

## A Study on the Relationship between Technostress and Employee Creativity with Perceived Organizational Support

Raunak Mishra

Indian Institute of Management, Kozhikode, India  
raunakm12fpm@iimk.ac.in

**Abstract:** Employee creativity is important to all kinds of organizations whether they're small or large whether they're for-profit or not-for-profit it doesn't matter. There has been a lot of research done in the past on employee creativity to assess how significant it is. This research has been done not just from the perspective of the organization, but also from the perspective of the employee's work happiness and job performance. In this essay, we made an effort to investigate the influence that technostress now exists in the organization has on employee creativity and how it will continue to do so in the future. We tried to foresee the result by focusing on the link between the two to indicate its future consequences and explain how it would be beneficial to both the organization and the individual. This was accomplished by highlighting the connection between the two.

**Keywords:** *Employee creativity, technostress, perceived organizational support.*

---

### 1. Introduction

Employee creativity is considered the ability to generate a unique or novel idea that is useful for the organization in making the process more efficient and helpful. It is to be taken into consideration that creativity is examined through goal orientation (Oldham & Cummings, 1996). The inclination of employees towards creating anything novel for the organization is basically the result of an internal factor. Employees are determined by their aspiration to perform in such a way. These aspirations come because of the motivation that they have in themselves, and not because they want to receive any external reward (Nohria, Groysberg, & Lee, 2008). Also, there are examples of external factors where the organization motivates the employees to come up and show their out-of-the-box thinking so that they can compete with the other companies' products and be appreciated by the management. These external factors which are influencing the employee's creativity can be divided into active and passive perspectives, like those who seek to attain favorable judgments and those who avoid unfavorable judgments, respectively.

Furthermore, there has been a lot of empirical work done in the organizational behavior psychology literature, and it is surprising to know that salary bonuses and rewards for creative work are actually not very effective at motivating creative work. So, salary is probably important to give to employees for reasons having to do with stressing creativity, but specifically in terms of motivating creative work through financial bonuses. Creativity brings togetherness among the employees to work in the same environment with each other. Many times, they discussed the idea with their subordinates to take the advice so that if something is missing that can be fulfilled; it's a kind of direct feedback that they are getting (Zhao & Rosson, 2007). These creative processes and thinking in the organization help in building alliances with the teammates at the workplace. Team bonding in an organization also helps the general commitment among representatives. Communications are almost certain among collaborators, even those individuals who don't cooperate consistently. An expanded degree of solace in a group is a positive for any association.

By building up a situation where innovative personalities are welcome, organizations can draw in increasingly gifted experts. They can fill positions all the more viably and proficiently. Apart from this, there is another set of researchers who have worked on employee creativity and stress. In the article (Hon, 2013), he studied how the requirement for creativity improves service performance with the help of a multilevel analysis study of the stress in the working environment. According to Naseem (1984), who tried to study the mediating role of emotional intelligence between job stress and employee creativity. Motivated by the challenges and the gaps in the literature in the abovementioned studies, the IS researchers need to find out whether there is an impact of technostress on employee creativity. Also, we have looked into perceived organizational support by the organization literature and how it's going to influence the relationship between

the technostress and employee creativity in this relationship. Acknowledge the above-mentioned studies and literature on employee creativity and technostress.

We aim to address the key research questions (RQ) that this study aims to address:

**RQ:** *How does technostress is going to impact employee creativity in the organization in the presence of perceived organizational support?* This article is organized in the following way: the next section is going to be the theoretical background where we will describe the technostress and employee creativity relationship and talk about the exciting literature. We will also discuss perceived organizational support and its impact on the relationship between technology and employee creativity. After that, we will move towards the research model and hypothesis development section, and then, subsequently, we will talk about the implications and future prospects of this research work in the discussion and conclusion section.

## 2. Theoretical Background

In this paper, we attempted to collect literature from 1993 to 2016 on employee creativity, organizational stress, and perceived organizational support for employees. For reviewing the article, the main purpose was to collect the literature, and the following libraries were searched for studies related to employee creativity, technostress, and perceived organizational support. Mostly useful and apposite online published papers and cited books are considered from EBSCO Host Database, JSTOR Database, SAGE Database, and Google Scholar using a number of keywords including creativity, employee creativity, organizational creativity, creative behavior, and creativity and innovation. The main keywords used during the search were employee creativity, creativity in the organization, technostress in the organization, perceived organizational support, and creative innovation. The abstracts of 248 journal articles were reviewed and, based on the relevance of the articles to the main topic, 48 articles were selected for in-depth study. A comparable impact happens with current workers, who are bound to remain on board in light of the innovative condition. They become content with their activity and focus on staying with the organization for the long haul.

Positively, the most significant part of creativity is the manner in which it influences the work (Karkoszka & Honorowicz, 2009). With the capacity to think imaginatively and fresh, workers are bound to concoct novel and inventive answers to the deterrents they experience. This excitement to take care of issues can prompt better approaches to achieve assignments and run the association all the more viably. In many past organizational behavior studies, they mentioned the benefit of a creative workplace. Also, in some of the literature, it is explicitly mentioned that companies that provide a creative environment for the employee help the employee to provide psychological distance from their problems during work (Rothaus, Morton, & Hanson, 1965). This wonder explains why it's simpler to offer companions guidance than take care of your issues; the issue isn't happening in the present and influencing you. Additionally, a study found that expanding spatial separation among people and issues helps inventiveness and efficiency. Since creative work environments allow employees to look at bigger problems, they experience more mental separation and can think of more creative solutions. Starting with (Woodman, Sawayer, & Griffin, 1993) they suggested the interactional model where they talked about the creative process, creative product, person, and situation and then integrated these constructs with the others.

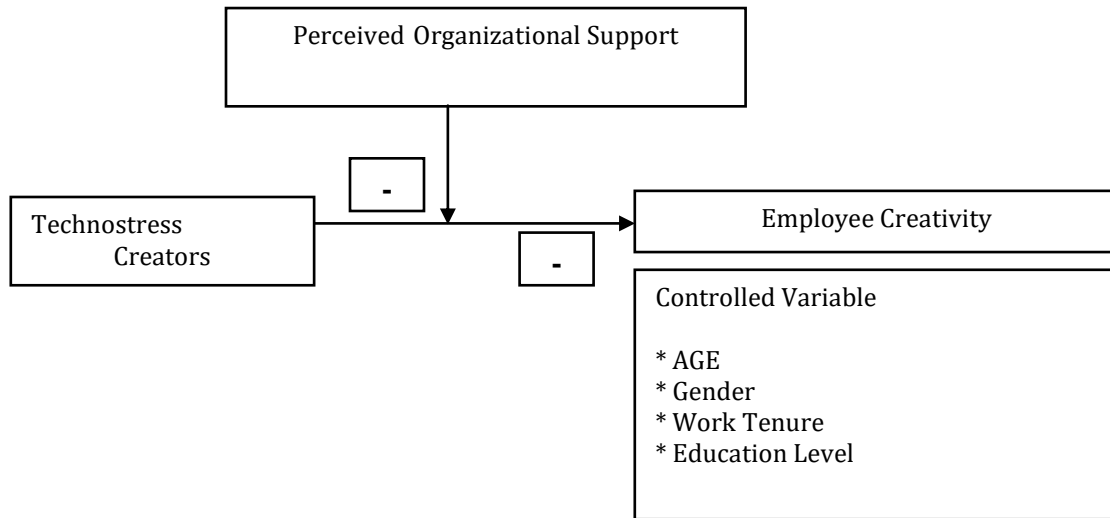
In their article, they talked about the conceptual model of the contextual factor and how this is going to affect employee creativity directly. In their model, they connected social capital to intrinsic motivation, knowledge, and then employee creativity (Chen & Kaufmann, 2008) (Simonton, 1984) discuss how social psychology creativity and social interaction influence creativity. According to (Greg, Douglas, Schmidt, Lavender & Peers, 1996), there are three characteristics of the organizational context that are: job complexity, supportive supervision, and controlling supervision, and with the help of these, they examined the independent and joint contribution of employee creativity. (Zhang and Bartol, 2010) tried to understand the creative process engagement with the help of the leadership, empowerment, and creativity theories, to provide a link between how leader encouragement of creativity moderated the connection between psychological empowerment. Also, we looked at the perceived organizational support (POS), which, according to (Eisenberger and Huntington, 1986), is the degree to which an employee thinks that his or her employer or company cares about him or her and what he or she brings to the company. There's a fine balance between the two costly or poorly planned POS (Akgunduz, Alkan, & Gök, 2018).

### 3. Research Model and Hypothesis Development

Management researchers are always interested in the study of how to work in the organization is associated with stress and this can be seen in the literature too (Cavanaugh, Boswell, Roehling, & Boudreau, 2000) (Glazer & Beehr, 2005) (Jex & Bliese, 1999) (LePine & Van Dyne, 1998). In recent past years, most researchers had talked about employee stress, creativity, organizational innovation, psychological capital and the behavior of employees; much literature also talked about what is the individual level factor which is affecting the growth of the organization (Abbas & Raja, 2015). (Arnetz & B.B, 1997 ) in his paper, he presented technological stress and studied how the psychophysiological aspects and working with modern information technology will be helpful from the organizational point of view (Hon, Chan, & Lu, 2013). This literature talked about how the work-related stress and creativity of employees are associated with the feedback of the supervisor. Based on that literature we argue that the relationship between the technostress creator and the employee and with that put the fourth of the following hypothesis:

**Hypothesis 1:** Technostress creator is negatively influencing the employee creativity.

**Figure 1: Research Model**



#### Moderating Influence of Perceived Organizational Support

In the existing literature perceived organizational support is used for employee creativity so that their creativity is used as a source for organizational competitiveness (Ibrahim, Isa, & Shahbudin, 2016), also employee experience the perceived support from the organization which benefits the organization's growth. Diliello, Houghton, & Dawley (2011) study talked about the perceived work-group support and how it's going to ice-break the employee potential for creativity so that they can be useful for the organization. Also when we are considering the technostress and POS studies are showing the moderating inversely influence of POS on the technostress (Wang & Shu, 2008). Based on the above studies we argue that there will be a negative influence of POS on the technostress creator and employee creativity relationship. Therefore we hypothesize:

**Hypothesis 2:** Perceived organizational support negativity moderates the relationship between the technostress creator and employee creativity.

**Controlled Variables:** As our study focused on employee creativity, the controlled variable used for it are employee age, gender, work tenure in the organization and education level.

#### 4. Methodology

We will be using mixed-methods research designs "include quantitative and qualitative aspects" (Tashakkori and Teddlie 1998, p. 5). Mixed-methods designs are especially effective within the IS field since the nature of the environment changes regularly and researchers typically struggle to derive major conclusions from current theories and views (Venkatesh et al., 2013). Mixed-methods designs provide three distinct advantages: the capacity to "address confirmatory and explanatory research issues," "give stronger conclusions than a single method or viewpoint," and "generate a broader variety of divergent and/or complementary perspectives" (Venkatesh et al., 2016, p. 437). Given the overall dearth of research on technostress in a hospital environment, a mixed-methods approach is ideal for our study. The mixed-methods design of the present study began with three research questions: one qualitative, one quantitative, and one that used both qualitative and quantitative approaches (Venkatesh et al., 2016).

Our targeted population sample included management school graduates who completed a two-year postgraduate program at a public institution in India between 2018 and 2021. The institute's alumni database included names, roll numbers, email addresses, phone numbers, etc. We're seeking graduates from all batches. The survey email invitation included details on the study and requested that participants respond to the survey within a week. By assuring them of their privacy and promising to share the study's findings with them, we hoped to increase their willingness to take part. We will be using the scales which have been used in the past to measure Technostress creators (Tarafdar et al., 2011). How much do you disagree or agree with each statement (1-to-7-point scale; "1" means "Strongly disagree" and "7" represents "Strongly agree")?

##### Techno-Complexity

- ❖ "I do not know enough about the new ICTs to handle my job satisfactorily".
- ❖ "I do not find enough time to study and upgrade my ICT skills".
- ❖ "I need a long time to understand and use new ICTs".

##### Techno-Insecurity

- ❖ "Because of new ICTs, I feel a constant threat to my job security".
- ❖ "Because of new ICTs, I feel a constant need to update my skills to avoid being replaced".
- ❖ "Because of new ICTs, I feel constant threat by co-workers with newer ICT skills".

##### Techno-Invasion

- ❖ "Because of ICTs, I spend less time with my family".
- ❖ "Because of ICTs, I have to be in touch with my work even during my vacation".
- ❖ "Because of ICTs, I have to sacrifice my vacation and weekend time to keep current on new ICTs".

##### Techno-Overload

- ❖ "I am forced by ICTs to work much faster".
- ❖ "I am forced by ICTs to do more work than I can handle".
- ❖ "I am forced by ICTs to work with very tight time schedules".

Also, for data analysis we will be using the SPSS tool, the statistical analysis of data is performed with the help of a piece of software called SPSS (Statistical Package for the Social Sciences), which is also referred to as IBM SPSS Statistics. Although its first use was in the area of social sciences, its usage has now grown into other data markets, despite the fact that the name SPSS symbolizes its history in that discipline.

#### 5. Conclusion and Recommendations

Due to the paucity of research that has been done on the direct influence that technology has on the creativity of employees. In addition, the link between the two is moderated by people's perceptions of the support they receive from their organizations. The goal of this essay was to contribute to the rapidly expanding body of research on technostress. The findings of this research indicate, on the whole, that a certain degree of stress is required since it will have a good effect on the well-being of both the workers and the organizations that they work for. It is intended that the results of this research will give valuable information and will be helpful to

organizations in the management of stress in the workplace, particularly stress caused by the use of technology. This type of research enables managers within an organization to better understand their staff members and to assist those staff members in realizing their full creative potential. This has consequences for the future of the organization.

We are considering using a mixed-method approach for this research in the progress report, as well as for our future research and methodology. During this, we will conduct interviews with people working in the IT field, and then find out the outcomes. The purpose of this study is to provide a comprehensive definition of technostress. To rephrase, we may say that the effects of technostress are both helpful and detrimental. This study presents (and assesses) a complete model of technostress in the context of health information technology and nursing. The article identifies a number of challenge and hindrance techno-stressors, as well as the positive and negative psychological emotions that evoke, and investigates the connection between these reactions and job satisfaction, turnover, and dissatisfaction. Overall, we believe our research will encourage IS researchers to reconsider the advantages and disadvantages of technostress in organizations and prompt them to do further research on the subject, especially in the medical field.

## References

- Abbas, M. & Raja, U. (2015). Impact of psychological capital on innovative performance and job stress. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 32(2), 128-138.
- Akgunduz, Y., Alkan, C. & Gök, Ö. A. (2018). Perceived organizational support, employee creativity and proactive personality: The mediating effect of meaning of work. *Journal of Hospitality and Tourism Management*, 34, 105-114.
- Arnetz, B. B. (1997). Technological stress: psychophysiological aspects of working with modern information technology. *Scandinavian journal of work, environment & health*, 97-103.
- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V. & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among US managers. *Journal of applied psychology*, 85(1), 65.
- Chen, M. H. & Kaufmann, G. (2008). Employee creativity and R&D: A critical review. *Creativity and Innovation Management*, 17(1), 71-76.
- Diliello, T. C., Houghton, J. D. & Dawley, D. (2011). Narrowing the creativity gap: The moderating effects of perceived support for creativity. *The Journal of Psychology*, 145(3), 151-172.
- Eisenberger, R., Huntington, R., Hutchison, S. & Sowa, D. (1986). Perceived organizational support. *Journal of Applied psychology*, 71(3), 500.
- Glazer, S. & Beehr, T. A. (2005). Consistency of implications of three role stressors across four countries. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 26(5), 467-487.
- Greg, R., Schmidt, D. C., Lavender, R. G., Schmidt, C. & Peers, P. (1996). Active Object-An Object Behavioral Pattern for Concurrent Programming.
- Hon, A. H. (2013). Does job creativity requirement improve service performance? A multilevel analysis of work stress and service environment. *International Journal of Hospitality Management*, 35, 161-170.
- Hon, A. H., Chan, W. W. & Lu, L. (2013). Overcoming work-related stress and promoting employee creativity in the hotel industry: The role of task feedback from supervisor. *International Journal of Hospitality Management*, 33, 416-424.
- Ibrahim, H. I., Isa, A. & Shahbudin, A. S. M. (2016). Organizational support and creativity: The role of developmental experiences as a moderator. *Procedia Economics and Finance*, 35, 509-514.
- Jex, S. M. & Bliese, P. D. (1999). Efficacy beliefs as a moderator of the impact of work-related stressors: a multilevel study. *Journal of applied psychology*, 84(3), 349.
- Karkoszka, T. & Honorowicz, J. (2009). Kaizen philosophy is a manner of continuous improvement of processes and products. *Journal of Achievements in Materials and Manufacturing Engineering*, 35(2), 197-203.
- LePine, J. A. & Van Dyne, L. (1998). Predicting voice behavior in work groups. *Journal of applied psychology*, 83(6), 853.
- Naseem, K. (1984). Job stress and employee creativity: The mediating role of emotional intelligence. *Stress*, 27, 2-1.

- Nohria, N., Groysberg, B. & Lee, L. E. (2008). Employee motivation. *Harvard business review*, 86(7/8), 78-84.
- Oldham, G. R. & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of management journal*, 39(3), 607-634.
- Rothaus, P., Morton, R. B. & Hanson, P. G. (1965). Performance appraisal and psychological distance. *Journal of Applied Psychology*, 49(1), 48.
- Simonton, D. K. (1984). Artistic creativity and interpersonal relationships across and within generations. *Journal of personality and social psychology*, 46(6), 1273.
- Tarafdar, M., Tu, Q., Ragu-Nathan, T. S. & 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.
- Tashakkori, A., Teddlie, C. & Teddlie, C. B. (1998). Mixed methodology: Combining qualitative and quantitative approaches, 46.
- Venkatesh, V., Brown, S. A. & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly*, 21-54.
- Venkatesh, V., Brown, S. A. & Sullivan, Y. (2016). Guidelines for conducting mixed-methods research: An extension and illustration. Venkatesh, V., Brown, SA, and Sullivan, YW "Guidelines for Conducting Mixed-methods Research: *An Extension and Illustration*," *Journal of the AIS*, 17(7), 435-495.
- Wang, K. & Shu, Q. (2008, September). The moderating impact of perceived organizational support on the relationship between technostress and role stress. In 2008 19th International Workshop on Database and Expert Systems Applications (pp. 420-424). IEEE.
- Woodman, R. W., Sawyer, J. E. & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of management review*, 18(2), 293-321.
- 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.
- Zhao, D. & Rosson, M. B. (2007). Facilitating Employee Creativity: What Can We Learn from Online Work Community?