (2016). Are cyberloafers also innovators?: A study on the relationship between cyberloafing and innovative work behavior. *Procedia Social and Behavioral Sciences*, 235, 694-700.
- Dyne, L. V., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. Academy of Management Journal, 41, 108-119.
- Geisser, S. (1974). A Predictive Approach to the Random Effects Model. Biometrika, 61(1), 101-107.
- Glassman, J., Prosch, M., & Shao, B. B. M. (2015). To monitor or not to monitor: Effectiveness of a cyberloafing countermeasure. *Information and Management*, 52, 170–182.
- Gokçearslan, S. a., Mumcu, F. K. k., Laman, T. H., & Çevik, Y. D. (2016). Modeling smartphone addiction: The role of smartphone usage, self-regulation, general self-efficacy and cyberloafing in university students. *Computers in Human Behavior*, 63, 639-649.

- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks, CA: Sage.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (2nd ed.). Thousand Oakes, CA: Sage.
- Henle, C. A., & Blanchard, A. L. (2008). The Interaction of Work Stressors and Organizational Sanctions on Cyberloafing. *Journal of Managerial Issues*, 20(3), 383-400.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variancebased structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Hobfoll, S.E. and Shirom, A. (2000) Conservation of Resources Theory: Applications to Stress and Management in the Workplace. In: Golembiewski, R.T., Ed., Handbook of Organization Behavior, Marcel Dekker, New York, 57-80.
- Hu, H.-H. S., & Cheng, C.-W. (2010). Job stress, coping strategies, and burnout among hotel industry supervisors in Taiwan. *The International Journal of Human Resource Management*, 21(8), 1337-1350.
- Hu, L.-t., and Bentler, P. M. (1998). Fit Indices in Covariance Structure Modeling: Sensitivity to Underparameterized Model Misspecification, *Psychological Methods*, 3(4), 424-453.
- Hurrell, J., Nelson, D., & Simmons, B. L. (1998). Measuring job stressors and strains: where we have been, where we are, and where we need to go. *Journal of Occupational Health Psychology*, 3(4), 368.
- Ivarsson, L., & Larsson, P. (2011). Personal internet usage at work: A source of recovery. Journal of Workplace Rights, 16(1), 63-81.
- Kemp, S., (2018). Digital in 2018 Report. We are social [Blog post]. Retrieved from https://digitalreport.wearesocial.com/
- Lait, J., & Wallace, J. E. (2002). Stress at work: A study of organizational-professional conflict and unmet expectations. *Industrial Relations*, 57(3), 463-490.
- Larson, D. G. (1985). Helper secrets: invisible stressors in hospice work. American Journal of Hospice Care, 2(6), 35-40.
- Liberman, B., Seidman, G., McKenna, K. Y. A., & Buffardi, L. E. (2011). Employee job attitudes and organizational characteristics as predictors of cyberloafing. *Computers in Human Behavior*, 27, 2192-2199.
- Lim, V. K. G. (2002). The IT way of loafing on the job: cyberloafing, neutralizing and organizational justice. *Journal* of Organizational Behavior, 23, 675-694.
- Lim, V. K. G., & Teo, T. S. H. (2005). Prevalence, Perceived Seriousness, Justification and Regulation of Cyberloafing in Singapore An Exploratory Study. *Information and Management*, 42, 1081-1093.
- Lin, J.-Y., Lin, C.-J., & Cheng, C.-J. (2013). A Study of the Relationship between Job Stress, Job Burnout, Job Satisfaction, and Organizational Commitment among Medical Radiologists in Taiwan. *Journal of Information and Optimization Sciences*, 34(2-3), 149-167.
- Malachowski, D. (2005). Wasted time at work costing companies billions. San Francisco Chronicle.
- Maslach, C. (1993). Burnout: A Multidimensional Perspective. Washington: DC: Taylor & Francis.
- Maslach, C., & Jackson, S. E. (1981). The Measurement of Experienced Burnout. *Journal of Occupational Behavior*, 2, 99-113.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job Burnout. Annual Review of Psychology, 52, 397-422.
- Miller, K. I., Zook, E. G., & Ellis, B. H. (1989). Occupational Differences in the Influence of Communication on Stress and Burnout in the Workplace. *Management Communication Quarterly*, *3*(2), 166-190.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance*, 10, 85-97.
- Pedhazur, E. J. (1997). Multiple Regression in Behavioral Research: Explanation and Prediction. Fort Worth, TX.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Rahimnia, F., & Mazidi, A. R. K. (2015). Functions of control mechanisms in mitigating workplace loafing; evidence from an Islamic society. *Computers in Human Behavior*, 48, 671–681.
- Robinson, S. L., & Bennett, R. J. (1995). A Typology of Deviant Workplace Behaviors: A Multidimensional Scaling Study. *The Academy of Management Journal*, 38(2), 555-572.
- Salehan, M., & Negahban, A. (2013). Social networking on smartphones: When mobile phones become addictive. *Computers in Human Behavior, 29, 2632-2639.*
- Scott, W. A. (1965). Values and organizations: A study of fraternities and sororities.

- Sheikh, A., Atashgah, M. S., & Adibzadegan, M. (2015). The Antecedents of Cyberloafing: A Case Study in an Iranian Copper Industry. *Computers in Human Behavior*, 51, 172–179.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and non-experimental studies: new procedures and recommendations. *Psychological Methods*, 7(4), 422-445.
- Statista. https://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/
- Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. Journal of the Royal Statistical Society, 36(2), 111-147.
- Swider, B. W., & Zimmerman, R. D. (2010). Born to burnout: a meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational Behavior*, *76*, 487-506.
- Viswesvaran, C., & Ones, D. S. (2000). Perspectives on models of job performance. *International Journal of Selection* and Assessment, 8, 216-226.
- Vitak, J., Waddell, J. C., & Larose, R. (2011). Personal Internet use at Work: Understanding Cyberslacking. *Computers in Human Behavior*, 27(5), 1751-1759.
- Yılmaz, F. G. K., Yılmaz, R., Öztürk, H. T., Sezer, B., & Karademir, T. (2015). Cyberloafing as a Barrier to the Successful Integration of Information and Communication Technologies into Teaching and Learning Environments. *Computers in Human Behavior*, 45, 290–298.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about Mediation Analysis. *Journal of Consumer Research*, 37(2), 197-206.
- Zischka, P. C., & Fox, R. (1983). Burnout and the catalytic role of the supervisor. *The Clinical Supervisor*, 1(2), 43-52.

## Appendix A

Sr. No	Non-Knowledge Intensive Sector	Sr. No	Knowledge Intensive Sector
1.	National Bank of Pakistan	1.	7VLA
2.	WAPDA	2.	Apricot Studio
3.	Bank of Punjab	3.	Arfa Kareem
4.	Pakistan Post Office	4.	CISCO Networking Lab
5.	LESCO	5.	Confiz Lnit
6.	WASA	6.	Corporate RTO
7.	FBR	7.	Crux Soft
8.	Railway	8.	Game Storm
		9.	I2C
		10.	Netsole
		11.	Techno soft
		12.	TopSpot
		13.	Uni Core
		14.	Wiz Core
		15.	Xaror
		16.	Xertz game studio
		17.	Ebryx
		18.	Frag Games
		19.	PITB Plan 9
		20.	NESPAK
		21.	Cyber Intelligence Solution
		22.	Loxvo Technologies
		23.	Inbox Business Technologies
		24.	Abacus Consulting
		25.	Fork Tech
		26.	Dell Pakistan
		27.	FAST Services Solution
		28.	Seven Centric
		29.	Saood Software Solutions SMC Pvt Ltd.
		30.	VenExel
		31.	Tower Technologies
		32.	E-Cart Services Pakistan Pvt. Ltd.
		33.	Apex Consulting Pakistan
		34.	Popin Jay
		35.	Wisedesign
		36.	Mobius Networks
		37.	NDS Technologies
		38.	Kinverg
		39.	WTWM
		40.	Viper Technology

# Table. List of Organizations