

**SPILOVER OF ONLINE VIGILANCE ON
EMPLOYEES CREATIVE PERFORMANCE:
COPING MECHANISM**

By
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**NATIONAL UNIVERSITY OF MODERN LANGUAGES
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SPILOVER OF ONLINE VIGILANCE ON EMPLOYEES CREATIVE PERFORMANCE: COPING MECHANISM

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DEDICATION

Dedicated To

As an expression of my gratitude to my parents for their patience and support during my whole life, this project is dedicated with my all love to my family.

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LIST OF ABBREVIATIONS

Abbreviations	Full Form
OV	Online Vigilance
AM	Absentmindedness
PBC	Perceived Behavioral Control
CP	Creative Performance
IT	Information Technology
COR	Conservation of Resources theory
POPC	Pediatric Outcome Performance Category
TPB	Planned Behavior Theory
LOC	Locus-of-Control
SE	Self-efficacy
TRA	Theory of Reasoned Action
T1, T2	Time 1, Time 2
IV	Independent Variable
DV	Dependent Variable
SPSS	Statistical Package for Social Sciences
CFA	Confirmatory factor analysis
SD	Standard Deviation
CI	Confidence Interval
LLCI	Lower level of confidence interval
ULCI	Upper level of confidence interval
PASHA	Pakistan Software Houses Association

ABSTRACT

This study investigates the effects of online vigilance on creative performance by the mediating role of absentmindedness and moderating role of perceived behavioral control. The review of literature revealed that past research is not sufficient to explain the relationships between the online vigilance, creative performance, absentmindedness, and perceived behavioral control. Moreover, the mediating role of absentmindedness in the relationship between the online vigilance and creative performance and, the moderating role perceived behavioral control is also not yet addressed in the existing body of knowledge. Therefore, this study investigates the effects of online vigilance on creative performance and absentmindedness effects on creative performance and mediating role of the absentmindedness in relationship between online vigilance and creative performance and moderating role of perceived behavioral control between online vigilance and creative performance through absentmindedness. A cross sectional study was conducted by using survey research design through self-administered questionnaire. Data were collected from the team leaders of software houses in Pakistan and 330 responses were found usable for data analysis with 63% response rate was males and 36% was females. Empirical results obtained from Process Macro findings, which suggests that online vigilance is negatively associated with the present mind and creative performance. Furthermore, online vigilance is negatively associated with creative performance through absentmindedness. Moreover, the moderating role of perceived behavioral control may reduce the negative effect of online vigilance on mental health and creative performance. Results supported that the moderating role of perceived behavioral control reduce the negative effect of online vigilance on creative performance through absentmindedness. The results of this study contribute to the body of literature and in theory. Additionally, this study also beneficial for organizations that divert the focus of organizations towards employees' mind care that is necessary for their creative performance. Recommendations for advancing scientific investigation of designated relationships on the aforementioned variables have been put forward for the upcoming researchers.

Keywords: Online Vigilance, Absentmindedness, Creative Performance, Perceived Behavioral Control.

CHAPTER 1

1. INTRODUCTION

Mobile technology, particularly smartphones, is becoming the main part of human life and it allows the user to constantly connect to online communication and interaction streams at work, like online vigilance. While Online vigilance, a continuous awareness of the current currents of web communication and interaction (Johannes, Veling, Meier, Reinecks, & Bujzan, 2018). Furthermore, Online Vigilance is a practice that cognitively ruminates employees toward online content and communication, along with their ability to exploit the choices on an ongoing basis and has three aspects.

First, salience relates to the thought of past, current, or future online experiences, i.e., the strength and perpetuity of preoccupation of mind with connected sources. Secondly, the reactivity refers that how the consumer reacts to incoming stimulation, and this is, that is, the rate at as well as the response to alerts. Thirdly, the monitoring function determines the frequency at which a user checks his or her smartphone, such that, the constant monitoring of ongoing strings of online activity, unprompted by forthcoming alerts (Johannes et al., 2018). In addition, this diverts the focus and constant connectivity to online media, and applications contribute to meaningless thoughts and absent-mindedness during working hours and make their minds unhealthy. Moreover, online vigilance frequently affects both staff and the company.

The conceptual dimensions of Creative Performance include attention, awareness, intent, and attitudes like open-mindedness and acceptability, cognitions Assertions, and acts such as absentmindedness (Reb, Narayanan, & Ho, 2013). Munene and Nyaribo (2013) were concerned that social media would become a driver of employee dependency that would affect employee efficiency (performance) as well as the waste of the organizational resource.

The problematic use of smartphones that make employees blind view against current tasks and decreases their creativity, which ultimately reduces the productivity of the organization. On the

other hand, employees perceived behavior control helps employees as a coping mechanism against cognitive tasks. Additionally, this study also beneficial for organizations that divert the focus of organizations towards employee's mind care that is necessary for their creative performance.

1.1 Background of the study

Existence of online media and social networking sites using the latest technology and devices, this trend is becoming a modern lifestyle, and most of the time they use this method during working hours (Jones, 2012). The high-performance mobile phones and the availability of virtually ubiquitous mobile internet connectivity have significant repercussions for the everyday lives of millions of people across the globe (Klimmt, Hefner, Reinecke, Rieger, & Vorderer, 2017). As per Kaplan and Haenlein, since 2009, Facebook's social communication applications worldwide registered 172-175 million users, marginally about the same as Brazil's population and twice as the Germans' population. Simultaneously, 10 hours of content was posted to this social media website every minute (Kaplan & Haenlein, 2010). Social media sites and Facebook used by workers is a situation that couldn't be regulated by employers either, as they can access it through their smartphones or tablets. Constant obsession with electronic data and constant connectivity correlates to irrelevant behaviors during work (Johannes et al., 2018). Constant monitoring and check the online-stream of information will contribute to absent-mindedness and likely detract from a pleasing moment (Johannes et al., 2018). Those with a high level of online vigilance have reported more absent-mindedness and concern about sources of online information is more related to task-free thought (Johannes et al., 2018).

Creative Performance and its aspects are concerned with the allocation of mental resources to the tasks and events taking place at present (Dane & Brummel, 2014), they can occupy a conceptual space similar to that of Creative Performance. According to Jayabalan that when an employee is working for long work hours, it doesn't necessarily indicate that the individual works all the time. The culture of having regular lunch breaks, taking multiple breaks, browsing the web, having a chat with colleagues, "Using Facebook," chatting with people on Google's web, and making phone calls could waste a lot of working time (Jayabalan, 2013). It was accepted that there are several possible problems generated by the introduction of this technology, as the perceived loss of productivity in the workforce (Tudu & Pathak, 2015)

(Johannes et al., 2018) Calls for further research investigating the relationship between online vigilance and creative performance.

This study contributes to the literature and practically useful for Organizations. Firstly, Observing and documenting the effect of online vigilance which influences the employee's creative performance and make the data sets of information, which might be of interest to organizations. Secondly, organizations can evaluate employees' Creative Performance because of absentmindedness and perceived behavioral control. Management can use this information for better planning procedures for employee's high performance. Thirdly, that information we can give to the organization's human resource officers in integrating human resource management to make market (business) strategies. However, this study will provide a guideline to the organizations of Pakistan which consists of public and private sectors, and they can easily track employee's performance most particularly in the Information Technology (IT) sector.

1.1.1 IT Sector Background

The importance of the Information technology sector cannot be ignored, as IT is the core function of each organization around the world (Abdullah, 2017). IT sector contributes to the organization by the empowered customers, rapid globalization, quality assurance, competitiveness, and innovation in the products and services (Romijn & Albaladejo, 2002; Akman & Yilmaz, 2008; Gumusluoğlu & Ilsev, 2009). According to one of the reports of the World Bank, the role of the South Asian region is important for the development and stability of the global IT service provider industries (Ghani & Kharas, 2010). Pakistan is a developing country in the South Asian region and it is a good reference point for getting a glimpse into the regional IT industry (Hassan, 2014). Although the IT industry of Pakistan has witnessed a 33% growth rate from 2005 to 2010 and many value-added IT businesses have been entered into the industry but huge performance gaps still exist in contrast to India (Pervaz, 2010); (Ghani & Kharas, 2010). 98% of IT services are provided by India from the South Asian region and Pakistan is considered to be the provider of expensive and comparatively poor quality products (Ghani & Kharas, 2010). Creative performance is believed to be a major factor for boosting the productivity and economic output of software industries (Akman & Yilmaz, 2008). For the IT Industry, it is said that “no innovation or creativity, no survival”, so innovation is seen as the driving factor that leads the IT based organizations towards success (Ken *et al.*, 2011).

Dyba (2005) researched the key success factors of IT process improvement and declared exploration and exploitation that are two facets of innovation as success factors for improved IT development processes in IT based developing organizations. The role of IT managers has got enormous attention in the 21st century, all over the world in the IT industry (Abdullah, 2017). Due to the core position of IT managers between Administration, top leaders, management, and other departments' staff, they are a highly significant and valuable resource in technical settings (Peters & Moreno, 2017). Moreover, according to them, without IT managers' active involvement, it is not possible to manage the whole organization system, so the IT managers have to perform their technical expertise within the organization. Unfortunately, there have been many issues experienced by IT managers in public and private sector organization of Pakistan, for instance, Online vigilance, less job autonomy, less satisfaction, lack of wellbeing, an unhealthy working environment, the threat of resource loss at the workplace, 24/7 hour connectivity, job insecurity, work to family conflict, longer working hours blame for error in technical setting even not their mistake, excessive vigilant behavior expected by an organization from their employees, are major consequences of techno-stress (Davis, 2018).

The core reason for this technology stress and online vigilant behavior towards IT professionals in Pakistan is that the Information technology profession has intense competition which can be observed among organizations all over the globe. Companies are opting for different strategies to gain a competitive advantage in their respective industries. In these circumstances, a sudden boom of technology is pragmatic in the corporate world. One important technological segment of the economy is the IT industry that totally depends on innovation and creative performance for their survival. The reason of this dependence towards IT managers is that Pakistan is a country where the (Information Technology) IT industry of Pakistan is still far behind countries like Singapore, the Philippines, and India (Ghauri, 2013). Pakistan stands 20th in the exportation of IT services as compared to its counterpart India that ranks first. The exportation size of software and IT service providers in Pakistan is 50 times less than in India in terms of dollars (Pervaz, 2010).

Shah (2015) indicated that one major factor that can account for growth in the software industry, is to move away from traditional ways of providing programming services to contractors and investors. So, innovation and creative performance are the major factors behind the success of the

technology-driven sector, especially the software development industry (Muller *et al.*, 2009). Therefore, Pakistan based software houses also need to be more and more innovative to compete in the world's software industries. Due to these reasons, IT managers have 24/7 hour connectivity behavior which made them absentminded, and chances of errors become higher while performing their job duties which can be the cause of serious negative outcomes (Poor Mind performance).

Moreover, the IT sector is the most important sector of the global economy, and in Pakistan, it contributes 00.90% to the worth of approximately 304 billion Dollars (USD) to the world Information Technology industry (Ghauri, 2013). The IT- industry of Pakistan is still in the nurturing stage and the satisfaction rate of IT managers in development projects is only 33% and mostly controlled by expatriates (Usmani, 2012). Furthermore, all software development projects in Pakistan are completed in teams under the supervision of team leaders. Team leaders are responsible for fostering creativity and innovation among the team members in the information technology sector because of their significant role towards team member's creative behavior which is directly related to the performance of IT based organizations. Since then many studies quoted multiple issues of IT professionals which they are facing in the information technology sector, for instance, overuse of technology, quick response, monitoring, salience, checking notifications, time-based pressures, and techno-stress at workplace (Chiu, 2018; Sun et al, 2019). These pressures have an adverse effect on their cognitions, behaviors, emotions, personal wellbeing, health, and creative performance.

Therefore, it is significant to investigate this vigilant behavior of IT managers. Whether this behavior is just a storm in a teacup or it is a truth that our managers are facing silently in the IT industry. Secondly, what can be the possible implications of this online vigilance behavior and technology role pressure towards IT managers by Top leaders and administrators? How it may affect the managers' mental and creative performance. Thus, it is very much important to research online vigilance and absentmindedness and its implications on workplace outcomes like lack of creative performance of managers in IT based organizations including public and private sector IT industry of Pakistan. Based on recent future calls this study has intended to address the aforementioned variables in order to fulfill the identified gap and contributed to the body of literature by investigating the impacts of online vigilance on IT managers' outcomes via absentmindedness and its effect on creative performance.

1.2 Problem Statement

Pakistan is a smartphone society with a total of 161,183 million cell phone users (pta.gov.pk) (2019). 77 percent of mobile phone users are youngsters between 21-30 years old. Uncontrolled and inappropriate use of smartphones can eventually lead to social, behavioral, and emotional issues, which in turn contribute to the problematic use of smartphones among personnel (Richardson, Hussain, & Griffiths, 2018). The high-performance mobile phones and the availability of virtually ubiquitous mobile internet connectivity have significant repercussions for the everyday lives of millions of people across the globe (Klimmt et al., 2017).

Across the globe, the proliferation of new Internet technology for wireless web communications and portable devices, like smart-devices are causing fundamental shifts in people's attitudes and thinking about communication (connectivity), like online vigilance (Reinecke et al., 2018). The online vigilance is an issue that continuously links workers to smartphones and has adverse effects on the actions, cognition, and emotions of workers. Furthermore, because of this permanent connectivity, there is an increasing concern among organizations about the impact of online vigilance in working hours and the extensive usage of social media and social networking sites that control working hours that form their everyday routines and make them vigilant in the workplace (Reuver, Nikou, & Bouwman, 2016).

Moreover, online vigilance affects both the employees and the organization's performance as well. The problematic use of smartphones that make employees blind view against current tasks and decreases their creativity, which ultimately reduces the productivity of the organization. Furthermore, PBC (Perceived Behavioral Control) allows workers for dealing with cognitive tasks as a process. However, given that individuals are being connected through a smartphone, there will be negative implications arising from this pervasive connectivity, which leads to the feeling that a user is linked to others at anytime and anywhere in the smartphone (Gao, Liu, Guo, & Li, 2018).

Constant monitoring and check the online stream of information will contribute to absent-mindedness and likely detract from a pleasing moment, resulting in reduced competitive performance (Johannes et al., 2018). Thus, this contrivance follows the negative effect of online vigilance and creative performance. This study is conducted to address the conceptual gap and contributing to the literature and theory through the following objectives. The study's main purpose is to investigate the effect of online vigilance on creative performance through absentmindedness

and the moderating role of employee's through PBC (perceived behavioral control) are under-explored and under-theorized. Furthermore, this research diverts the focus of organizations towards mindfulness that is necessary for the creative performance of employees that ultimately affect organizations' performance.

1.3 Research Questions

Refer to the discussion above about online vigilance at the workplace and Creative Performance, the main purpose of this study is to examine the consequences of the Online Vigilance at the workplace in deteriorating the Creative Performance of employees. Below are the suggested research questions:

RQ1. What is the relationship between online vigilance and creative performance at the workplace?

RQ2. Does absentmindedness mediates the relationship among online vigilance and creative performance of employees?

RQ3. Does perceived behavioral control moderates the relationship among online vigilance and absentmindedness?

RQ4. Does perceived behavioral control moderates and weaken the relationship among online vigilance and creative performance?

1.4 Research Objectives

To describe the influence of online vigilance at the workplace on the employees' Creative Performance

To describe the relationship among online vigilance and creative performance of employees through absentmindedness

To assess the role of perceived behavioral control on the relationship among online vigilance and absentmindedness.

To assess the role of perceived behavioral control on the relationship among online vigilance and creative performance.

1.5 Operational definitions of study variables

1.5.1 Online vigilance

Online vigilance is defined as a mental alertness to observe and respond to the notifications via smartphones is called online vigilance (Reinecke et al, 2018). Furthermore, excessive alertness towards smartphones for receiving notifications and fast response may interrupt the mindfulness in other activities, such behavior is called highly vigilant. In today's organizations' employees are highly associated with technology and have found more vigilant at the workplace that may negatively influence their creative performance in current tasks and mindfulness required in job-related activities.

1.5.2 Absentmindedness

Absentmindedness is defined as a downfall of mental presence and attention to do activities by individuals which affect their daily and upcoming tasks (Cheyne, Carriere, & Smilek, 2006). So Absentmindedness is defined in this study context as an experience of memory loss due to high vigilant behavior in office time that may reduce presenteeism in job activities.

1.5.3 Creative Performance

Creative performance has been defined as "The individual's actions to generate, introduce and implement beneficial novelty in an organization". West & Farr (1989, p. 16). In this study, creative performance is employees' creative behavior which active employees mind in effective

decision making in job tasks and also leading towards innovation which is one of the important factor for IT manager's survival in the service industry.

1.5.4 Perceived Behavioral Control

Perceived behavioral control is a condition of self-efficacy where the person (He or She) understands their own capacities, can adapt to the ordinary worries about their life, can work beneficially and efficiently, and can make a commitment or a contribution to their locale (Cheung, 2000). Additionally, this study regarding to perceived behavioral control is the state of job control in which employee feel comfort and relax and manage work-related stress positively, less focused, inattentiveness at the workplace by an employee, while highly vigilant behavior affect employee creativity that can be cop up if employee perceived behavioral control is highly predicted.

Examining the ways in which online vigilant behaviors exhibit, (Johannes et al., 2020) recognized the construct of online vigilance at the workplace to address the particular gap in the literature, that current study on online vigilance does not assess the online vigilance at the organizational level and its impact on absentmindedness. These authors defined online vigilance as “mental alertness and quick response” by using technology against notifications at the workplace. Receiving notifications, text messages in official hours, and excessive use of technology for updating applications, spillover absentmindedness that declines employee attentiveness which ultimately reduces employee mindfulness and creative performance. The individual experience of online vigilance makes them absent mind and blind vision towards work and may not manage their job role in an efficient way. Research on Short term recovery such as emotional disinterest to technology provides external help towards adverse effects linked to online vigilance (Johannes et al., 2020). However, research in the context of long-term outcomes of online vigilance like the possible spillover onto work-related decision making and creative outcomes of employees. In addition, there is a great need to stop the spirals of loss emanating from the process of a physical and psychological dependence on technology. Furthermore, a lot of moderators of the online vigilance (i.e. quick response to notifications, installing new applications at a workplace) and depressive symptoms (depression, headache) and job performance (Burnout, turnover) relationship through mental stress, may be used as a method to deplete the energy of workers. Such as, (Kossek et al., 2019) found in a meta-analysis, personal and organizations' related specific support helps to alleviate personal and organizational resources, that are discussed by us in the

above segment via lenses of conservation of resource theory (Hobfoll, 1989). (Hobfoll, Halbesleben, Neveu, & Westman, 2018) have diverted the focus of the researcher by providing importance to organizational level constructs because in past most of the researches are on employee level and stress have also a great value at organizational level constructs and chances of contribution are high at an organizational level.

1.6 Underpinning Theories

The link between Online Vigilance, Absentmindedness, creative performance, and perceived behavioral control can be hypothesized by a number of relevant theories. Discussion about underpins theories is the core aim of this section. The theory in focus is the Conservation of resources theory (COR).

1.6.1 Conservation of resources theory:

Steven Hobfoll in 1989 developed the theory of “Conservation of Resource Theory”. This theory is motivation and stress theory and used both individual and organizational level at the workplace and have great importance at organizational level constructs (Hobfoll et al., 2018). This theory incorporates the engagement between the individuals and the society or environment, or also incorporate that the extent to which the demand is created by surroundings or the resources of a person through which he will handle these types of demands. This concept is similar to the P-E model. P-E model is the major distinction from (Hobfoll, 2001) which is based on an individual’s expectations to suit, while this theoretical model is based on actual fit. According to Hobfoll, (2001) the basic aspect that the theory COR is, the individual endeavor for gain, maintain, save, or nurture the certain aspects which are being valued. Such that, individual strive mostly to protect the resource or gather resource to choose a way in a better manner to deal with different challenges and demands of life. The resources can be anything which is vital or essential for an individual or people constructively contribute towards wellbeing and enable them to handle.

When we overview Hobfoll Conservation of resources theory (COR) theory applications, it indicates that resources are of 74 kinds that are being examined by studies. Mostly are the personal resources and others are elements of the external environment. Personal resources include some attributes from personal values like (the achievement prevalence) traits of personality (inner locus-of- control, resilience, non- positional confidence (optimism), and self-esteem in general) or

additional features have a constructive impact (Nelson & Simmons, 2003). Resources of the environment are different and depend upon the type of environment in which a person operates. In workplace contexts, elements like job control in someone's job and quantity of reviews obtained on work execution or degree of reward received against efficacious work execution all are illustrations of resources of the environment (Hakanen, Perhoniemi, & Toppinen-Tanner, 2008). Moreover, coworker's social support at a workplace or the support from the organization (compliant needs of individuals) are as well as types of resources of the environment. These are helpful in reducing stress and burnout in a job (Halbesleben, 2006) and promoting positive-wellbeing as well (Luszczynska & Cieslak, 2005).

As mentioned above that COR theory incorporates individual and environmental features. In COR theory dimensions are similar to determine where a person will face or not resources of conservation. Conferring from Hobfoll's suggestions model of Lazarus pays a great deal of attention to individual evaluations rather than why people react against in some certain ways towards events. The argument regarding Lazarus model of transaction gives much importance to mental progressions, or pay less consideration towards the surroundings. On the other hand COR theory by Hobfoll give much attention to environmental features that contribute towards the conservation of resources, this is more practical application. The fundamental element of the theory of COR is though that strenuous event can be led towards the depletion of resources. A model is strife with others at the working environment that might consume a person's vitality, sets aside some effort to deal with, and disturbs their fundamental work tasks, thus resulting in all resource loss. In an examination, ideal settings will prompt resources gain. For example, if individuals receive a constructive response from managers at work, they can boost their constructive influence or improve their self-respect and ensure that their commitment is appropriate. Furthermore theory of COR deals with resources loss (through the unfavorable environment) or resources gain (through favorable environmental conditions) and main attention to resource loss. Hobfoll suggests that resource loss is a threat to survival that's why Hobfoll gives much importance to resource loss because it undermines a person's abilities and creates difficulties to survive in the world. Resource gain is important to gain an overall level of psychological and social wellbeing.

Two important theories of COR principles are i) resources spiral or ii) resources convoys. This spiral is based on the concept that is when individuals have a lack of resources to handle a stress

able situation not only are they more impervious in this case, but they often lose resources which are additional (Hobfoll, 2001). Many kinds of research had gained provision in resources of spiral loss. For example (King et al., 1999) identify that resource loss experienced by a person “spillover” decreases the capability to deal with conflict strain, decreases the chances to rescue purpose. Likewise resources gain may correspondingly be a related spiral, for example, when effective execution is needed to pick up progress. The researcher proposes that generally, losing spiral has more effect on an individual’s wellbeing than spirals gaining.

Additionally resources gains or losses, the theory of COR incorporates the construct about caravan resources. Such an argument showed that these means could combine or develop with one another. Hobfoll gave an example about that caravan of individual effectiveness by way of hopefulness. For instance, individual efficiency about someone in a job has improved through operational work execution and they are going to get more serious with the job performance in the future. Same as social support may also boost up feelings of an individual’s self-esteem and taking themselves to become much affluent and looking in the future for societal assistance. Caravans concept is extended by Hobfoll, (2001) stated that entourage of resource tend to go together over the time span until some external effort are particularly focused to change the arrangement of resources. As stated above empirical support for COR logic and principles. This theory contributes towards both practical and academics.

The underpinning conservation of resource theory basically helps to elucidate the conservation of resources that have great importance in an individual’s life. Moreover, this theory highlights two major aspects of resource gain and resource loss and their effects on employees at the workplace. This study is examining the negative effects of technology stressors. Therefore, in order to summarize, this theory provides fundamentals to support the harmful stressor like online vigilance behavior at the workplace, absentmindedness, and their effects on outcomes among IT Managers in the public and private IT industry of Pakistan. Some suggestions by conservation of resource theory include, by increasing personal power of employee resources are gained and chances of employee growth are high if employees' self-efficacy is high such as perceived behavioral control resilience, etc. On the other hand, if employee's personal resources are low they will lose their cognitive resources, and the loss of interpersonal resources is also high that will affect their creative performance and decision making. For example, increasing personal resources will reduce the

negative effects of online vigilance on creative performance of employees, life satisfaction, family, and personal wellbeing and they will perform their roles in both domains in an effective way.

1.7 Study Significance

Online vigilance affects both the employees and the organization's performance as well. The problematic use of smartphones that make employees blind view against current tasks and decreases their creativity, which ultimately reduces the productivity of the organization. On the other hand, employees perceived behavioral control helps employees as a coping mechanism against cognitive tasks.

This study also beneficial for organizations that divert the focus of organizations towards employees' mind care that is necessary for their creative performance. Few studies have been conducted in this context except management sciences. For academia, this study is the first of those few studies that empirically examine the consequences of online vigilance, and contributing to the body of literature and theory by exploring these unexplored relationships.

1.8 Study Scope (It covers delimitation)

The research focuses on how online vigilance at the workplace influences the Creative Performance of employees in organizations. In this aggressive competitive world, getting high employees' performance is one of the considerable issues for the organizations. The need for an efficient and attentive workforce with Creative Performance has increased over the last decade. The understanding of how online vigilance at the workplace implicates consequences to an organization is important to both academics and decision-makers. Moreover, not much research is done into the potential implications of this modern paradigm for the workplace.

The literature lacks research conducted on online vigilance in Pakistan to evaluate the Creative Performance. As it is found that everyone is connected with their smartphones and is zoning out to their present moment work which makes their attention less towards their work. This gap has been found after taking face-to-face interviews with the researcher with some of the IT Professionals who are currently working in organizations. This study is more focused the investigating the online vigilance at the workplace and its effects on the Creative Performance of

employees in the IT Industry in Pakistan. Thus, the gap of this study has examined the consequences of online vigilance in decreasing employees' attentiveness at the workplace.

This research may be seen as an opportunity to help and extend the results of the creative performance of employees, the relation (linkage) between developed countries to a developing world. It is important to know the relation among online vigilance and creative performance of the employees.

CHAPTER. 2

2. DEVELOPING HYPOTHESIS AND LITERATURE REVIEW

2.1 Online Vigilance

2.1.1 Concept, Background and Definition

Online communication offers a plethora of different rewards (Reinecke et al., 2018) and it is a reliable source of satisfaction for an inherent need (Reinecke et al., 2018).

In particular, Internet access allows online communication and knowledge incentives readily accessible, providing an instant approach to systematic solutions for about every condition, and area of life (Klimmt et al., 2017). Technical connections like mobile bells, alerts, are particularly prominent and pervasive for the Pediatric Outcome Performance Category (POPC) community (Bayer, Campbell1, & Ling, 2016). Responding appropriately towards this relation has been frequently related to social benefits or informative incentives (Reinecke et al., 2018). As a consequence, online vigilance includes the both aim-sloping, inspired actions and focus, and also subsequent action and media exposure. A significant difference that distinguishes this from other similar constructs such as online consumer behavior (Reinecke et al., 2018). Online vigilance is markedly non-pathological, whereas the problematic use of smartphones or the Internet is, by definition, maladaptive (Johannes et al., 2018). Constant connectedness (online vigilance) describes the learned trait which can be adaptable or mal-adaptive. Particularly, (Reinecke et al., 2018) identifies that online vigilance has the ability not only to foster but also to hinder well-being. In other words, various mechanisms can account for the adaptive but also mal-adaptive effects of online vigilant behavior. However, digital awareness (online vigilance) can acquire information on someone's social interactions and social networking. Furthermore, continuous exposure to pleasing contents, diversions from displeasing practices, and fulfilling the socialists could be effective (Johannes et al., 2018). Technology (Online Vigilance) causes individuals to perform more than one task at a time and pay little attention to other issues. As people want to prove that they have adequate knowledge of technology relative to their colleagues, although, they do not

have the knowledge they need. Apart from that, if people always bring home all their work, which should be done at their workplaces (Ab Ghani, et al., 2017), which ultimately affects their Creative Performance.

The growing pattern of technical entanglement and its adverse effects, especially, the damage of cognitive and physiological wellbeing, and its adverse effect on the 'work to family environment,' i.e. the interaction of professional and personal life (Nevin & Schieman, 2020). Constant monitoring and checking online streams of information can lead to absent-mindedness and possibly distract from a pleasing moment (Shin & Shin, 2016). Furthermore, hyper-connectivity affordances have encouraged increasing demands that employees can consistently reach out to bosses through job-enhancing technologies, like e-mails and mobile phones. The newer workforce is the one that is remotely connected, and constrained in the conventional separation of practical work and personal life while digitally available for job interaction and able to monitor your work (Nevin & Schieman, 2020).

More precisely, this constant divergence may come at the cost of a decreased concentration at work. The study reveals, if you are constantly connected it creates more irrelevant activities (Johannes et al., 2018). Sometimes, employees cannot afford to disengage to handsets and lose their control and abilities which helps to cope-up with workaholic stress (Nevin & Schieman, 2020). Online Vigilance causes technology stress (Technostress) can be described as a modern adaptation disease caused by an inability to connect with new computer technologies healthily. The clear signs of Technostress include the inability to focus on a single problem, increased irritability, and a feeling of lack of control (Ab Ghani, et al., 2017). Rosen & Weil (1997) extended the concept of technostress to include, any detrimental effect on emotions, feelings, behaviors, or psychology induced directly or indirectly by technology. The attitudes of individuals who are unable to set a specific time limit when using technology, whether at home, at work, and during exercise or relaxation. Individuals believe, they need to respond to all messages or perform all given tasks immediately, even though they may select a message or task based on their own needs (Ab Ghani et al., 2017).

2.1.2 Dimensions of Online Vigilance

The online vigilance leads to a constant awareness of the communication on the internet and streams and covers the three dimensions (Johannes et al., 2018), which are salience, reactivity, and monitoring.

2.1.2.1 Salience

The first aspect is salience, which represents an amount at which a user's cognitions are linked with the virtual (online) environment, and these smart gadgets and other web devices are the constantly accessible gateway (Reinecke et al., 2018). Therefore, high levels of salience can indicate both detailed thinking of a person's web environment, automatic, and senseless exposure to virtual thought (Reinecke et al., 2018). Whereas the first aspect of "salience" tells us about the thoughts related to the user's experiences of online media in the past, present, and future, i.e. it is strength and continuous preoccupation of cognition/mind with digital content (technology/information) (Johannes et al., 2018).

2.1.2.2 Reactivity

Reactivity refers to how the user responds to incoming mobile stimuli, the responses to alerts, and the speed at which they are checked (Johannes et al., 2018). One being able to react faster to alerts, new texts, and opportunities to engage, therefore, trying to capitalize on possibilities for group rewards, like having in contact with the social media friends (Ling & Lai, 2016), and resisting social penalties, such as the effects of answering 'late' to important alerts (Reinecke et al., 2018). As a consequence, the daily user's habit or the degree to be more online vigilant by their apps is marked by constant attention, consistent propensity to answer the incoming notifications comes from a web portal (Reinecke et al., 2018).

2.1.2.3 Monitoring

The third aspect of online vigilance tells us about the people's propensity which headed deliberately them to join the online environment regularly (Reinecke et al., 2018). Monitoring refers to the frequency at which a user checks his or her smartphone, therefore, the continuous monitoring of persistent threads of online activity, unprompted by incoming alerts (Johannes et al., 2018). For a lot of users, mobile social platforms, like Instagram, WhatsApp, and Facebook, are the main platform to collect information and contact to your social-media network. Social-media is the way of communication with your friends through the different accounts made on these

platforms and these accounts are communication repositories of your shared content, which is in the form of timelines posting, different feeds, and the social threads (Reinecke et al., 2018). The information flow of social-media which represents your recent processes like texts, photographs, and videos. It gives you the overall view of a person's profile and his social circle interactions (Utz, 2015). Consequently, constant control provides a touch of continuity of relation. It gives a feeling which is "perpetual contact" to the user (Mascheroni & Vincent, 2016).

2.1.3 Similar concepts

Initially, the idea of "online vigilance" tends to overlay considerably to current concepts in research. Precisely, from "media habits" perspective the high engagement of people in the world to online communication is discussed obsession (Reinecke et al., 2018), along with mobile phones and internet obsession (Reinecke et al., 2018). Therefore, in order to sharpen the "online vigilance" concept and to illustrate the relevance outside of current viewpoints. Below is the distinction of relevant constructs of online vigilance (Reinecke et al., 2018).

2.1.3.1 Media habits

This construct of habits leads to "learned dispositions to repeat past responses" (Reinecke et al., 2018) and it is based on the "automatic association of cues and actions that are formed by repetition." As a consequence, habits evolve as the same activity is repeatedly executed in identical environments before finally it is initiated, through environmental indicators automatically. (Reinecke et al., 2018; Gardner B, 2015). As with every other behavior, the use of media in general (LaRose R, 2010) and online media use in specific (Bayer, Campbell1, & Ling, 2016) it may be subject to the formation of habits. The formation of construct media habit has several parallels with "online vigilance" in context to and it suggests that these principles could be related (Reinecke et al., 2018). Previous research indicates that certain aspects of online vigilance, such as repeated monitoring behavior, are usually correlated with its monitoring dimension (Reinecke et al., 2018). Respond instantly to received contact stimuli expressed in the reactivity component is often highly habitual (Bayer, Campbell1, & Ling, 2016).

Media habits' initial concepts lead towards the normal usage of media is essential 'media' involvement is inert and subconscious like "minimal self-examination", and "spontaneous" patterns to use gadgets and texts (Reinecke et al., 2018). While this behavior focuses on media

behaviors that fit well with certain dimensions of “online vigilance”, three facets involve “salience” which specifically defines cognition involvement which is linked with the virtual (online) environment that seems less consistent with the habit concept (Reinecke et al., 2018). However, mental habit’s research shows these behaviors are just not limited to apparent actions, but often include mental process (Reinecke et al., 2018). According to (Verplanken, Friborg, Wang, Trafimow, & Woolf, 2007), cognition practices, like negative thinking, may gain mental habit’s status "to the degree that such thought occurs frequently, and is initiated without any awareness, and is mentally productive". Besides, following the attention-learning research above discuss the current work on “attentional habits”, the particular type of mind habit, indicates automacy of the stimuli related to rewards catch diligence, and make stimuli related to rewards more difficult to avoid (Reinecke et al., 2018).

With online vigilance theoretical prospects, this research suggested the term includes the “goal oriented” modes of diligence and action (behavior), and also unconscious reactions for contact codes (cues) and attentional distribution (Reinecke et al., 2018). The research discussed above indicates that the habits and automated components of online vigilance can be taken into account. Although this indicates that the concept “online vigilance” is the media’s practices' main constituent, the study shows the usual model “habit-construction”(Reinecke et al., 2018). As stated in the concept definition, the “online vigilance” not derived solely through the situations that cause unconscious actions or cognition (Reinecke et al., 2018). One of the main implications of habit automation is to trigger the habits that are relatively oblivious towards changing the goal (Reinecke et al., 2018). Consequently, habits that depict the goals initially underlying behavior before the formation of habits. However, when habits have been established, the actions are triggered thru situations, regardless of the state of the current goals of the person (Reinecke et al., 2018). Although we believe that online vigilance processes are stimulated spontaneously thru interaction signals. So, we propose the idea of online vigilance that includes constructive and rational actions “(goal directed behavior)”(Reinecke et al., 2018). Thinking and observing the digital settings, and also reacting towards the incoming text, really aren't inherently and primarily automated process, which can remain contemplative and goal oriented behavior to fulfill social desires, like fear of being left out (Reinecke et al., 2018). Fear of ostracism (Schneider et al., 2017), or to receive positive benefits, such as enhancing mood. A broad body of research characterizes the use of electronic media as objective and oriented depending on the situational vulnerable wants, like

connectivity (Reinecke et al., 2018). Moreover, the decision to give priority to responding to a received text above the others, parallel off-line activities and connections are not inherently spontaneous, however, can include the dispensation of reflective information. As a result, the theoretical construct of “online vigilance” is not meant to replicate the construct of the internet use (media habits) (Reinecke et al., 2018). We also believe that the current study effectively extends the prior efforts to understand the phenomenon of constant connectivity (Reinecke et al., 2018), by offering hypothetical viewpoints on the disparities in cognition and behavior orientations towards the internet world which are intentional or goal oriented, and also an instinctive or chaotic process.

2.1.3.2 Internet addiction

As far as the uniqueness regarding to other definitions are concerned, “online vigilance” is often derided as just a pure expression or indication of addictive behavior. Given the large but gradually increasing body of work on addictive behavior which has already grown for the last twenty years and the widely recognized definition of this term, there is a lack of details (Reinecke et al., 2018). Although the operational concepts of Internet addiction often vary considerably from one study to another, multiple evaluated standards have been established, like Acceptance, avoidance, inadequate control, and adverse effects for various areas (Reinecke et al., 2018). The definition of online vigilance has similarities with most of the discussed constructs of web addiction (online addiction) (Klimmt et al., 2017). This connection is especially evident in the salience aspect (Reinecke et al., 2018). The preoccupation cognitions about Web usage are also explored as a primary indicator of Internet use (Reinecke et al., 2018) And mobile phone addiction in particular (Reinecke et al., 2018). Whereas, “salience” an aspect of OV leads towards the orientation of cognitions of the internet world for daily routine. However, cognitions concern for web obsession related towards the serious or addictive types of “salience” like "obsessive thought" or an "irresistible drive to go online"(Reinecke et al., 2018).

Additionally, endeavors to adjust the manifestations for the most part connected with substance misuse, for example, over the top inclusion, concern, or resistance, to conduct addictions, like, the Internet or cell phone enslavement have recently been studied (Reinecke et al., 2018). (Reinecke et al., 2018) Scrutinize the selection of regular substance misuse indications to analyze conduct habit as observational and to see a disturbing pattern in dependence examination to "over-

pathologize daily life" or "construct creative and ludicrous addictive disorders"(Reinecke et al., 2018), Bolster the view to point out that side effects that might be troublesome in one setting might not be in others: "Video games problems are often considered dangerous in the same way as drug issues, even though the former is a normal daily practice that has far less troublesome effects than the latter." Instead of relying upon indications, for example, resilience or struggle that "are likely to contribute too much of the behaviors that people find important". They recommend that the meanings of conduct addictions will concentrate solely on two segments: 1) huge useful impedance that is an immediate outcome of conduct and 2) constancy after some time (see also the working depiction on social dependence (behavior addiction) (Billieux et al., 2017). As a quality like a trait, online carefulness (vigilance) shares the component of diligence after some time with this idea of conduct habit (Reinecke et al., 2018). However, the second characterizing part of conduct compulsion, disability, and online watchfulness can be separated from Internet dependence (addiction) (Reinecke et al., 2018). An enormous developing group of exploration has indicated that Internet compulsion has severe negative implications of the internet for the functioning of users (Reinecke et al., 2018). Nevertheless, online watchfulness might be related with some hurtful impacts of Internet utilization, for example, technology stress or stalling (Reinecke et al., 2018). This study suggests that the idea ought to mirror a substantially more commonplace type of inclusion in the online world that doesn't inherently influence the singular working and emotional wellness. On the other hand, we also propose that online-vigilance can possibly improve wellbeing by creating the advantageous (social) gains of online correspondence all the more promptly open, elevated levels of online-vigilance may heighten the constructive outcomes of online correspondence, for example, state of mind control or related fulfillment (Reinecke et al., 2018).

Finally, this study shows that the online-vigilance and web obsession reveal major variations in their commonness. Current discoveries show that lone a little level of every one of Internet clients experience the ill effects of undesirable types of Internet dependence (Müller, Glaesmer, Brähler, Woelfling, & Beutel, 2017). Online-Vigilance is an immediate result of everyday utilization of practices and an overall worldview that affects a significant number of Internet users (Reinecke et al., 2018).. Additionally, the orientation of cognition towards the online context can tend to be addictive because of its universality and medial automaticity (Bayer, Campbell1, & Ling, 2016), it indicates that "online-vigilance" and "Internet-addiction" both are distinct from each other.

The definition of online-vigilance refers to the continuous cognition of users to online substance and correspondence, just as their capacity towards utilization of instruments on a progressing premise (Reinecke et al., 2018). Individuals who have a serious extent of online-vigilance will think all the more frequently and all the more seriously to their web environment despite the fact that they don't utilize their cell phones (Reinecke et al., 2018).

2.2 Absentmindedness

2.2.1 Concept, Background and Definition

Absentmindedness is a state of inattentiveness to ongoing tasks and of losing control of their present objectives. Salient but irrelevant stimuli can distract the intended thought or action due to absent-mindedness (Ishigami & Klein, 2009). In-attention discusses the generic absentmindedness and inability to focus on information which is supposed to result from an absence of effortful consideration control (Blume et al., 2019). Hyperactive-impulsive behavior is hectic, lacks cognitive control, or requires a serious extent of physical action (Blume et al., 2019). These are believed to help to continually divert the person's attention regarding new significant improvements and because of the failure to control gratification or powerful reactions (Blume et al., 2019). Consequences may be mild, though irritating, everyday home, school, or work-related mistakes; or consequences may be more severe or even more lethal when conditions become demanding, such as driving a car or piloting an aircraft (Ishigami & Klein, 2009). Being absentminded is to be inattentive to ongoing operations, to lose track of current goals, and to be diverted from deliberate thought or action by conspicuous but "actually irrelevant stimuli (Manly, Robertson, Galloway, & Hawkins, 1999). Errors of Absentmindedness result from the absence of information or lacking or inaccurate data (numbness or misconception), or incorrect implementation of standards, basically from the inability to enforce them. i.e., inaccurate and incomplete from accessible (right) data (Cheyne, Carriere, & Smilek, 2006).

Absentmindedness is correlated with failure to perform all the tasks that a person is trying to concentrate on (Janes, Casey, Huntsdale, & Angus, 1999). Becoming engrossed in thinking rather than attending to every stroke of the toothbrush hardly has a negative impact. Even apart from the considerable medium, this relentless attention to current operations will entail (Manly et al., 1999). Absent-mindedness can include two sub-factors: the "momentary attention deficit" and

“prospective forgetfulness” or impeded memory on the agenda (Fernaesus & Östberg, 2009). All of the experiments alluded to above have the dimension of forgetfulness called prospective memory (Fernaesus & Östberg, 2009). Reason's work on absent-mindedness and “self ratings” of cognition failure was the beginning stage for different scientists in the territory of memory every day (Fernaesus & Östberg, 2009). Those who consistently fail to do so are often considered absent-minded or forgetfulness. Such concepts are additionally utilized similarly as we utilize the terms character or attribute (Fernaesus & Östberg, 2009).

2.2.2 Similar Concepts

Absent-mindedness has shown a decline in well-being, and the consistent diversion of attention among the current circumstance, past, progressing, or future web experiences that bring about a similar impact. Precisely, the consistent diversion may come at the expense of a diminished attention core interest (focus) (Johannes et al., 2018). Mind-wandering is a type of task irrelevant considerations that can be deciphered as an essential type of absentmindedness (Johannes et al., 2018). Absentmindedness in the form of mind-wandering is adversely linked to well-being (Johannes et al., 2018). Forget-fullness can cover a wide range of ways, which are conceivably irrelevant to absent-mindedness as a characteristic. For instance, individuals with beginning dementia are typically distracted yet are not commonly thought to be preoccupied. Since the carelessness of absentminded people can meddle with academic and professional performances related execution and in this manner need of assessment and counseling (Fernaesus & Östberg, 2009). Absent-mindedness and forget-fullness are difficult to assess utilizing unbiased mental assessments (Fernaesus & Östberg, 2009). Absent-mindedness has been shown to reduce well-being (Johannes et al., 2018)..

Absent-mind is another popular dimension of lack of mindfulness (Reb et al., 2013). Being absentminded isn't conscious of, or focus on, an undertaking, for example, holding a discussion, lecture listening, and document reading. The brain is inactive, but one executes the automatic function and not in the slightest degree, for instance, in light of the fact that the brain meanders and goes flat (Reb et al., 2013). An absentmindedness, therefore, leads towards the form of the depravity of mind (mindlessness) (Reb et al., 2013). To be absentminded seems relatively a normal practice (Reb et al., 2013). Notice the absentmindedness isn't, theoretically, the specific inverse of

mindfulness, so, this demonstrates an absence of focus (Reb et al., 2013). Moreover, continuously monitoring or reviewing web sources of data which lead to a sense of absentmindedness and probably detract from a pleasant moment, resulting in decreased well-being (Shin & Shin, 2016)

2.2.2.1 Mind Wandering:

The expression mind-wandering utilized as a build in mental hypothesizing is generally youthful. Researchers argue on diverse studies constructions: those who list irrelevant tasks thinking, irrelevant tasks sets, stimulation of independent thinking, consciousness flips, or the outer loop that can be united behind a single name (Shepherd, 2019).

Mind-wandering and unrelated thoughts about task or work is the most common. Using indicators which examine the engagement in the work. It is generally correlated variability of the responses which declines the job efficiency like work related and non-related thinkings go after restricted attentional assets. As indicated by the leader asset speculation, individuals mind meander more during simple than troublesome errands, as simple undertakings require less attentional assets leaving more space for task disconnected thinkings (M. Shin, Linke, & Kemps, 2020).

As indicated by this view, individuals mind meander (mind-wander) throughout complicated activities, yet just in the event that they have enough intellectual assets and ability to deal with the complicated roles and if diversions are negligible. Given that past investigations have reliably related successive media performing multiple tasks with Increasing impulsive behavior or higher impulsiveness (M. Shin, Linke, & Kemps, 2020).

Hefty media-multitaskers have a higher edge of role commitment than medium or moderate media-multitaskers. This could make hefty multimedia taskers more powerless against leader work disappointments on troublesome undertakings, prompting more noteworthy brain meandering and execution decrease than medium or transitional media-multitaskers during troublesome undertakings than simple activities (M. Shin, Linke, & Kemps, 2020).

Expanded thoughtfulness regarding the scope that is clustered by mind-wandering is valuable. However, scholars perceive that the scope of procedures the term clusters may contain different etiologies and preparing marks. Appropriately, scholars have categorizes many sub-kinds of mind-wandering, categorizing scenes of psyche meandering in three particular ways in any event (Shepherd, 2019).

The initial two include origination of brain meandering (mind-wandering) as characterized partially by the substance of a brain meandering scene, where the substance is irrelevant to an assignment a worker was performing, or on the other hand, should perform. However, there are different ways for a worker to take part in the task-irrelevant idea. A few order brain meandering scenes regarding a relationship to a specialist's goal: brain meandering (mind-wandering) may happen deliberately or on the other hand accidentally (Shepherd, 2019).

Secondary way to arrange mind meandering scenes is as far as a relationship to outer factors. One may here recognize between interruption, when the brain is incited to meander by outside improvements, and psyche meandering, when the brain is provoked to meander by inside procedures, freely of a specific factor. Perhaps some might contend whether diversion, particularly persistent diversion, is a real mind meandering too (Shepherd, 2019).

The third approach to describe mind meandering isn't in the wording of its substance, but instead its elements. Analysts portray mind meandering as a type of unconstrained thought, with particular elements. Brain meandering is recognized from inventive idea, and rumination, and different sorts of mental scenes, by connection to the presence or nonattendance of different limitations on the scene. For example whatever they're called, intentional or instantaneous restrictions (Shepherd, 2019).

This is the probability that Contingent upon the psychological control framework's model of the estimation of different modulation schemes, throughout the situation comparatively minimal expected worth the framework may choose a bundle of control-signals prompting an investigation. There would have been the situations in which the objective is to locate another and better objective. Also, the technique, which stays here hazy and someone can envision it including movements of consideration, development of undertaking sets including creative mind, restraint of current objectives, and so forth. May be commonly depicted as withdrawal from the current undertaking so as to set out upon a quest for more important work (Shepherd, 2019).

2.3 Perceived Behavioral Control

(Ajzen, 1991) In his planned behavior theory introduced the idea of PBC (perceived behavioral control) is a part of both behavior and behavioral objective (Ajzen, 1991). When introduced the concept of PBC that can predict intention as another antecedent factor, it was described as "a perception of a person to perform a behavior of interest with ease or difficulty" (Ajzen, 1991).

PBC is considered to be the most contentious construction in the Planned Behavior Theory (TPB), partly because of the inconsistency in the empirical results related to its effect on intent, and partly because of the inconsistency in its conceptualization and operationalization (Vamvaka, Stoforos, Palaskas, & Botsaris, 2020). Planned Behavior Theory (TPB) is a widely recognized paradigm for interpreting behavior in the field applied to social psychology. This model is very common and the most cited, which is predicting the behavior of humans (Barua, 2013). (Ajzen, 1991) Planned behavior theory has been grown nearly the most powerful or common philosophical structures to investigate human activity (Ajzen, I, 2002). After its inception 26 years ago, the theory has been widely applied to understand behavior-specific cognitive factors (Barua, 2013). Planned Behavior's theory basic principle is to determine behavior from behavior intentions, which are functions of independent TPB, (Create behaviors, emotional standards, and “perceived behavioral control”) (Barua, 2013). Idea of PBC is tailored to the understanding of non-volitional elements in the TPB. A high PBC level will improve the intention to perform the behavior of the individual, and a low PBC level would be less likely to perform the behavior (Barua, 2013). (Ajzen, 1991) The study examines that the intent of positive attitudes and subjective norms is improved by perceived behavioral control. However, Eagly & Chaiken (1993) discuss that PBC generates positive intentions when a person shapes a positive state of mind, but not when a person shapes a negative state of mind. The idea of PBC has been introduced to deal with circumstances where people can lose full volitional influence over the behavior of concern (Ajzen, I, 2002). While assessing the factors that affect human behavior, the reasoned-action approach suggests that behavioral intention has become the most significant indicator of behavior (Martinez & Lewis, 2016). The frequency of a person's intention to conduct a behavioral action is due to Behavioral intention (Martinez & Lewis, 2016). According to behavioral achievements, Perceived Behavior Control depends on the confidence and precision of perceptions. For example, if a person perceives a lower accuracy of perception, PBC cannot be reasonable to a limited amount of information (Barua, 2013). (Ajzen, 1991) Postulated that there might be a direct behavioral effect by Perceived Behavior Control. The idea “perceived behavioral control” and self efficacy are essentially identical constructions, has led many researchers to substitute PBC with self-efficacy in their studies (Vamvaka et al., 2020). PBC (Perceived behavioral control) lies in the relationship gap of study (Dalila, Latif, Jaafar, Aziz, & Afthanorhan, 2020). This is due to the work setting (Arli et al., 2018), propensity (Hansen et al., 2018), and relevant data on the sources (Hajli & Lin, 2016)

that remains the paradox of the food hawkers' situation (Dalila et al., 2020). The Perceived Control includes some external control factors, such as opportunities, resources, and possible obstacles, and represents one's belief that behavior is solely up to him or her. Additionally, the prevalent view nowadays is that Perceived behavioral control is segregated into the “Perceived self efficacy” or the perceived stability, and Perceived self efficacy can be calculated in terms of the perceived complexity and perceived confidence (Vamvaka et al., 2020).

2.3.1 Similar Concepts

2.3.1.1 Self Efficacy:

The idea of PBC is by no means novel or unique to the planned behavior's theory. There is a common concept in the paradigm of health belief (Ajzen, I, 2002), Where obstacles are related to, in the interpersonal behavior model (Ajzen, I, 2002), Where this takes the form of fostering conditions. However, to Bandura's work on self-efficiency, Perceived Behavioral Control owes its greatest debt, (Ajzen, I, 2002). The working life centered primarily on behavioral or job related aspect of self efficacy, reflecting workers' expectations on their ability to finish job tasks (Loeb, 2016). Self-efficacy is a pliable concept that can vary with improvements in self, job, and social context-related factors (Christensen-Salem, et al., 2020).

In the context of work, self-efficacy is the most important manpower and is seen as one of the key building blocks of positive organizational behavior. Self-efficacy is in general domain-oriented (Bandura, 1997) and there are many domains within the work setting. However, on working life, research concentrated primarily on the behavioral and job-oriented aspects of self-efficacy (Loeb, 2016). Self-efficiency (self-efficacy) can enhance job well-being for several reasons. First, innovative (creative) self-efficacy beliefs improve the capacity of individuals to endure and cope with difficulties in their work. Strengthening the focus on challenging tasks and the willingness and flexibility to approach problems creatively and from a new viewpoint (Christensen-Salem, et al., 2020). Secondly, innovative self-efficiency (self-efficacy) allows workers to look for knowledge more widely through effectively seeking resources. Commitment to knowledge-searching activity is connected to productivity as workers come across new and innovative concepts, facts, and strategies (Christensen-Salem, et al., 2020). Finally, the belief in effectiveness (efficacy) allows people to be more energetic and willing to learn to accomplish goals, as these

convictions are central to inspiring people towards ambitious tasks and high expectations of results (Christensen-Salem, et al., 2020).

The perceived self efficacy leads towards the human's confidence in their ability to manage the level of skill and to monitor incidents which influence their's lives" (Ajzen, I, 2002). Furthermore, the "perceived behavioral control" and, "perceived self efficacy" varies significantly from each other while PBC focuses on the capability to conduct the specific behavioral task (Ajzen, I, 2002). Self-efficacy (self-efficacy) has been introduced to cope with behavior in the context of behavioral modifications (Ajzen, I, 2002). Perceived self-efficacy should suppose the 'convictions in one's capacity to plan and actualize the approaches needed to deliver the levels to the 'beliefs in one's ability to plan and implement the courses of action needed to deliver the levels of achievement" (Ajzen, I, 2002). Self-efficacy (self-efficacy) has centered largely on workers' expectations of their ability to perform their job tasks professionally, and actually not much known regarding the impact of confidence on the emotional and societal competence may have had (Loeb, 2016). Work related social self-viability led the worker's trust in their capacity to play out the societal interactive activities required to establish, improve, and sustain relational connections at work. Job related, emotional self-efficacy leads towards the individual's trust in their abilities to grasp, comprehend, control, and using interpersonal skills at work. Social experiences at the workplace may be tools and demand for work (Loeb, 2016). Furthermore, workers should have high self-efficacy (self-efficacy) at work to be able to overcome the actual job function (e.g. occupational self-efficacy) (Loeb, 2016).

"Perceived behavioral control" (PBC) as well as "self efficacy" both are very identical: and associated to the "perceived capacity" to execute behavior (behavioral sequence) (Ajzen, I, 2002). Besides, the recommendation of using the terminology "Perceived Behavioral Control" to describe this aspect of the planned behavior theory could be misleading. This concept has often been used to refer to the assumption that the output of action provides control over the achievement of a result (Ajzen, I, 2002). There is a consideration that Perceived control is usually a human driving force (Jewell & Kidwell, 2005), It was defined as the individual's need to exhibit competence, dominance, and supremacy over the environment (White, 1959). As stated in the planned behavior theory (Jewell & Kidwell, 2005). Behavior is viewed as manageable to the degree that persons seek that they can possess personal resources, such as the abilities and skills needed, and is free

from obstacles to the performance of that specific behavior (Ajzen, I, 1985). The higher degree of perceived control is believed to be correlated with an increased probability of a clear behavioral intention to participate in focal actions (behavior). The psychological literature has accepted this widely conceptualization of control (Jewell & Kidwell, 2005). Behavioral intent is conceived as representing one's subjective likelihood of conducting behavior (Jewell & Kidwell, 2005). Locus leads to the position where the person's control is either 'internal' (i.e. relying on his or her behavior or lasting characteristics) or 'external' to the person (e.g. due to other people's behavior, circumstance, opportunity, or chance) (K. Wallston, 2001). This study indicates that creative self-efficacy affects creative performance by allowing individual drive or energy (vitality) and cognitive ability (learning) to participate in creative work (Christensen-Salem, et al., 2020).

2.3.1.2 Mindfulness

Mindful-ness has been hypothetically and exactly connected with mental prosperity. The components of mindful-ness that is consciousness or the non-judgmental acknowledgment of someone's point in time-to-moment (Keng, Smoski, & Robins, 2011). Expertise has been shown to be potentially powerful antitoxins against regular types of mental misery rumination, tension, and stress, dread, outrage, etc. (Keng, Smoski, & Robins, 2011). A considerable lot of which include the mal-adaptive propensities to dodge, stifle, or over-draw in with one's troubling contemplations and feelings (Keng, Smoski, & Robins, 2011).

The three aspects of a study that enlighten the connection among Mindful-ness and mental wellbeing:

1. The examination of Cross-sectional and Correlational which looked on the relationship among singular contrast through aspect or construct. Mindful-ness or the extra emotive wellness related characteristics.
2. Intercession research that analyzes the impacts of Mindful-ness arranged intercessions on mental working.
3. On account to the examination on Lab based that analyzes, tentatively, the impacts of brief Mindful-ness acceptances on enthusiastic and social cycle's characteristic of mental wellbeing (Keng, Smoski, & Robins, 2011).

Mindfulness is a capacity thought to be normally present in all people somewhat (relational), despite the fact that it can likewise be purposefully developed until it completely shows (Aguerre, Bajo, & Gómez-Ariza, 2020).

The word mindfulness might be utilized to depict a mental quality, an act of developing Mindfulness (e.g., Mindfulness contemplation), a mode or condition of mindfulness, or a cognitive procedure (Keng, Smoski, & Robins, 2011). The term "mindfulness" might be utilized to depict a cognitive characteristic, a method for fostering mindfulness, another type, and level of consciousness, or even a cognitive mechanism (Keng, Smoski, & Robins, 2011). Among the most widely quoted meanings of Mindfulness is consciousness which emerges from focusing on a certain goal in mind in a specific way intentionally, even in a current situation, but non-judgmentally (Keng, Smoski, & Robins, 2011). Even though a few researchers concentrate solely around the attention-based factors of mindfulness, the majority pursue its paradigm which suggested that Mindfulness includes two segments one is self-guideline of consideration and selection of a specific direction towards one's own behavior. Self-guideline of consideration alludes to involuntary perception and familiarity with emotions, contemplations, or sentiments from time to time (Keng, Smoski, & Robins, 2011). It needs both the capacity to stay one's consideration on what is happening and the capacity to deliberately change consideration starting with one part of the knowledge or practice then onto the next. Attitude to encounter is about the sort of demeanor that one holds towards one's understanding, explicitly a mentality of interest, receptiveness, and acknowledgment (Keng, Smoski, & Robins, 2011).

2.3.1.3 Locus of Control

Locus-of-Control (LOC) is an extent at which individuals accept the effects of occasions remain either a consequence of their own conduct "inside LOC" or dictated by some coincidence or by the impact of others "outside LOC". Model of LOC is comprised of these three constructs (Thompson, Kuah, Foong, & Ng, 2020).

1. Internality Locus-of-Control
2. Locus- of- Control (Chance)
3. Locus- of- Control (Powerful)

The model recommends that greater LOC- Internality persuades that they have a noteworthy function in affecting and guiding their lives to accomplish their ideal objectives. People who have

extensive LOC- chance see the world as erratic and disorderly, while which have extensive LOC powerful accept that their lives are at last controlled by the impact of influential people (Thompson et al., 2020).

Locus of control is very useful for many areas of study, which includes almost every field of study which is clarifying individuals' differential execution in domestic professionalism and education conditions with high Internality Locus- of- Control, Locus- of- Control with low Chance, or Locus- of- Control with low Powerful by and large being related with improving results (Thompson et al., 2020).

Locus of control has been observed to cover with different elements of self-assessment, for example, confidence, summed up self-efficacy (SE), and passionate strength, even though it relates more to the person's assessment of the environments as opposed to themselves (Thompson et al., 2020). It has likewise been recommended that internally and externally ought to be thought (and estimated) as independent builds, and a trait is depicted as a quality, a generous measure of examination has demonstrated transient inconstancy, along these lines proposing, locus of control is a state as opposed to an attribute, It also implies that it is possible to adjust due to experience that contributes to improved outcomes (Thompson et al., 2020).

The Locus of control evaluates customer's perception they have or have not their control in a circumstance or occasion such that consequence of someone's activities or outer components) and thusly influences their incentive preferences and conduct on a spectrum from internally to externally as a character attribute. People fall on a spectrum running from an inner (Ranges low extreme ends) to an outer (Ranges high extreme ends) locus of control (O'connor & Kabadayi, 2020).

The ones with an inward locus of control assume that they can monitor a wide variety of variables in their lives and see their activities will create unsurprising results. Conversely, people with an outer locus of control see occasions as being under the influence of karma and are less inclined to ace the aptitudes important to achieve objectives (O'connor & Kabadayi, 2020).

2.3.1.4 Cognitive Control

Cognitive-control is the foundation of a person's capacity to drive action by intent, particularly in new environments and environments where insufficient best practices were activated quickly adjust yourself in the changing conditions (Aguerre, Bajo, & Gómez-Ariza, 2020).

Strangely, psychological control has been connected to some psychological states, for example, care mindful-ness to allude to the condition of non-critical consideration toward the current experience. Although mindful-ness has been related with an assortment of customs (Aguerre, Bajo, & Gómez-Ariza, 2020). Cognitive-control" incorporates measures like the development and upkeep of a work catalog, the transition through one errand set then onto the next, the integration of focus in different manners, the arrangement of a hindrance, also, the observing of a specialist's advancement towards objective accomplishment. To improve at seeing how these procedures cooperate or not, it assists with having a name. In any case, the type of framework is just approximately portrayed (Shepherd, 2019).

Studies have contended that one unobtrusive way psychological control systems affect perception and behaviour and by the perception in actions linked with the progress of some work. Studies speculate the expertise of commitment is the consequence of individual calculations that decide the current undertaking's worth, just as the estimation of close by accessible projects, also, yield an assurance of the open door cost of continuing on the current assignment. The expertise of commitment is theorized to be a sign of a worker to switch projects (Shepherd, 2019).

2.4 Creative Performance

2.4.1 Concept, Background and Definition

The creative performance was described as "Actions of the person to create, incorporate, and enforce beneficial novelties in an organization." West & Farr (1989, p. 16). Creative performance can differ greatly in terms of innovation and originality and can range from slight modifications to existing procedures to revolutionary discoveries of new methods. Creativity is important for both individual and organizational performance as it helps to improve or assist in the discovery of more efficient processes, procedures, and goods & services (Christensen-Salem, et al., 2020).

The creativity of employees is perceived to be one of the prerequisites for organizational innovation (Hon. & Lui, 2016). Employee's performance" refers to the accomplishment of an individual's job by undertaking the requisite work effort associated with productive work, engaging personality, and caring co-workers/employers (Pradhan & Jena, 2017). In a rapidly evolving market landscape, a company needs to put out innovations incessantly if it wants to be in a dominant position in the market, and innovative success is the key source of innovation promotion (Gong, Zhao, Wang, & Yu, 2018). Creative performance can be described and theoretically created at different levels, both as a process and as a consequence, and can be relevant at various levels of study. E.g. Creative production as a consequence, is a new and valuable product or service created by an individual, a community, or an organization (Gong et al., 2018). Creative performance is the outcome of numerous motivational and cognitive processes and is enriched by the personal and social context in which behaviors are implemented. Creativity research has shown that the perceptions of employees on the working environment have an impact on their creativity, either directly or in interaction with individual variables (Christensen-Salem, et al., 2020). The CP (creative-performance) of a venture is personally connected to its workers, and they assume a significant part in creativity (Ren, Zhang, & Zheng, 2020). The way to advancing the undertaking's innovative presentation (creative-performance) is to improve its workers' imaginative exhibition (Ren, Zhang, & Zheng, 2020). Surviving examination on representatives' inventive execution has discovered that numerous components impact a person's innovative presentation such as psychological capital, knowledge sharing, creative climate, leadership style, job engagement, rewards, and the psychological contract, for example, mental capital, information sharing, imaginative atmosphere, authority style, work commitment, rewards, and the mental agreement (Ren, Zhang, & Zheng, 2020). The perceived value of work and the interdependence of activities are two especially important aspects of work environments that have been shown to influence individual creative performance. Perceived Job Significance – the degree to which workers find their job difficult, important, and rewarding and have a positive effect on the company and others. And the interdependence of tasks – the degree to which employees communicate and rely on each other to perform their tasks at work (Christensen-Salem, et al., 2020). Individuals will more easily recognize problems and come up with solutions when they thrive and learn and grow (Walumbwa, Muchiri, Misati, Wu, & Meiliani, 2018).

Productivity utilizing employment execution (Job Performance) in literature is a widely explored field on Human Resource Growth as well as “Organizational Behaviour” (Pradhan & Jena, 2017). The internal need for business administration is how to enhance creative performance? The Component Theory proposed by Amabile offered a theoretical context to the innovative (creative) performance investigation in organizations (Gong et al., 2018). The modern view of creative performance is too extensive pointed out by Kaufmann; it should differentiate between the driver of innovation and the outcomes of innovation, suggest new evaluation practices and techniques, and develop appropriate measurement tools (Gong et al., 2018).

“Creativity” is finest defined using people's capability to resolve conflicts regularly and design items in the area which is originally unique and eventually applicable to cultures (Gardner, 1989). The creativeness which is appreciated by us hopes humans have it or have much from it, which is used as a definition of individuals, goods, answers to the problems, or innovations. Be that as it may, what is it, and how it's supposed to be? Creativeness can be defined as far as the procedure by which it is created, the person's attributes that are fundamental for an individual to be innovative (creative), and conditions which empower inventiveness (creativity), or the nature of the item made. Simonton, (1988) plots the “four P's” of Creative thinking.

- i) Process is related to cognition methodology.
- ii) Product is related to a resulting concept or entity which is novel and effective.
- iii) Person is related to the qualities of the person who takes part in the process to make the item.
- iv) Persuasion is related to the vital social build associated with the acknowledgment and usage of an inventive item. While Simonton's preferred “p” is the fourth one (Persuasion).

This study tends to concentrate on an innovative individual on the grounds that is the creator of a concept that does not automatically fulfill the role of champion or persuader of the idea. Besides, these two positions might be associated with different kinds of character qualities, which could or could not possibly exist in a similar person. The creativeness is characterized as the development of new and potentially beneficial innovations for problem-solving and the development of new goods, facilities, processes, systems, and working methods (Yekaniabeiglou & Demirkan, 2018)). Because of creative ideas some of the ordinary firms turn into leading companies, fostering

creativity in the workplace has become a key concern for the competitive advantage and success of firms. The characteristics of employees and the working environment show a critical work in the creation, achievement, and long haul endurance of companies (Yekanielibeiglou & Demirkan, 2018). Working environment must promote creativity as it provides physical and social stimuli that give rise to the creation of innovations (ideas). Creativity is a component of how people adapt and adjust to their conditions and organizations and can be a key factor in organizational development and success. Work conditions that promote innovation can boost the morale of workers as far as “job-satisfaction” or intention to leave or to make a turnover (Yekanielibeiglou & Demirkan, 2018).

Personnel innovation is regarded as a vital part of the method. The potential of the company to be creative and it capitalizes in complex, innovative conditions Commitment to work environments can be demanding. Likewise, noticed that "a strong feeling of adequacy gives the essential resilience in the burdensome quest for development and innovation (Tierney & Farmer, 2011).

Creativity requires versatility, fluidity, creativity, and elucidation (Huang, Chang, & Chou, 2020). Innovative success specifically requires creativity but is measured on the basis of two main metrics of universality and innovation (Huang, Chang, & Chou, 2020). Creative Self-Efficacy includes the idea that people do have the potential to create innovative ideas but it is a stipulation for the creation of innovative goods (Huang, Chang, & Chou, 2020). Observational investigations have proposed that inventive self-adequacy (creative self-efficacy) emphatically influences imaginative thoughts and execution Therefore, innovative self-viability (creative self-efficacy) is viewed as a pointer of a person's inventiveness (Huang, Chang, & Chou, 2020).

In Contrast, inventive thoughts and conduct, inventive self-adequacy (creative self-efficacy) remember certainty for one's skill and readiness to face challenges which empower individuals to go up against difficulties, look for arrangements, and improve execution. Inventive self-adequacy (creative self-efficacy) drives representative development and can reflect innovativeness and occupation execution (Huang, Chang, & Chou, 2020).

2.4.2. Similar Concepts

Employee creative performance relies upon personal characteristics, such as cognitive style, specific expertise, and personality traits (Dula, Ceylan, & Jaspers, 2011). In 1979 Gough presented the construct of creative performance as traits and characteristics of personality that is related to creativity. Few empirical studies have used the construct (concept) of creative personality in organizational environments to measure how the creative performance of employees is affected by creative personality (Yekanielibeiglou & Demirkan, 2018). Some studies have found conflicting findings. Most of the earlier studies have established a direct connection between the creative personality and the creative performance of employees (Yekanielibeiglou & Demirkan, 2018), while others didn't. The purpose of this research is to determine whether or not employees' personalities have a significant direct influence on their creative performance (Yekanielibeiglou & Demirkan, 2018)

Khalifa, Ebrahim Nobandegani (2009) examined that whether there is a connection among both creativity and academic performance of high school students in Ahwaz video games, with the results obtained between the creativity and performance of high school students with experience and time to participate in video games (Soori & Ferasat, 2016).

Creative performance needs a special human mind and cognitive style (Personeelsbeleid & Vossaert, 2012). It consists of suspending judgment, how much you open to non-conventional approaches and paths, and using a specific conceptual framework instead of concentrating too narrowly on the issue (Amabile, 1983). Achieving creative performance often requires a certain amount of patience on the part of people. Creative solutions are most frequently not the ideas that spring to mind first (Personeelsbeleid & Vossaert, 2012). Besides, new concepts also involve a shift in practices and procedures that can lead to opposition from coworkers or supervisors who are used to treating situations in a normal and more traditional manner (Personeelsbeleid & Vossaert, 2012). Overcoming this obstacle is essential to the effective adoption and acceptance of innovative (creative) solutions. If people are self-determined, which shows that they are recognized with their actions, it would be easier for them to resolve the constraints to creative performance and to implement the right mindset (Personeelsbeleid & Vossaert, 2012). Employee creativity is perceived to be a criterion for firm innovation (Hon. & Lui, 2016). Research shows that "work esteems" is a general concept for different measurements (fitness, status, comfort), and

each measurement has an alternate worth assessment direction (Ren, Zhang, & Zheng, 2020). Primary dimension, satisfaction, is primarily measured as protection at work, working environment and worktime strength, and lucidity of critical thinking (Ren, Zhang, & Zheng, 2020). Representatives with high solace work esteem are more traditionalist, reluctant to acknowledge demands or attempt new working strategies and thoughts, and they won't put additional time and vitality into work. Thus, solace work esteem isn't helpful for creative-performance (Ren, Zhang, & Zheng, 2020). And the second element of work esteems, ability, is identified with learning, correspondence, work self-governance, inventiveness, and work accomplishment. These elements are believed to be emphatically related to creative-performance on the grounds that to be inventive, workers need to have an imaginative rationale and be occupied with nonstop learning and correspondence (Ren, Zhang, & Zheng, 2020).

The last component of work esteems, status chiefly alludes to esteem assessment of salary, advancement, the need to work freely, and the feeling of being regarded (Ren, Zhang, & Zheng, 2020). Workers who seek after status may give more consideration to inventive exercises, since achievement in creative-performance execution may pay workers who seek after status more cash and word related advancement. Workers who are creative may appreciate high regard from their pioneers and partners (Ren, Zhang, & Zheng, 2020). Consequently, representatives who seek after Status at work will bring more innovative execution to their positions (Ren, Zhang, & Zheng, 2020).

Advancement is the core of a country's financial and economic growth, the most important component of global productivity, and the most significant capacity for individual professional improvement (Huang, Chang, & Chou, 2020).

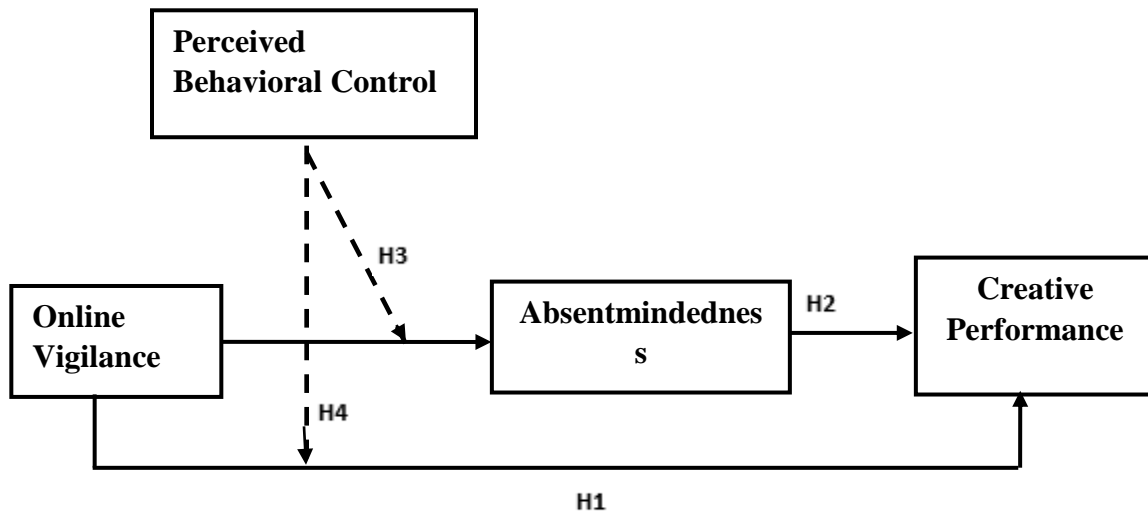
In this way, most nations have underscored the development of innovative-ness in their residents. China has proposed a procedure to "urge individuals to go into business and make advancement" and zeroed in on "imagination, development, and creativity through its training and monetary approaches. This empowered the quick development of various organizations and igniting the talent and imagination of young people, the goal of innovation is to encourage innovative-ness and to nurture creative thinking via initiatives, for example, the ALIBABA Group (Huang, Chang, & Chou, 2020). The creative-performance should be focused on creativity, technical knowledge, self-efficiency including ambition. So, many evidential research consistently shows the association

between creative-performance and intellectual thought, self efficacy, cognitive function experience, and knowledge differs between different fields (Huang, Chang, & Chou, 2020).

2.5 Hypothesis Development:

2.5.1 Theoretical Framework:

Figure 1



In organizational context the COR (conservation of resource theory) is widely used and is very helpful to understand the stress conditions. The basic core of this theory is that people strive to “build resources” and the thing that threatens them is to lose these resources (Wayne, Lemmon, Hoobler, Cheung, & Wilson, 2017). We build up our study model based on the conservation of resource theory COR (Hobfoll, 1988, 1989, 1998), with an emphasis on resource loss of employees. In particular, the concept of loss spiral depends on COR theory (Ten Brummelhuis & Bakker, 2012), we clarified how employees' cognitively exhausted or absentminded due to online vigilant behavior at workplace and psychological stress in employees offers less accessible personal resources that might be capable them to deal cognitive pressure. So, Team leaders may be unknown about employees' absentmindedness coming about because of all day, every day online vigilant behavior, and the working environment exhibit of that exhaustion observed by the team manager is employee creative job performance. Further, while online vigilance is hypothesized as resource loss, perceived behavioral control is situated as a contextual resource gain, moderating the connection between online vigilance and absentmindedness and creative performance (Halbesleben, Neveu, Paustain-Underdahl, & Westman, 2014; Ten Brummelhuis & Bakker, 2012). Our estimated model is given in Figure 1

2.6. Online Vigilance and Creative Performance:

This study adopts the Conservation of Resource theory which explores online vigilance interface. The refrain put forward from the study seems that online vigilance with high levels generates stress-inducing conditions that cause resources drainage. Although workers have less motivational opportunities to do work duties, the employee's behaviors and attitudes suffer a lot. It has been found that online vigilance has depleted workers' resources across time, causing work difficulties, higher organizational commitment, better life distress, and physical health problems (Wayne et al., 2017).

Online Vigilance is harmful to the creative performance of both employees and organizations. On the other hand, more vigilant workers have less interest in the workplace and their performance is affected. According to Schaufeli and Taris (2014), the market for work and the resource model have made a significant contribution to the investigation of the constant demand for communication and employee's creativity. While constant monitoring and viewing the information from web sources which lead to absent-mindedness and pleasing moment distraction, which in result reduced the Creative Performance (Johannes et al., 2018). Online vigilance is related to reduce creative performance due to increased absentmindedness (Johannes et al., 2018). Expanded brain meandering and diminished carefulness pose possible pathways which can relate "online vigilance" to a decreased level of Creative Performance. However, mind- meandering is consistently negative and correlated with creative performance end results (Johannes et al., 2018). On the other hand, passive usage of technologies used as procrastination can have adverse effects on Creative Performance (well-being) (Johannes et al., 2018).

Hypothesis 1: Online vigilance negatively influence creative performance

2.7. Mediating Role of Absentmindedness

2.7.1 Online vigilance and Absentmindedness:

According to COR absentmindedness is correlated to minimal resources which workers may devote to their own jobs, coupled with the desire of employees to preserve their minimal resources carefully. So, a negative relationship among absentmindedness and creative performance is expected. The workers with a high degree of absentmindedness will have a minimal resource to spend at the workplace which may cause low job involvement. Through Absentmindedness the

resources of cognition and emotions are depleted via the internal behavior process at the workplace (Wayne et al., 2017).

Online vigilance is connected to decreasing Creative Performance due to the increased absentmindedness (Johannes et al., 2018). The people who are high in vigilance should also experience less mindfulness, besides that it becomes the cause of absentmindedness. For example, people with a high level of extensive usage of social media are frequently preoccupied with thoughts of the online environment and experience lower mindfulness or more absentminded (Johannes et al., 2018). Inattention leads to a generic absentmindedness or inability to pay enough focus to information that is likely to result from a loss of effortful attention management (Blume et al., 2019). Being absentminded is to be inattentive to active practice, to lose control of current goals, and to be diverted from deliberate thought or intervention by salient but "generally unrelated stimulus"(Manly et al., 1999). Absent-mindedness is linked with the inability to execute all the activities that an individual is seeking to focus on (Janes et al., 1999).

Hypothesis 2: Absentmindedness mediates the relationship between online vigilance and the creative performance of employees.

2.8 Moderating role of Perceived Behavioral Control

2.8.1 Between Online Vigilance and Absentmindedness

According to the conservation of resources theory, the online vigilance and absentmindedness relationship is treated as drainage of resources. While this theory also suggests that your personal resource perceived behavioral control can demolish this relation. Which provides employees more attention to detail to work and help in multitasking at the workplace to cope up with the different situations. This resource helps you to deal with the psychological and mental challenges encountered due to online vigilance (Wayne et al., 2017).

Employees who have more perceived behavioral control become less absent-minded and attentive in the workplace. While Perceived Behavioral Control is an augmentation to the underlying the (TRA) "Theory of Reasoned Action" which is beneficial in conditions when people do not have full control over their behavior, such as skills and resources to conduct a task (Jokonya, 2017). Behavioral intent refers to "the extent to conduct a behavior according to individual's desire or to

act as a personal tool for employees in the organization, and the positive relationship decreases between online vigilance and absentmindedness and vice versa (Martinez & Lewis, 2016).

Hypothesis 3: Perceived behavioral control will moderate the relationship between online vigilance and absentmindedness such that the relationship becomes weaker when perceived behavioral control will be high.

2.8.2. Between Online Vigilance and Creative Performance

According to COR, online vigilance is commonly linked to minimal resources to spend on creative performance. The supervisors might be unaware of the online vigilance of their workers, which might manifest in working domains. The supervisors observe a reduction in the creative performance of employees because of a high-level of absentmindedness, which has been identified as a result of workers' online vigilance. While perceived behavioral control lowers the effect of this relation and which tend to increase your creative performance. This resource helps you how to deal with the stressors with a self-assertive style to overcome future resources loss (Wayne et al., 2017).

This research is projected to have a negative (adverse) relationship between the online vigilance and creative performance at the workplace. This impact may be minimized by the personal traits of workers, such as perceived behavioral control at the workplace. Employees with poor perceived behavioral control (PBC) at work can only sit back and be inactive (absentminded) in the current job activities of their work environment, which limits their creativity (Jalkala, 2018). On the other side, the employees who have more perceived behavioral control over difficult circumstances (problematic situations) as a challenge or learning experience, rather than threats, will display a good desire to deal with their challenging work-related activities (Choi, Kim, Ullah, & Kang, 2016). So, "perceived behavioral control" shows crucial conduct in fostering employee creativity in organizations while online vigilant at the workplace. Furthermore, perceived behavioral control makes employees help in multitasking that boosts up their innovative behavior, and also supporting the creative environment at the workplace (Mahmood et al, 2018). According to resource theory, as workers are confronted with electronic vigilance-related tension, their psychological energy resources are diminishing and their abilities, such as understanding of behavioral control, help to sustain their mental energy through self-motivation, which means task-oriented thought and the desire to absorb the mental energy required to accomplish the target (Hobfoll et al., 2018). The

concept of Creative self efficacy (Perceived Behavioral Control) is that individuals generate innovative results, and is a core factor of creative performance. Furthermore, growth in creative self-efficacy has been correlated with higher creative performance. Building (Creative Self-Efficacy) may be an especially fascinating perspective for management activities directed at increasing creative efficiency (Christensen-Salem, et al., 2020).

“Creative self efficacy” is generally a form of “self efficacy” that serves both motivational and cognitive purpose. While “creative self efficacy” is a person's assumption that they can generate innovative (creative) ideas (Farmer & Tierney, 2017).

Creative self-efficacy is predicted to have an impact on creative performance as it represents an internal, persistent force that pushes individuals to persevere in the face of creative work-related challenges (Christensen-Salem, et al., 2020). The degree to which employees consider their job challenging, important, useful, and meaningful and perceive that employees of the working unit depend on each other to perform the tasks and working closely together will engage with creative self-efficiency (self-efficacy) to improve the creative performance of employees (Christensen-Salem, et al., 2020).

Conclusively, this research contributed in literature by taking “Perceived Behavioural Control” for a moderator which can reduce negative effects of cognitive fatigue on employee creative performance by increasing self-motivation and make them feel that they have higher cognitive control and ability of multitasking that become their one of major strength while performing their job and getting promotion in current organization due to their higher job control. So and vice versa. Employees with more perceived behavioral control show creative performance during their working hours.

Hypothesis 4: Perceived Behavioral Control moderate the relationship between online vigilance and Creative Performance such that the relationship becomes weaker when perceived behavioral control will be high.

CHAPTER. 3

3. METHODOLOGY AND RESEARCH DESIGN

3. Research Design:

This study has used a quantitative research approach. This study's purpose is hypothesis testing. And the investigation type which this study uses is based on correlations to investigate the relationship of independent variable and dependent variable.

3. Research Methodology

3.1 Population:

The study population is comprised of the IT Employees of Public and Private sector.

3.2 Sample Technique:

This study uses the non-probability sampling technique. Non probability refers, that population components don't have any probabilities connected to their being picked as a sample (Uma Sekaran, 2003; David, 2011). In non-probability sampling, this study has used convenience sampling for data collection through the questionnaire. Convenience sampling leads to collect data from individuals from the population who are easily accessible to give it (Uma Sekaran, 2003; David, 2011).

3.3 Unit of Analysis

The unit of analysis is individual. In this research, the information that is collected from each employee is counted as a single response of each employee.

3.4 Size of Sample

The sample is a subset of the total population, which represents and generalizes the whole population (Ruane, 2005). 200 to 500 sample size is sufficient for the survey (Hill & Alexander, 2000). According to Item Response Theory, "5 to 10" responses are adequate for each item: sample size = (5-10) * several items (Hair & Anderson, 1998). The size of sample is "330" based on Item Response Theory.

3.5 Data Collection Methods

The main tool to collect the data from the respondents is a questionnaire. As indicated by Schermerhorn. (2000), the upsides to using questionnaire incorporate minimal efforts and cost, and the imprecision among respondents that will prompt more open and trustful reactions.

3.6 Detail of Data Collection Instrument

3.6.1 Online vigilance.

To evaluate online vigilance, we employed the validated and developed online vigilance scale by (Reinecke et al., 2018). The scale comprises of three aspects i) salience, ii) monitoring, and iii) reactivity) with four items each. Respondents responded items such as “my thoughts often drift to online content” on Likert scales, ranging from Scale (1= Strongly Disagree 5 = Strongly Agree).

3.6.2 Absentmindedness:

12 items representing common daily circumstances likely to be experienced by people from a wide variety of experiences and preferences (Cheyne, Carriere, & Smilek, 2006). Used Likert scale with 5 possible responses ranges from (1= Strongly Disagree 5= Strongly Agree). High scores showing more prominent numbers of slips

3.6.3 Perceived Behavioral Control:

The short form of “occupational self efficacy” scale with six items was used to measure the validity of the “occupational emotional”, and “occupational social self efficacy”. The occupational self efficacy scale is a job-related cognitive scale. The items on Likert scale ranges from (1= Strongly Disagree 7= Strongly Agree). A sample item is “When I am confronted with a problem in my job, I can usually find several solutions” (Loeb, 2016).

3.6.4 Creative Performance:

Creative process engagement is measured through 3 item scale related to the identification of a problem, collecting the data then decoding and generating the concept (idea) adapted from (Zhang & Bartol, 2010) measured the responses on Likert Scale consist of 5 points (1= Strongly Disagree 5= Strongly Agree) Sample items include “I spend considerable time trying to understand the nature of the problem”.

3.7 Data Collection Procedure

The information is gathered from IT Employees, their respective Team leaders working in IT-based organization. Instructions have been given while filling the questionnaires. Personal networks also have been used for filling data. Questionnaires have been distributed by Team Leader to their employees. Leaders have filled the data by themselves.

3.8 Data Analysis Software and Statistical Methods:

Data has been analyzed with Statistical Package for Social Sciences (SPSS) and Hayes process macro v3.5 tool.

3.9 Explanation of Methodology and Research Design

3.9.1 Chapter Overview:

Methodology chapter gives us an overview regarding research methodology and research design that is employed in the empirical investigation of this study. The research strategy and the advantages of choosing this particular research strategy for this study are discussed in detail in section 3.2. In the next section, details of the population i.e. team leaders of IT based organizations and geographical location of study is discussed. Section 3.4, addresses the sampling technique for choosing samples from the target population. The next section addresses the complete procedure of data collection for this study, instrument designing, and the tools and techniques for analyzing the collected data from the population.

3.10 Research Design:

The process of research design is used to find out the conclusion of a study (Tull & Hawkins, 1993). Research design includes all the strategies, approaches, techniques, and methods to conduct research (Ghauri & Gronhaug, 2002). The current study has used a quantitative research approach and the purpose of this study is hypothesis testing. The investigation type of this study is based on correlations in order to investigate the relationship among the dependent variable and the independent variable. A survey research method has been used to collect data. Research through survey implies that team leaders and self reported collection of the data, and which may be about behavioral actions and conducts. In order to get rid of a biased survey, data is collected first from

managers (team leaders) and peers along with different times. In social science, the descriptive method of survey research is widely and commonly used (Ary, Jacobs, & Razavieh, 1996).

The associational research is concerned to investigate the relation between different types of variables (Fraenkel & Wallen, 2000). E.g., to find or get the answers the correlational type of research is used for relationships among Online Vigilance with Absentmindedness, creative performance, and perceived behavioral control. The associational research has two types, i.e. “causal comparative” or correlation-research (Fraenkel & Wallen, 2000; Ary, Jacobs, & Razavieh, 1996). Correlation research’s main goal is to examine or analyze the results, among the both variables and also they have a relationship with each other. Within this approach or method, the researcher can find out the current natural relationship among the variables. To get data or for the collection of data from the sample size, we conducted surveys.

The research is considered to be a descriptive-research, because the aim of a descriptive-research is to observe, describe and document the information and characteristics of the studied data with the minimal interference of the researcher (Polit & Hungler, 1999). Descriptive research design is usually opted to answer the normative or correlative nature questions such as “what is” or “what was” How” (Bickman & Rog, 2008). The major strengths of descriptive research are low cost, less time taking, easy implementation, and fair results (Bickman & Rog, 2008). Furthermore, descriptive research allows a questionnaire tool for data collection (Fraenkel & Wallen, 2003). As all these features are in line with current research therefore this empirical research can be categorized as descriptive research.

The main purpose of the research is to investigate the effect of online vigilance on creative performance, the influencing role of perceived behavioral control in relation with absentmindedness. For this reason, the present research chooses the best available methods for study, to check out the expected variable’s relationship among them. The most commonly used self-administrated field-survey, which are for quantitative research and has been used in this study (Shaughnessy & Zechmeister, 1997). Previous researches use qualitative research designs and experimental research designs to study the relationship between Online Vigilance with the use of smartphone and creativity in young adults (Thomee, 2012).

This research used two waves of study design. The present research used equal intervals of approximately four weeks in each time. This research used a time gap of four weeks. Recent research by (Zhang et al., 2014) also used four weeks gap between each time. The four week interval minimized the concern that the relationship that is observed is just because of the one specific instance, and not as long as the prospect of a loss of contributors because of attrition and shifts in relationship of reporting (Zhang et al., 2014).

This research used two waves of research due to several reasons. First, it helps in decreasing the common bias error (Podsakoff *et al.*, 2003). Second, this research is causal research, investigating how online vigilance causes an effect on criterion variable (Cohen, *et al.*, 2013). Third, the framework of present research investigates that the predictor (online vigilance at a workplace) effect on the mediator (absentmindedness) affects the criterion variables (creative performance). The cross section research with mediation analysis is questionable. Only research with different time lags or longitudinal would best estimates for mediation relationships (MacKinnon, 2007).

Moreover, to test the hypothesis of this research or study an online survey is conducted. In the Social sciences, surveys are conducted to measure attitudes, behaviors, performances, and Characteristics of a particular set of the population (Podsakoff & Organ, 1986). So, considering the trends and acceptability of survey methodology in the Organizational Behavior field, the same strategy was adopted for this study.

3.11 Population and Sampling Frame

A Sampling Frame leads towards “a complete list of a population from which the sample is selected” (Sekaran, 2013). It is best that a sampling frame completely represents all the elements of the population but it is very rare to have a complete list of population members, so there is a need to develop an approximate but appropriate list (Arbuckle, 2005).

The target population of this study are IT Professionals and Team Leaders working in public and private IT- based organizations of Pakistan where 90% percent of employees are using laptops and smartphones at the workplace and IT-based organizations in Lahore is a sample of this study. Lahore is a metropolitan city having a maximum number of IT-based organization. According to Pakistan Software Houses Association (PASHA) (2014), there are 272 software houses operating

in Pakistan, and 100 are in Lahore in which 11 are public, and the remaining 91 are private software houses are operating.

3.11.1 Sampling

The element which is the smallest and best representative of the population is the “sample” (Frances & Ali, 2005). According to (Frances & Ali, 2005) the findings from the study would be generalized to the whole populace (Population). The much important thing is that from the whole population the sample should be selected, the sample’s nature helps the researcher to select an appropriate sample. In the heterogeneous sample, a larger size of a sample is needed, whereas the identical sample, relatively smaller in size needed (Gill & Johnson, 2002). If the size of the data is increased. It doesn’t mean that the efficiency of the data is increased. The current literature indicates that if the size of the sample is increased and ranges from 1000 to 2000 (increases 100%) will be efficient to 1% (Newport et al., 1997). The main and important type of issue for an effective sample is to select the suitable measures (Gill & Johnson, 2002), suggested that to select the finest sample’s size reasonable factors are needed. For surveys, the size of the sample of (two hundred to five hundred) is deemed to be sufficient (Hill & Alexander, 2000). According to Item Response Theory, the adequate response for every item is five to ten (5-10): $\text{sample size} = (5-10) * \text{a number of items}$ (Hair & Anderson, 1998). This formula provides a sample size is 330 which is adequate for the survey. The non probability technique of sampling is used in the study. Non-probability sampling refers to elements have not predetermined chance to be selected person or things. In non-probability technique, this study has used convenience sampling for distributing the questionnaires in order to collect data. Convenience sampling is to collect the information from members of the target population who are conveniently accessible and proximity to the researcher (Uma Sekaran, 2003; David, 2011). Confidentiality has to remain certain while conducting research. Just because of resources and time shortage the convenience sampling technique is selected.

3.12 Data Collection and Administration

This data was collected from IT professionals and Team leaders in IT- based organizations. This study has collected the data in Time-Lag research design through a web-based questionnaire. The questionnaire provides objectivity in data, therefore; it is a reliable and efficient data collection tool (Ruane, 2005). Non-probability sampled Questionnaires have been administered personally.

Through emails, we send the survey Questionnaires' or WhatsApp to IT-Professionals. The professionals who did not respond to the survey after 1 to 2 weeks reminders were sent through emails. At Time 1 (T1) data has been collected on variables: Online Vigilance, Absentmindedness, and Perceived behavioral control. We told the workers that recorded responses will remain anonymous and would only be used in an aggregated and confidential manner. Questionnaire was sent through emails to the Team leader which includes their concerned manager's name, to whom the person to be considered when responding to web based Questionnaire. Invitations to Team leaders were sent later, 2 weeks after the invitation was sent to the personnel, but emails for reminders were sent to both at the same time (interval). The Team Leaders presented Time 2 (T2) data three months after the initial surveys were sent on their subordinate employee's Creative job performance.

3.13 Instrument of the Studied Variables

The researcher would use the questionnaires for data collection in a personal survey. Although finalizing the questionnaire, the researcher's attention is on the consistency, and to measure the construct the scale's validity and reliability are used (Peterson, 2000). As per (Burns, 2000), close-ended quantitative research questions will be appropriate. Consequently, in order to get the desired information and data questions which are close-ended should be questioned. All the measures used to evaluate each and every measurable element is being used already and as a legitimate and accurate scale from recent organizational behaviour study.

Different strategies suggested by the researchers were employed for designing the questionnaire to attract the maximum number of responses and keep the respondents interested in it while filling the questionnaire. Roth & Bevier (1998) emphasized to keep the length of the questionnaire short to achieve maximum response rate. Galesic & Bosnjak (2009) concluded in their study that a questionnaire that lasts 10 minutes, attracts a higher number of responses therefore respondent friendly questionnaire was designed for this study that could be easily completed in 10 to 15 minutes. Secondly, the questionnaire was divided into three sections: Section A: Online vigilance, Absentmindedness, Perceived behavioral control, and General Information of IT professional Section B: Employees' creative job performance and General Information of Leader. In an online questionnaire, all the fields of all sections were mandatory to fill to make sure that no question

remains unanswered. Fourthly, researchers emphasized to add demographical questions in the questionnaire because demographical questions increase the probability of responses (Drummond et al., 2008). Therefore, the demographic section was added and it was ensured that questions asked were of practical nature. Fifthly, university affiliation was confirmed in the cover letter of the questionnaire (Appendix A).

Lastly, following the guidelines of Jobber & O'Reilly (1998) anonymity of respondents was assured to respondents by adding a statement in a cover letter in order to achieve a higher response rate. A Likert scale consists of 5 points was utilized for the measurement of the responses of the team leaders of Pakistan's IT based organizations about studied variables. A scale of each variable was adopted from valid and reliable sources. Before the actual data collection, the content of the questionnaire was approved from a panel of experts that included academics, researchers, and IT experts. A panel of experts approved the Online vigilance, Absentmindedness, perceived behavioral control section, and creative job performance section as these were adopted from famous studies but experts suggested to make few changes in the cover letter and general or demographic section. Experts suggested adding the proper contact information of the researcher so the respondent can contact the researcher conveniently in case of any confusion. Moreover, experts commented to remove the "name of IT-based organization" question from the demographic section to ensure the anonymity and privacy of the leaders' responses. After getting satisfactory feedback, a pilot study was conducted on 30 team leaders and their opinion was also noted on the questionnaire design. Leaders pointed out to few terms that were difficult to understand so those terms were replaced with easy synonyms. Finally, the data was collected through a revised and improved questionnaire. Concisely, the finalized instrument is divided into five main sections. First, a cover letter was given on the introduction of the data compiler, an introduction of instruments, reasons for data collection, the sponsoring authority for data collection, and reassurance of the confidentiality of the responses. In the first section of the questionnaire, all the statements regarding online vigilance, Absentmindedness, perceived behavioral control, and general information of respondents was included. Respondents were instructed to mark on one of the Likert scale options against each statement. In the second section, statements measuring the Creative job performance of employees and the statements regarding

general information of leaders were stated. The questionnaire of this study is given in appendix A. Table 1 provides a brief summary of the used measures for this study.

3.14 Measures and Scales

All constructs measured by using self-reported questionnaire. All measured remain in English and no translation has been done in the native language. From Pakistan's perspective, the official language that is used is English, English is used as a compulsory subject in the beginning from school to college and university level. Only in entry-level jobs, English is not required, whereas every employed in Pakistan, they know English (Raja, Johns, & Ntalianis, 2004). English is used widely and almost every researcher in Pakistan uses it in their questionnaires (Butt, Choi, & Jaeger, 2005; Raja, Johns, & Ntalianis, 2004; Raja, U; Johns, G, 2010; Abbas, Raja, Darr, & Bouckenoghe, 2012). The reliabilities for all measures used in their studies are above (.70).

Table 1 Summary of Variables' Measures

Variables	Sources	No. of Items
Online Vigilance	Adopted from Reinecke et al, 2018	12-items
Absentmindedness	adapted from Cheyne et al, 2006	12-items
Creative Performance	Adapted from Zhang and Bartol, 2010	3-items
Perceived behavioral control	Adapted from Loeb, 2016	6-items

3.14.1 Online vigilance

To evaluate online vigilance, we employed the validated and developed online vigilance scale by (Reinecke, et al., 2018). The scale comprises of three aspects i) salience, ii) monitoring, and iii) reactivity) with four items each. Respondents responded items such as “my thoughts often drift to online content” on Likert scales, ranging from Scale (1= Strongly Disagree 5 = Strongly Agree).

Table 2: Measures of Online Vigilance

Constructs	Statements
------------	------------

Online Vigilance	My thoughts often drift to online content.
	I have a hard time disengaging mentally from online content.
	Even when I am in a conversation with other people, I often think about what is happening online right now in the back of my mind.
	Often online content occupies my thoughts, even as I am dealing with other things.
	I constantly monitor what is happening online.
	I often feel the urge to make sure I know what is happening online.
	I often start certain online applications so I don't miss out on any news
	I always keep an eye on what is happening online at the moment.
	My thoughts drift there immediately.
	It triggers an impulse in me to check it right away
	I immediately attend to it, even if I am engaged in other things at that moment.
	I immediately give it my full attention.

3.14.2 Absentmindedness:

12 items representing common daily circumstances likely to be experienced by people from a wide variety of experiences and preferences (Cheyne, Carriere, & Smilek, 2006) Used Likert scale with 5 possible responses ranges from (1= Strongly Disagree 5= Strongly Agree). High scores showing more prominent numbers of slips.

Table 3: Measures of Absentmindedness

Constructs	Statements
------------	------------

Absentmindedness

I have absent-mindedly placed things in unintended locations (e.g., putting milk in the pantry or sugar in the fridge).

When reading I find that I have read several paragraphs without being able to recall what I read.

I have misplaced frequently used objects, such as keys, pens, glasses, etc.

I have found myself wearing mismatched socks or other apparel.

I have gone into a room to get something, got distracted, and left without what I went there for.

I fail to see what I am looking for even though I am looking right at it.

I begin one task and get distracted into doing something else.

I have absent-mindedly mixed up targets of my action (e.g., pouring or putting something into the wrong container).

I make mistakes because I am doing one thing and thinking about another.

I have gone to the fridge to get one thing (e.g., milk) and taken something else (e.g., juice).

I have to go back to check whether I have done something or not (e.g., turning out lights, locking doors).

I go into a room to do one thing (e.g., brush my teeth) and end up doing something else. (E.g., brush my hair).

3.14.3 Perceived Behavioral Control

The short form of “occupational self-efficacy” scale with six items was used to measure the validity of the “occupational emotional”, and “occupational social self-efficacy”. The occupational self-efficacy scale is a job-related cognitive scale. The items on the Likert scale ranges from (1= Strongly Disagree 7= Strongly Agree). A sample item is “When I am confronted with a problem in my job, I can usually find several solutions” (Loeb, 2016).

Table 4 Measures of Perceived Behavioral Control:

Constructs	Statements
Perceived Behavioral Control	I can remain calm when facing difficulties in my job because I can rely on my abilities.
	When I am confronted with a problem in my job, I can usually find several solutions.
	Whatever comes my way in my job, I can usually handle it.
	My past experiences in my job have prepared me well for my occupational future.
	I meet the goals that I set for myself in my job.
	I feel prepared for most of the demands in my job.

3.14.4 Creative Performance:

Creative process engagement is measured through 3 item scale related to the identification of a problem, collecting the data then decoding and generating the concept (idea) adapted from (Zhang & Bartol, 2010) measured the responses on the Likert Scale consist of 5 points (1= Strongly Disagree 5= Strongly Agree) Sample items include “I spend considerable time trying to understand the nature of the problem”.

Table 5 Measures of Creative Performance:

Constructs	Statements
Creative Performance	This employee spend considerable time trying to understand the nature of the problem (problem identification).
	This employee search for information from multiple sources (Information seeking).
	This employee generate a significant number of alternatives to the same problem before choose the final solution. (Idea generation).

3.15 Instrument Validation and Pilot Study

Before actual data collection, expert opinion was taken on the instrument, from the professors in organizational psychology; English language experts; researchers having a minimum of five research publications in the same field, and IT professionals. The questionnaire was finalized on the basis of the panel’s comments. Experts agreed with the scale of online vigilance, absentmindedness, creative performance, and perceived behavioral control but they suggested modifying a few of the fields from a demographic section according to the nature of the study. The name of the software house was removed from the demographic section because the corruption case of “AXACT Software house” made software houses very conscious. They feel reluctant in sharing any kind of information about their employees or company. So the “name of software house” was removed. Moreover, on the suggestions of experts, the experience of leaders was divided into two that are working experience in a software house and working experience in other industries. After getting satisfactory responses from experts about the questionnaire, a pilot study was conducted on a small sample of software houses’ team leaders. According to Van de Ven and Ferry (1980), 10% of the final sample size can be used as a pilot study. Following their criteria, questionnaires were distributed among 30 team leaders for a pilot study. Beneath each section of the questionnaire, a field was designed for the comments and suggestions of the respondents about the mentioned statements. 22 valid questionnaires were received back. In the comment section,

respondents suggested simplifying a few difficult words like blue, chores, vivid, etc. Considering their comments, these words were replaced with easily understandable synonyms. Filled responses were also used to establish the reliability and validity of the instrument. Face, criterion, and content validity of the instrument was ensured through the comments of the panel of experts and respondents. Reliability was ensured by the Cronbach's alpha coefficients of the responses.

Table 6: Reliability Score of Pilot Study

Variable	<i>Cronbach's Alpha Score</i>
Online Vigilance	0.823
Absentmindedness	0.831
Creative job performance	0.923
Perceived behavioral control	0.714

Table 6 shows the Cronbach's alpha score of each construct Straub et al., (2004) suggested that a Cronbach's value above 0.60 shows that the construct falls into an acceptable range of reliability evaluations. Therefore, all the constructs were found reliable and valid so no significant changes were made to the questionnaire.

3.16 Data Analysis

In this section, different statistical tests and data analysis techniques were used to find out the answers of research questions. This study is using the quantitative method, so recent Statistical Package for Social Sciences (SPSS) and the Hayes process macro v3.5 tool is widely used statistical software for hypothesis testing. Therefore, the present study used Hayes process macro v3.5 tool and SPSS 22.0 to analyze the data

3.16.1 Descriptive Statistics

The researcher used the descriptive statistics for explaining the data in survey that comprises on measures of variability, frequency distribution, and measure of central tendency. In this regard, the overview of various data characteristics will provide through descriptive statistics.

3.16.2 Preliminary Data Analysis

At the first attempt, all the preliminary data analysis techniques like coding of data, data screening, missing values analysis, normality assessments, Skewness and Kurtosis analysis, and an assessment of outliers were performed. Demographic and descriptive analyses were also conducted in the preliminary data analysis phase. In the demographical information, a region wide distribution of respondents, a gender wide distribution of respondents, a qualification wide distribution of respondents, and an experience wide distribution of respondents were reported. In the second step, a descriptive analysis of each item and each construct were performed that included the mean value, maximum, minimum value, and sum of the responses and the standard deviation of each construct. Moreover, SPSS was used for the calculation of the Pearson correlation coefficient among dependent and independent variables. A correlation analysis helps to get an initial idea about the direction of the relationships between variables. The aim of the current research was to investigate the impact of Online Vigilance on Creative job performance and, the influencing role of Perceived behavioral control in relation with Absentmindedness.

3.16.3 Validity, Reliability, and Unidimensionality Analysis

Different statistical strategies were used; face validity, criterion validity, convergent validity, discriminate validity, inter-item reliability, composite reliability, internal consistency, and the multi collinearity and the uni-dimensionality of the data were evaluated to ensure the accuracy and appropriateness of the data. The CFA (confirmatory factor analysis) technique was used to check the common method biasness, reliability, validity, and Unidimensionality of the data. Moreover, CFA was also employed to evaluate the significance of a conceptualized model through the collected data.

3.16.4 Regression Analysis

As indicated in chapter 1, the research problem in this study is to determine the impact of online vigilance, absentmindedness, creative performance, and the influencing role of perceived behavioral control in relation with absentmindedness and creative performance. Murphy (1989) indicated that multiple regression analysis allows the appraiser to determine how much relationship exists between several independent and dependent variables. To investigate the

relationship online vigilance, absentmindedness, creative performance, linear regression analysis is an appropriate multivariate technique.

$$Y = \alpha_0 + \beta_1 X_1 + \varepsilon \quad (i)$$

Whereas Y= Dependent Variable, α_0 = “Intercept of population regression line”; β_1 = “Slope of population regression line with regressor”; ε = error term.

In the second step, to investigate the impact of the intermediate variable included on a dependent variable, Z has been included in the equation as a moderator. (i)

$$“Y = \alpha_0 + \beta_1 X_1 + \beta_2 Z + \varepsilon” \quad (ii)$$

Where β_2 the Slope of the regression population line is linked with an intermediate variable. And the third equation, (interactions) is added in the regression equation (iii).

$$“Y = \alpha_0 + \beta_1 X_1 + \beta_2 Z + \beta_3 XZ”$$

Additionally to investigate the negative and positive effect on the moderator, the sign β_3 review with data analysis and the moderating effect on moderators.

3.16.5 Factor Analysis

Zikmund (1997) defined factor analysis as a type of analysis used to discern the underlying dimensions or regularity in phenomena. Its purpose is to recapitulate the information of a large number of variables into a smaller number of factors (Zikmund, 1997). Factor analysis explores unobserved variables which elucidate correlations patterns in a set of an observed variable (Bollen, 1998). The main objectives of factor analysis are: to determine linear combinations of variables that aid in investigating the interrelationships; and to reduce the issue of the problem of Multicollinearity in multiple regression models. For this purpose, factor analysis has been used before testing the multiple regression equations.

Factor analyses are, exploratory factor analysis, and confirmatory factor analysis, exploratory factor analyses reveal various numbers of factors that associate with particular factors. Whereas in confirmatory factor analysis we have an evident expectation about the structure of factors, we used CFA for already used measures (Mooi & Sarstedt, 2011). This study has done the confirmatory factor analysis of already used measures.

3.17 Summary of Chapter

This chapter summed up the information regarding research design, the targeted population, sampling strategy, the data collection technique, the data collection instrument, the scale to measure the variables, and data analysis techniques that were opted for this empirical research.

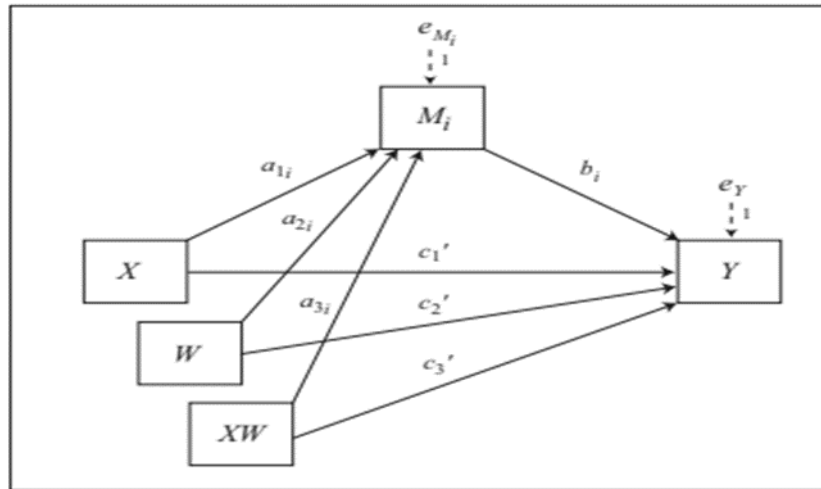
CHAPTER. 4

4. ANALYSIS OF DATA

4.1 Analysis of Data

After data collection process data was screened and analyze statistically. IBM SPSS 22 with Hayes process macro tool was used to analyze the data. Cronbach's Alpha reliability of scales was checked before analysis. Missing values and Outliers had detected during analysis those were checked and sort out clearly in file. For perceived behavioral control, absentmindedness and creative performance some outliers detected in the scatterplot. Those were checked again by comparing means of other variables and resolved in data file clearly. After that primarily analysis was conducted to check the linearity, Multicollinearity and normality of the data. No violation of Multicollinearity and homoscedasticity assumptions were identified. In primarily analysis means, standard deviation and correlation is conducted. After that this main analysis of moderated mediation was conducted. This occurs when mediator is creating effect on the outcome variable and that moderator is worked as an intervention against that effect (Moonemans, 2017). Andrew F. Hayes (2013) process macro extension was used specifically for model 8 of this study. If p value is <0.05 the relationship will be significant as a minimum criteria. In addition bootstrapping was used to calculate multiple resamples of this data set and found appropriate sample distribution of data. However, sample was conceptualized from broader population (Preacher, Rucker & Hayes, 2007). Statistical diagram of this study is given below.

Figure: 2 Statistical diagram



Conditional indirect effect of X on Y through $M_i = (a_{1i} + a_{3i}W)b_i$

Conditional direct effect of X on $Y = c_1' + c_3'W$

*Model 8 allows up to 10 mediators operating in parallel

4.2 Demographic Analysis

The below values in the table gives detail of the demographics of respondents (N=330).

Table 7: Demographic Frequency Distribution Analysis

Demographic Characteristic	Frequency (N=330)	Percentage %
<u>Gender</u>		
Male	210	63.63%
Female	120	36.36%
<u>Age</u>		
20-25 Years	90	27.27%
26-30 Years	189	57.27%
31-35 Years	45	13.63%
36 Years or above	6	1.81%
<u>Experience</u>		
Less than 5 Years	90	27.27%
6-10 Years	189	57.27%
11-15 Years	45	13.63%
More than 15 Years	6	1.81%
<u>Hierarchy</u>		
Entry Level	90	27.27%

Middle Level	189	57.27%
Senior Level	45	13.63%

Meeting Frequency

Never	0	0%
Rarely	0	0%
Sometimes	18	5.45%
Often	133	40.30%
Always	179	54.24%

This demographic analysis shows that there are more male respondents who participated in the study than females because, in the IT sector of Pakistan, the proportion of males is more than females. The mean of gender was 1.80 and standard deviation (SD= .412). There were 210 males (63.63%) and 120 females (36.36%) who gave their responses to the questions asked for the current survey. The age mean of participants is 1.89 and (SD= .645). The age of respondents is the main concern, 90 participants were in the range of 20-25 years, consisting of (27.27%) of the total, 189 people belonged to the age group category of 26-30 years. (57.27%), 45 respondents were having an age group category of (31 to 35) years (13.63%). 6 participants are from the age group category of 36 years or above consisting of (1.81%). The demographics of age show that large numbers of Employees in IT organizations are from the age group category of 26 to 35 years. The respondent's mean of the working experience is 1.89 and (SD= .645). The tenure of the participants in their organizations showed that most of them had a term of 6 to 10 years since 189 participants had the tenure showing the proportion of the participants 56.9%. The 88 workers involved in this current study had a period of fewer than 5 years, comprising 27.27% of the overall respondents. The number of respondents with a period of 11 to 15 years was 45 (13.63 %) and the number of respondents with more than 15 years of experience was also 6, with 1.81 % of the total participants. As far as the mean hierarchical level of the respondents was 2.44 and (SD=.547). The hierarchical level of IT staff involved in the analysis shows that there are a large number of 189 middle-level staff working in IT organizations (57.27%). Employees at the entry-level were 90 (27.27 %) and 45 (13.63 %) are at the senior level. Also, the mean frequency of the meeting is 4.42 and (SD=.621). The meeting frequency between workers and their supervisor indicates that there were 0 respondents (0 %) who never and rarely communicate with their supervisor. This study indicates that a significant 179 workers communicate with their superiors regularly as normal (54.24%). A

total of 133 respondents frequently met with their immediate boss (40.30 %) and there were at least 18 respondents who often met with their head consists of (5.45 %).

Table 8. “Means”, Standard Deviation and “Correlations Analysis”

		M	S. D	1	2	3	4
1	Online Vigilance	4.77	1.22	(.72)			
2	Perceived Behavior Control	4.52	1.02	.19*	(.76)		
3	Absentmindedness	4.45	1.36	.24**	.38**	(.87)	
4	Creative Performance	4.64	1.27	.17*	.37**	.65**	(.72)

N=330, * P< 0.05, **P< .01

Table 8 shows the means, standard deviation and correlation statistics of this study. Results suggest that a significant correlation between variables. Online vigilance is significantly related with Absentmindedness ($r = .24, p < .01$), and negatively to Creative Performance ($r = .17, p < .05$). Similarly, Perceived Behavior Control significantly weak the effect of Absentmindedness ($r = .38, p < .01$) and significantly high Creative Performance ($r = .37, p < .01$). According to the results of correlations, the direct relationships between variables are significant so the hypothesis is supported.

Table 9. Validation of Scale

Scales	No. of Items	Convergent Validity	Discriminant Validity	Reliability α
Online Vigilance	12	0.39-0.73	0.08-0.57	0.946
Absentmindedness	12	0.52-0.72	0.12-0.57	0.894
Perceived Behavioral Control	6	0.68-0.74	0.16-0.56	0.827
Creative Performance	3	0.38-0.73	0.09-0.59	0.804

4.3 Regression Analysis

To check the existence between the variable relations correlation analysis has been performed for this study. So, correlation analysis is not sufficient because it only provides the variable relation with adequate support and does not explain the causality between the variable relations. Therefore, regression analysis is executed to know the exact dependence of one variable on another variable for example dependent variable is regressed on independent variable. Simple linear

regression is being used to check the existence of casual relationship among two variables. On the other hand multiple regression is used when there are more than two variables like mediation and moderation. Simple linear regression analysis tables are given below. In this study Preacher and Hayes (2013) method was applied for mediation and moderation analysis. Model 8 in PROCESS Macro by Hayes (2013) was used for both mediation and moderation regression analysis separately.

Table 10: Simple Linear Regression

Predictor	Creative Performance		
	(Beta)	se	Sig
	-.2098***	.0419	0.000

Note: N = 330, Unstandardized coefficients of regression results, *p < .05. **p < .01. ***p < .001.

H1: Online vigilance negatively influenced creative job performance

Table 10 described the hypothesis testing results. We starts from Hypothesis 1 that is online vigilance is negatively influenced creative job performance of employees. Out results showed the existence significant negative relationship between online vigilance and creative performance. The value of beta coefficient is -.2098, and the p-value is 0.000. The value of R determined the coefficient and the value of Beta described the level of change that change of 1 unit in online vigilance leads a change of -.2098 in creative job performance of employees. Furthermore, the P-value 0.000 showed the relationship significance. Thus, hypothesis 1 is accepted.

Table 11. All Direct and Indirect Effect Regression Results

Structural Paths	Beta	Pvalue		95% LLCI-ULCI
OV→CP	-.2098	< .001	***	[-.2923, -.1273]
OV→AM	.6427	< .001	***	[.5138, .7716]
OV*PBC→AM	-.1651	< .01	**	[-.2659, -.0644]
OV*PBC→CP	-.0968	<.01	**	[-.1544, -.0393]
OV→AM→CP	-.0800	< .05	*	[-.155, -.195]
OV*PBC→AM→CP	-.0373	< .05	*	[-.0544, -.0171]

Note: Confidence Interval is reported as 95% [Lower confidence Interval-Upper Confidence Interval] *p < .05. **p < .01. ***p < .001.

Furthermore, Online Vigilance was positively related to absentmindedness ($b = .6427, p < .001$). These results suggest that absentmindedness mediates the relationship between online vigilance and creative job performance, supporting Hypothesis 2. Hypothesis 3 recommended that perceived behavioral control would direct and indirect the association between online vigilance and absentmindedness (H3) and that the backhanded relationship between online vigilance and creative job performance through absentmindedness was prohibitive on the degrees of perceived behavioral control. Following the spread out techniques for Hypothesis 3 we found support. Most importantly, there was significant relationship between online vigilance and perceived behavioral control on absentmindedness, ($b = -.1651, p < .01$; (Lower level confidence interval LLCI = $-.2659$; (Upper-level confidence interval ULCI = $-.0644$). second, the record of moderated-mediation (Hayes, 2015), is the item term of the related effect among online vigilance and perceived behavioral control on absentmindedness and the immediate effect between absentmindedness and creative performance of employees, was significant, ($b = -.0373, p < .05$; Lower level of confidence interval (LLCI) = $-.0544$) and Upper level of confidence interval (ULCI) = $-.0171$). According to previous studies in third step, the restricted indirect impact was tested by looking at the size and importance of the indirect effect of online vigilance on employee creative job performance through absentmindedness at different levels of perceived behavioral control (Preacher, Rucker, & Hayes, 2007; Cheung and Lau, 2017). We modeled the restricted indirect impacts of online vigilance on creative performance through absentmindedness at different levels of perceived behavioral control. This was indicated that lower level of perceived behavioral control was related with a more grounded indirect negative impact from online vigilance to employee creative performance via absentmindedness. The indirect impact was just significant when perceived behavioral control was less than 0.5 level and standard deviations (SD) greater the mean (M).

4.4 Results of Mediation Analysis

The hypothesis 2 of this study was proposed that absentmindedness plays a mediating role between online vigilance and creative performance of employees. PROCESS macro in SPSS by Hayes, (2013) was used to test the mediation of hypothesis 2. We check different paths a, b and c accordingly. As per Preacher and Hayes PROCESS there are three types of effects needed to be checked those are total, direct and indirect effect.

Fig 3 with Coefficients Mediation Analysis

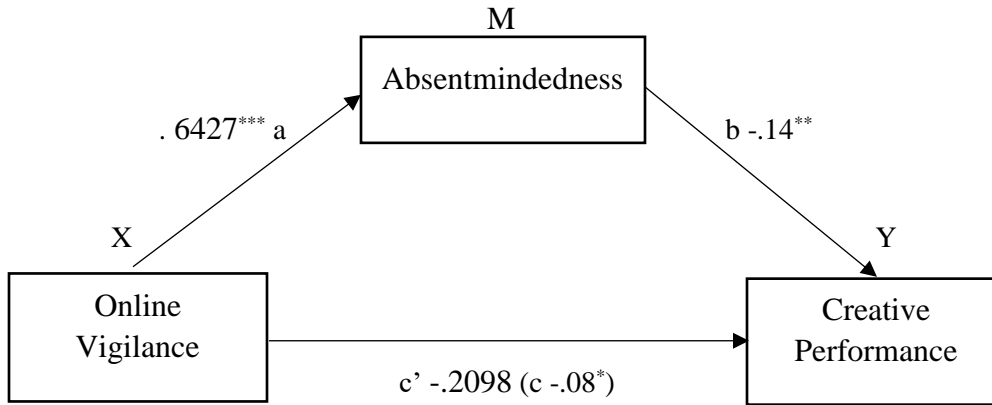


Table 12. Mediation Analysis Results

II	IV effect on M (Path a)	M effect on DV (Path b)	IV and DV Total effect (Path c)	IV on DV direct effect (Path c')	Indirect Effects bootstrap Results	
	β	β	β	β	LLCI	ULCI
OV	.6427***	-.14**	-.08*	-.2098	-.155,	-.195

Note: N= 330 Unstandardized regression Co-efficient results. Sample size of bootstrap was 5000.

Confidence Interval CI =95% * P < 0.05, **P < 0.01, ***P < 0.001.

Interpretation of all paths are given below.

Hypothesis 2 articulates that absentmindedness mediates the relationship between online vigilance and creative job performance of employees. Results are mentioned in table 12. Which provides justification of our study findings. Table 12 showed the indirect relation of online vigilance on creative performance has lower confidence interval is -.155 and upper confidence interval is -.195. There is no zero between both values and same negative signs. So we conclude the findings of this relation from here that mediation is exist and hypothesis 2 was accepted that absentmindedness mediates the relationship between online vigilance and creative performance of employees.

4.5 Results of Moderated Analysis

We used PROCESS Macro in SPSS by Hayes (2013) to test hypothesis 3 that was moderating role of perceived behavioral control between online vigilance and absentmindedness.

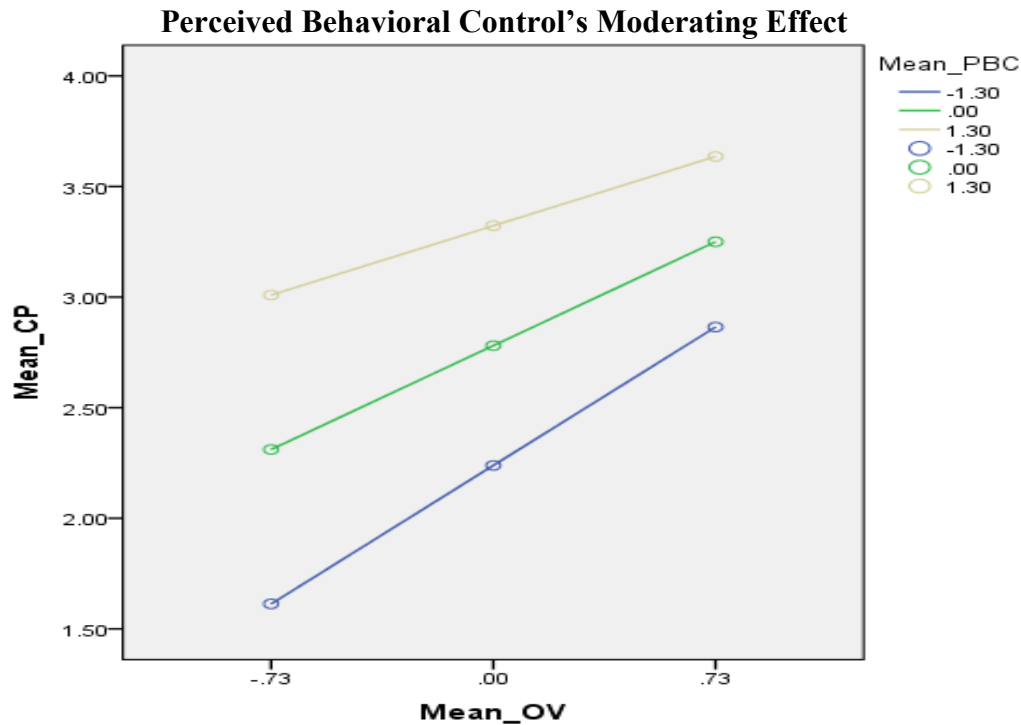
Table 13. Moderation Analysis Results

Variables	β	se	t	p	Indirect effects bootstrap results	
	-.1651**	.0512	-3.2243	.0014	-.2659	-.0644
	-.0968**	.0292	-3.3111	.0010	-.1544	-.0393

Note: N= 330 Unstandardized regression Co-efficient results. Sample size of bootstrap was 5000. Confidence Interval CI =95% * P < 0.05, **P < 0.01, ***P < 0.001.

Furthermore, to test the moderation hypotheses of “perceived behavioral control” in the relationship of Online Vigilance and Absentmindedness also in the relationship of Online Vigilance with Creative Performance has lower level of confidence interval -.2659 and upper level confidence interval is -.0644. These both have same signs and there is no zero between these values. This interaction term is significant ($\beta = -.1651$, $p < .01$), the relationship between Online Vigilance and absentmindedness is weaker when Perceived Behavioral Control of an employee is at a high level, these findings partially supported the hypothesis. Moderation test suggests that if “perceived behavioral control” is on a high level then results are significant, and if “perceived behavioral control” is on a low level then insignificant. To test the hypothesis 4 the interaction term is significant between online vigilance and creative performance of employees ($\beta = -.0968$ $p < .01$) and the lower and upper confidence interval of this relationship is -.1544 and -.0393. There is no zero exists in both terms and signs of values are also same. So, these findings suggest that when an employee’s “perceived behavioral control is on a high level then it reduce the negative affect of online vigilance on “creative performance”. The interaction is depicted by a plotted moderated graph (see figure 4) indicating results of “perceived behavioral control”, with a high level is significant and results of “perceived behavioral control”, with low level is insignificant. So these findings supported the hypothesis H4.

Figure 4



4.6 Moderated Mediation Results

We used model 8 PROCESS macro in SPSS by Hayes (2013) to test hypothesis 4. Hypothesis 5 articulated that indirect relationship between Online Vigilance via absentmindedness on creative performance is moderated by “perceived behavioral control such that this indirect effect is stronger at a higher level of “perceived behavioral control”.

Table 14. Moderated Mediation

For Creative Performance				
Independent	Mediator	Level of moderator	Conditional indirect effect	95% Confidence interval
Online Vigilance	Absentmindedness	High PBC	.29	[.14, .46]
		Low PBC	.09	[.09, .13]
		Index for moderated mediation	.07	[.07, .11]
Online Vigilance	Creative Performance	High PBC	-.41	[.16, .25]
		Low PBC	-.018	[-.07, -.11]
		Index for moderated mediation		[.06, .09]

Note: PBC stands for “perceived behavioral control”

Results suggest that the confidence interval of online vigilance on absentmindedness in the

presence of “perceived behavioral control” the conditional indirect effect for low “perceived behavioral control” is insignificant (effect = .07, LLCI= .07, ULCI, =.11), and significant for high Perceived Behavioral Control (Effect = .17, LLCI= .16, ULCI, =.25). Index of moderated mediation (Effect = .05, LLCI= .06, ULCI, =.09) partially support hypothesis (coefficient. = .26, LLCI=.13, ULCI, =.41). The confidence interval of online vigilance on creative performance through absentmindedness in the presence of “perceived behavioral control” the conditional indirect effect for lower “perceived behavioral control” was insignificant (effect=.09, LLCI=.09, ULCI= .13), and significant only for high Perceived Behavioral Control (effect=.29, LLCI= .14, ULCI= .46) partially supporting the hypothesis. The indirect relationship between Online Vigilance and absentmindedness on creative performance is moderated by “perceived behavioral control such that this indirect effect is weaker at a higher level of “perceived behavioral control”.

Table 15. Description of Hypothesis Accepted or Rejected

Hypothesis	Declaration of Statement	Status
H1	Online vigilance negatively influenced creative job performance.	Accepted
H2	Absentmindedness mediates the relationship between online vigilance and the creative performance of employees.	Accepted
H3	Perceived behavioral control will moderate the relationship between online vigilance and absentmindedness such that the relationship becomes weaker when perceived behavioral control will be high.	Accepted
H4	Perceived Behavioral Control moderate the relationship between online vigilance and Creative Performance such that the relationship becomes weaker when perceived behavioral control will be high.	Accepted

4.7 Summary

Chapter four discusses the data analysis of research. This involves demographic frequencies, variable correlation, direct relationships between variables, and indirect relationships by regression analysis, as well as interpretation of findings. Also, the next chapter includes the findings’ discussion.

CHAPTER. 5

5. STUDY FINDINGS DISCUSSIONS

The study integrated the conservation of resources theory to identify the effect of online vigilance on the creative performance of employees. The research findings largely supported the study hypotheses. In Particular, findings indicate that online vigilance had a negative indirect effect on the employee's creative performance via absentmindedness. Absentmindedness mediated the negative relationship between the online vigilance and creative performance of employees. Thus, the moderation effect in this study found that the moderated effect of "perceived behavioral control" is positive between the relationship of online vigilance and the creative performance of employees, and this relationship is significant only in the existence of high "perceived behavioral control" and non-significant when there is low "perceived behavioral control". Moreover, the indirect effect of online vigilance on the creative performance of employees via absentmindedness was significant when there is the high "perceived behavioral control".

5.1 Discussion

We tried a model to clarify how and why online vigilance identifies employee's creative performance. This study also contributed in the theory by adding new constructs in the literature of conservation of resources theory. In light of conservation of resource theory, this study investigates how employee's creative job performances in the work area are related with online vigilance through employee absentmindedness and how perceived behavioral control cope up in this situation. The Previous studies worked vigilant behavior related consequences such as mindfulness, and work exhaustion in mental resources in different service sectors. This is first study on IT sector that examine IT professionals Vigilant behavior related consequences by using conservation of resource theory and some evidences based on past research findings. Furthermore, the study findings of our study are consistent with previous study results and our all study findings are supporting the literature by accepting hypothesis. Previous studies used social interventions in technology assisted behaviors but we have used personal resources that proved helpful in coping

these stressors. Based on previous studies calls (Wayne et al., 2017) intervening variables are best ways to detect this relationship and findings may be different in other study settings. We also trust on previous study findings and tried to test perceived behavioral control is personal resource, as a significant moderator of the intervened relationship. From our outcomes, we reached a few fundamental inferences. Initially, our findings show that absentmindedness has to appear like a behavioral sign in employees that serves to clarify the connection between online vigilance and supervisor-rated employee creative performance. Specifically, our outcomes show that when employees experience online vigilance, they report an experience of absentmindedness, leaving them with less psychological resources to commit to their work. Despite the fact that managers will be unable to identify employees' online vigilance at workplace as it uncovers itself in the outside area, what they do appear to have the option to recognize is their employees' performance at work-related tasks. Hence, the sign of absentmindedness transmitted by an employee appears to have the basic consequences of supervisor/manager evaluations against that employee. Further, we found that supervisor-rated employee creative performance was related to the proximal activity results of manager evaluations of employee creative performance. Critically, in supporting these immediate impacts, online vigilance was negatively related through absentmindedness and boss evaluations of employee creative performance. At long last, we found that perceived behavioral control moderated this relationship: when employees had higher perceived behavioral control, the indirect impact of online vigilance on employees' creative performance via absentmindedness was insignificant. In aggregate, our outcomes support a model determining how online vigilance, through misfortune spirals, may stretch out back to the work environment and identify with managers' evaluations of employee creative performance, just as employees work results, and how a relevant resource—work-related perceived behavioral control—may help decrease this impact. Our model features the expanding influences of online vigilance, which, amazingly, adversely affect the other life domains however appear to undulate go into the workspace, where the absentmindedness due to online vigilance started, to the relationship with employee creative job performance. This research makes several contributions. We give a hypothetical clarification just as exact proof for both how and why online vigilance identifies with pointers of employees' creative work performance. Initially, supporting the COR hypothesis, and especially loss spirals, we found that online vigilance acts to drain one's energy and resources, anticipating absentmindedness. Our model broadens the knowledge and provides new insights for

Conservation of resource theory (COR) (Hobfoll, 1988, 1989, 1998) by examining the ramifications of resource depletion because of online vigilance beyond the immediate effect on the central employees as far as stress or absentmindedness and pointing the significance of the manager. In our examination, employee loss of personal resources exuding from online vigilance has repercussions past employees' absentmindedness. The loss spiral sustains as confirm from the negative connection between employee absentmindedness and boss evaluations of employee creative performance and, thus, work achievement. Regarding online vigilance at workplace, consolidating the COR theory into the individual resource depletion winding empowered us to verbalize how excessive online vigilant behavior of employees at work experience is related to factors back in the working environment. Theory, which proposes that evaluators search for specific signs that demonstrate future accomplishment potential (Wayne et al., 2017) empowered us to connect an employee's understanding of the loss of resources (absentmindedness) to an immediate judgment about that loss (supervisor-rated employee creative job performance). Further, we point out the critical job that boss evaluation against his/her subordinate creative job performance plays in this resource loss, as this evaluation gives off an impression of being related with work results that are apparently the boss/supervisor decided.

Furthermore, our model is imperative to consider the employee's point of view. Employees may see technology used as a state of pride; that is, they may see their psychological distraction with function as proof that they are exceptionally put resources into their work, organizing work in their cognitions and their behaviors. In any case, our model shows the opposite view — that online vigilance may not be the "acceptable employee symbol of respect" that some may feel it is. We found that absentmindedness actuated by excessive online vigilant behavior might be difficult to hide and fills in as a sign identified with super-visors' view of employees' social speculation of intellectual and passionate individual resources in their work-related tasks. This is reliable with Kahn's (1992) depiction of involvement being a perceptible phenomenon. Along these lines, employees might be beguiling themselves to the extent that they feel that being "consistently on" via smartphone and organizing a job to the detriment of cognitive health is the best approach to excel at work. Or maybe, steady distraction with work outside work may not permit the employee the benefits of recuperation or mental separation from work (Sonnetag, et al., 2010), leaving them overextended and recognizably less occupied with their work. From the supervisor's point of view, our model underscores the significance of portraying clear work and personal life. Managers who

harbor solid desires that employees work extended periods, consistently check notifications individually, and consistently be "accessible and 24/7 hour online as needs are"— trademark antecedents to online vigilance at the workplace may really be affecting the degree to which their employees can be psychologically present, energetic, and engaged at the workplace. However, incidentally, those employees who are cognitively diverted from other life activities by work may really be the ones with low creative job performance back at the workplace.

We additionally add to the scarcity of examination that has investigated the relation among online vigilance and employee creative performance. Our results expand the indirect relationship of online vigilance, with the creative performance of employees that has a significant relationship with creative tasks of the job such as idea generation, information seeking, and problem identification. These outcomes shed light on employees' mindfulness while performing their job and dealing with cognitive stress with excessive connectivity or vigilant behavior might be managed with higher perceived behavioral control for work-related activities (Kossek, Ruderman, Braddy, & Hannum, 2012). With higher work-related perceived behavioral control of employees by self-motivation in career growth which ultimately enhances their creative behavior required at the workplace. Moreover, our study adds to a couple of earlier investigations looking at online vigilance in weekends or vacations and occupation results e.g. (Hoobler et al., 2010), by analyzing why online vigilance behavior specifically, is related with creative job performance.

Finally, we contributed by focusing our identification of perceived behavioral control as one potential resource that may reduce the effect of online vigilance on the supervisor rated creative job performance of employees through the feeling of absentmindedness. This recommends human personal resources that work as an intervention and empowers employees more motivation and willpower related to work-related tasks can stem the negative effect of online vigilance behavior. Excessive self-support and higher willpower or self-efficacy may enhance employees' mindfulness in creative tasks to an extent, because of higher online vigilant behavior employees are unable to visible at work psychologically so only perceived behavioral control can fit employees' role at the workplace by understating their work-related creative job requirements and expectations.

5.2 Theoretical Implications

This study contributes to the literature and practically useful for Organizations. The main aim of this research is to investigate the effect of Online Vigilance on creative performance of employees through absentmindedness and the moderating effect of “perceived behavioral control” that are under-explored and under-theorized. Creative Performance and its aspects are concerned with the allocation of mental resources to the tasks and events taking place at present (Dane & Brummel, 2014). Constant monitoring and check the online stream of information will contribute to absent-mindedness and likely detract from a pleasing moment, resulting in reduced competitive performance (Johannes et al, 2018). Thus, this contrivance follows the negative effect of online vigilance and creative performance. This study has been conducted to address the conceptual gap and contributing to the literature and theory through the following objectives.

These study findings focus on the influence of online vigilance at the workplace on the Creative Performance of employees in organizations. In this aggressive competitive world, getting high employees’ performance is one of the considerable issues for the organizations. The need for an efficient and attentive workforce with Creative Performance has increased over the last decade. The understanding of how online vigilance at the workplace implicates consequences to an organization is important to both academics and decision-makers. Nevertheless, the research done on this novel mindset for the workplace is very little.

The literature lacks research conducted on online vigilance in Pakistan to evaluate the Creative Performance. As it is found that everyone is connected with their smartphones and is zoning out to their present moment work which makes their attention less towards their work. This gap has been found after taking face-to-face interviews with the researcher with some of the IT Professionals who are currently working in organizations. This study is more focused the investigating the online vigilance at the workplace and its effects on the Creative Performance of employees in the IT Industry in Pakistan. Thus, the gap of this study has examined the consequences of online vigilance in decreasing employees’ attentiveness at the workplace.

This research may be seen as an opportunity to help and extend the results of the employees’ “creative-performance” relations shown in the developed nations to a developing nation. It is important to know the relationship between online vigilance and the Creative Performance of employees.

5.3 Practical Implications

This study exhibit that online vigilance can negatively influence the employee's creative performance directly and indirectly. Awareness of online vigilance helps both the employees and organizations towards mind care and organizations provide flexibility or job autonomy to their employees for gaining higher creative performance in their current job tasks. This study is practically contributing by taking into account cognitive connectivity that affected both mental and behavioral performance (Johannes et al, 2020). This research provides the practical implications for managers working in organizations to lessen the detrimental effects of online vigilance on their cognitive performance relevant to creative tasks during a job. Precisely, organizations need to create a relaxed job environment and a flexible work atmosphere. Organizations should make effort to increase the job control of supervisors/Managers and educate them to care for their mind by protecting their cognitive resources like perceived behavioral control, self-efficacy, resilience, etc. relevant to job-related tasks and that provokes in their subordinate employees So, that could help the employee to better understand their cognitive needs and expectations of the organization and deal it with their effective functioning. If organization and their manager would be higher in their perceived behavioral control employee would automatically feel better and unconsciously behave in those manners to create a flexible environment and ultimately it influences the productivity of employees and organizations. The support of perceived behavioral control will help the employees to better deal with their job-related roles. Managers could better deal with their vigilant behavior and use the practices to decrease the cognitive stress by using overuse of technology for work-related emails, notifications that are the cause of damaging psychological health and employee mindfulness at the workplace.

Another management implication is that organizations need to outsource transformational leaders who are good in providing psychosocial support which will elevate their competence and role modeling techniques to the employees who are facing information overload and absentmindedness related problems at the workplace. They also help them to better increase their creativity because without the creativity of a manager-employee could not be influenced. For low perceived behavioral control, organizations need to provide support and guidance to meet the ultimate satisfied creative performance of employees that are required to manage and consider the perceived

behavioral control behavior. Organizations should pay consideration to the employees who are high in their creative performance and offer them surplus resources to obtain better performance and this would be an encouragement for those who are not following the normative rules at the workplace. Organizations need to hire the right people for the right job. They should hire individuals who are honestly caring for their roles with higher self-efficacy of the jobs and culture of the organizations.

5.4 Recommendations

- Firstly, Observing and documenting the effect of online vigilance which influences the “creative-performance” of an employee representative will frame an information bank of data which will be helpful to organizations.
- Secondly, organizations can evaluate employees’ Creative Performance because of absentmindedness and perceived behavioral control. This data can be helpful for a better strategy of planning the high performance of employees by the management.
- Thirdly, that information we can give to human resource officials to integrate better business strategies to the human resource management. However, this study will provide a guideline to private and public sector organizations of Pakistan, to track the performance of employees most particularly in the IT sector.
- This research diverts the focus of organizations towards mindfulness that is necessary for the creative performance of employees that ultimately affect organizations' performance.
- This research may be seen as an opportunity to help and extend the results of the employees' “creative-performance” relations shown in the developed nations to a developing nation.

5.5 Limitations and Future Research Direction

Numerous limitations along with the future direction are discussed. Firstly, the nature of the study’s data is cross sectional and does not permit to draw the relationships among variables even though the theorized model has clear grounded definitions in the prior theory. However, the longitudinal studies and experimental researches strengthen the tested model and provide

information about the relationships and attitudes over a certain period of time. The other limitation is the data collection is from IT-based organizations and the same country. This may raise apprehensions about the generalizability of the results. A large sample used for the same research might be helpful and questionnaires have been distributed in the time lag to minimize biasness. Similar studies can be done on a larger scale with time lag for reliability and validity of this finding. This will establish a clear picture of the connection between the examining variables.

Future research should examine the respondents from different cultural and geographical boundaries that will help to explore the different vigilant behaviors and relationships over a certain period of time. There is a dire need to examine the effects of online vigilant behavior on other company's outcomes. In the future, it could be investigated the perceived behavioral control at the group level which can help for workgroups and the entire organization to make better creative performance. Further studies in this field should go for a longitudinal study to get reliable results. Further research should explore the assessments of new sides of online vigilance and its antecedents such as (role overload and role technology) which are contributing to making an employee vigilant. Besides it, future research could investigate other outcomes of online vigilance as mediating mechanisms such as cognitive fatigue, work exhaustion, sleep deprivation, and spousal conflict. This study along with this also suggests that to examine the mediating mechanisms on the consequences of online vigilance such as interpersonal behavior and work role performance (adaptivity and proactivity).

5.6 Conclusion

This study provides various necessary implications for online vigilance and creative performance research. Firstly contribute to promoting the “perceived behavioral control” construct along with online vigilance. “Perceived behavioral control” is a meaningful tool for managers to control over stressors regarding connectivity at the workplace. This study identified the absentmindedness mediating mechanism to support in transmitting the influence of IT manager's online vigilance behavior and perceived behavioral control on the creative performance of subordinates. This study adds essential knowledge in vigilant behavior research regarding the influence of perceived behavioral control positive impact on creative performance.

Furthermore, to consider the significance of development and innovation in the current period, this investigation was started to discover the indicators and enablers of creative performance stages. As vigilant behavior is the factor that is available in all individuals, the impacts of vigilant qualities were assessed on creative performance stages. Another significant factor that is highly emphasized and worried upon by researchers and experts is absentmindedness. After reviewing the previous studies and literature impact of online vigilance was investigated on employees' cognitive components and the effect of cognitions were evaluated on creative performance stages. Also thinking about the rational stream and hypothetical underpinnings, mediation of absentmindedness was tested between the relationship of online vigilance and creative performance. Perceived behavioral control was tested as a moderator between online vigilance and absentmindedness and creative performance as well.

In the wake of reviewing the previous studies on vigilant behavior science, absentmindedness theories, and creative performance literature, the online vigilance behavior model was picked to measure the technology assisted behavior of the respondents and understanding its wide reliability and validity. Likewise, following similar criteria, absentmindedness was defined by fatigue relevant to technology usage defined (Smith et al., 2018). Three stages of the creative performance of employees were embraced from the investigation of Scott & Bruce (1994) that are idea generation, gathering support, and idea execution. This empirical study was started with five targets. The principal objective was to assess the impacts of online vigilance on creative performance stages. The second goal of this research was to assess the impacts of online vigilance on the absentmindedness of employees at the workplace. The third target was to examine the impacts of absentmindedness on creative performance. The fourth target was to investigate the intervening functions of absentmindedness between the relationship of online vigilance and creative performance phases. The last target of the research is headed for investigating the moderating effect of the perceived behavioral control between the relationship of online vigilance and absentmindedness and between absentmindedness and creative performance as well to check the moderated mediation.

For testing the created hypothesis, group Leaders of the IT-Based organizations of Pakistan were picked as the population for this study. The survival of the IT-based Organizations thoroughly

relies upon their development and innovative abilities. Furthermore, thinking about the project failure rate in the IT-based organizations of Pakistan, it was regarded as critical to examine the study framework in IT-based organizations of Pakistan. For getting the specific insights of the population, PASHA (Pakistan Software Houses Association for IT and ITES) was approached. From the convenience accessed registered IT-Based organizations retrieved from Pasha. Questionnaires were distributed among those organizations employees and group leaders, 330 complete reactions were chosen to be utilized for data analysis. Data were analyzed by using SPSS 22.0 and Hayes process macro v3.5 tool. The result of the first target shows that Online vigilance behavior of employees stable group leaders generally perform better in the idea generation phase, gathering support phase, and execution phase of creative performance. Employees with high vigilant behavior performed less in all creative performance phases. However, their persistent use of technology did negatively influence their mind and creative performance.

Results of the second target show that online vigilance of employees was effected their cognitions and they seem absentminded in their current job activities at the workplace. So, their constant use of smartphones for checking notifications did influence their ruminations and capacity to give 100% mindfulness in the current job. Despite what might be expected, less vigilant employees were found to perform well in assessing their cognition and mindfulness. On the other hand, Employee leaders have assessed their mindfulness and creative performance according to their work related to effective decision making while insignificant outcomes were found comparable to utilization and guideline of mind performance. The next target was to investigate the impacts of absentmindedness on the creative performance of employees. The findings of the third objective shows that employees who perceived higher absentmindedness their presence is not actually found in all phases of creative performance. In contrast, the employees who were highly concentrated by brain usage were may be performed well in all phases of creative performance those are that are idea generation, gathering support, and idea implementation.

The Fourth and most critical goal of the examination was to assess the moderating role of absentmindedness between online vigilance and creative performance. From the outcomes, significant interventions of absentmindedness were demonstrated between the relationship of

online vigilance and the creative performance of employees. The final objective was to test the moderation between online vigilance and absentmindedness findings of this target showed that the effect of a negative relationship between online vigilance and employee creative performance was reduced in the presence of perceived behavioral control. According to the findings of the fifth relationship between online vigilance and creative job, the performance showed that Perceived behavioral control weaker the relationship between online vigilance and creative performance. To sum up, things of this study revealed that through online vigilance behavior and absentmindedness of employees, their creative performance potential can be predicted. Furthermore, through technology assisted vigilant behavior analysis of employees, their cognitive performance can also be assessed.

The most significant contribution of the study was regarding Moderated-Mediation of perceived behavioral control in the relationship between online vigilance and absentmindedness and creative performance of employees at the workplace. From the results, it is implied that employees with higher perceived behavioral control experienced less absentmindedness and creative job performance even they are highly vigilant behaviors. Moreover, they should utilize their mind abilities successfully in work related creative tasks.

5.7 Summary of Chapter

This chapter discussed all the results obtained from hypotheses testing. The findings of each objective were discussed under separate sections. The implications and contributions of the study from theoretical and managerial aspects were summed up. Moreover, the limitations of the study were discussed along with recommendations to prospective researchers to overcome those limitations in their researches. And finally, the objective and findings of the research were briefly Summarized in the conclusion section.

6. REFERENCES

- Ab Ghani, S. N., Ismail, S. N., Manshor, M., Sah Allam, S. N., Ramlan, A. F., & Abdul Latiff, D. I. (2017). A study on technostress among first semester postgraduate students in Universiti Teknologi Mara, Shah Alam. *Journal of Academia*, 5(1), 118-126.
- Abbas, M., Raja, U., Darr, W., & Bouckenoghe, D. (2012). Combined Effects of Perceived Politics and Psychological Capital on Job Satisfaction, Turnover Intentions, and Performance. *Journal of Management*.
- Aguerre, N. V., Bajo, M. T., & Gómez-Ariza, C. J. (2020). Dual mechanisms of cognitive control in mindful individuals. *Psychological Research*, 1-13.
- Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 32(4), 665-683.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior And Human Decision Processes*, 50(2), 179-211.
- Akman, G., & Yilmaz, C. (2008). Innovative Capability, Innovation Strategy And Market Orientation: An Empirical Analysis In Turkish Software Industry. *International Journal of Innovation Management*, 12(1), 69-111.
- Ary, D., Jacobs, L. C., & Razavieh, A. (1996). Introduction to research education (5th ed.). Orlando, Fl: Harcourt Brace College.
- Barua, P. (2013). The Moderating Role Of Perceived Behavioral Control: The Literature Criticism And Methodological Considerations. *International Journal of Business and Social Science*, 4(10), 1-4.
- Bayer, J. B., Campbell, S. W., & Ling, R. (2016). Connection Cues: Activating the Norms and Habits of Social Connectedness. *Communication Theory*, 26(2), 128-149.
- Billieux, J., Rooij, A. J., Heeren, A., Schimmenti, A., Maurage, P., Edman, J., . . . Kardefelt-Winther, D. (2017). Behavioural Addiction Open Definition 2.0—Using The Open

- Science Framework For Collaborative And Transparent Theoretical Development.
Addiction, 112(10), 1723-1724.
- Blume, F., Göllner, R., Moeller, K., Dreslerb, T., Ehlib, A.-C., & Gawrilow, C. (2019). Do students learn better when seated close to the teacher? A virtual classroom study considering individual levels of inattention and hyperactivity-impulsivity. *Learning and Instruction*, 61, 138-147.
- Burns, J. (2000). The dynamics of accounting change Inter-play between new practices, routines, institutions, power and politics. *Accounting, Auditing & Accountability Journal*, 13(5), 566-596.
- Butt, A. N., Choi, J. N., & Jaeger, A. M. (2005). The effects of self-emotion, counterpart emotion, and counterpart behavior on negotiator behavior: a comparison of individual-level and dyad-level dynamics. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 26(6), 681-704.
- Cheyne, J. A., Carriere, J. S., & Smilek, D. (2006). Absent-mindedness: Lapses of conscious awareness and everyday cognitive failures. *Consciousness and cognition*, 15(3), 578-592.
- Choi, S. B., Kim, K., Ullah, S. M., & Kang, S.-W. (2016). How transformational leadership facilitates innovative behavior of Korean workers. *Personnel Review*, 45(3), 1-27.
- Christensen-Salem, A., Walumbwa, F. O., Hsu, C. I.-C., Misati, E., Babalola, M. T., & Kim, K. (2020). Unmasking the creative self-efficacy–creative performance relationship: the roles of thriving at work, perceived work significance, and task interdependence. *The International Journal of Human Resource Management*, 1-27.
- Dalila, Latif, H., Jaafar, N., Aziz, I., & Afthanorhan, A. (2020). The Mediating Effect Of Personal Values On The Relationships Between Attitudes, Subjective Norms, Perceived Behavioral Control And Intention To Use. *Management Science Letters*, 10(1), 153-162.
- Dane, E., & Brummel, B. J. (2014). Examining workplace mindfulness and its relations to job performance and turnover intention. *Human Relations*, 67(1), 105-128.

- Dula, J., Ceylan, C., & Jaspers, F. (2011). Knowledge worker creativity and the role of the physical work environment. *Human resource management*, 50(6), 715-734.
- Farmer, S. M., & Tierney, P. (2017). Considering creative self-efficacy: Its current state and ideas for future inquiry. In M. Karwowski & J. C. Kaufman (Eds.), *The creative self: Effects of beliefs, self-efficacy, and identity*. San Diego, CA: Academic Press, 23-47.
- Fernaesus, S.-E., & Östberg, P. (2009). The AMQ: A Four-Factor Inventory of Absentmindedness and Memory. *Scandinavian Journal of Psychology*, 50(3), 193-202.
- Fraenkel, R. J., & Wallen, E. N. (2000). How to design and evaluate research in education (4th ed.). San Francisco: McGraw-Hill.
- Frances, R., & Ali, U. ((2005)). Foreign direct investment and productivity spillovers in Irish manufacturing industry: evidence from plant level panel data. *International Journal of the Economics of Business*, 12(1), 53-66.
- Gao, W., Liu, Z., Guo, Q., & Li, X. (2018). The dark side of ubiquitous connectivity in smartphone-based SNS: An integrated model from information perspective. *Computers in Human Behavior*, 84, 185-193.
- Gill, J., & Johnson, P. (2002). *Research Methods for Managers*. 3rd, Sage Publishing, London.
- Gong, Z., Zhao, Z., Wang, S., & Yu, H. (2018). The Antecedents of Creative Performance: A Literature Review and Research Agenda. In *2018 3rd International Conference on Politics, Economics and Law (ICPEL 2018)*. Atlantis Press., 246, 1-7.
- Gumusluoğlu, L., & Ilsev, A. (2009). Transformational Leadership and Organizational Innovation: The Roles of Internal and External Support for Innovation. *Journal of Product Innovation Management*, 26(3), 264-277.
- Hakanen, J. J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior*, 71(1), 78-91.
- Hill, N., & Alexander, J. (2000). *Handbook of Customer Satisfaction and Loyalty Measurement*. Gower Publishing, Ltd.

- Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation Of Resources In The Organizational Context: The Reality Of Resources And Their Consequences. *Annual Review of Organizational Psychology and rganizational Behavior*, 5, 103-128.
- Hon., Y. A., & Lui, H. S. (2016). Employee Creativity And Innovation In Organizations: Review, Integration, And Future Directions For Hospitality Research. *International Journal of Contemporary Hospitality Management*, 1-56.
- Huang, N.-t., Chang, Y.-s., & Chou, C.-h. (2020). Effects of creative thinking, psychomotor skills, and creative self-efficacy on engineering design creativity. *Thinking Skills and Creativity*, 37, 1-10.
- Ishigami, Y., & Klein, R. M. (2009). Are Individual Differences in Absentmindedness Correlated with Individual Differences in Attention? *Journal of Individual Differences*, 30(4), 220-237.
- Janes, C., Casey, P., Huntsdale, C., & Angus, G. (1999). Memory In Pregnancy. I: Subjective Experiences And Objective Assessment Of Implicit, Explicit And Working Memory In Primigravid And Primiparous Women. *Journal of Psychosomatic Obstetrics & Gynecology*, 20(2), 80-87.
- Jayabalan, P. (2013). Employers and employees are key players in increasing productivity in an organisation. <http://mystarjob.com/>.
- Jewell, R. D., & Kidwell, B. (2005). The Moderating Effect of Perceived Control on Motivation to Engage in Deliberative Processing. *Psychology & Marketing*, 22(9), 751-769.
- Johannes, N., Meier, A., Reinecke, L., Ehlert, S., Setiawan, D. N., Walasek, N., . . . Veling, H. (2020). The Relationship Between Online Vigilance and Affective Well-Being in Everyday Life: Combining Smartphone Logging with Experience Sampling. *Media Psychology*, 1-25.
- Johannes, N., Veling, H., Meier, A., Reinecks, L., & Bujzan, M. (2018). Mind-Wandering and Mindfulness as Mediators of the Relationship Between Online Vigilance and Well-Being. *Cyberpsychology, Behavior, And Social Networking*, 21(12), 761-767.

- Jokonya, O. (2017). Critical Literature Review of Theory of Planned Behavior in the Information Systems Research. *DEStech Transactions on Computer Science and Engineering, (ameit)*, 177-181.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68.
- Keng, S.-L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review*, 31(6), 1041-1056.
- Klimmt, C., Hefner, D., Reinecke, L., Rieger, D., & Vorderer, P. (2017). The Permanently Online and Permanently Connected Mind: Mapping the Cognitive Structures behind Mobile Internet Use. *New York: Routledge.*, 1-22.
- Ling, R., & Lai, C.-H. (2016). Microcoordination 2.0: Social Coordination in the Age of Smartphones and Messaging apps. *Journal of Communication*, 66(5), 834-856.
- Loeb, C. (2016). SELF-EFFICACY AT WORK: SOCIAL, EMOTIONAL, AND COGNITIVE DIMENSIONS. (*Doctoral dissertation, Mälardalens högskola.*), 1-95.
- Manly, T., Robertson, I. H., Galloway, M., & Hawkins, K. (1999). The Absent Mind Further Investigations Of Sustained Attention To Response. *Neuropsychologia*, 37(6), 661-670.
- Martinez, L. S., & Lewis, N. (2016). The Moderated Influence of Perceived Behavioral Control on Intentions Among the General U.S. Population: Implications for Public Communication Campaigns. *Journal of Health Communication*, 21(9), 1006-1015.
- Mascheroni, G., & Vincent, J. (2016). Perpetual contact as a communicative affordance: Opportunities, constraints, and emotions. *Mobile Media & Communication. Mobile Media & Communication*, 4(3), 310-326.
- Moonemans, J. The relationship between inclusive leadership and work wellbeing The mediating role of perceived organizational support for strength use.
- Müller, K. W., Glaesmer, H., Brähler, E., Woelfling, K., & Beutel, M. E. (2017). Prevalence Of Internet Addiction In The General Population: Results From A German Population-Based Survey. *Behaviour & Information Technology*, 33(7), 757-766.

- Nevin, A. D., & Schieman, S. (2020). Technological Tethering, Digital Natives, and Challenges in the Work–Family Interface. *The Sociological Quarterly*, 1-27.
- O’connor, G. E., & Kabadayi, S. (2020). Examining Antecedents of Health Insurance Literacy: The Role of Locus of Control, Cognitive Style, and Financial Knowledge. *Journal of Consumer Affairs*, 54(1), 1-34.
- Personeelsbeleid, A. B., & Vossaert, L. (2012). Ideas that matter: The relationship between self-regulatory processes and creative performance on real-world projects. *ugent.be*, 1-55.
- Peterson, C. (2000). The future of optimism. *American psychologist*, 55(1), 44-55.
- Pradhan, R. K., & Jena, L. K. (2017). Employee Performance at Workplace: Conceptual Model and Empirical Validation. *Business Perspectives and Research*, 5(1), 69-85.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers*, 36(4), 717-731.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate behavioral research*, 42(1), 185-227. <https://doi.org/10.1080/00273170701341316>
- Raja, U., Johns, G., & Ntalianis, F. (2004). The Impact of Personality on Psychological Contracts. *The Academy of Management Journal*, 47(3), 1-17.
- Raja, U; Johns, G. (2010). The joint effects of personality and job scope on in-role performance, citizenship behaviors, and creativity. *Human Relations*, 63(7), 981-1005.
- Reb, J., Narayanan, J., & Ho, Z. W. (2013). Mindfulness at Work: Antecedents and Consequences of Employee Awareness and Absent-mindedness. *Springer Science+Business Media New York*, 6(1), 111-122.
- Reinecke, L., Klimmt, C., Meier, A., Reich, S., Hefner, D., Knop-Huelss, K., . . . Vorderer, P. (2018). Permanently online and permanently connected: Development and validation of the Online Vigilance Scale. *PLoS ONE*, 13(10), 1-31.

- Ren, H., Zhang, Q., & Zheng, Y. (2020). Impact of work values and knowledge sharing on creative performance. *Chinese Management Studies*, 1-13.
- Reuver, M. d., Nikou, S., & Bouwman, H. (2016). Domestication of smartphones and mobile applications: A quantitative mixed-method study. *Mobile Media & Communication*, 4(3), 347-370.
- Richardson, M., Hussain, Z., & Griffiths, M. D. (2018). Problematic smartphone use, nature connectedness, and anxiety. *Journal of Behavioral Addictions*, 7(1), 109-116.
- Romijn, H., & Albaladejo, M. (2002). Determinants of innovation capability in small electronics and software firms in southeast England. *Research policy*, 7, 1-15.
- Schneider, F. M., Zwillich, B., Bindl, M. J., Hopp, F. R., Reich, S., & Vorderer, P. (2017). Social media ostracism: The effects of being excluded online. *Computers in Human Behavior*, 73, 385-393.
- Shaughnessy, J. J., & Zechmeister, E. B. (1997). *Research Methods in Psychology*. McGraw-Hill, 524.
- Shin, J., & Shin, M. (2016). To Be Connected or Not To Be Connected? Mobile Messenger Overload, Fatigue, and Mobile Shunning. *Cyberpsychology, Behavior, And Social Networking*, 19(10), 579-586.
- Shin, M., Linke, A., & Kemps, E. (2020). Moderate amounts of media multitasking are associated with optimal task. *Computers in Human Behavior*, 1-6.
- Soori, Z., & Ferasat, H. (2016). The Relationship between Creativity and Job Performance Khorramabad Municipal Departments. *Journal of Applied Environmental and Biological Sciences*, 6(3s), 192-198.
- Thompson, C. L., Kuah, A. T., Foong, R., & Ng, E. S. (2020). The development of emotional intelligence, self-efficacy, and locus of control in Master of Business Administration students. *Human Resource Development Quarterly*, 31(1), 113-131.
- Tierney, P., & Farmer, S. M. (2011). Creative Self-Efficacy Development and Creative Performance Over Time. *Journal of Applied Psychology*, 96(2), 277-293.

- Tudu, P. N., & Pathak, P. (2015). Social Network Sites: Can they enhance Employee Productivity in an organization? *The International Journal of Management Science and Information Technology (IJMSIT)*(17), 23-35.
- Utz, S. (2015). The function of self-disclosure on social network sites: Not only intimate, but also positive and entertaining self-disclosures increase the feeling of connection. *Computers in Human Behavior*, 45, 1-10.
- Vamvaka, V., Stoforos, C., Palaskas, T., & Botsaris, C. (2020). Attitude Toward Entrepreneurship, Perceived Behavioral Control, And Entrepreneurial Intention: Dimensionality, Structural Relationships, And Gender Differences. *Journal of Innovation and Entrepreneurship*, 9(1), 1-26.
- Verplanken, B., Friborg, O., Wang, C. E., Trafimow, D., & Woolf, K. (2007). Mental Habits: Metacognitive Reflection on Negative Self-Thinking. *Personality and Social Psychology*, 92(3), 526-541.
- Walumbwa, F. O., Muchiri, M. K., Misati, E., Wu, C., & Meiliani, M. (2018). Inspired to perform: A multilevel investigation of antecedents and consequences of thriving at work. *Journal of Organizational Behavior*, 39(3), 249-261.
- Wayne, S. J., Lemmon, G., Hoobler, J. M., Cheung, G. W., & Wilson, M. S. (2017). The ripple effect: A spillover model of the detrimental impact of work–family conflict on job success. *Journal of Organizational Behavior*, 38(6), 876-894.
- Yekanielibeiglou, S., & Demirkan, H. (2018). Enhancing Creative Performance In Work Environments. In *DS 89: Proceedings of The Fifth International Conference on Design Creativity (ICDC 2018)*, University of Bath, Bath, UK, (pp. 264-271).
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of management journal*, 53(1), 107-128.

7. APPENDICES

SURVEY QUESTIONNAIRE

(For employees - Time 1)

Dear Sir/Madam!

This survey aims to analyze your Online Vigilance, Absentmindedness and Perceived Behavioral Control. The data will be utilized in aggregate for research purpose only. The results will have *no* effect upon your performance appraisal or any other organizational decisions. Your anonymity will be strictly retained. Your honest feedback is highly appreciated.

1. General Information

a. Marital Status: <input type="checkbox"/> Single <input type="checkbox"/> Married	b. Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female
c. Age: <input type="checkbox"/> Below 25 <input type="checkbox"/> 26-35 <input type="checkbox"/> 36-45 <input type="checkbox"/> 46-55 <input type="checkbox"/> 56 – 65 <input type="checkbox"/> Above 65	
e. Education (Equivalent to): <input type="checkbox"/> High School <input type="checkbox"/> Bachelor’s <input type="checkbox"/> Master’s <input type="checkbox"/> PhD	
f. Name of your team leader/supervisor:	g. Working tenure with this team leader (in months):

1. Please read questions carefully about the <u>Online Vigilance during the job</u> and then choose the right option against questions. (Reinecke, et al., 2018)	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
a. My thoughts often drift to online content.	1	2	3	4	5
b. I have a hard time disengaging mentally from online content.	1	2	3	4	5
c. Even when I am in a conversation with other people, I often think about what is happening online right now in the back of my mind.	1	2	3	4	5
d. Often online content occupies my thoughts, even as I am dealing with other things.	1	2	3	4	5
e. I constantly monitor what is happening online.	1	2	3	4	5
f. I often feel the urge to make sure I know what is happening online.	1	2	3	4	5
g. I often start certain online applications so I don’t miss out on any news	1	2	3	4	5
h. I always keep an eye on what is happening online at the moment.	1	2	3	4	5
I. My thoughts drift there immediately.	1	2	3	4	5
j. It triggers an impulse in me to check it right away	1	2	3	4	5
k. I immediately attend to it, even if I am engaged in other things at that moment.	1	2	3	4	5
l. I immediately give it my full attention.	1	2	3	4	5

2. Please read the questions carefully pertaining to your <u>Absentmindedness</u> and then choose the right option against the question. (Cheyne, Carriere, & Smilek, 2006)	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
a I have absent-mindedly placed things in unintended locations (e.g., putting milk in the pantry or sugar in the fridge).	1	2	3	4	5
b. When reading I find that I have read several paragraphs without being able to recall what I read.	1	2	3	4	5

c. I have misplaced frequently used objects, such as keys, pens, glasses, etc.	1	2	3	4	5
d. I have found myself wearing mismatched socks or other apparel.	1	2	3	4	5
e. I have gone into a room to get something, got distracted, and left without what I went there for.	1	2	3	4	5
f. I fail to see what I am looking for even though I am looking right at it.	1	2	3	4	5
g. I begin one task and get distracted into doing something else.	1	2	3	4	5
h. I have absent-mindedly mixed up targets of my action (e.g., pouring or putting something into the wrong container).	1	2	3	4	5
i. I make mistakes because I am doing one thing and thinking about another.	1	2	3	4	5
j. I have gone to the fridge to get one thing (e.g., milk) and taken something else (e.g., juice).	1	2	3	4	5
k. I have to go back to check whether I have done something or not (e.g., turning out lights, locking doors).	1	2	3	4	5
l. I go into a room to do one thing (e.g., brush my teeth) and end up doing something else. (E.g., brush my hair).	1	2	3	4	5

1. Please answer these questions as they apply on how <u>Occupational Self-efficacy (Perceived Behavioral Control)</u> help you to cope up with challenges choose the right option against the question. (Loeb, 2016)	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
a. I can remain calm when facing difficulties in my job because I can rely on my abilities.	1	2	3	4	5	6	7
b. When I am confronted with a problem in my job, I can usually find several solutions.	1	2	3	4	5	6	7
c. Whatever comes my way in my job, I can usually handle it.	1	2	3	4	5	6	7
d. My past experiences in my job have prepared me well for my occupational future.	1	2	3	4	5	6	7
e. I meet the goals that I set for myself in my job.	1	2	3	4	5	6	7
f. I feel prepared for most of the demands in my job.	1	2	3	4	5	6	7

Thank you

SURVEY QUESTIONNAIRE

(For team leader/supervisor - Time 2)

Dear Sir/Madam!

This survey is being conducted to study your engagement in creative processes (Creative Performance). The results will have **no** effect what so ever upon your performance appraisal. Your anonymity will be strictly retained and results will be used for research purposes only. Your time, cooperation and honest feedback is highly appreciated.

1. General information

a. Your name:	b. Formal education (years):
c. Age: <input type="checkbox"/> Below 25 <input type="checkbox"/> 26 – 35 <input type="checkbox"/> 36– 45 <input type="checkbox"/> 46 – 55 <input type="checkbox"/> 56-65 <input type="checkbox"/> above 65	
d. Working tenure with this organization (in months):	e. Gender: Male <input type="checkbox"/> Female <input type="checkbox"/>

2. Please rate the creative performance engagement of your subordinates separately given criteria. (Zhang & Bartol, 2010)	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Name of the Subordinates:					
a. This employee spend considerable time trying to understand the nature of the problem (problem identification).	1	2	3	4	5
b. This employee search for information from multiple sources (Information seeking).	1	2	3	5	5
c. This employee generate a significant number of alternatives to the same problem before choose the final solution. (Idea generation).	1	2	3	5	5

Thank you

REFERENCES

- Cheyne, J. A., Carriere, J. S., & Smilek, D. (2006). Absent-mindedness: Lapses of conscious awareness and everyday cognitive failures. *Consciousness and cognition*, 15(3), 578-592.
- Loeb, C. (2016). Self-Efficacy At Work: Social, Emotional, And Cognitive Dimensions. (*Doctoral dissertation, Mälardalens högskola*)., 1-95.
- Reinecke, L., Klimmt, C., Meier, A., Reich, S., Hefner, D., Knop-Huelss, K., . . . Vorderer, P. (2018). Permanently online and permanently connected: Development and validation of the Online Vigilance Scale. *PLoS ONE*, 13(10), 1-31.
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of management journal*,, 53(1), 107-128.