

# Leading the Innovation: Role of Eustress and Work Engagement as Simultaneous Mediators Between JD-R and Innovative Work Behavior

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## Abstract

**Purpose:** The purpose of study is to explore that how job demands-resources can significantly impact individual state of eustress and work engagement to promote employees' innovative work behavior.

**Methodology:** Qualitative data has been collected from 40 x managers performing supervisory role over the workers involved in organizational creativity and innovation. A semi-structured survey interview has been formulated for qualitative data collection. Interview contents of interviewees have been written and also recorded on audio tape for further analysis. Thematic content analysis technique has been used for content analysis and extraction of themes.

**Findings:** Themes emerged from thematic analysis of qualitative data reveal that Job demands (creativity role expectations & workload), job resources (autonomy & intellectual stimulation) and personal resources (creative self-efficacy & resilience) have direct relationship with innovative work behavior. Moreover, eustress and work engagement act as simultaneous mediators between job demands-resources and innovative work behavior of employees.

**Originality/ Value:** The research study contributes to innovation and JD-R theories with new empirical knowledge by explaining linking mechanism between job demands, job resources and personal resources and innovative work behavior. The core novel contribution of the study is simultaneous mediating role of eustress and work engagement between JD-R and innovative work behavior. Moreover, the study has explored positive role of job demands to stimulate eustress and work engagement that impact innovative work behavior of employees to promote organizational innovativeness.

**Keywords:** Autonomy, creative self-efficacy, creativity role expectations, eustress,

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innovative work behavior, intellectual stimulation, job demands-resources, resilience, work engagement, workload.

## **1. INTRODUCTION**

High-tech IT organizations cannot think of growth and profitability without ensuring their innovative potential. Earlier, it was believed that organizational success can be ensured if new technology is acquired and maximum business assets are built by the organizations. But now nobody can think of success without ensuring sustainable organizational innovative potential. Extant literature also enlighten that competitive organizations cannot succeed in contemporary corporate environment without paying true attention towards sustainable innovation, since rapid changing business landscape compels to be innovative and compete. Moreover, globalization and shortened product life cycle also steer the organizations to be innovative and maintain the desired competitive pace (Anser et al., 2020). Therefore, there is there is not any other substantial option than maintaining innovative potential which can guarantee the sustainability and growth in the present business scenario (Ghardashi et al., 2019).

In organizational perspective innovation is connected with building new thinking, developing improvement consciousness, searching new methods to resolve the issues, taking initiative for exploration of new technologies, adopting novel insights and ensuring their implementation (Akram et al., 2016). Organizational innovation in fact includes two processes exploitation and exploration. When the existing processes, products and services are improved through smaller and incremental improvements these innovative activities come in exploitation process of organizational innovation. On the other hand, exploration process of organization is related to activities which produce entirely new processes, products as well as services. Therefore, today's era stresses to pay attention towards smaller-scale improvement and also completely new innovations to better compete and excel the challenging business landscape (Bani Melhem, 2018).

Different authors viewed regarding innovative work behavior differently. According to West (2002) has stated that a work willingly and consciously introduces and implements novel ideas to promote organizational innovativeness. Likewise, Ezech (2020) opined that IWB of employee is his or her ability to generate novel ideas and transform those ideas into desired innovation. Hence, it may be said that innovative work behavior is realizing, crating, developing, promoting, modifying and finally implementing the novel ideas to promote organizational creativity and innovation. Innovative work behavior brings favorable and positive changes in good, services and business processes to undertake the issues generated owing to changing business scenario on account of globalization and rapidly changing demands of customers. De Jong (2007) has shared that innovative work behavior is actually set of human behaviors which interact to promote novel ideas willfully by the employee and implement to benefit the organization. Moreover, innovative work behavior may be said a multistage process that comprises of identification of problem and seeking solutions through novel ideas to overcome the problem and benefit the work role as well as the whole

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organization (Wojtczuk Turek, 2012). Therefore, it may be concluded that innovative work behavior comprises of a set of human behaviors and distinct stages to generate and implement the novel ideas. Moreover, its key activities or stages include ideas generation, seeking support for shortlisted ideas and finally implementation of ideas to improve work processes, products and services in the benefit of the organization (Reis et al., 2015).

Considering the significance of employees' IWB distinct researchers and practitioners have paid concentrated attention towards its determinants aiming to develop a contemporary and better theoretical explanations to enlighten the organizational leaders that how innovative work behavior of employees may work effectually (Coad et al., 2016). Therefore, numerous researchers have examined the constituents of IWB at individual, work group and organization levels and have claimed that work climate, individual differences, work group, leadership, job characteristics, organizational support, personality traits, motivation, perception about innovation, expectations as well as values are significant determinants of employees' IWB (Scott & Bruce 1994; Anderson & West, 1998; Janssen, 2000).

Theoretical lens opted for this research study is JD-R theory. JD-R model is built on the two underlying psychological processes that play role in developing the job strain and motivation that have grave subsequent impact on employees' performance (Bakker and Demerouti, 2007). It takes into account impact of job demands as well as job resources and personal resources on employees' performance which may be status quo and/ or innovative (Bakker & Xanthopoulou, 2013). Innovative work behavior is mostly viewed by the authors as beyond-status-quo behavior which is concerned with willingness and commitment of employee to undertake innovative activities like creation, promotion and implementation of novel ideas. Further, it depends on individual's cognitive, emotional and physical investment into the work roles. Therefore, job demands as well as job and personal resources (JD-R) have a simultaneous impact on employee's motivation and level of stress to promote the IWB (Carmeli et al., 2014). Therefore, JD-R theory significantly covers pluralistic job and individual aspects to develop better theoretical explanation of phenomena that pertains to successful IWB of employees (Kwon & Kim, 2020).

## **1.2 Research Rational**

There are giant opportunities of knowledge incentive economies like IT sector to grow ahead through advancement in creativity and innovation. In Pakistan almost all public and private businesses use IT and IT enabled services (ITeS). In IT profession continuous change and innovation are essential features. Therefore, without ensuring sustainable innovative potential growth of this sector is not feasible (Digital Pakistan Policy Review, 2018). IT sector has grave potential to pursue to increase their businesses by addressing the customized demands of businesses and masses. In ongoing era quick response as well as first to the market enjoys profitability and success. The organizational innovation is driven by employees by promoting innovative work behavior. Innovative work behavior can range from incremental improvements to developing radically novel ideas that affect products, services, and processes of an organization. HR is an important asset as they possess knowledge, skills and such attitudes that can stimulate and implement useful innovative

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ideas for creation of value for the organization (Bos-Nehles et al., 2017). This study is significant since it takes into account the role of JD-R to promote innovative work behavior to ensure the sustainable creativity and innovation in IT sector of Pakistan.

## **2. Review of Literature**

### **2.1 Impact of Job Demands, Job Resources and Personal Resources on Innovative Work Behavior**

Fiest Demerouti et al. (2001) introduced the concept of Job Demands-Resources (JD-R) on employee performance as well as health and motivation. They focused on work engagement and job burnout perspectives and highlighted the importance of job and individual aspects to promote employee performance. In accordance with Demerouti et al. (2014) when job resources are limited, and job demands are high then employees lack motivation and become stressed which have negative effects on work engagement and job performance of employees. Additionally, JD-R framework is tied with job design and stress theories and states how demands and resources have exclusive impact on the motivation and state of stress (Bakker & Demerouti, 2012). Bakker and Demerouti (2012) stated that 'JD-R theory emerged from prior theories i.e. Two-Factor Theory, the Demands-Control Model (Karasek, 1979), the Job Characteristics Model (Hackman & Oldham, 1980), and the Effort-Reward Imbalance Model (Siegrist, 1996). Therefore, Bakker and Demerouti (2016) emphasized that JD-R predicts job burnout, organizational commitment, work enjoyment, connectedness, work engagement, proactive job crafting behavior, in role work performance and specifically is detrimental in extra role performance i.e., individual innovative behavior. Hence, JD-R theory is important to understand that how innovative work behavior can best be promoted to ensure sustainable creativity and innovation in organizational perspective.

### **2.2 Role of Work Engagement and Eustress as Mediators**

In accordance with many research studies eustress is associated with employee motivation and performance (Quick, et al., 2000). In lines with the opinion of Nelson & Cooper (2007) owing to eustress employee are actively involved in job roles and their commitment and engagement is increased to substantial extent. Another research study also suggested a synonymous view and stated that due to eustress an employee becomes engaged and gets easier into the flow of work and likely to savor the challenges that are being faced in work roles (Nelson & Simmons, 2003). Eustress also has association with innovative performance of employees since it provides stimuli for challenge and beyond the call of duty performance. Meyer et al. (2017) investigated that heavy ICT workers i.e., software developers and specific customized software inventors better performed in the presence of eustress. Tams et al; (2018) suggested that eustress has positive and significant effect on employee engagement, creativity, and innovation. According to Andersson et al; (2020) employees were intensively involved in innovative work behavior who experienced the eustress created by job demands and supported by job resources. According to Tarafdar et al; (2019) eustress is associated with employee engagement and innovative performance. According to Maier et al; (2015) also opined that positive individual outcomes, including hope and innovation specific involvement are related to state of eustress of employees. The study of extant literature

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revealed positive association among JD-R, employee work engagement and IWB. The findings of study of Agarwal et al; (2012) also opine that employee engagement portrays a mediating role between job –individual antecedents and innovative work behavior. It came to know from the study of De Spiegelaere et al; (2014) that relationship between JD-R and IWB was partially mediated by work engagement. According to the opinion of Wang et al. (2020) job resources and personal resources are also positively associated with employee work engagement and innovative work behavior.

### **3. Research Methodology**

#### **3.1 Research Design**

The study is qualitative and has been conducted on IT sector managers involved in creativity and innovation activities of their respective firms. Deductive approach to theorizing with cross sectional data collection technique has been opted for study. According to Petty et al. (2012) the qualitative method is ideal for conducting research studies when relevant theory is immature and true understanding is required to developed regards various phenomena. As, it explains a phenomenon by collecting qualitative data and findings can be generalized purposefully. The population of current research study is managers working in IT companies in Pakistan (Pakistan's IT Industry Review; 2020). However, owing to constraints like time and cost etc. sampling technique has been used for collection of primary data and accordingly integration of data. Data has been collected from 40 x managers.

#### **3.3 Qualitative Data Collection**

Semi-structured, in-depth interviews have been conducted for 40 x managers. In accordance with the objective of the study a script containing interview questions was prepared face-to-face interviews has been conducted. In Face to face interviews highest response rate is achieved and longest and most complex questions are successfully replied by the research participants. Interviews of respondents were recorded using tape recorder and subsequently written notes were prepared from recording for further analysis.

The Naive Assumption Model' has been used as benchmark to conduct interviews. It comprises of comprehensive and appropriate guidance and undertakes a rational process to collect data. Issues of communication as well as ethics are not faced by researcher and research participants and thoughts of respondents are matched perfectly. Motivation on both sides remains interacted and information collection process of research is completed through empirically to get desired outcomes of study under the theme of this assumption model (Secor, 2010).

#### **3.4 Qualitative Data Analysis and Results Interpretation**

Thematic Analysis' approach has been used for analysis of qualitative data. Under the lens of relevant theory this qualitative data analysis approach explores genuine outcomes and hence it is an appropriate approach to bring empirical outcomes in lines with the objective of study (Lester et al., 2020). In addition, recurring themes which were emerged from interview contents were also mapped and indexed properly using proper process. Therefore, to



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undertake explanatory purpose, qualitative contents were analyzed and mapped very carefully and preliminary typologies were devised. Under the umbrella of thematic approach contents were read, understood, then coded properly. Then made their categories and distinct relationships among these categories were devised to develop understanding. Accordingly, various themes were finalized and conclusions were established. Finally under the lens of JD-R and IWB theories results have been discussed.

#### **4. Findings of Research Study**

##### **4.2 Data Analysis and Interpretation of Results**

From audio recording written notes have been prepared and analyzed. Respondents shared their agreement as well as disagreement regarding impact of JD-R on IWB.

In the relationship between creativity role expectations and innovative work behavior most of respondents have supported that relationship exists. Themes emerged from research participants' perspective includes; *Expectations of manager develop understanding and one behave innovatively. Creativity becomes employees' preferred intent when job desires, therefore, they come under eustress and act innovatively.* Themes emerged from the qualitative data reveal that there is positive relationship between intellectual stimulation and innovative work behavior. Similarly, in the relationship of workload and innovative work behavior themes emerged include; *Workload being a challenge steers one to think out of the box and behave innovatively. Workloads challenge the status quo, initiate learning and development and steer one to undertake innovative work behavior.* These themes clearly state that there is a positive relationship between workloads and innovative work behavior.

Themes emerged in the context of this relationship include; *Autonomy gives opportunity and motivation to go beyond status quo actions and act innovatively. Autonomy builds sense of flexibility in job that acts as source of inspiration and one uses more cognition abilities to innovate. Mind works proactively and innovative outcomes are ascertained when one is made autonomous and is kept free from strict supervision.* Therefore, from these themes it may be concluded that a significant relationship exists between autonomy and innovative work behavior. Themes extracted from the contents analysis with respect to relationship of intellectual stimulation and innovative work behavior include; *Intellectual stimulation is source of inspirational motivation that stimulates innovative work behavior. Intellectual stimulation extends intellectual abilities and one behaves innovatively. Intellectual stimulation is source of developing divergent thinking that stimulates innovate work behavior.* Therefore, these themes clearly support the relationship between intellectual stimulation and innovative work behavior. Relationship of creative self-efficacy and innovative work behavior analyzed from the contents reveals; *Creative self-efficacy develops belief on self creative abilities and one act innovatively.* Therefore, from this theme it may be concluded that there is a positive relationship between creative self-efficacy and innovative work behavior. The opinion of research participants regarding relationship between resilience and innovative work behavior indicates; *Resilience builds confidence on self-abilities that gives strength and employee invests one-selves into creative endeavors to promote innovative work behavior. Resilience maintains mental equilibrium that enriches mental abilities and steers one*

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to act innovatively. Therefore, these themes indicate that there is a positive relationship between resilience and IWB.

In the relationship between creativity role expectations, work engagement and innovative work behavior, all participants have agreed that creativity role expectations positively impacts work engagement that stimulates innovative work behavior. Themes emerged from the data analysis revealed; *Creativity role expectations generate positive affective state to get engage and one behaves innovatively. Creativity role expectations boost employees' morale to get engage and behave innovatively.* Most of the participants agreed that work engagement has mediating impact between workload and innovative work behavior. Themes emerged in this relationship include; *Workload gives challenge to get engage into the work roles and work engagement steers one to behave innovatively.* Therefore, relationship between workload and work engagement has been confirmed from these themes.

Similarly, in the relationship between autonomy, work engagement and innovative work behavior themes reveal; *Autonomy gives opportunity to willingly involve into the work roles that explores novel ideas and one behaves innovatively. Autonomy gives sense of responsibility and develops confidence that motivate one to get engage into the job activities that stimulates innovative work behavior.* Therefore, it is obvious from these themes that work engagement has mediating impact between autonomy and innovative work behavior. All respondents have also agreed that intellectual stimulation fosters work engagement that positively impacts innovative work behavior. Themes emerged from contents analysis reveal; *Intellectual stimulation boosts intellectual abilities and one gets engage into the work roles that further stimulates the innovative work behavior as engaged person is more involved into diversified thinking.*

Themes emerged pertaining to the relationship between creative self-efficacy, work engagement and innovative work behavior include; *Creative self-efficacy establishes positive self-perception that engages into the work roles and one behaves innovatively.* This theme indicates that creative self-efficacy positively impacts work engagement that further stimulate the innovative work behavior. In the mediating role of work engagement resilience and innovative work behavior themes that emerged include; *Resilience being ability to remain persistent in adverse circumstances motivates one to invest one-selves into the work roles that further stimulate innovative work behavior".* Therefore, mediating role of work engagement between resilience and innovative work behavior has been confirmed by this thematic analysis.

Similarly, the mediating role of eustress between creativity role expectations and innovative work behavior has also been supported by the most of respondents. The themes emerged in this regard include; *Creativity role expectations develop pleasurable work pressure which motivates one to undertake innovative endeavors. Creativity role expectations being employer's preferred intent positively pressurizes the employee towards creativity and blows mind proactively that stimulates creative actions and innovate work behavior is ascertained.*

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Likewise, most of the respondents supported that workloads positively affect eustress and eustress has a positive impact on innovative work behavior. Themes emerged from the contents analyses reveal; *rational workloads encompass challenging element that motivates and keeps the employee under eustress by creating positive emotions and commitment towards the job that encourage creativity and stimulate innovative work behavior.* In the relationship of autonomy, eustress and innovative work behavior, most of respondents also opined that eustress has mediating impact between autonomy and innovative work behavior. Themes emerged from the data analysis reveal; *Autonomy boosts one's motivation and institutes a positive pressure to utilize more abilities into professional roles that result into innovative work behavior. An autonomous person, being motivated, remains under positive work stress that further strengthens cognitive abilities to explore and utilize the novel ideas that ensures innovative work behavior.*

All research participants have agreed that intellectual stimulation is positively related to eustress and eustress positively affects the employees' innovative work behavior. Themes emerged from the data analysis include; *Intellectual stimulation develops intellectual abilities that stimulate positive work pressure towards the job under which mind works proactively and one behaves innovatively. Leader's intellectual support keeps one under pleasant stress through confidence building that develops divergent thinking and innovative work behavior is flourished.* Pertaining to the relationship of creative self-efficacy, eustress and innovative work behavior, themes revealed from the data analysis include; *Creative self-efficacy develops belief on self-capabilities and stimulates pleasurable tension that keep under eustress and one behaves innovatively.* These themes obviously indicate that eustress mediates the relationship between CSE and IWB.

Most of the respondents agreed that resilience is positively associated with eustress and eustress has a positive impact on innovative work behavior. The themes emerged from the respondents' feedback include; *Resilience intrinsically motivates and keeps one under pleasurable work stress that further develops innovative work behavior. Resilience acts as boosting agent to take the work pressure positively that stimulates innovative thinking and one behaves innovatively.* Therefore, from the qualitative data analysis it may be opined that work engagement and eustress are developed from job demands, job resources and personal resources and may further enhance the innovative work behavior of employees in the workplace scenario.

## **5. Conclusion and Recommendations**

The study is concerned with the role of job demands, job resources and personal resources to promote innovative work behavior of employees under the simultaneous mediating role of eustress and work engagement. Thematic analysis has been carried out on contents of interviews of managers. Most of research participants opined that job resources have potential to contribute towards eustress and work engagement and improve innovative work behavior of employees. Similarly role of personal resources has also been emerged very positive. The interviewees clearly stated that personal resources resilience and creative self-efficacy have strength to promote eustress, work engagement and innovative work behavior.



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Role of job demands has also been emerged positive and supporting to promote eustress, work engagement and innovative work behavior. Most of research participants have opined that workload and creativity role expectations act as challenge demand and have positive impact on employees health, work engagement and innovative performance. Moreover, interviewees also stated that eustress and work engagement are significant variables which adequately mediate the relationship between job demands, job resources and personal resources.

The study has significant contribution for JD-R and IWB literatures since new knowledge has been explored which gives enriched understanding pertaining to various paths which affect the innovative work behavior via job demands, job resources and personal resources. . This study has practical implications for IT sector professionals. Since, it has provided valuable knowledge pertaining to individual and contextual determinants on which IT manager work most of the for improvement. Therefore, using these novel insights IT sector managers can improve innovative work behavior of their employees.

This study has been conducted using qualitative approach, future studies may opt of both qualitative and quantitative approaches to develop better understanding regarding the phenomena through which Job demands, job resources and personal resources impact innovative work behavior. Moreover, more intervening and moderating variables may be used for further extension of understanding pertaining to the role of job demands, job resources and personal resources and innovative work behavior.

## References

1. Agarwal, U. A., Datta, S., Blake-Beard, S., & Bhargava, S. (2012). Linking LMX, innovative work behaviour and turnover intentions: The mediating role of work engagement. *Career development international*, 17(3), 208-230.
2. Andersson, M., O. Moen, and P. O. Brett. 2020. "The Organizational Climate for Psychological Safety: Associations with SMEs' Innovation Capabilities and Innovation Performance." *Journal of Engineering and Technology Management* pp 55-56.
3. Anser, M.K., Yousaf, Z., Khan, A. and Usman, M. (2020), "Towards innovative work behavior through knowledge management infrastructure capabilities: mediating role of functional flexibility and knowledge sharing", *European Journal of Innovation Management*.
4. Bakker, Arnold B., & Demerouti, Evangelia. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
5. Bakker, Arnold B., & Demerouti, Evangelia. (2016). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-285.
6. Bakker, Arnold B., & Xanthopoulou, Despoina. (2013). Creativity and charisma among female leaders: The role of resources and work engagement. *The International Journal of Human Resource Management*, 24(14), 2760-2779.
7. Bos-Nehles, A., Bondarouk, T. and Nijenhuis, K. (2017a), "Innovative work behaviour in knowledge intensive public sector organizations: the case of supervisors in The Netherlands fire services", *The International Journal of Human Resource Management*, Vol. 28 No. 2, pp. 379-398.
8. Coad, A., Segarra, A. and Teruel, M. (2016), "Innovation and firm growth: does firm age play a role?", *Research Policy*, Vol. 45 No. 2, pp. 387-400.

*Leading the Innovation: Role of Eustress and Work Engagement as Simultaneous ...*

9. De Jong, J & Den Hartog, D (2007), 'How leaders influence employees' innovative behaviour', *European Journal of Innovation Management*, vol. 10, no. 2, pp. 41–64.
10. Janssen, Onne. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287-302.
11. Digital Pakistan Policy, May (2018) [http://Moib.Gov.Pk/Downloads/Policy/Digital Pakistan Policy](http://Moib.Gov.Pk/Downloads/Policy/Digital%20Pakistan%20Policy).
12. Demerouti, Evangelia, Bakker, Arnold B, & Leiter, Michael. (2014). Burnout and job performance: The moderating role of selection, optimization, and compensation strategies. *Journal of Occupational Health Psychology*, 19(1), 96.
13. Demerouti, Evangelia, Bakker, Arnold B., Nachreiner, Friedhelm, & Schaufeli, Wilmar B. (2001). The job demands-resources model of EUSnout. *Journal of Applied Psychology*, 86(3), 499-512.
14. Ford, Cameron M. (1996). A theory of individual creative action in multiple social domains. *Academy of Management Review*, 21(4), 1112-1142.
15. Hackman, J R, & Oldham, Greg R. (1980). *Work redesign*. Reading, MA: Addison-Wesley. 126
- Hakanen, Jari J., Bakker, Arnold B., & Schaufeli, Wilmar B. (2006). EUSnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495-513.
16. Khan, M.A., Ismail, F.B., Hussain, A. and Alghazali, B. (2020), "The interplay of leadership styles, innovative work behavior, organizational culture, and organizational citizenship behavior", *SAGE Open*, Vol. 10 No. 1, 215824401989826.
17. Pakistan's IT Industry Overview (2020), Pakistan Software Export Board Ministry of Information Technology & Telecommunication Government of Pakistan. [pseb.org.pk](http://pseb.org.pk) [moitt.gov.pk](http://moitt.gov.pk) [techdestination.com](http://techdestination.com), pp 03-11.
18. Karasek, Robert A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2), 284-309.
19. Meyer, A. N., L. E. Barton, G. C. Murphy, T. Zimmermann, and T. Fritz. 2017. "The Work Life of Developers: Activities, Switches and Perceived Productivity." *IEEE Transactions on Software Engineering* 43 (12): 1178–1193.
20. Nelson, D. L., & Simmons, B. L. (2003). Health psychology and work stress: A more positive approach. *Handbook of occupational health psychology*, 2, 97-119.
21. Nelson, D., & Cooper, C. L. (Eds.). (2007). *Positive organizational behavior*. Sage.
22. Ogola, M., Linge, K., Sikalieh, D., & Linge, T. (2017). The Influence of Intellectual Stimulation Leadership Behaviour on Employee Performance in SMEs in Kenya. *International Journal of Business and Social Science*, 8 (3), 89-100.
23. Quick, J.C., Quick, J.D., Nelson, D.L. and Hurrell, J.J. (2000). *Preventive Stress Management in Organizations*. Washington, DC: American Psychological Association.
24. Tams, S., J. B. Thatcher, and V. Grover. 2018. "Concentration, Competence, Confidence, and Capture: An Experimental Study of Age, Interruption-Based Technostress, and Task Performance." *Journal of the Association for Information Systems* 19 (9): 858–902
25. Akram, T., Lei, S., & Haider, M. J. (2016). The impact of relational leadership on employee innovative work behavior in IT industry of China. *Arab Economic and Business Journal*, 11, 153-161. doi:10.1016/j.aebj.2016.06.001
26. Bani-Melhe, Rachid, Z. S., & Mohamed A. (2018). Determinants of employees' innovative behavior. *International Journal of Contemporary Hospitality Management*, 30, 1–20.
27. West, M. A. (2002). Sparkling fountains or stagnant ponds: An integrative model of creativity and innovation implementation in work groups. *Applied Psychology*, 51(3), 355-387. doi: <https://doi.org/10.1111/1464-0597.00951>
28. Ezech, L. N., Chukwuemeka, E. E., Stephen, E. I., Nnaebue, C. I., & Rachael, A. O. (2020). Association of Innovative Work Behaviour, Organizational Frustration and Work-family Conflict among Private Sector Employees. *Asian Journal of Advanced Research and Reports*, 8(2), 20-29. doi:

*Leading the Innovation: Role of Eustress and Work Engagement as Simultaneous ...*

<https://doi.org/10.9734/ajarr/2020/v8i230195>

29. Wojtczuk-Turek, A. (2012). Innovative work behavior and psychological capital-analysis of relationships. *Kwartalnik Naukowy*, 3(19), 71-88.
30. Reis, D., Hoppe, A., & Schroder, A. (2015). Reciprocal relationships between job resources, personal resources, work engagement and health: Evidence for gain cycles. *European Journal of Work and Organizational Psychology*, 24, 59–75.
31. 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*, 235-258.
32. Carmeli, Abraham, M., Alexander, S., & Kaufman, J. C. (2014). Emotional intelligence and creativity: The mediating role of generosity and vigor. *The Journal of Creative Behavior*, 48(4), 290-309. doi: 10.1002/jocb.53
33. Kwon, K., & Kim, T. (2020). An integrative literature review of employee engagement and innovative behavior: Revisiting the JD-R model. *Human Resource Management Review*, 30(2), 100704.
34. Tarafdar, M., Cooper, C. L., & Stich, J. F. (2019). The techno stress trifecta-techno eustress, techno distress and design: Theoretical directions and an agenda for research. *Information Systems Journal*, 29 (1), 6-42. doi:10.1111/isj.12169
35. Maier, C., Laumer, S., Weinert, C., & Weitzel, T. (2015). The effects of techno stress and switching stress on discontinued use of social networking services: A study of face book use. *Information Systems Journal*, 25(3), 275-308.
36. Wang, S., Eva, N., Newman, A., & Zhou, H. (2020). A double-edged sword: the effects of ambidextrous leadership on follower innovative behaviors. *Asia Pacific Journal of Management*, 1-22. doi: <https://doi.org/10.1007/s10490-020-09714-0>.
37. Lester, J. N., Cho, Y., & Lochmiller, C. R. (2020). Learning to do qualitative data analysis: A starting point. *Human Resource Development Review*, 19(1), 94-106.
38. Bakker, A., & Demerouti, E. (2012). *Job Demands-Resources Theory*. Chichester, West Sussex, England: Wiley- Blackwell.
39. Creswell, J. W. (2012). *Planning, conducting, and evaluating quantitative and qualitative research* (fourth edition). Boston: Pearson Education Inc.