

## **Impact of Smartphone Usage on Work Neglect with Mediating Role of Cyberloafing and Moderating Role of Work Engagement**

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### **Abstract**

*While smartphones were among a couple of innovations that have facilitated our lives massively, the downsides of this tiny gadget are non-negligible too. This study is carried out with the main purpose of exploring how smartphone usage at the workplace leads to work neglect through cyberloafing in the IT sector of Pakistan. The model projected that smartphone usage at the workplace leads employees to neglect work through cyberloafing, such that cyberloafing at the workplace leads to work negligence. Additionally, it has been analyzed that whether work engagement affects the direct relationship of smartphone usage and work neglect or not. The sample size for the present study was 363, while sample data was collected from the IT sector of Pakistan through a questionnaire adopted from previous studies. Empirical results obtained through the analysis of data have shown that a significant positive relationship exists between smartphone usage and work neglect while cyberloafing mediates and work engagement moderates this relationship. The study, therefore, makes a significant contribution by describing the mechanism through which the relationship between smartphone usage and work neglect occurs.*

**Keywords:** Smartphone usage, Cyberloafing, Work engagement, Work neglect

### **Introduction**

In this present age, cellphone use has turned into an essential apparatus of correspondence among all-inclusive communities around the world. Cellphones, with the facility of internet, called smartphones, turned out to be something beyond a method of correspondence among individuals. This change has modified the examples of cellphone utilization and has left this innovation to be discussed as a cause of conceivable risks subjective to its problematic use which may meddle with users' different exercises in day to day life, modify relations and may even influence individuals' wellbeing (Augner & Hacker, 2012).

Smartphones offer multiple functions to its users in a single tiny device, such as a GPS navigator, video and music player, document readers, camera, information sharing and communicating devices for e-mail and chat, and many more. In addition, with an introduction of Near Field Communication (NFC) technology, smartphones became a

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mobile wallet. As smartphones' infiltration rate expanded, the reliance on the smartphone increased (Shin, 2014); however, there are negative impacts for habitual use of smartphones (Lee *et al.*, 2014).

The thing that differentiates early and present smartphone is that the former ones were utilized by big business and were exceptionally costly for the general customers (Brad, 2010). Google offered its android operating system at the end of 2007 with the expectation to capture the smartphone market share. The focus was to present advanced features in a single device that are generally required by customers, by keeping the cost at the minimum level. Features like email, social site incorporation, sound/video, internet access, chatting, alongside general features of the phone were offerings of these digital smartphones (Brad, 2010; Nurfit, 2012).

Subjective to affordable prices and convenience provided by this handheld device, the usage of smartphones at the work unit is expanding. With the development in the field of technology, smartphone accessibility is not an issue and a greater part of the general population working in organizations owns this instrument. These mobile phones have the prospect to promote employee's commitment and they can be used as a social relationship tool. For instance, smartphones can promote relationships with co-workers, as well as superiors, and assist in information sharing, which can lead to work pleasure and contribute to work effectiveness (Pitichat, 2013). In addition, smartphone technology can maintain workflow in an organizational network which facilitates workers in a company to be more productive and cost-effective (Carayannis & Clark, 2011). Though smartphone utilization at the workplace for sensible time or in a leisure time won't hurt the organization, if this usage is beyond limits, it can generate harmful end results on work performance and ultimately on organizational performance. An organization follows timelines for the projects or tasks and they expect their employees to work strictly by keeping in mind the deadlines. Employees use their smartphones frequently at the workplace and this leads to delay in the assigned tasks. Delay in tasks hurts the organization's overall reputation and may have other serious repercussions. (Vitik, Crouse & LaRose, 2011).

Previous literature shows that the findings of many researchers have unfolded various aspects of smartphone usage on work performance. In past, researchers have attempted to test the relationship of smartphone usage and work performance, with the mediating role of usage frequency and usage hours (Lee & Shin, 2016), however the present study targets at adding a new aspect to this field, with an aim to explore the relationship between smartphone usage and work performance, with the mediating role of cyberloafing and moderating role of work engagement. The concept of cyberloafing refers to the utilization of the Internet at the workplace for personal work, while

pretending it is for official work (Jandaghi *et al.*, 2015). Although, a Michigander researcher, Stoddart (2016) has already investigated the mediating effect of cyberloafing in her study on mindfulness and employee burnout. Yet, to the convened knowledge, its mediating behavior has never been examined in the context of smartphone usage and work performance. Furthermore, work engagement is characterized by an optimistic, satisfying, and working oriented mindset (Schaufeli *et al.*, 2002). Studies have revealed that the moderating behavior of work engagement has been examined in relation between the potential of smartphones and work efficiency (Pitichat, 2013), as well as in association between smartphone use and daily work-home interference (Derks *et al.*, 2015); however, this will add a new aspect to the accessible literature of smartphone usage on work performance as no prior evidence was found for this exploration. Due to the presence of social media, cyberloafing is not limited to calls or text. It has spread to other horizons and the addiction of smartphone is at peak. The present study is, therefore, indented to find answers for the following questions:

*RQ1: What is the relationship between smartphone usage and work neglect?*

*RQ2: Does cyberloafing mediate the relationship between smartphone usage and work neglect?*

*RQ3: Does work engagement moderate the relationship between smartphone usage and work neglect?*

### **Deriving the Conceptual Framework**

The smartphone was considered a class representation a few years ago, but nowadays it has been acknowledged as an essential necessity for individuals in a social setup. Leung (2007) argued that out of 45% teenagers, 12 to 17-year-olds own different gadgets to have interpersonal organizations, in which smartphone is the most prevalent. However, after technological advancements, possession of mobile phones became a normal trend (Chan *et al.*, 2006; Donya & Afari-Kumah, 2011). With technological innovations, new features were added, including Short Messaging Service, information searching and sharing, and an all-time internet connectivity, with reduction in the costs of old cellphones, while new models were moderated for the white collar class additionally (Chan *et al.*, 2006; Donya & Afari-Kumah, 2011).

According to Leung (2007), it has been observed that people who experience boredom depend more on their cellphones. This argument is true for teenagers and young ones as well. When they start feeling leisure-boredom, they tend to make calls or short messages from their cellphones, or they pass their time by involving themselves with internet browsing or e-socializing. The young generation believes that smartphones have acquired a constructive transformation in their lives since it has made access to anybody at anyplace possible (Lepp, Barkley, & Karpinski, 2014). Subjective to excessive usage

of mobile phones, Donya and Afari-Kumah (2011) in their study have mentioned that people consider their lives incomplete without their cellphones. Additionally, it has been reported that 71.8 percent individuals utilize their phone for business, and 28.2 percent individuals utilize it for individual practices. This overview demonstrates that the essential explanation behind purchasing a mobile phone was for business reasons, such that it helped people to keep themselves in touch with business contacts.

Right from the inception, smartphones were viewed as an instrument to help in business, yet now they are more useful in the social existence of individuals. While at the workplace, the administration expects their workers to act mindfully and not to utilize their phones for individual purposes. During work hours the usage of mobile phones deviate workers' focus and impose a negative impact on their efficiency and security, while causing an unsettling influence for coworkers, therefore, it is generally requested that workers make the individual telephone use at breaks and advise their family and companions not to aggravate them during work hours, unless it is a sort of crisis (Cohen, 2001).

Many smartphone users see their phones not just as a mean of making telephone calls, but as a source of comfort, a handheld PC, and even as a friend of whom they have a private relationship (Kwon *et al.*, 2013). Existed literature has identified that the mishandling of advanced mobile phones and consistent checking may push the user into chronic utilization, or even cellphone addiction (Lee *et al.*, 2014). Smartphone addiction is the extraordinary utilization of mobile phone in a way that is difficult to oversee and its impact expands to other zones of life destructively (Namsu, Park, & Lee, 2014).

Won-jun (2013) found that among the various adverse consequences of smartphone addiction, work neglect, escape reality, and absence of control are strong features. Moreover, aggravation of versatile capacities and virtual life introduction are critical components of smartphone addiction, which are similar as work neglect and escape reality.

Spector and Fox (2005), in their study, have referred to work neglect as "withdrawal behavior," a type of counter efficiency. Furthermore, Kidwell and Robie, (2003) considered work neglect as "a risky, yet unapproachable reaction to disappointment with a work" for example, giving less exertion, maintaining a strategic distance from the director, taking more incessant or longer breaks than allowed, and appearing late for work. Employees engaged in work neglect do not give full push to their work, and they are less profitable to organizations than they generally could be, which leads to reduced individual efficiency.

In contemporary associations, work neglect can likewise appear as "cyber-loafing," which Lim (2002) characterized as workers abusing their organization's internet

or email for individual purposes during working hours. Cyberloafing, also known as cyberslacking can be considered harmless, particularly if constrained in length (e.g. sending and accepting an individual email or checking features at CNN.com); however, cyberloafing activities including web-based shopping, internet betting, music downloading, etc. leads to lower productivity and profitability. Furthermore, Lim and Chen (2012) conceptualized cyberloafing as a form of office cyber activity that leads employees to activities other than their work, while prevents them from completing their tasks timely, and sometimes results in financial losses due to less worker output. Better said, cyberloafing is often referred to as a serious risk to organizational culture whereby time efficiency, organizational commitment and adequacy are weakened through cyberloafing (Barlow, Bean, & Hott, 2003). It has been revealed that 30-40 percent of workers work time is spent utilizing the internet for individual interests. Subjective to the usage of internet and smartphones, researchers have cited that if mobile phones are utilized at the workplace, it will occupy them from work which will influence their output limit, indicating that it will generate the behavior of work neglect (Cohen, 2001). Despite the fact that work neglect shows in various forms, at whatever point, and in whatever form, it is a deplete on profitability (Verton, 2000).

Over the last decade, a lot of research has been conducted in the domain of smartphone usage, taking different constructs into account based upon the social cognitive theory of internet uses and gratification (LaRose & Eastin, 2004) inspired by Bandura's (1986) Social Cognitive Theory (SCT) and conventional uses and gratifications. Fitting of uses and gratification with SCT leads to a new model of media attendance. Where, SCT determines performance of human behavior based on observed behavioral conduct through the expected outcomes of behavior or direct/indirect experience while uses and gratification in context of internet media demonstrates the motivation and gratification behind internet usage. Adding to it, the use and gratification of internet has been connected to new media and communication tools, such as the cellphone (Aoki & Downes, 2003; Leung & Wei, 2000), and PC based VoIP phone (Park, 2010). Based upon SCT of internet uses and gratitude and the existent literature, the current study thus hypothesize about human conduct performance that:

*H<sub>1</sub>: There is a positive relationship between smartphone usage and work neglect*

*H<sub>2</sub>: There is a positive relationship between smartphone usage and cyberloafing*

*H<sub>3</sub>: There is a positive relationship between cyberloafing and work neglect*

Individual technological devices such as the smartphone and tablet PCs have turned out to be prevalent, while the structure of internet access and usage has also changed, because of which the potential for people to take part in cyberloafing practices has expanded (Kim *et al.*, 2016). Cyberloafing results in poor job performance through

the loss of working time as the time invested on cyberloafing would have been spent on work. Here, any loss of work time is expected to convert into lost efficiency. Owing to correctness of this opinion, one should expect a negative relationship between cyberloafing and work performance (Vitak, Crouse & LaRose, 2011).

Cyberloafing only effects work performance in specific cases. In accordance to such a viewpoint, people have a specific amount of work to complete and they can fall back on cyberloafing when they have sufficient time to do so. It does not imply that everybody is equally productive; it proposes that each worker has a specific standard of work they seek and once done with enough of the work to get that standard achieved, an employee can practice cyberloafing with some of the left-over time. If this viewpoint is right, then there should be no relationship - or a small relationship - between cyberloafing and work performance. Moreover, it is also claimed that cyberloafing is only injurious if done massively. Frequent long spans of cyberloafing should contrarily estimate work execution (Askew, 2012).

Cyberloafing may affect workers capacity to focus on their work obligations which prompts increments in burnout because of the measure of assets consumed on individual exercises. This leads to the proposal of another hypothesis, which states that:

*H<sub>4</sub>: Cyberloafing mediates the relationship between smartphone usage and work neglect*

Another parameter in the domain of organizational work performance is work engagement, which is characterized as a positive, satisfying, work-related state of mind (Schaufeli & Bakker, 2004). It is an enjoyable practice for many workers that goes along with feelings of energy, devotion, and absorption in one's work (Bakker *et al.*, 2008; Schaufeli *et al.*, 2002). Being vigorous, devoted, and absorbed at work does not naturally suggest that occupied workers work extremely hard or tremendously long hours. It has been contended that in spite of the fact that the experience of being completely connected with work has constructive results, preceded with submersion in one's employment may be impeding for a man's effective state (Sonnentag *et al.*, 2008).

The experience of work engagement amid the day is related with a high enactment level. It is conceivable that this high initiation level is exchanged to the private space when returning home from work. However, Bakker (2014) showed that occupied employees do well in diminishing this high enactment level amid after-work hours, resulting in psychological detachment from job-related thoughts and activities during the evening. In another study, it has been demonstrated that consistently unwinding and mental separation from work while being at home corresponds with day by day engagement at work (Breevaart *et al.*, 2012).

Another study analyzed the relation between smartphone use, engagement at work, and disengaging from work, which has shown that functionally engaged workers, dynamic connectors as they call it, are competent of turning the device off as a means to disengage from work, empowering them to improve both hierarchical and individual needs. Most smartphone users in their study felt that technology had improved their ability to engage with the work place, while taking benefit of increased flexibility and mobility. Using smartphone at the workplace other work related reasons may have an impact on the work engagement of the employee (Dery & MacCormick, 2012). Based upon the reviewed literature, it is therefore hypothesized that:

*H<sub>5</sub>: Work engagement moderates the relationship between smartphone usage and work neglect*

### Research Model

Based on the proposed hypotheses, the current study has designed the research model with smartphone usage as an independent, while work neglect as a dependent variable, with cyberloafing as a mediator and work engagement as a moderator.

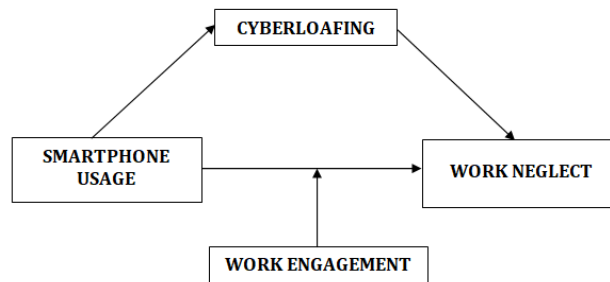


Fig. 1: *Proposed Research Model*

### Methodology

According to the Pakistan Software House Association (PASHA), over 12000 IT professionals are working in Pakistan. IT professionals have been chosen because the researcher himself is an IT professional, and the respondents mainly consist of the managerial level staff of different organizations from all over Pakistan. Data was collected through an online and a self-administered paper-and-pencil survey. The snowball and judgmental sampling techniques are used due to time limitations. The respondents were contacted through the researcher's personal and professional contacts and through the chain referrals by referents. The sample size was calculated using G\*Power 3.1 (Faul *et al.*, 2009). More than 400 questionnaires were distributed and the sample size was 372, out of which 363 were found valid. The response rate was 90%.

## Data Analysis and Results

All the items in the questionnaire were designed on 7-points Likert-scale, where 1 represented ‘strongly disagree’, while 7 represented ‘strongly agree’. To measure smartphone usage (27 items), the scale is adopted from Bianchi and Phillips (2005), with an alpha value of .93; to measure work neglect (4 items), the scale is adopted from Lee and Shin (2016), and the alpha value recorded was .84; to measure work engagement (9 items) the scale was adopted from Breevaart *et al.*, (2012), and the alpha value was .93 while for measuring cyberloafing (22 items), the scale was adopted from Lim (2002) and extended by Henle and Blanchard, (2008) with the evaluated alpha value of .94. The present study performed the Confirmatory Factor Analysis for the measurement model on the basis of fit statistics criteria, and the direct and indirect effects of variables included in the model were analyzed for the structural model.

### Descriptive Statistics

Personal information of respondents including their gender, age, education and experience was asked in the demographics section.

Table 1: *Demographics*

Variable	Frequency	Percent	Variable	Frequency	Percent
Gender			Education		
Male	223	61.4	Intermediate	6	1.7
Female	140	38.6	Bachelors	86	23.7
Total	363	100	Masters	175	48.2
			Post Graduate	96	26.4
			Total	363	100
Age			Experience		
18-30	206	56.7	Less than 1 year	69	19.0
31-40	121	33.3	1- 5 years	155	42.7
41-50	36	9.9	6-10 years	62	17.1
Total	363	100	11-20 years	77	21.2
			Total	363	100

In Pakistan, the trend of female workers in an IT organization is lower than males. 61.4% of the respondents were male, and only 38.6% were female. The next demographic variable was age. Respondents were asked to categorize their age. Respondents having age between 18-30 years were 56.7%, between 31- 40 were 33.3% while between the ages of 41-50 were 9.9%. With respect to education, 1.7% of respondents were having an intermediate degree, 23.7% were having a bachelors’ degree, 48.2% were having a masters’ degree, and 26.4% were having a postgraduate degree. Respondents were asked about their experience. 19% of respondents were having less than 1-year of experience, 42.7% of respondents were having 1-5 years, 17.1% having 6-



10 years and 21.2% having 11-20 years' experience. Table 1 shows the collected demographics in detail.

### Mean and Standard Deviation

Descriptive statistics were done to reinforce the responses. Elucidating insights give the synopsis of the entire information and tests. The results of the descriptive analysis showed that all the variables were found to be significant in the study area. Table 2 below shows the computed values for the mean and standard deviation of the sample data in a tabular form.

Table 2: *Mean and Standard Deviation*

Variables	N	Mean	Standard Deviation
Smartphone Usage	363	3.92	1.00
Work Neglect	363	3.13	1.37
Work Engagement	363	4.44	1.04
Cyberloafing	363	3.67	.90

The results show that the minimum and maximum values of smartphone usage were 1 and 6.04. For work neglect, the minimum mean value was 1, and maximum was 7. The mean value of work engagement has a minimum value of 1.44, while a maximum 6.22. The minimum mean value of cyberloafing was 1.50 and the maximum was 5.82. The standard deviation of smartphone usage, work neglect, work engagement, and cyberloafing were 1, 1.37, 1.04, and .9 respectively.

### Measurement Model Analysis

The first variable of the study was smartphone usage, which included 27 items in the scale. The statistic fit indices showed values that were on acceptable criteria, for example, CFI=.87, GFI=.66, AGFI=.8, and RMSEA=.08 which were in the acceptable range. Work Neglect was coded as "WN" and it included 4 items in the scale. Statistic fit indices showed values that were in the acceptable range, such as CFI=.99, GFI=.99, AGFI=.95, and RMSEA=.08. Work Engagement included 9 items in the scale. Statistic fit indices showed values of CFI=.96, GFI=.96, AGFI=.91, and RMSEA=.07. All the evaluated values were in the acceptable range. The scale for cyberloafing included 22 items. Statistic fit indices showed values that were on the acceptable criteria, such as CFI=.87, GFI=.88, AGFI=.82, and RMSEA=.08. The model was further tested with complete covariance to check the model fitness. This practice is also recommended in the literature (Leach, 2008). The results show an acceptable range for GFI=.91, AGFI=.90, CFI=.92, RMSEA=.08, and SRMR=.06. Pearson's correlation analysis was done and the results are reported in Table 3 below. Smartphone is positively correlated with rest of the variables. Since the p-value for all variables is <.01, therefore all the correlations are significant.

Table 3: *Correlation Analysis*

S. No	Variables	1	2	3	4
1	Smartphone Usage	1			
2	Work Neglect	.59**	1		
3	Work Engagement	.51*	.60**	1	
4	Cyberloafing	.45**	.45**	.55**	1

### Structural Model Analysis

The single regression test was performed on the independent variable smartphone usage and the dependent variable work neglect, with control variables of demographics. Figure 2 below illustrates the highly significant ( $p < .001$ ) relationship between the two variables with .61 regression weight, and thus, accepts  $H_1$  (there is a positive relationship between smartphone usage and work neglect).

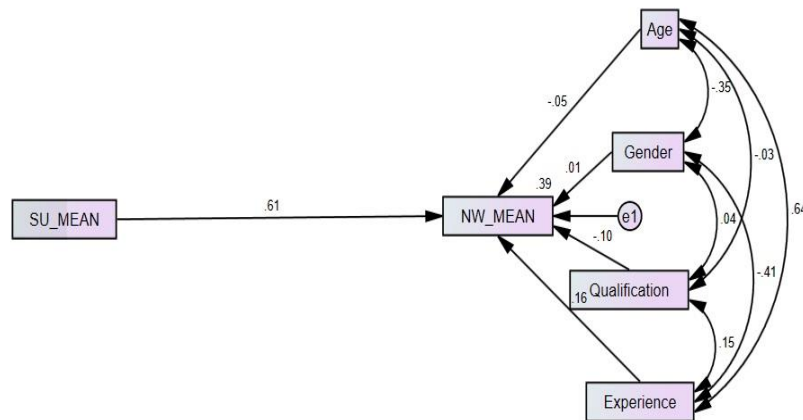


Fig. 2: *Single Regression between Smartphone Usage and Work Neglect*

The multiple regressions test was performed between all the variables of the study, using demographics as the control variables. The results in Figure 3 below showed positive and highly significant relationships between these variables. A highly significant relationship at  $p < .001$  was observed between smartphone usage (SU-Mean) and work neglect (NW\_Mean), with .51 regression weight; between smartphone usage (SU\_Mean) and cyberloafing (CL\_Mean) with .46 regression weight, driving the acceptance of  $H_2$  (there is a positive relationship between smartphone usage and cyberloafing); between smartphone usage (SU\_Mean) and work engagement (WE\_Mean) with .41 regression weight; between cyberloafing (CL\_Mean) and work neglect (NW\_Mean) with .22 regression weight, leading to the acceptance of  $H_3$  (there is a positive relationship between cyberloafing and work neglect) and between work engagement (WE\_Mean) and work neglect (NW\_Mean) at  $p < .05$ , with .18 regression weight.

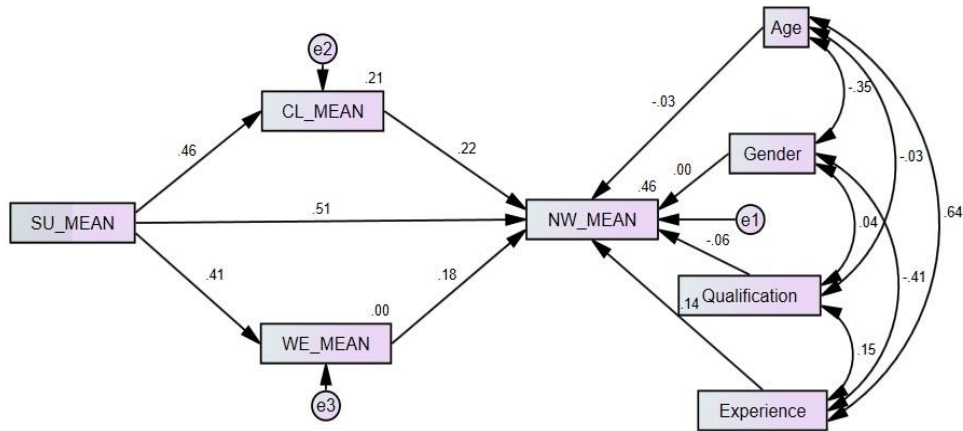


Fig. 3: Multiple Regressions

### Mediation Analysis Evaluation

Mediation Analysis was done by employing the bootstrap method to check the significance of each step, as recommended by Baron and Kenny (1986). Mediation was run in three steps to ensure the significance of the analysis; the result showed positive significance (p-values) at each step.

The first step of mediation suggests running the model without the mediator. Figure 4 below showed positive and highly significant ( $p < .001$ ) values between the relationships, while the regression weight between predictor (SU\_Mean) and outcome variable (NW\_Mean) was .61.

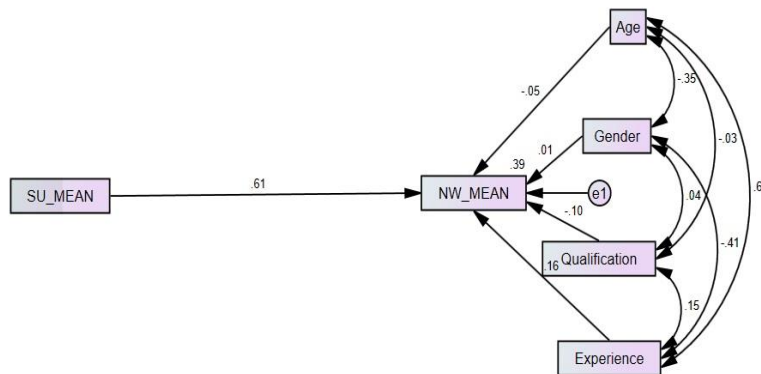


Fig. 4: Mediation Step 1 (without Mediator)

The second step of mediation model with mediator is shown in Figure 5 below. It shows positive significant (.03,  $p < .05$ ) value between the relationships. The regression weight between predictor and outcome variable i.e. between SU\_Mean and NW\_Mean was recorded as .51.

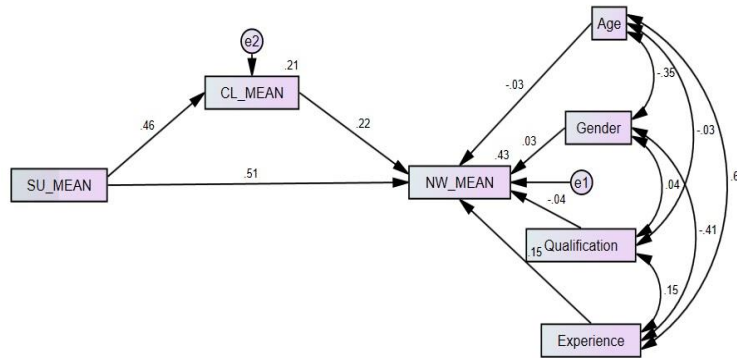


Fig. 5: Mediation Step 1 (with Mediator)

The third step of mediation involves running the model by the bootstrap method. The result in Figure 6 below showed a positive significant (.01,  $p < .05$ ) value between the relationships, and recorded the value at .51

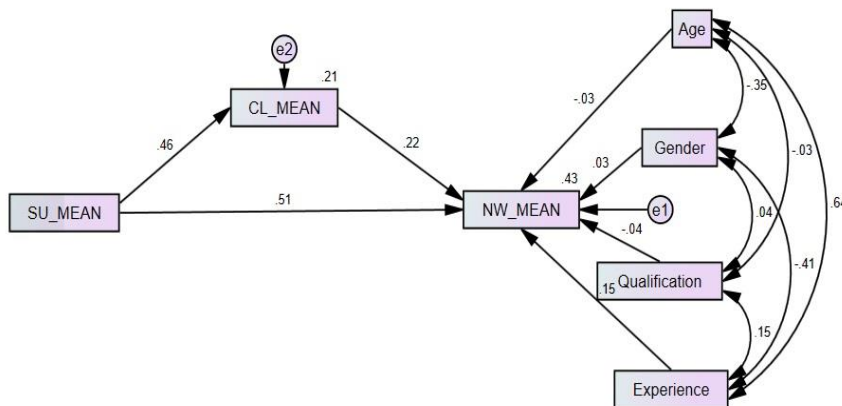


Fig. 6: Mediation Step 3 (Indirect Effect by Bootstrap)

Next, Figure 7 below demonstrated the mediation path analysis.

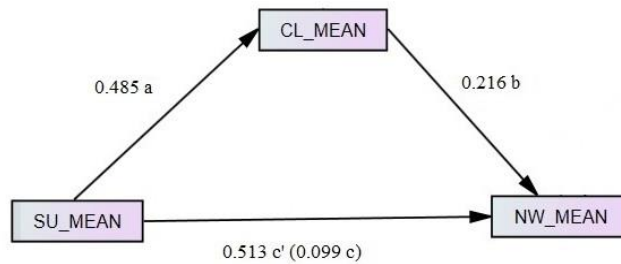


Fig. 7: Mediation Paths

Referring to Figure 7, the result suggests that (path a) smartphone usage is positively related to cyberloafing ( $\beta=.485$ ,  $p<.001$ ), and (path b) cyberloafing is positively related to work neglect ( $\beta=.216$ ,  $p=.02$ ). The direct (path c') results showed that smartphone usage is positively related to work neglect ( $\beta=.413$ ,  $p<.001$ ), while path c results of the mediation indicated that there is a partial mediating role of cyberloafing between smartphone usage and work neglect, ( $\beta=.099$ ,  $p=.01$ ). The change in c and c' confirmed the existence of mediator in the model, thus led to the acceptance of H<sub>4</sub> (cyberloafing plays a mediating role between smartphone usage and work neglect).

#### Moderation Analysis Evaluation

Figure 8 below shows the results of the moderating effect of work engagement between smartphone usage and work neglect. The result showed significant results of moderation between the relationship ( $p=.04$ ,  $p>.05$ ) causing the acceptance of H<sub>5</sub> (work engagement plays a moderating role between smartphone usage and work neglect).

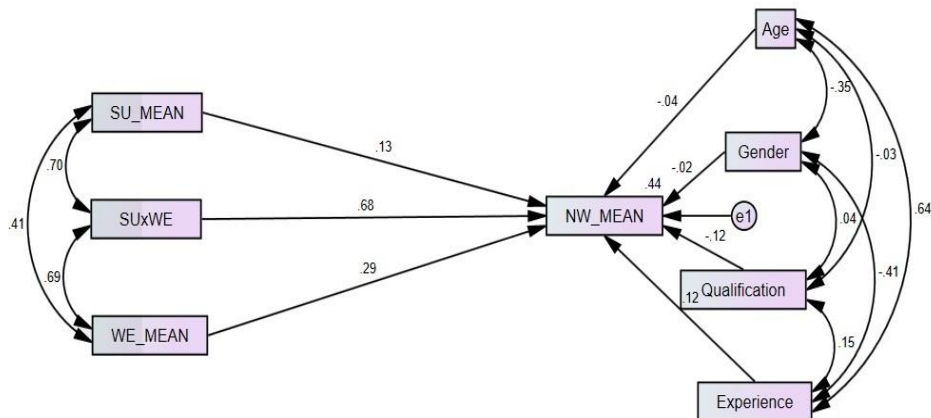


Fig. 8: Moderation between Predictor and Outcome Variable

Besides, the statistic fit of indices showed a favorable result for GFI=.93, AGFI=.89, CFI=.91, RMSEA=.06, and SRMR=.06.

## Structural Model

Figure 9 below shows the structural diagram of model with all variables of the study. The results are slightly different as compared to the individual testing of the model; however, significant relationships are observed.

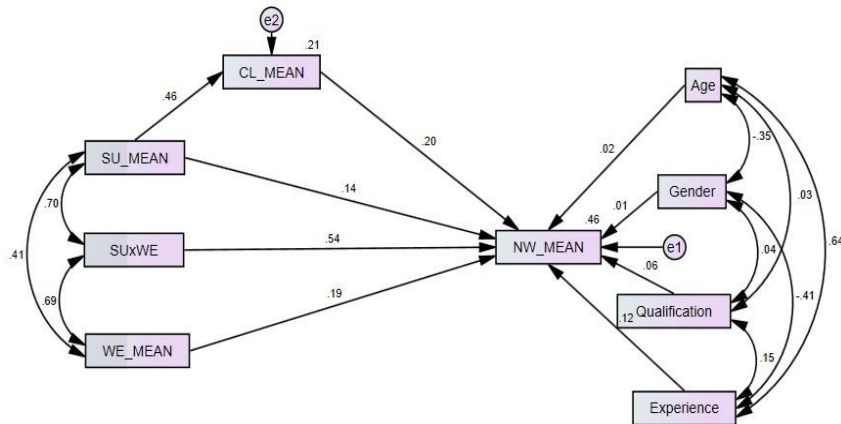


Fig. 9: Model Analysis

## Discussion

Lee (2015) discussed the impact of smartphone usage on work performance, and in this study, a positive relationship between smartphone usage and work neglect has been found. As per Park and Lee (2014), the use of cyberloafing at the workplace affects work and performance. A positive relationship has also been found in this study and cyberloafing mediates the relationship.

## Theoretical Implications

Previous studies (e.g. Lee, 2015) discussed the impact of smartphone usage on work performance, but this study extended this work by describing the mechanism through which this relationship occurs. Choliz (2012) discussed that the latest smartphones contain attractive features other than messaging and calls. Owing to this, the excessive use of smartphones at work during working hours affects the productivity of individuals and causes the tasks to be delayed.

According to Park and Lee (2014), the use of the internet at the workplace for non-office work, which is cyberloafing, affects work performance and ultimately loss of productivity. Barlow, Bean, and Hott (2003) discussed the utilization of the internet at the workplace for personal purposes as an organizational risk. The present study has claimed that cyberloafing led smartphone usage to work neglect and proved this relationship.

In addition, the study also used work engagement as a moderator, suggesting that the interaction between smartphone usage and work engagement moderates the impact of smartphone usage on work neglect. Work on smartphone usage and cyberloafing has

been done in western cultures earlier, but Pakistan has a different context, thus this study assists in examining whether the relationship, which was conducted in other western countries holds the same results in the Pakistani setting or not. The results are almost close to western countries' results. The study, therefore, made the contribution in literature by showing usual and different results.

### **Managerial Implications**

This study will be helpful for managers as well as policymakers and researchers as it will assist organizations to deal with smartphone usage at the workplace and the effect on work performance as employees' lower performance is one of the major issues faced by organizations nowadays. This study will somehow help the managers to know the underlying reasons for the concerned problem. Employees and employer relationships are given importance these days, so this study will help organizations to make policies or some regulations such that employees' use of the phone at work will not affect their performance and the organization's goals. The usage of the smartphone may be restricted for specific timings or separate zones may be created for this purpose. This study will help policymakers to make a flexible and healthy environment where employees can use smartphones at work for a specific time or for relaxation purposes.

### **Limitations and Future Directions**

The study was conducted in a short span of time, which did not allow it to be conducted at a broad level. The most important limitation of the study was the sample. The sample of the study was just limited to a single sector (Information Technology). As the study used the IT sector of Lahore and Islamabad as a sample, it cannot be generalized to other sectors of Pakistan as they may provide different results for the same model of the research study. Future researchers must conduct the study in other sectors in order to review the results, and also for comparative analysis. The sample size can be enlarged, and thus can be tested. Lastly, other mediators can be added to the model in order to explore more into the context i.e. job satisfaction, usage frequency and usage hours.

This study examined the independent, dependent, and moderating variables instantaneously in a distinct model, and therefore improve our understanding by demonstrating the joint effects. The goal of this study is to find the impact of smartphone usage on work neglect, with the mediating role of cyberloafing, and the moderating role of work engagement. The results of the study supported all five hypotheses. The study was conducted in the IT sector of Pakistan. According to the results, smartphone usage is positively related to work neglect. As smartphone usage increases, work neglect also increases. Cyberloafing was proved as a mediator between smartphone usage and work neglect, as this relation is fully mediated by cyberloafing. Cyberloafing at the workplace

leads to work negligence. According to the results, work engagement moderates the relationship between smartphone usage and work neglect in the IT sector of Pakistan. This means this dimension does affect the impact of smartphone usage on work neglect. The findings proved that whenever an employee uses a smartphone at the workplace, it leads to work neglect, which ultimately affects the productivity and efficiency of employees.

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