Examining the Influence of Technostress Inhibitors on Work-Related Stress and its Impact on Performance Outcomes in Human Resource Management

Areeba Sarwar *

Abstract: *The study aims to find out the elements that alleviate the stress of technology in the department of human resources and illustrate the effects of technostress inhibitors on employee organizational commitment, employee satisfaction towards their job, negative affectivity, and technology-enabled performance. The study used self-administrative and online questionnaires to collect the data. A structural equational modeling technique has been used to analyze the results. Findings illustrated that top management human resource technical support has a significant and negative impact on human resource technical work stress. Moreover, results also identified that human resource technical work stress has a positive and significant impact on negative affectivity and technology-enabled performance. However, the research is the first that considers the Department of Human Resource Management in order to evaluate the combined attitude toward work that is influenced by human resources technologies in Pakistan. Past literature has already considered the reaction of users towards the aspects of human resource technologies and the perception of shareholders. Thus, this study will contribute to the field of human resources and academia as well.*

*   **Keywords:** *Technostress inhibitors, HRT work stress, Organizational Commitment, Job satisfaction, technology enabled performance, negative affectivity, HR staff, HR technologies.*

Introduction

Innovation of technology give numerous approaches to help and learning in organizations. To stay up with dynamic markets and make new innovations in order to get competitive advantage, firms forced new technologies habitually. This makes stress (preparing, accessibility outside of work, or different replacements), that can possibly make stressful situations. Stress identified with the usage of information technology called technostress. It explored in the year of 1980 or numerous practitioners had attempted the research on the related issues. The more considerable research (Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008; Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2011) examine a impact about the creators of technostress and their results, for example, JS and OC. This study additionally analyzed components to handle technostress. Moreover, various studies examined impacts about the creators and inhibitors of technostress on mental results and the outcomes of behavior.

---

*Marketing Manager, Iris International, Karachi, Pakistan. Email: arsr.96@gmail.com

Technostress inhibitors are factors that decline the direct and indirect effect of technostress on employees. Manager IT support linked with the support related to help desk or IT help desk which group of information technology gives to employees if newly information technology are executed. Literacy facilitation deals with help or scattering about information technology in firm in order to motivate employees about the advantages of utilizing IT. Employees association deals to empowering and including employees in various periods of executing newly information technology, for reducing the technostress. According to the transactional stress model, technostress inhibitors grounded to direct the connection among technostress creators or strain and for decreasing stress by legitimately affecting strain. The past papers that investigated, inspected all investigated the impacts, and also technostress inhibitors part like construct for the creators of technostress (lessening the technology stress). With the technostress creators, technostress inhibitors showed several impacts at the total and segment level.

The progression in innovation is one of the primary components contributing to the development of Human resource development practices. However, according to Kossek, Young, Gash, and Nichol (1994) there are contrasting concepts to the technologies of human resource, or the intention to utilize are connected to HR technologies (HRTs). Hence, it is mostly explained in the past researches, HR staff can be horn of delimma between with HR technologies (HRTs). However, human resource programming connected with measurable decreases in the workloads of managerial or developing capacities to investigating the model (Bersin & by Deloitte, 2013). For employees, this implies continually adjusting to replacing firm requirements or demand for achieving the tasks that makes stress (for preparing, for accessibility, or different replacements), that can possibly make pressure. Stress related to information technology utilization shows indirect results, for example, diminished organization commitment, expanded turnover, automatically causes investment wastage in IT and undiscovered advantages.

Pakistan is a country, which is demonstrating a positive financial development. As the economy is developing, there is a monstrous lift in the HR requirements and arrangements (Mahmood, 2007). The development of a few HR firms and recruitment agencies in Pakistan is an imperative evidence of this reality. This globalization and overpowering information on the Human Resources (experts) is representing an extraordinary challenges for employers, particularly their Human Resource Department. Pakistan is a country where a few segments are developing and HR is being broadened. This examination is to comprehend and distinguish the significant HR challenges faced by a rising sectors like HRT (Florkowski, 2018). Being a developed country, Pakistan face deficiency in highly skilled technical HR. Also, we are facing a change in perspective with regards to HR Demand and Supply, HR Mobility, Retention and Expectations of managers versus workers and vice versa. However, In Pakistan, human resource development is affected by absence of assets and qualified HRT staff. There is a need to upgrades technostress inhibitor constructs. Besides, human resource technology administration involvement restricted the concentration for basic access to make decisions. Regardless a capacity benefited from such access in a comprehensive way wasn't thought. However, the staff of human resource department not any more engaged in the issues related to human resource technologies in case of human resource official singularly acts if the decisions are

constrained through managers. The loss of power over HR information may diminish view of authoritative significance and lift sentiments of staff disappointment. Despite the past literature on technostress inhibitor, fewer studies have been conducted on technostress inhibitor and Performance outcomes in context of Pakistan. Hence, limited work available in past literature, according to the authors knowledge. Moreover, this study extend the transaction theory in order to elaborate the situational factors which are responsible in decreasing stress or strain by newly firm's atmosphere (Tarafdar, Pullins, & Ragu-Nathan, 2011). However, Ragu-Nathan et al. (2008), the constructs known as technostress inhibitors. Hence, Tarafdar, Tu, et al. (2011) determined 4 kinds inhibitors of technostress. But in this study assess in context of human resource department.

On the basis of facts this study would determine the impact of technostress inhibitors that is HRT governance involvement, HR-IT knowledge, top management HRT support and HR innovative climate on HRT work stress on employees in IT sector of Pakistan. All variables have been taken from separate studies. Hence, this study would also determine the combined influence of technostress inhibitors and HRT work stress impact on employee organization commitment, job satisfaction, negative affectivity and technology enabled performance. After analyzing the results the gaps highlighted above would be fulfill.

The research objective is to explain effects of technostress inhibitors on HRT stress and the effect of workers working on IT firms located in Karachi, Pakistan. This research also aims of finding a link among HRT work stress impact, organization commitment, job satisfaction, negative affectivity & technology enabled performance.

Aditionally, to what extent do technostress inhibitors that is HRT governance involvement, HR-IT knowledge, Top management HRT support and HR innovative climate influence the HRT work stress impact in the firms? and to what extent does HRT work stress impact influence Performance outcomes that is organization commitment, job satisfaction, negative affectivity and technology enabled performance?

The current research proves to be significant for human resource sector in Pakistan. By this research the sector can get knowledge about how to enhance and develop performance in market due to proper implication of technostress inhibitors. Hence, this research advances firms knowledge on different anteriors. However, this determination estimating effects of technology on employee work attitude which proves to be helpful for managers of different departments.

The research also proves to be significant for HR managers specifically belongs to firms that uses HRTs in order to gain better insight for optimizing or enforcing their practices perceived by employees for enhancing employee's job satisfaction and commitment. Additionally, what types of trainings would be significant for employees in order to enhance their productivity & the ways for managing negative affectivity in organizations, hence the workers perceive their presence like they have special place in workplace.

Additionally, this research important among the workers belongs to firms which uses HRTs. Due to this study employees get information about technologies which help them in achieving their higher performance and how proper training can boost the skills, knowledge and capabilities of employees. The study organize in the following manner: the first section contain introduction whereas the second section consist of literature review.

Hence, the third section involves the methodology of the study while forth and fifth section contain data analysis and conclusion of the study respectively.

Literature Review

Theoretical Background

Richard S. Lazarus and Susan Folkman had proposed the process of Cognitive Appraisals and theory of transactional in their investigations of stress in 1984. As per Lazarus (1984), there are two sections in the theory of appraisals, which are primary & secondary appraisals. It could likewise be considered as "What the situation is?" also "How to manage this present circumstance?" According to the Transactional Model, there is a dynamic, bidirectional relationship between the individual and their environment. They have been analyzing the degree of specific life altering situations assessed adversely as issues or emphatically as inspires. These stressors which were brought thought into, be that as it may, were general stressors instead of work related requests. Transactional theory of stress revolves around a correspondence for people with pressure and expecting the consequences of stress (Lazarus, DeLongis, Folkman, & Gruen, 1985), and acknowledge that stress is unbiased (Webster, Beehr, & Love, 2011). The after effects of stress can be positive or negative. The outcomes of stress are determined by how the stress is assessed and organized. According to Folkman and Lazarus (1985), stress is the interaction of an individual with an environment in which the individual perceives relevance to her or his well-being and will charge or exceed sources. According to Selye (1991), any mental or substantial demand on an individual can result in unspecified stress.

In the technostress setting, the transactional theory of stress was used in the study. Since value-based hypothesis of stress can consider as the component to explore the secret areas of technostress. Notwithstanding, value-based hypothesis of stress can explain why technostress would prompt negative or positive outcomes. It views stress as independent, and the effects of stress brought on by using technology at work depend on how stress is evaluated. The effects of technostress also depend on how technostress is evaluated. We are able to examine how individuals assess technostress, which would influence the results of technostress, thanks to the modification of the transactional theory of stress in the technostress setting. However, the concept of various technostress types can be investigated using the transactional theory of stress. This can give data on the specific aftereffects of every sort of technostress. Moreover, conditional hypothesis of stress offers an opportunity to look at the part among technostress that is, technostress assessment. As a result, we accept that managers can benefit from applying the technostress context to the transactional theory of stress.

Past literature utilized the standard of "transaction theory" clarify the construct related to situations that are oblige for decreasing stressful condition because of newly atmosphere under firms (Tarafdar, Tu, et al., 2011). The elements known as Technostress Inhibitor. The situational factors consider to be Technostress inhibitors which decrease impacts about Technostress (Chitturi, Raghunathan, & Mahajan, 2008). Distinguished 4

sorts about Technostress Inhibitor for example governance involvement, IT-knowledge, top management support and innovative climate (Tarafdar, Tu, et al., 2011). It supports hierarchical systems and modification that decrease the negative results from technology use. The studies of technostress shows the components that would stifle the adverse outcomes create by technostress. According to research Tarafdar, Pullins, and Ragu-Nathan (2011), the degree of employee satisfaction can be increased by providing technical support for the use of technology, involving ICT clients in the acquisition or creation of technology, and creating an environment that encourages employees to learn and experiment with new innovations. Organizational commitment, long-term commitment, creativity, and productivity that were diminished by technological stress. The elements referenced above can diminish the conflict and over-burden, which are established by technostress. This study review "definitely known" and unknowns in the technostress related researches, also present transactional theory of stress and elaborate the cause to bring Transactional theory of stress. The research characterized a condition of emotional or physical incitement generate due to technology usage for the reason of work, which is generally associated to expanding work over-burden, quickened rhythm, and disintegration of individual time, among others.

Hypothesis development

HRT governance involvement and HRT work stress

Tarafdar, Tu, et al. (2011), the situational factors that explain by transactional theory in order to decrease stress for innovative atmosphere in firms. However, those situational variables knowns as techno-stress Inhibitors. There are a few reasons to accept that employee's involvement in governance and administration will balance HRT work-stress. However, employees seeing decisional-command over the applications that they manage are less inclined to encounter anxiety (Gemzøe Mikkelsen & Einarsen, 2002). Involvement nature also relevant along aspects about system, enhance forecasting of internal organization, better adjust functionalities to genuine needs and cultivate social capital with basic partners (for example staff of information technology). Advantages towards the staff of human resource will high opportune data of the system's decisions, increasingly open and easy to use aspects of technology, or decrease under event about sending clashes, advancements that reduces stress. Thus, the study posit hypothesis that:

H1: there are significant relationship between HRT governance involvement and HRT work stress.

HRT IT-knowledge and HRT work stress

The level of stress differ with departments. One foresees less genuinely framework connects if technology capability broadly disseminated. The study considered reliable illustrating the technology aptitudes shows solid, indirect impact on technology uneasiness. Solid IT-abilities may also cultivate self-efficacy (for example one can comprehensively

apply technology abilities in a successful way). As technology self-viability expands, people will in general have an increasingly constructive effect toward technology utilization, or decreased weakness to sentiments of technostress (Shu, Tu, & Wang, 2011). Moreover revealed the people positive about information technology capacities experience less technostress, (Ragu-Nathan et al., 2008). These investigations propose that:

H2: There is a significant relationship between HRT IT-knowledge and HRT work stress.

Top management HRT support and HRT work stress

Other relevant construct is support system. According to the job demand model, stressful work emerges at whatever point work environment can't satisfaction to accessible assets (Bakker, Demerouti, De Boer, & Schaufeli, 2003). The proposes of human resource technologies consider to be low inclined for stress producing to every day schedules like there is satisfactory sponsorship for supporting the utilization (for example steady, top notch preparing and technical support; adequate subsidizing for rollouts). Top administration is exceptionally arranged this happens. Its progressing involvement or commitment would expand chances about suitable resources or required cooperation between interior partners (for example required information exchanges, resolution of conflict) (Ha & Ahn, 2014). As anticipated as follow:

H3: There is a significant relationship between top management HRT support and HRT work stress.

HR innovative climate and HRT work stress

Work Stress is the type of stress that occur in the workplace and its commonly generate due to work attribution, organizational structure, and the connection among employees. HRT feelings of stress influenced by the internal climate. innovative climate generally significant, since experimentation is advanced, data streams enhance and cause supportive management (Cheng, Lau, & Chan, 2014). Past literature indicates which newly human resource practices are bound to acknowledged that the innovative climate consider to be strong (Stirpe, Bonache, & Trullen, 2015). That will especially gainful that information technology included on the grounds that it conveys the double test of acing the necessities of newly functions while tolerating enormous replacement in assignments or schedules. A suggestion about human resource technology consider to be low worry or learn quickly like innovative climate is available. Past researches illustrated that, more open doors would be present about coping structure. Staff members that may somehow face stressful situation through the demands of human resource technology that proves more chances to confine the impacts by political and social procedures. Another main investigation illustrates the innovative climate has an immediate, indirect impact (Koo & Wati, 2011). On the other hand, recommended the "preparation for change" a characteristic more created right climate which consider to be an essential technostress inhibitor in

terms of the staff of HR department (Ibrahim & Yusoff, 2015). Hypothesis stated as:

H4: There is a significant relationship between HR innovative and HRT work stress.

HRT work stress and organizational commitment

Organizational Commitment may be define as the degree to that an individual determine with and is include in organizations (Mowday, Steers, & Porter, 1979). OC is a mental condition about employees. It characterizes their relationship to the firm. Committed workers can be portrayed as the individuals that possess more engagement towards the associations and particularly prefer to still some portion of the associations. Numerous investigations has illustrated effect of Technostress on commitment (Kumar, Lal, Bansal, & Sharma, 2013; Ragu-Nathan et al., 2008). The previous studies determined indirect effect of Technostress on various elements about OC. Hence, the authentic connections among work stress and OC of employee. As per this relation, it may be potentially referenced that work stress, which is a result of overwhelming outstanding task at hand, job conflict and the absence of assets cause negative impacts on organizational commitment. Past studies also identified that stress and commitment illustrated that stress decreases organizational commitment (Nart & Batur, 2014). Accordingly, the study built following hypothesis:

H5: There is a significant relationship between HRT work stress and organizational commitment.

HRT work stress and Job satisfaction

Locke (1976) characterized Job satisfaction as an "apparent connection among individual's needs through person's employment or individual see it as contributions". The enthusiastic condition of individual professional experience or common perspectives to job. JS considered as additionally an enthusiastic emotion (positive or negative) of worker's job. However, the variable of job satisfaction has gotten generous consideration from past researches because of its contributions toward job satisfaction of employees (Somvir & Kaushik, 2012). As illustrated before that Technostress could prompt dissatisfaction towards job. It is revealed a indirect relationship among Technostress or employment satisfaction (Ragu-Nathan et al., 2008; Tarafdar, Tu, et al., 2011). The studies determined the employees deal with techno stress feels dissatisfaction towards their jobs. A indirect relationship among Technostress and job satisfaction also determined (Ayyagari, 2012). Additionally explained the technology vulnerability is a solid indicator about satisfaction of job between employees. So we posit that:

H6: There is a significant relationship between HRT work stress and Job satisfaction.

HRT work stress and Technology enabled performance

Job Performance may be define as "recognize relation among what person desire from his job and person recognize it as contributions" (Locke, 1976). Performance of employee like

social more dimensional idea is essential for associations to arrive at its vital objectives or practices. Performance of employee is how much an individual has finished the prerequisites of their expected set of responsibilities. Moreover, performance of employee consider to be beneficial consummation about work through selected persons or estimated through manager and organizarions dependent on the pre-characterized satisfactory norms. Employee performance deals to the outcomes, practicality about results, work's collaboration, work's efficiency, or adequacy of completed work. Employee Performance is a basic variable in organizations based researches to explain why a few associations are better than all. Explaining a significance or parts about execution under association might impact a utilization of hierarchical assets in order to more execution. Presently, technology is turning into an indispensable piece of every single association and contributes toward the person and organization's performance. In any case, work to quick replacement of technologies could upgrade and diminish performance. Numerous researches elaborated the Technostress have contrarily effects on performance (Tarafdar, Pullins, & Ragu-Nathan, 2011).

H7: There is a significant relationship between HRT work stress and Technology enabled performance.

HRT work stress and negative affectivity

Negative Affectivity may be defined as "a steady, transmitted character habit to experience a wide scope of negative emotions for example stress, depression, criticize to themselves & negatively perceive. As per past literature, negative affectivity is a disposition of mood which reverse a habit to experience the condition of negative emotion and lower self-esteem (Watson & Clark, 1984). A variable of negative affectivity got from past researches and has been explained as "a steady, heritable quality to experience a wide scope of negative emotions, for example, stress, uneasiness, self-reactions, and a negative personal view (Keogh & Reidy, 2000). As per Watson and Clark (1984), Negative Affectivity is a temperament attitude that mirrors a propensity to encounter negative passionate situation or less confidence. Hence, a continue argument about the concept of Negative Affectivity (NA) in the stressor–strain process. People who possess Negative Affectivity considered to get away from the work through detailing the health as terrible and natural conditions as horrible. Technostress relatively induce Negative affectivity. To decreased the Technostress influence numerous Technostress Inhibitor are being concentrated through practitioners around the globe. On the basis of above literature the study hypothesis is:

H8: There is a significant relationship between HRT work stress and negative affectivity.

Figure 1
Conceptual Model
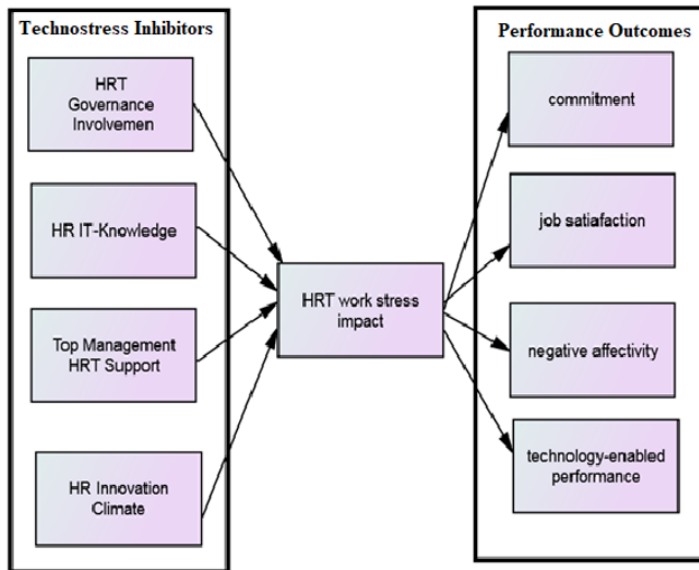
Research Methodology

In order to identify the impact of constructs, explanatory research is used in the present study. Hence, it gives answer to the question about how and why different types of variables possess relationship. Therefore, the current study illustrating how and why HRT governance involvement, HR IT-knowledge, top management HRT support and HR innovation climate influences HRT work stress as well as the influence of HRT work stress on employee's commitment, job satisfaction, negative affectivity and technology-enabled performance. This research used quantitative approach. It is commonly linked to deductive approach or consider on theory testing through utilizing the data. Therefore, it is approach we used cross sectional survey in order to collect data through organized questionnaire. Additionally, there is primary data that utilize in the current study. The current study used correlational type of design. However, in this type of research, finding of facts and collection of data must be included by the help of questionnaire survey. On the other hand, the information about relationship which exist between variables elaborated through correlation design. Hence, the future events also forecast through correlational design. Additionally, the statistical relationship among two constructs also explains through this. Hence, the study illustrating the link of HRT governance involvement, HR IT-knowledge, top management HRT support and HR innovation climate with HRT work stress as well as the link of HRT work stress with commitment, job satisfaction, negative affectivity and technology-enabled performance of employees located in Karachi, Pak-

istan.

Data Collection

The collection of data has been conducted through survey questionnaire containing close-ended questions. However, data collection has also been done by two ways. Firstly, by the help of self-administrative questionnaire and secondly through online questionnaire by the help of emails. In this study, the sample size consists of 507 respondents. The participants are the employees of HR department from different firms located in Karachi, Pakistan. Additionally, the study consist on non-probabilistic sampling technique in which convenience sampling is utilized. This type of sampling is convenient due to time limitation and budget factors. In this research, the target audience are the employees only. Hence, the target population based on employees works in HR department of different firms in Karachi, Pakistan.

Statistical Technique

IBM SPSS 22 (Statistical package for the social sciences) has been used for the analysis of demographics through applying method of descriptive statistics that is Frequencies in this research. Further, for the data analysis has been done through Smart PLS 3.0 software in order to check the reliability, convergent validity and discriminant validity for path model. On the other hand, in order to measure the model, the method of blindfolding has been used while for testing the hypothesis, bootstrapping method has been utilized. According to the criterion given by Churchill Jr (1979), reliability of all individual variable also higher to 0.7. The criterion also illustrated that the loading of each must be greater than 0.7 and if the loading appears to be below 0.4 than in this case that should be eliminated. Hence, the instrument reliability confirms by the loading which is above 0.7. Although, through AVE (average variance extracted) the convergent validity was examined. In this study all constructs possess the minimum values of 0.5 that fulfills the benchmark illustrated by Fornell and Larcker (1981). Through the analysis of cross loading or AVE, the discriminant validity was evaluated. The benchmark of Fornell and Larcker (1981) which suggests that the Average value extracted must be greater than correlation among the constructs. Additionally, the difference of cross-loadings also greater than the suggested benchmark that is 0.1. Therefore, this describes the adequacy of discriminant validity. Moreover, the value of HTMT exceed from 0.85, the criteria suggested by Henseler, Ringle, and Sarstedt (2015).

The series of relapses as far as vector loads is called PLS-calculation (Henseler et al., 2015). For a general analysis of equations and the ensuing convergence issues, the vector weights satisfy fixed point equations that are obtained at convergence. The straightforward PLS calculation incorporates the accompanying levels, the main level estimates score of dormant factors, the subsequent level estimates external loads/loadings and way coefficients and the third level estimates area boundaries. Blindfolding is a strategy used to evaluate way model's prescient importance by estimating the worth of Q-square. Bootstrapping is a non-parametric technique utilized for statistics significances about sev-

eral partial least square outcomes by value of Cronbach's alpha, R-square, Heterotrait-monotrait or path coefficients etc. The tests of validity utilized in this review were convergent and Discriminant legitimacy. Merged legitimacy estimates same builds and shows they are connected. Discriminant validity, on the other hand, indicates that two measures that were intended to be related are unrelated. The instrument reliability has been really taken a look at by Cronbach's alpha. Cronbach's alpha decides the interior consistency of overview things. The standard incentive for Cronbach's alpha is more than 0.7 (i.e.>0.7) suggested by Straub (1989).

The study based on structured questionnaire in which all items are adopted from past literature. Hence, HRT governance involvement contain 2 items which were adopted from the papers of Olivas-Lujan and Florkowski (2010). The construct HR IT-knowledge have 4 items adopted from the studies of Boynton, Zmud, and Jacobs (1994); Sambamurthy and Zmud (1999). There are 4 items of top management HRT support which were adopted from past literature. The variable of HR innovation climate contain 5 items adopted from the studies of Anderson and West (1998); Bock, Zmud, Kim, and Lee (2005); Tannenbaum and Dupuree-Bruno (1994). The items of HRT work stress are 11, which were adopted from the research of Hewitt, Flett, and Mosher (1992). While there are 4 items of commitment and 3 items of job satisfaction which were taken on from the investigation of Ragu-Nathan et al. (2008). Additionally, there are 5 items of negative affectivity and 5 items of technology enabled performance which were adopted from the studies of Agho, Price, and Mueller (1992); Tarafdar, Tu, et al. (2011), respectively. Although the questionnaire based on likert scale. There are forty three total questions which are present in questionnaire. Hence, in this study the criterion of scale is as follow: 1= strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree. Additionally, the questionnaire consist on items related to dependent and independent variables and possess separate section for each variable.

Ethical Consideration

In this study the information collected with the help of questionnaire from the respondents in order to fulfill the study's purpose. In other words, it fulfills the objective of the study too or it would not consider as harmful for the respondents as well. Moreover, the information about the participant are keep confidential as it should always remain intimate.

Data Analysis

In the current study, the section include the description of respondent's profile, construct reliability and validity, hypothesis testing and result's interpretation and explanation. However, for the determination of measurement and structural model, PLS-SEM (Partial least square-structural equation modeling) software: Smart PLS 3.0 has been used suggested by Ringle, Da Silva, and Bido (2015) and bootstrap resampling of subsample by Hair, Ringle, and Sarstedt (2011). For many complicated model and many research sit-

uations PLS (SEM) is consider to be suitable. Hence, for sample size, this type of method possess minimum restrictions. Instead of other covariance-based techniques this method also has residual distributions. Anderson and West (1998) suggested two steps approach and the estimation of this method based on that steps. Therefore, the reliability and model validity examine in step one while the second step include the structural model assessment and testing of hypothesis.

Respondent's descriptive profile

Through the use of online survey questionnaires and hard copies, the data were gathered from 507 Karachi workers from various sectors. On the basis of 507 complete responses, hypothesis testing or additional analysis were therefore developed.

Based on participant age, gender, education, and work experience in the current company, Table 4.1 presented demographic data. The table shows various classes where the main classification address the age gathering and we verified that 33.9% of respondent were in the age section that is under 30 and 46.4% were in the section of 31 to 40, while 19.7% were in the section of over 40. The subsequent classification is about orientation in which 37.9% lies in the choice of male while 62.1% lies in the choice of female. The third class shows instruction and it has been observed that around 39.2% respondents were undergrad and 30.8% of respondents were graduate. Nonetheless, 21.9% were post graduate and the rest 8.1% of respondents have a place with different fields of study. The fourth category depicts experience, and we discovered that 53.4 percent of respondents belonged to the group with 5 to 10 years of experience, while 20.9% of respondents belonged to the group with less than 5 years of experience. While 25.7% of respondents were belongs to the group that have more than 10 years of experience.

Measurement of the model

With help of construct reliability or reliability of single item, convergent validity and discriminant validity, the competency of the model has been evaluated. Table 1, illustrated that Cronbach's alpha composite dependability of all constructs are more than 0.7, which fulfills criteria suggested by Straub (1989). According to the criterion given by Churchill Jr (1979), reliability of all individual variable also higher to 0.7. This criterion also fulfill in this study. The criterion also illustrated that the loading of each must be greater than 0.7 and if the loading appears to be below 0.4 than in this case that should be eliminated. Hence, the instrument reliability confirms by the loading which is above 0.7. Although, through AVE (average variance extracted) the convergent validity was examined. In this study all constructs possess the minimum values of 0.5 that fulfills the benchmark illustrated by Fornell and Larcker (1981).

Through the analysis of cross loading or AVE, the discriminant validity was evaluated. In the diagonal form of Average value extracted elaborated in table 2 and meets the benchmark of Fornell and Larcker (1981) which suggests that the Average value extracted must be greater than correlation among the constructs. Hence, table 3 shows that each item of every variable represents higher loading in their concerned construct instead of other

construct. Additionally, the difference of cross-loadings also greater than the suggested benchmark that is 0.1. Therefore, this describes the adequacy of discriminant validity. Moreover, the frequency of HTMT correlation illustrated by table 4, which shows that none of the value of HTMT exceed from 0.85.

Therefore the convergent and discriminant validity confirms the measurement model. Hence, it further confirms the construct diffetiation and it further utilize to determine the structural model.

Structural model

Through analyzing standardizing paths we determined the conceptual model. Ever path linked with the hypothesis of the study. However, effects of latent variable on dependent construct is stronger if the value of coefficient is higher. Therefore, 0.1 is the level of significance on which hypothesis of study are considered. Table 5, illustrated the result of the study. TMHRTS, HRTWSI, NA and TEP were found to be significant. While, HRIC, HRIK, HRTGI and OC shows insignificant impact. Thus, H3, H7 and H8 are supported. On the other hand, H1, H2, H3, H4 and H6 are not accepted. Overall, out of eight hypothesis, three were accepted.

Discussion of the result

The study's objectives are determined by the outcomes. Hence, the results illustrates better measurement and structural model. The path among HRTGI and HRTWS is negative, ($p>0.1$, B= -0.018) and the path among HR IT-knowledge and HRTWS is positive, ($p>0.1$, B= -0.011). This findings shows same like the previous studies (Florkowski, 2019) that determined negative relationship which shows that HRTGI and HR IT-knowledge decreases HRT work stress.

H3 also shows significant effects but illustrated negative relationship ($p<0.1$, B= -0.139). This findings also same like past study (Florkowski, 2019). Thus, it means that top management HRT support strengthen the chances of reducing HRT work stress.

H4 shows positive and insignificant relationship. The path among HRIC and HRTWS is positive, ($p>0.1$ and B= 0.044). This positive relationship linked with past studies (Ren & Zhang, 2015). Hence, shows positive results.

H5 also shows insignificant and negative relationship ($p>0.1$, B= -0.056). The result also same among studies (Nart & Batur, 2014), because the studies shows negative relationship between stress and organizational commitment which means that work stress negatively impacts employee's firms commitment.

H6 also illustrated insignificant and negative relation ($p>0.1$, B= -0.052) that also linked with past literature and shows negative and insignificant link between the stress in work and employees satisfaction in job. This implies that lessening in the degree of work weight on representatives pitifully affects expanding position fulfillment of workers.

H7 shows significant and positive relationship ($p<0.1$, B= 0.664). The result also linked to past studies (Spector, Jex, & Chen, 1995). Thus, by increasing the level of work stress ultimately causes negative affectivity.

H8 represented significant and positive relationship (p<0.1, B= 0.841). The results consistent with past literature (Shaikh, Akram, Rizwan, Kousar, & Malik, 2013). Therefore, it illustrates that by increasing HRT work stress the Technology enabled performance will also be increase.

Conclusion

This study objective is to illustrate the effects of technostress inhibitors & HRT work stress on Performance outcomes. Quantitative approach had utilized with survey questionnaire in order to get data. 507 respondent's responses has been received and evaluated by the help of SPSS and Smart PLS software. The test of reliability and validity conducted through PLS algorithm and no problems were evaluated with the results. Moreover, the direct and indirect effects were diagnosed by the method of bootstrapping. However, the results represented that the HRT governance involvement and HT IT-knowledge has a negative and insignificant impact on HRT work stress. While, top management HRT support also shows negative but significant impact on HRT work stress. The HRT innovative climate has positive but insignificant impact on HRT work stress. Additionally, the HRT work stress represents negative and insignificant effects on organization commitment and job satisfaction of employees but it effects positively and significantly on negative affectivity and technology enabled performance.

According to the results of this study when the employees of HR department are given with proper top management HRT support in their organizations than their HRT work stress will decrease. Due to this their negative affectivity will also be decrease and their technology enabled performance will also enhance.

Managerial implication

This research found that HRT support of top management have a significant impact and it negatively impacted the work stress of HRT (Technostress) and the study also determine positive but significant impact of HRT work stress on negatively effectiveness & the enabled performance related to technology. However, this study recommends few suggestions for Supervisors, reducing the impacts of Technostress. However, for educating their staff about new technologies in daily routine. Additionally, to disprove illogical idea or immunization of stress, the techniques of stress management must needed. The innovative trainings and technical support would be given by top management for the discharge of newly methods under the collaborative learning. However, for reducing effects for the creator of techno-stress, the unwillingness aspects are highly emotional centered or low efficient. Like in Pakistan, in order to support the environment of collaborative learning, several firms have low efficient structure of ICT, hence, there is a need to use suitable measures for generating necessary structure that support the learning collaboratively. It will decrease the between overall shareholders.

Future recommendations

This study also contains some limitations for future practitioners. First, this paper based on 507 participants however, the research will also use large and different sample size. Second, the data has been gathered from the employees of HR department of different firms located in Karachi, Pakistan just, the future researcher also gathered data from different departments of multiple firms. Third, in this study only four technostress inhibitors are used, that is, HRT governance involvement, HR-IT knowledge, Top management HRT support and HR innovative climate. But in future practitioners will focus on many other constructs. Forth, the research SmartPLS technique future researcher will use many other techniques too. Last, this study is simply check the direct effects among constructs therefore future study would also use some mediators like employee well-being, and technostress creators to check mediation effects. However, the future study would also use more than one dependent variable.

References

Agho, A. O., Price, J. L., & Mueller, C. W. (1992). Discriminant validity of measures of job satisfaction, positive affectivity and negative affectivity. *Journal of occupational and organizational psychology*, *65*(3), 185–195.

Anderson, N. R., & West, M. A. (1998). Measuring climate for work group innovation: development and validation of the team climate inventory. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *19*(3), 235–258.

Ayyagari, R. (2012). Impact of information overload and task-technology fit on technostress.

Bakker, A. B., Demerouti, E., De Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of vocational behavior*, *62*(2), 341–356.

Bersin, J., & by Deloitte, B. (2013). Predictions for 2014. *Bersin by Deloitte*.

Bock, G.-W., Zmud, R. W., Kim, Y.-G., & Lee, J.-N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS quarterly*, 87–111.

Boynton, A. C., Zmud, R. W., & Jacobs, G. C. (1994). The influence of IT management practice on IT use in large organizations. *MIS quarterly*, 299–318.

Cheng, C., Lau, H.-P. B., & Chan, M.-P. S. (2014). Coping flexibility and psychological adjustment to stressful life changes: a meta-analytic review. *Psychological bulletin*, *140*(6), 1582.

Chitturi, R., Raghunathan, R., & Mahajan, V. (2008). Delight by design: The role of hedonic versus utilitarian benefits. *Journal of marketing*, *72*(3), 48–63.

Churchill Jr, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of marketing research*, *16*(1), 64–73.

Florkowski, G. W. (2018). Hr technology systems: an evidence-based approach to construct measurement. In *Research in personnel and human resources management* (pp. 197–239). Emerald Publishing Limited.

Florkowski, G. W. (2019). HR technologies and HR-staff technostress: an unavoidable or combatable effect? *Employee Relations: The International Journal*, *41*(5), 1120–1144.

Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: study of emotion and coping during three stages of a college examination. *Journal of personality and social psychology*, *48*(1), 150.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, *18*(1), 39–50.

Gemzøe Mikkelsen, E., & Einarsen, S. (2002). Relationships between exposure to bullying at work and psychological and psychosomatic health complaints: The role of state negative affectivity and generalized self–efficacy. *Scandinavian journal of psychology*, *43*(5), 397–405.

Ha, Y. M., & Ahn, H. J. (2014). Factors affecting the performance of enterprise resource planning (ERP) systems in the post-implementation stage. *Behaviour & Information Technology*, *33*(10), 1065–1081.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: indeed a silver bullet. *Journal of Marketing theory and Practice*, *19*(2), 139–152.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, *43*, 115–135.

Hewitt, P. L., Flett, G. L., & Mosher, S. W. (1992). The perceived stress scale: Factor structure and relation to depression symptoms in a psychiatric sample. *Journal of psychopathology and behavioral assessment*, *14*, 247–257.

Ibrahim, H., & Yusoff, Y. M. (2015). User characteristics as antecedents of techno stress towards EHRM: from experts' views. *Procedia-Social and Behavioral Sciences*, *172*, 134–141.

Keogh, E., & Reidy, J. (2000). Exploring the factor structure of the Mood and Anxiety Symptom Questionnaire (MASQ). *Journal of personality assessment*, *74*(1), 106–125.

Koo, C., & Wati, Y. (2011). What factors do really influence the level of technostress in organizations?: An empirical study. *New challenges for intelligent information and database systems*, 339–348.

Kossek, E. E., Young, W., Gash, D. C., & Nichol, V. (1994). Waiting for innovation in the human resources department: Godot implements a human resource information system. *Human Resource Management*, *33*(1), 135–159.

Kumar, R., Lal, R., Bansal, Y., & Sharma, S. K. (2013). Technostress in relation to job satisfaction and organisational commitment among IT professionals. *International Journal of Scientific and Research Publications*, *3*(12), 1–3.

Lazarus, R. S. (1984). On the primacy of cognition.

Lazarus, R. S., DeLongis, A., Folkman, S., & Gruen, R. (1985). Stress and adaptational outcomes: The problem of confounded measures.

Locke, E. A. (1976). The nature and causes of job satisfaction. *Handbook of industrial and organizational psychology*.

Mahmood, S. (2007). *Good governance reform agenda in Pakistan: Current challenges*. Nova Publishers.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of vocational behavior*, *14*(2), 224–247.

Nart, S., & Batur, O. (2014). The relation between work-family conflict, job stress, organizational commitment and job performance: A study on Turkish primary teachers. *European journal of research on Education*, *2*(2), 72–81.

Olivas-Lujan, M. R., & Florkowski, G. W. (2010). Does IT governance matter in e-HRM? *International Journal of Business Information Systems*, *5*(2), 134–147.

Ragu-Nathan, T., Tarafdar, M., Ragu-Nathan, B. S., & Tu, Q. (2008). The consequences of technostress for end users in organizations: Conceptual development and empirical validation. *Information systems research*, *19*(4), 417–433.

Ren, F., & Zhang, J. (2015). Job stressors, organizational innovation climate, and employees' innovative behavior. *Creativity Research Journal*, *27*(1), 16–23.

Ringle, C., Da Silva, D., & Bido, D. (2015). Structural equation modeling with the Smart-PLS. *Bido, D., da Silva, D., & Ringle, C.(2014). Structural Equation Modeling with the Smartpls. Brazilian Journal Of Marketing*, *13*(2).

Sambamurthy, V., & Zmud, R. W. (1999). Arrangements for information technology governance: A theory of multiple contingencies. *MIS quarterly*, 261–290.

Selye, H. (1991). History and present status of the stress concept. In *Stress and coping: An anthology* (pp. 21–35). Columbia University Press.

Shaikh, A. A., Akram, M., Rizwan, M., Kousar, S., & Malik, M. (2013). The impact of job stress: An imperative insight into the banking sector. *Journal of Public Administration and Governance*, *3*(3), 294–316.

Shu, Q., Tu, Q., & Wang, K. (2011). The impact of computer self-efficacy and technology dependence on computer-related technostress: A social cognitive theory perspective. *International Journal of Human-Computer Interaction*, *27*(10), 923–939.

Somvir, S. K., & Kaushik, S. (2012). Job satisfaction among library professionals in Haryana state. *International Journal of scientific and research Publications*, *2*(5), 1–4.

Spector, P. E., Jex, S. M., & Chen, P. Y. (1995). Relations of incumbent affect-related personality traits with incumbent and objective measures of characteristics of jobs. *Journal of Organizational Behavior*, *16*(1), 59–65.

Stirpe, L., Bonache, J., & Trullen, J. (2015). The acceptance of newly introduced HR practices: Some evidence from spain on the role of management behavior and organizational climate. *International Journal of Manpower*, *36*(3), 334–353.

Straub, D. W. (1989). Validating instruments in MIS research. *MIS quarterly*, 147–169.

Tannenbaum, S. I., & Dupuree-Bruno, L. M. (1994). The relationship between organizational and environmental factors and the use of innovative human resource practices. *Group & Organization Management*, *19*(2), 171–202.

Tarafdar, M., Pullins, E., & Ragu-Nathan, T. (2011). Impacts of technostress on innovation and performance: The professional sales context.

Tarafdar, M., Tu, Q., Ragu-Nathan, T., & Ragu-Nathan, B. S. (2011). Crossing to the dark side: examining creators, outcomes, and inhibitors of technostress. *Communications of the ACM*, *54*(9), 113–120.

Watson, D., & Clark, L. A. (1984). Negative affectivity: the disposition to experience aversive emotional states. *Psychological bulletin*, *96*(3), 465.

Webster, J. R., Beehr, T. A., & Love, K. (2011). Extending the challenge-hindrance model of occupational stress: The role of appraisal. *Journal of Vocational Behavior*, *79*(2), 505–516.