Effect of Techno-Stress on the Work Behavior of University Teachers

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Abstract: The present study aimed to explore the effect of technostress (TS) on university teachers' work behaviour (WB). The study was quantitative in nature. A total of nine universities were included in the sample of the study, such that each university was selected from each of the nine divisions of Punjab, Pakistan. There was a total of 3786 (1319 female and 2467 male) faculty members in the overall population, from which a sample of 494 faculty members was selected. The present study has been based on standardised questionnaires with written approval directly by research authors via email communication. The standardised instruments on technostress (Ragu-Nathan et al. 2008) and work behaviour (Koopmans, 2015), respectively, were used to collect data from the teachers of the universities regarding technostress and work behaviour. The inferential statistical technique regression was applied to reach the findings that technostress had an inverse effect on the work behaviour of university teachers.

Key Words: Techno-stress, Work Behavior, Task Performance, Counterproductive

Introduction
The teaching and learning behaviour of educational point of view have been eagerly innovated in universal through information and communication technologies (ICT) by the Higher Education Institutions (HEI) temporarily implementing a) flip classroom, b) advance immense online courses and c) increased ICT's learning (Markowitz et al., 2018). Initially, the ICTs have the capacity to get better teaching-learning strategies. Further, it requires basic information and skills from university professionals to effectively use ICTs. As a result, the teaching skills improved likely. Basically, the stress or pressure exerted by the mind is being caused by technology, which is defined as "the negative effect on the humans' attitude, thoughts, and psychology behaviour which could be caused by techno-stress" (Weil & Rosen, 1997). This techno-stress is a type of pressure or mental disorder which is produced due to the excessive use of technology (Lamberton & Stephen, 2016). There have been various reasons for emerging the technostress, but the most prevailing factor is the speedy changes in technology for the deficient or improper training of the technology of employees, thus increasing the work capability of the employees.

In this article, the research has pointed out the effect of TS on WB of HEI teachers and shows the importance of ICT, that is, being accountable for the amplification of technostress in the field of education (Longman, 2013). It has been stated as well-organised modernism, and the unnecessary (too much)make use of technology play a key role in producing techno-stress and anxiety in the employees' life as well as work ability (Ibrahim, Bakar, & Nor., 2007). Basically, anxiety is
related to individuals that have been deficient in knowledge towards operating modern technology, but their use becomes necessary in daily activities of life.

The technology is principally works of the employees working day and night on the computers technology. In the intervening time, the advancement in the field of technology has been the principal reason for the mental and physical illnesses of employees (Ibrahim et al., 2007). So, the main problems that are being observed; are back pain, fatigue, lack of feeling, and collapse (Dunmade, Adegoke, & Agboola, 2014). On the other hand, in the past, there has been a minute investigation in Pakistan on the topic of techno-stress along-with undesirable influence on the work performance of employees (Mushtaque et al., 2021; Siddiqui, Arif, & Hinduja, 2022). Certainly, it is based on the observable factor (techno-stress in higher education departments) that has applied to the research gap which is being discussed, so it could do with looking at the techno-stress from a variety of techniques used in different fields of life. Consequently, the present research study investigates to provide the evidence of a range of proportions of technostress like techno-overwhelmed, techno-anxiety, techno-inferiority complex, and techno insecurity, that is being seriously affected on work behaviour. For that reason, current research has investigated to look at the consequence of TS on the WB of a university teacher.

**Statement of the Problem**

The technostress problem is at the top in the field of education. ICTs are used in the field of education for pedagogy (Peerær & Van Petegem, 2015), and new technologies are taking their place in the education system rapidly (Trucano, 2005). As in the present era of the coronavirus, most of the teaching is done through technology. According to Markowitz et al. (2018) and Qi (2019), institutions of higher education and universities all over the world are using the technologies in education, such as lecture preparation, blended learning, computer-based teaching, and virtual education. All the conditions negatively affect the university teachers' work behaviour and performance which leads to burnout and the intention to escape from the job (Pignata et al., 2016). Therefore, this study focuses on the effect of techno-stress (TS) on the work behaviour (WB) of university teachers.

**Objectives**

1. To find out the relationship between the TS and WB of university teachers.
2. To examine the effect of TS on the WB of university teachers.

**Hypothesis**

H01: There is no significant relationship between the TS and WB of the university's teacher.

H1: TS has a significant effect on the WB of university teachers.

**Delimitations**

This study delimited the university teachers of Punjab, Pakistan. There were nine divisions in Punjab; therefore, the study was delimited to one university from each division of Punjab, Pakistan. What is Technostress

**Literature Review**

**What is Technostress?**

Any sort of emotional, disturbing, mental or physical nervous tension might cause technostress. Thus, this above expression of the term was investigated in 1984 as an up-and-coming disease which is the source of technology and lack of ability to handle with newer-technology. The techno-stress is being applied after the use of technology which was used forcefully by the employees, even though they don't have knowledge of it. Unfortunately, techno-stress has become a widespread element of individual lives and affected on lives of the members of every organization. Thus, it has been investigated that the anguish affected part of individuals' body labels such as technostress, technophobia, cyber plasma, Computer stress, and negative computer usage (Rolon, 2014).
Referring to the definition of Weil and Rosen (1997), it is explained as several negative factors in the various field of an individual’s life, like the judgment, mindset, manner and deeds effected on human physiology and body functioning which is responsible in pitiable performance. Above this discussion, it has cleared that from the description of techno-stress caused two different effects, the first one is on the performance, behaviour, thoughts and feelings Rosen et al. (2013), and the second one is the most horrible contact on the human physiology which has responsible to causes the difficulty in the performance of the individuals. Thus, the final discussion related to techno-stress could be responsible defined as the anxiety which is produced by the un-appropriate or unproductive utilisation of newer technologies.

Techno-Stressors

Stressors damage the individual power of thinking, ideas, novel trends in every aspect, and the capacity of performance and working capability, which decreases with the passage of time. According to Reinke and Chamorro-Premuzic (2014), work-overload and excessive use of ICTs would place the force on the employees; i) ability to do excessive work while using the ICT, although D’Arcy et al. (2014) clarify that more organisational precautions requirements with respect to its use. It seems that stress causes anxiety during the work of individuals would be damaged their work capacity, where the users feel uncomfortable during work (Tarafdar et al. 2007).

The employees have faced the experience of techno-ambiguity such as; a) the system of information that would modify immediately with the passage of time (Tarafdar et al. 2007), b) imperative feature of technology is interconnected decisions that are not communicated to employees, so their performance has decreased (Barber & Santuzzi 2015), and c) employees have no ability to handle the information system (D’Arcy et al. 2014) related to the security system. According to Tarafdar et al. 2007, techno insecurity (TIS) is enforced by the lack of self-confidence and insecurity that individuals would feel anxious when they would be experienced that others may know additional information about newer technologies. Actually, techno complexity (TC) is a kind of stress that employees feel experience constant worry because they have to continuously find out how to use ICTs properly, but unfortunately, they have felt difficulty understanding the comprehensive system of technology (D’Arcy et al. 2014) that would be used various newer procedures. Considerably, all those aspects that would affect the point of techno-stressors consist of the; i) thoughts of an individual in the direction of informational technology (Barley et al. 2011). ii) work-load, iii) work complication, iv) modern-digital literacy and v) the individuals' participation and confidence (Tarafdar et al. 2015).

The Effect of Techno-stressors

The effects of technostress inventors are being studied in a variety of content like education, mechanised and engineering industry (Fuglseth et al. 2014). Furthermore, It has been shown that technostress creators investigate quite a lot of strains (Tu et al. 2005) emerging from the use of ICTs in organisations. Thus, end-users contentment is the most dependable output reported in these studies thoroughly (Fuglseth et al., 2014). These studies showed that employees in any organisation have a negative mindset between the overall effect of TSinventor and end-user contentment. Thoughtlessly, the experimental end result of Ragu-Nathan et al. 2008 study between TSinventor and contentment has shown this would cause a negative impact on employees' working performance. Additionally, the study has examined the involvement of an organisation between techno-stress creators and employees that can be affected both performance and productivity. Advocated by Ioannou and Papazafeiropoulou (2017), the association between TS creators and an individual's performance has shown an unfailing negative association with an individual's mental or physical health.
What is Work Behavior?

There are different conceptualisations of work behaviour and individual productivity. General descriptions make it possible to include all concepts of work behaviours, even those which are not directly related to physical work responsibilities and tasks. Moreover, it has covered all those behaviours that contribute to the achievement of professional and organisational goals for obtaining outstanding outcomes. The principal problem of the modern organisation is upgrading its products and required standard outcomes. It has been investigated that the domain of research in human resources (HR) in order of development and organisational behaviour (OB) is being called "performance of job through productivity", which was supported by the study by Schiemann(2009). In addition, according to Bateman and Snell (2007), in human resources (HR) management, after the development of the human resources portfolio, the job performance of employees and higher authorities have interrelated towards assessment and management that would be considered an essential element. Furthermore, the definition of "employee productivity" is related to performance after the attainment of mandatory attempts or efforts on the job and the work performance of employees. Moreover, human resources management has been associated with exploiting significant work that would be occupied profile and engaged employees in a built-up friendly environment in an organisation (Hellriegel, Jackson, & Slocum, 1999). The study of Jena and Pradhan(2014) predicted how to improve work performance that would inter-relate with managerial policies that affected the whole process of transferring more intentional and mandatory observations.

Task Performance

The multi-component concept of work performance is based on essential levels that would differentiate the characteristic of work performance interrelated toward the behavioural engagements (Borman & Motowidlo, 1993) from predictable goals ending. Apparently, devoting employees' behaviour has illustrated signs of completing their work. Meanwhile, the conclusion of the end result would be able to show the outcome of employees’ job performance (Campbell, 1990). Borman and Motowidlo (1993) investigated establishing a friendly environment in the workplace, the behavioural engagement that would be expected necessary effect for success, but the wide-ranging outcomes have been linked with enthusiasm and cognitive capabilities (Williams & Anderson, 1991) as a distinction to behavioural uniqueness of task performance. Apparently, that has related to the exchange of unprocessed materials into organisation's products that included selling commodities, working a production machine, maintaining their raw structures that have inter-link towards actions for replenishing the raw materials to a new one for achieving better outcomes (Borman & Motowidlo, 1993). Previous research has stated that the performance of tasks consists of job unambiguous behaviours that have related to everyday jobs description. Task performance requires essential cognitive ability; principally, job tasks would be facilitated through knowledge that makes sure job performance and having the skill to grip numerous task skills through task habits (Conway, 1999).

Contextual Performance

Contextual performance (CP) is a link between an interpersonal and volitional task that maintains the social context that has established motivational and organisational goals in the workplace. It does not promote the organisation processes but improves the characteristics of an organisation's workplace (Van Scotter & Motowidlo, 1996), which can be essential for the central part of enhancing the developmental work. CP is recognised as
individual work capacity and behaviour (Borman et al. 2001). Occupation enthusiasm, managerial hold, and interpersonal relationships are noticeable parameters of contextual performance (Borman, Penner, Allen, & Motowidlo, 2001). Furthermore, contextual performance is referred to as a class of pro-social behaviour that can be established through employees in a working system, such characteristics of behaviours are related to employees' performance, but it is not obviously mentioned in the individual job report. Above these mentioned kinds of unspecified behaviours are called pro-social as well as extra-role behaviour. At the bottom of the aforesaid beliefs, a lot of well-known research investigators in this field have declared estimated work efficiency majorly consisted of two main dimensions; the first one is the work's obligation in an organisation, and the second is flexible work's behaviour (LePine et al., 2002). Similarly, the significance of charitable WB is related to individual productivity. Later on, psychologists considered contextual performance as the ability to help individuals to familiarise themselves with diverse roles of job descriptions (Motowidlo et al., 1997). In addition, Bergeron (2007) recommends that contextual performance would entail numerous "sub-dimensions" such as cooperation, commitment, and determination.

Counterproductive Work Behaviors

Counterproductive work behaviours are defined as deliberate organisational behaviour that has affected an individual on job performance or deteriorated organisational efficiency and success (Lau, Au, & Ho, 2003). Counterproductive work behaviours are a class of behaviours that violate the officially authorised interests of an organisational employee (Sackett &DeVore, 2001) and are extremely hazardous to members of an organisation (Marcus, 2000).

Counterproductive work behaviours consist of two group categories; one is property deviance, and the next is production deviance. Property deviance has defined as the exploitation of individual resources, such as property harm and stealing. Production deviance includes non-attendance and laziness. Furthermore, behaviours that would be moved away from an individual when on the job, like the use of alcohol and deliberately working little by little (Hollinger & Clark, 1982). Martinko, Gundlach, and Douglas (2002) projected that counterproductive work behaviours have classified into three classes such as (a) personal, (b) organisational, and (c) contextual factors. Personal factor includes individuality among employees that have been motivating in counterproductive work behaviours in the workplace (Boyce & Jones, 1997), such as demographic personality, lifestyle, minimise stress, and job pleasure is all behaviours in this category. Organisational factors consist of collective awareness of the individuals attracted toward the specific purpose of the work performance (Ostroff, 1993), which comprise organisational characteristics, and organisation-level anti-theft strategy. The contextual character has related to the environment that is directly and indirectly related to the individual's performance to engage in specific inequitable acts (Murphy, 1993).

Research Methodology

Research Design

The present study was quantitative in nature, and the survey methods were adopted for data collection from the sample of the study and the analysis of data. According to Kothari (2004), the descriptive research design is used in educational research studies for the purpose of description of the population through the collection of data and statistical analysis.

Population, Sample and Sampling

The total population was spread over the nine divisions of Punjab. There are 3786 teachers in these universities of Punjab Divisions. It was not possible for the researcher to collect data from the overall population. The current study involved a stratified sampling technique that was regarded as a suitable factor. Thus, 494 teachers were the sample of the present study from nine universities in the nine divisions of Punjab Province, Pakistan. The faculty
members in Bahawalpur were 66 (13.4%), DG Khan 49 (9.9%), Lahore 55 (11.2%), Gujranwala 46 (9.3%), Faisalabad 72 (14.5%), Multan 45 (9.1%), Rawalpindi 43 (8.7%), Sargodha 62 (12.6%), and Sahiwal 56 (11.3%) respectively. The involved 290 (58.7%) males and 204 (41.3%) females from three faculties: 193 (39.1%) social sciences and humanities, 180 (36.4%) physical sciences and technologies, and 121 (24.5%) administrative/management sciences respectively which comprised of four designation: 281 (56.9%) BPS, 124 (25.1%) TTS, 57 (11.5%) Contract, and 32 (6.5%) Visitors. The data was collected from 296 (59.9%) lecturers, 116 (23.5%) assistant professors, and 82 (16.6%) associate professors having different qualifications like 280 (56.7%) PhD degree holders and 214 (43.3%) M. Phil degree holders as well. Three age groups like 241 (48.8%) 25-40 years, and 253 (51.2%) 41-55 years with groups 137 (27.7%) 1-10 years, 327 (66.2%) 11-20 years and 30 (6.1%) 21-30 years respectively.

**Table 1. The Reliabilities of the Instruments**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Sub-factors</th>
<th>No of Items</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technostress</td>
<td>23</td>
<td>0.97</td>
</tr>
<tr>
<td>2</td>
<td>Work Behavior</td>
<td>18</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Table 1 indicates the overall reliability of the research instrument. The reliability of the technostress questionnaire was 0.97 and the work behaviour 0.94 (Excellent), respectively. A reliability of 0.70 or higher is considered acceptable (Bolarinwa, 2016). That’s why the questionnaires were considered appropriate for data collection.

**Data Collection**

The required information collected from the faculty members in Bahawalpur was 66 (13.4%), DG Khan 49 (9.9%), Lahore 55 (11.2%), Gujranwala 46 (9.3%), Faisalabad 72 (14.5%), Multan 45 (9.1%), Rawalpindi 43 (8.7%), Sargodha 62 (12.6%), and Sahiwal 56 (11.3%) simultaneously.

**Data Analysis**

The collected data were analysed using descriptive as well as inferential statistics (correlation and regression). Pearson product correlation was run to measure the relationship between quantitative variables. The regression analysis was performed to find the effect of technostress on work behaviour.

**Instrument of Data Collection**

For the present study, standardised questionnaires with written approval directly by research authors via email communication were used to collect data from the teachers of the universities regarding the technostress and work behaviour. The first part comprised the 23 items related to the technostress. The instrument was developed and validated by Ragu-Nathan et al. (2008) with five sub-factors: techno overload (TO) 5-items, techno invasion (TI) 4-items, techno complexity (TC) 5-item, techno insecurity (TIS) 5-item, and techno uncertainty (TU) 4-item respectively. The second part consisted of 18 items related to work behaviour. This instrument was developed and validated by Koopmans (2015) with three sub-factors: task performance (TP) 5-item, contextual performance (CP) 8-item, and counterproductive work behaviour (CWB) 5-item as well. This questionnaire measured the constructs on five points Likert-type scale.
Results And Discussion

Table 2. Descriptive Analysis of Technostress and its Sub Factors

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS</td>
<td>494</td>
<td>1.48</td>
<td>5.00</td>
<td>3.68</td>
<td>0.73</td>
</tr>
<tr>
<td>TO</td>
<td>494</td>
<td>1.00</td>
<td>5.00</td>
<td>3.82</td>
<td>0.91</td>
</tr>
<tr>
<td>TI</td>
<td>494</td>
<td>1.00</td>
<td>5.00</td>
<td>3.88</td>
<td>0.87</td>
</tr>
<tr>
<td>TC</td>
<td>494</td>
<td>1.00</td>
<td>5.00</td>
<td>3.60</td>
<td>0.94</td>
</tr>
<tr>
<td>TIS</td>
<td>494</td>
<td>1.00</td>
<td>5.00</td>
<td>3.09</td>
<td>0.91</td>
</tr>
<tr>
<td>TU</td>
<td>494</td>
<td>1.00</td>
<td>5.00</td>
<td>3.98</td>
<td>0.88</td>
</tr>
</tbody>
</table>

Table 2 demonstrates the $M$ and $SD$ of the technostress and its subparts. The table indicated that the overall mean of the technostress was 3.68, and the standard deviation was 0.73. Moreover, the mean and SD of the different sub-parts of the technostress variable is as techno-overload ($M=3.82$, $SD=0.91$), techno-invasion ($M=3.88$, $SD=0.87$), techno-complexity ($M=3.60$, $SD=0.94$), techno-insecurity ($M=3.09$, $SD=0.91$) and techno-uncertainty ($M=3.98$, $SD=0.88$). Moreover, this data showed that the mean of techno-uncertainty was the highest, and the mean of techno-insecurity was the lowest among the other sub-parts.

Table 3. Mean and Standard Deviation of Work Behaviour and its Sub Factors

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>494</td>
<td>1.00</td>
<td>4.72</td>
<td>3.04</td>
<td>0.82</td>
</tr>
<tr>
<td>TP</td>
<td>494</td>
<td>1.00</td>
<td>5.00</td>
<td>3.14</td>
<td>1.23</td>
</tr>
<tr>
<td>CP</td>
<td>494</td>
<td>1.00</td>
<td>5.00</td>
<td>3.17</td>
<td>1.19</td>
</tr>
<tr>
<td>CWB</td>
<td>494</td>
<td>1.00</td>
<td>4.60</td>
<td>2.82</td>
<td>0.39</td>
</tr>
</tbody>
</table>

Table 3 depicts the $M$ and of the work behaviour and its sub-factors. On the whole, $M$ of work behaviour was 3.04 and $SD$ was 0.82. $M$ and $SD$ of the sub-factors of the work behaviour were TP ($M=3.14$, $SD=1.23$), CP ($M=3.17$, $SD=1.19$), and CWB ($M=2.82$, $SD=0.39$). The comparative analysis shows that the mean of the contextual performance was highest, and the mean of the counterwork behaviour was lowest among the other sub-factors.

Table 4. Correlation between Technostress and Work Behavior of Teachers

<table>
<thead>
<tr>
<th>Work Behavior Dimensions</th>
<th>TO</th>
<th>TI</th>
<th>TC</th>
<th>TIS</th>
<th>TU</th>
<th>TS-Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP</td>
<td>-0.42*</td>
<td>-0.38*</td>
<td>-0.42*</td>
<td>-0.30*</td>
<td>-0.36*</td>
<td>-0.47*</td>
</tr>
<tr>
<td>CP</td>
<td>-0.39*</td>
<td>-0.37*</td>
<td>-0.40*</td>
<td>-0.28*</td>
<td>-0.34*</td>
<td>-0.44*</td>
</tr>
<tr>
<td>CWB</td>
<td>-0.57*</td>
<td>-0.20*</td>
<td>-0.34*</td>
<td>-0.11*</td>
<td>-0.38*</td>
<td>-0.40*</td>
</tr>
<tr>
<td>WB-Overall</td>
<td>-0.48*</td>
<td>-0.40*</td>
<td>-0.45*</td>
<td>-0.30*</td>
<td>-0.40*</td>
<td>-0.50*</td>
</tr>
</tbody>
</table>

*p = 0.01
The correlation analysis applied to examine the association between technostress and work behaviour is presented in Table 4. It is found that there was a significant inverse correlation to demonstrate an association between dimensions of technostress and work behaviour. A monotonous relationship clearly exhibits that high technostress reduces work behaviour. A higher degree of negative correlation exists between technostress overload and counterwork behaviour ($r = -0.57, p < .01$) significantly. While the least reversal association is found between techno-insecurity and counterwork behaviour ($r = -0.11, p < .01$). It was concluded that the teachers with high technostress were negatively associated with impeded work behaviour. Therefore, the H01 "There is no significant relationship between the technostress and its different dimensions with work behaviour of university teachers" is not supported by data. Therefore, the results indicated that techno-stress was negatively correlated with the work behaviour of university teachers.

**Table 5. Effect of Technostress on Work Behaviour of University Teachers**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Un-standardized</th>
<th>Standardised</th>
<th>95%CI</th>
<th>b</th>
<th>SE</th>
<th>β</th>
<th>t-value</th>
<th>p-value</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>(constant)</td>
<td>5.13</td>
<td>0.16</td>
<td></td>
<td>31.03</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TS</td>
<td>-0.57</td>
<td>0.04</td>
<td>-0.51</td>
<td>-12.88</td>
<td>.000</td>
<td>-0.66</td>
<td>-0.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANOVA</td>
<td>SS</td>
<td>MS</td>
<td>df</td>
<td>Model</td>
<td>R</td>
<td>R²</td>
<td>R² adjusted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>84.91</td>
<td>182.27</td>
<td>1</td>
<td>1</td>
<td>0.502</td>
<td>0.252</td>
<td>0.251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>251.65</td>
<td>0.52</td>
<td>492</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>336.56</td>
<td>493</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\*p = 0.01

A simple linear regression has been run to envisaged work behaviour as a criterion variable studied by technostress which is being explanatory variable. The regression equation was significant as $F (1, 492) = 166.00, p < .000$, with the value of $R^2$ as 0.252. The values of $b = -0.57$ and $\beta = -0.51$ are in reversal contraction between technostress and work behaviour frequency. Table 5 predicted that there is a momentous effect of technostress on work behaviour. The value of $R^2$ (0.252) and $R^2$ adjusted (0.251), respectively, represent the total variance of 25.1% ($p < .01$) to predict the effect of technostress on work behaviour. Technostress explained the significant amount of variance. The regression coefficient ($B = -0.57, 95\% CI[-0.66, -0.48]$) illustrated that magnification in one unit of technostress corresponds overall decrease in work behaviour of 0.84, which demonstrates the monotonous effect of technostress on work behaviour significantly. Ozili (2022) carried out the study to observe the satisfactory $R^2$ value in social sciences by empirical modelling to the meticulous centre of attention with the purpose of low $R^2$ model is being acceptable in empirical social science research, consequence, end results has given an idea about that a low $R^2$ of at least 0.1 (10%) is being accepted on the condition that a few or for the most part of the explanatory variables are statistically considerable. Therefore, the alternative hypothesis stating that "There is a significant effect of techno-stress on the work behaviour of university teachers" is supported by data.

**Discussion**

The present study contributes three major facts. First, it provides the literature on technostress creators and work behaviour. Teachers, who are facing technology-related stress, have anxiety and issues related to their work. Second, the work behaviour dimensions indicate how teachers have influenced and needed support to diminish the adverse effects of technology. Thirdly, the research provided evidence about the negative side of technology and challenged the extensive use of technology in higher institutions. However, present research proved the phenomena of
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technostress. Correspondingly, when technostress have decreased the work behaviour of teachers, as $R^2_{\text{adjusted}}$ (0.418), the total variance of 41.8% which is satisfactory (Ozili, 2022) and correspondingly to evaluate the sensible effect (Chin 1998) although, these statistical results have been interpreted as a well-built model (Chin 1998; Hair et al. 2011). Meanwhile, the end results have supported the study of Cohen (1988) and Hair et al. (2013) estimated the value of $R^2$: 0.26 as substantial, 0.13 as moderate, and 0.02 as weak, respectively. However, the value of $R^2$: 0.75 as substantial, 0.50 as moderate, and 0.25 as weak, respectively. The result of the present study is supported by Tiwari (2021), which demonstrated the negative impact of technostress on employees' productivity. A study by Ragu-Nathan et al. (2008) depicted that information and communication technologies resulted in vast, efficient work in less time while forcing employees to complete more tasks in less time duration, resulting in deviant behaviour. Advocated by Imam et al. (2022) narrated the result of the study that technology affects the health as well as the job productivity of employees in various aspects. The result of the present investigation is also in line with (Longman, 2013; Jena, 2015; Tarafdar et al., 2011). There are many studies which confirm the result of the present study that employees are feeling of the technostress due to the use of technology in their workplaces (Ahmad et al., 2012, Salanova et al., 2014, Tu and Wang, 2005). Embi (2007) is of the view that many terms were used in the past to express the feeling of technostress due to extensive use of technology like technophobia, computer phobia, etc. But, there is evidence that the technostress remains in the employees from the very beginning since the use of technology and computer in the workplace. The study of Wang and Li (2019) also confirms the result of the present study stating that the university teachers were also feeling the technostress due to utilising ICT, which resulted in the reduction in work performance of university teachers. Wang et al. (2008) also supported the outcomes of the present study that the majority of university teachers were feeling the technostress due to not having adequate time for technology and their inability to deal with the technology in an effective way. The view of the study is that technostress can be in the form of the discomfort of employees at the workplace, stress and tension of employees, nervousness and anxiety that is caused by employees due to the use of technology without proper training and expertise. However, Kouvonen et al. (2005) reported that technostress is felt in the workplace in those employees who are exposed to technology for a longer time and are experienced in computer work. The results of the present investigation are also in line with the study of Sami and Panganniah (2006), which reported that employees might feel technological exertion and fear due to a lack of confidence in the use of technology in the workplace. The same results are also reported by Ragu-Nathan et al. (2008), which experienced that the technostress is caused by the employees due to lack of confidence in the use of technology in the workplace.

**Conclusion**

Based on the objectives of the study, the following results were drawn through inferential statistics: Technology is frequently used in every organisation, especially getting popular among all the educational sectors. The above analysis indicated that the techno-stress is associated with the WB of the university teacher; moreover, TS has a significant effect on the WB of university teachers.

**Recommendations**

1. It was found that the technostress has a bad impact on the WB of university teachers. Therefore, it is recommended that university teachers may be trained in the use of technology at their workplaces to avoid the bad feelings of the techno-stress

2. Additional research may contribute to exploring some mixed impacts of technology in educational settings.
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