



Relationship between Techno-Stress, Occupational Burnout and Job Satisfaction among Primary School Teachers.

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Abstract

Technology is now frequently interwoven into every field. In recent years, an increasing number of academics have begun to focus on techno-stress. The stress they face in the workplace is an emotional or physical tiredness that is also accompanied by a sense of limited accomplishment and a loss of one's identity, which is said to be occupational burnout. The present study attempted to examine the relationship between techno-stress, occupational burnout and job satisfaction among primary school teachers, and to identify a predictive percentage of Job satisfaction and occupational burnout towards techno-stress among Primary school teachers. The results show that techno-stress was significantly associated with scores for Job satisfaction and occupational Burnout. The study brings out how techno-stress impacts on the primary school teacher's job satisfaction and occupational burnout.

Keywords: Techno-stress, occupational burnout, job satisfaction, primary school teachers, Technology.

Introduction

In the twenty-first century, most jobs—whether performed in an office setting or out in the field—require some sort of computer interface, according to Arnetz and Wiholm (1997). Interaction with computer systems is inevitable and can cause techno-stress, which can cause difficulties with one's health as well as ineffectiveness at work. These health issues cause missed work, absences, and productivity loss. Organizations must comprehend these problems and put forth answers. Following the rapid development of technical equipment, particularly in Information Technologies (ITs), technology is now frequently interwoven into every field. However, while IT was convenient and effective, it also introduced some new issues for instructors, most notably techno-stress. In recent years, an increasing number of academics have begun to focus on techno-stress. The government has made significant investments in technology in education, which has changed the essential capabilities in teaching. Instructors are expected to employ technology such as multi-media and digital textbooks, which are considered fundamental skills for teachers in this digital age.

Although the third wave of COVID-19 is still active, the online teaching mode is still in use in some areas. Since there is no vaccination for children, this raises the investment in technology in education in teachers, particularly primary school teachers. Craig Brod coined the phrase "techno-stress" in 1984. Negative attitudes about computers and newly developed technology are referred to as "techno-stress".

Teachers are particularly vulnerable to burnout syndrome due to the affective and emotional components inherent in their job. Teacher burnout consists of three components: emotional exhaustion (EE), personal accomplishment (PA), and depersonalization (DP). Due to the pandemic, online learning settings have grown in popularity, resulting in an unplanned yet rapid transformation in educational contexts.

Occupational burnout is a syndrome caused by persistent work-related stress, with symptoms including "feelings of energy depletion or tiredness; greater mental distance from one's job; or feelings of negativism or cynicism related to one's employment." (World Health Organization (WHO)).

Job satisfaction refers to a worker's attitude toward his or her profession, frequently stated as a hedonic response of loving or disliking the work itself, the benefits (money, promotions, recognition), or the context (working conditions, colleagues). The word "job satisfaction" usually refers to how much employees enjoy the aspects of their work (Spector, 1997). Other definitions of the construct have been embraced over time and across different paradigms, sometimes in parallel with one another. Locke's (1969) concept of a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences; Vroom's (1964, 1982) focus on workers' emotional orientation toward their job; Milkovich and

Boudreau's (1997) definition of job satisfaction as a pleasurable response to job contents; versus Schultz's (1982) proposal that job satisfaction is simply employees' psychological disposition toward their job.

According to Locke's value theory, job satisfaction occurs when an employee achieves an outcome that corresponds to his or her desire. The more the employee receives the result, the more delighted they are with their employment. (S). Job satisfaction is defined as "a happy or good emotional state resulting from the appraisal of one's job or job experiences," according to Locke (1976). As a result, job satisfaction refers to a positive trait in which an employee feels like an integral part of a company. Task performance and contextual performance are two types of behaviour depending on an employee's performance that are regarded significant components for an organization's effectiveness, according to Borman and Motowidlo (1993). Contextual performance is not directly related to the main tasks but is important in shaping social, psychological, and organisational skills. Task performance includes behaviour that is directly involved in reinforcing behaviour through the reward system (Werner, 2000).

Based on Maslow's Hierarchy of Needs, human beings' needs are classified into five levels: physiological needs, safety needs, belongingness or love, self-esteem, and self-actualization. Because of these needs, people are motivated to move forward in their lives. This theory is also used to explain the job satisfaction of employees. In order to fulfil the rest of the needs, one of the basic physiological needs is getting a job. According to the needs of Maslow, in order to achieve self-actualisation the individual must achieve or overcome the rest of the needs. This theory is used here to explain how the primary school teacher are able to overcome those difficult situations and achieve job satisfaction.

The safety requirements of this are that the person feels safe in their work environment; only if they are satisfied can they focus in the workplace and feel like they belong to one domain. When they feel like they are part of something, they start to be more confident and have a positive relationship with their colleagues. When they achieve self-esteem, the employee strives to become everything that they are capable of, which leads to self-actualisation. (Theories of Job Satisfaction).

Nowadays, the use of technology is a must for everyone, from small kids to elderly people. Everyone has access to it nowadays. People rely on the internet for everything and anything, from grocery shopping to academics, to keep up with the latest trends. People have learned to study online or in a digital mode from the comfort of their own homes. Due to the rise in use of technology, especially during the pandemic, all teaching or academic activities have been conducted online. Even though most of the population is familiar with the digital world, there are still people who are struggling or facing issues due to technology, and primary school teachers are among them. Primary schooling is still happening in many places in an online mode. Teachers are supposed to take online or hybrid classes for kids. The researcher is conducting this current study in order to understand the effect of technology on these teachers' mental wellbeing. This study is focusing on the variables of techno- stress, occupational burnout, and job satisfaction among primary school teachers.

The Research questions of this particular paper as follows: are there any significant difference in the techno-stress, job satisfaction and occupational burnout in primary school teachers working in schools with less and more years of work experience? Are there any significant gender difference in techno-stress, job satisfaction, and occupational burnout in primary school teachers? What relation does techno-stress have with occupational burnout and job satisfaction in primary school teachers? What are the predictors of techno-stress in teachers working in primary school?

This research examine the impact of years of work experience and its correlates in teachers with less experience and more experience in primary school, to study techno-stress in primary school teachers in relation to occupational burnout and job satisfaction, and to identify predictive percentage of Job satisfaction and Occupational burnout towards techno-stress among Primary school teachers.

Therefore it was hypothesized that:

H1: There is a significant difference in the techno-stress in teachers with less experience and more experience in primary school.

H2: There is a positive correlation between techno stress and occupational burnout.

H3: There is a negative correlation between techno-stress and job satisfaction.

Review of Literature

Cahapay & Bangoc II worked on a study in which the variables techno-stress, work performance, job satisfaction, and career commitment of teachers in the Philippines were tested, and it was found that there is a significantly adverse relationship between work performance and teachers. (II M. B., 2021). Estrada-Munoz et.al did a study on primary and elementary school teachers' techno-stress and discovered that 13% are techno-fatigued, 13% are techno-anxious, and 11% are both. (Carla Estrada-Muñoz, 2020). Yang et al. investigated the effects and interrelationships of techno-stressors, technology, and work-exhaustion. The findings of this study showed that techno-induced job ambiguity and the frequency of technological changes have a direct impact on techno-exhaustion and that both work-exhaustion and techno-exhaustion have a detrimental impact on job satisfaction and teacher retention. However, techno-exhaustion induces work-exhaustion indirectly. (Rui-Juan Yang, 2017). Chakravorty and Singh's study established that general job demands and emotional job demands in a school environment were substantially connected with burnout, which has resulted in increased somatic symptoms and decreased pro-social conduct among teachers. (Arjun Chakravorty, 2021). Few studies on technology-related stress and well-being in school settings have been undertaken where technology adoption is required. This study intends to contribute to and better understand technostress under a Mandatory Adoption Policy Environment, building on Jena's (2015) preceding techno-stress study (MAPE). Jena's study focused on the impact of techno-stress on academic job satisfaction, and the findings revealed a negative relationship between techno-stress generators and job satisfaction. (Jena, 2015). This is especially important for teachers and administrators in middle and high schools who are immediately touched by new technology integration. Statistical analyses show a difference in technology-enabled performance between middle and high school teachers, with middle school teachers ($M = 18.54$,

SD = 3.10) scoring higher on items asking about their technology performance after the MAPE was introduced ($t(145) = 2.542, p.05$) than high school teachers ($M = 16.98, SD = 3.89$). There were differences in scores on Techno-stress Creators items between teachers who had worked for the school division for 1-2 years, 2-5 years, and 11-20 years. (Liu, 2019).

Methodology

Research design

A quantitative cross sectional study will be done using purposive sampling method. This is a type of non-experimental research design in which the researcher identifies three variables and measures the statistical relationship by trying avoid the effect of extraneous variables.

Sample

This research focuses on the non-probability sampling method, in which purposive or subjective sampling will be used, i.e., in which the researcher chooses variables for the sample population at their discretion. This study is focusing on the correlation method, in that comparison will be done with two different groups in order to determine either the similarity or the difference between the groups. The study includes Primary school teachers who have the experience from 0-10 years and 15-25 years in teaching. A Google form will be generated as it helps the researcher gather information from faraway places. Based on the inclusive criteria mentioned in the Google form, the participant goes further in the test after agreeing to the consent form. The estimated sample size would be 100-200.

Inclusive criteria:

- Primary school teachers who have the work experience of 0-10 and 15-25 years.
- Those who are currently residing and working in India
- Those who are working in private schools.
- Both female and male.

Exclusion criteria:

- Teachers who are mentally challenged.
- Teachers who have had more than 25 years of teaching experience
- Teachers working in rural setting.

Operational definition

Occupational burnout

In this study, this refers to the state or work-related stress that the teachers face due to work overload and exposure to new technology or digital teaching experience. This results in less energetic, emotionally exhausted and negative feelings towards everything related to work.

Job satisfaction

How satisfied are the teachers, or how do they feel about their work as primary school teachers? In this study, I am trying to understand their satisfaction level even when they are exposed to digital teaching experience.

Techno-stress

In this study, the term "techno-stress" is used to define the stress experienced with struggles and problems faced by primary school teachers while dealing with new technology or digital teaching experience.

Measurement and tool

- Techno-stress scale of Teacher educator (K. Thiyaagu)

This test is consists of 32 items in a five point scale. To each classification, all favourable statements were assigned a score ranging from a maximum of five to a minimum of one. The responders were instructed to carefully read each item and place a tick mark in the appropriate cell. For each responder, the investigator computed all of the item scores. The individual's score was determined by adding the total scores of all the

items. Cronbach's alpha (0.953) and Split Half (0.919) approaches were used to determine the tool's dependability. The validity of the tool is determined by content validity method. (K, 2021)

- Maslach burnout Inventory-ES (Christina Maslach, Susan E. Jackson and Richard Schwab)

This consists of a self-report questionnaire with 22 items that assess burnout on a sevenpoint scale. Emotional exhaustion (EE; nine items), depersonalization (DP; five items), and personal accomplishment are MBI subscales (PA; eight items). All items were graded on seven-point Likert scale ranging from "never" (0) to "every day"(6). For each subscale, responses were totaled and averaged. Only the emotional exhaustion (EE) measure was employed in this investigation. (Giacomo Angelini, 2021)

- Teacher Job Satisfaction Scale (TJSS-9 item) (Alessandro Pepe)

The TJSS-9 has three dimensions: satisfaction with coworkers (3 items), satisfaction with parents (3 items), and satisfaction with students' behaviour (3 things) (3 items). Items are graded on a 5-point scale (1 = I am extremely unsatisfied with this part of education, 5 = I am extremely delighted with this feature of school). (Alessandro Pepe, 2017)

Procedure

The informed consent with the questionnaire will be sent to the participants via different social media platforms. Once 100-200 accept to participate in our study, will give them the questionnaires. The “Techno-stress scale” of teacher educator instrument can be used to assess teacher educators' stress levels when they employ technology in their teaching and learning. The Maslach burnout Inventory-ES is used to measure the emotional exhaustion, depersonalization and personal accomplishment of educators. Teacher Job Satisfaction Scale (TJSS) is used to measure the job satisfaction in teaching or work-related satisfaction of teachers. Because the survey is conducted online, the participants will be in the comfort of their homes.

Data Analysis

The data will be collected from the surveys that will be held online. The tools used in this study are the Techno-stress scale of the teacher educator, the Maslach Burnout Inventory-ES, and the TJSS (Teacher Job Satisfaction).

The collected raw scores were first converted into standard scores, or T-scores, in order to compute the appropriate statistical results. This was done since the psychological standardised tools used to assess each psychological construct had a different amount of statements, distinct Likert scales as replies, and different techniques for calculating the scores on each scale. As a result, the transformation of raw scores into standard scores aids in providing a more accurate representation of all the factors being empirically investigated. T-scores were obtained by first converting raw scores to z-scores using the SPSS (Ver. 25) score transformation tool, and then converting z-scores to T-scores using the proper formula ($T\text{-score} = 50 + 10z$).

To achieve the goals of the current inquiry, linear correlation utilising Pearson's product moment method of correlation coefficient was calculated after descriptive statistics.

Additionally, The stepwise linear regression were performed on the data to reveal that whether job satisfaction and occupational Burnout were a significant predictor for techno- stress among primary school teachers.

Result

The primary objective of the present investigation was to examine the impact of years of work experience and its correlates in teachers with less experience and more experience in primary school for which descriptive statistics have been computed (see Table 1). The second objective was to study techno-stress in primary school teachers in relation to occupational burnout and job satisfaction. To accomplish this objective, Pearson's product moment coefficient of correlation was computed (see Table 1). The third and final objective of the present correlation study was to identify predictive percentage of Job satisfaction towards techno-stress among Primary school teachers. To achieve this objective statistically, stepwise linear regression analysis was applied (see Table 2). On the obtained data, descriptive statistics have been computed for the present sample. Table 1.1 depicts the

descriptive statistics of the variables. As shown in the table, a significant positive correlation was found between techno-stress and Job satisfaction $r = 0.348$, $p < 0.01$ and a positive correlation was found between techno-stress and occupational burnout without any significance $r = 0.089$, $p < 0.05$. Table 1.3 elucidate that techno-stress emerged as a significant predictor of job satisfaction where 12% of job satisfaction was predicted by the level of techno-stress by the primary school teachers. The t value for the same was also significant, $t = 0.849$, $p < 0.01$. Table 1.4 depicts that techno-stress does not emerge as a significant predictor of occupational burnout.

Discussion

To live a fulfilling life, an individual's mental health is just as important as his or her physical health. In other words, a good life is the result of a combination of mental and physical health. The present study highlights the association of Techno-stress, occupational Burnout and Job satisfaction among primary school teachers. The study brings out how techno-stress impacts on the primary school teacher's job satisfaction and occupational burnout. The findings of the present study suggests that there is a positive relation between techno-stress and job satisfaction among primary school teachers, as well as there is a positive relation between techno-stress and occupational burnout.

As Kanungo (1979, 1982) found, there was no significant association between participation and a range of other emotional states, including job satisfaction. For example, highly invested people may feel a high level of job satisfaction with their work at times and discontent at other times or under different circumstances (Barki & Jon, 1989). Also, the study by Ofir Turel and Fulvio Gaudioso (2018) depicts that a high leadership climate and a low competitive climate can act as buffers to lessen the negative organisational effects of technostressors and prevent the translation of techno-stressors into distress. These studies support the present study result, which is, when techno-stress increases, job satisfaction also increases and vice versa.

As per Tiemo, Pereware Aghwotu and Ofua, Justice Owajeme (2010) the majority of librarians of both sexes suffered from techno-stress is due to the technological advancements, when they are exposed to using computers and related technologies. This supports the next finding of the present study that is there is a positive relation between techno-stress and occupational burnout. Even though the librarians experienced techno-stress, they also

accepted the numerous coping mechanisms and programmes to deal with techno-stress in their varied places of employment, which enhanced their level of job satisfaction.

To summarise the findings of the current empirical research work, primary school teachers reported that there is no significant difference in the amount of stress between teachers with less and more experience in primary school. Further, the findings also indicated that there is a positive relationship between techno-stress and job satisfaction and a positive relationship between techno-stress and occupational burnout. Finally, the investigation found that techno-stress emerged as a significant predictor of job satisfaction where 12% of job satisfaction was predicted by the level of techno-stress by the primary school teachers, and it also showed that techno-stress does not emerge as a significant predictor of occupational burnout. Hence, as some research claims that with effective encouragement, a low competitive climate, and coping strategies can help individuals cope with burnout syndrome and enhance job satisfaction.

Limitation

Although the study began during offline mode, when the possibility of online education was low, the results may vary. Due to the small sample size, statistical analyses would fail to reveal any meaningful associations in the data set. As a result, it claims that using a bigger sample size for the study could have led to more accurate results. Since the study includes participants from a specific background, it cannot be generalized to the entire teachers or other population. Since the study included long questionnaires, there may be a high chance of getting biased responses.

Implication

The current study contributes to our understanding that there is both job satisfaction and occupational burnout present in primary school teachers due to techno-stress. In order to lessen their burnout syndrome, the school should provide better coping strategies and a less competitive environment in terms of the teachers' workload. Further, Psychoeducation programmes can be run in these schools keeping in mind the teachers' requirement to work their best and help with the children's future with regard to their academic. Thus, it implies that by fulfilling these requirements, the teachers will ultimately attain job satisfaction and reduce the burnout syndrome.

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Tables

Table 1

Table 1.1 Mean and standard deviation

Variable	1	2	3	M	SD
1. TSS	-	0.348**	0.089	99.80	22.761
2. TJSS		-	0.258*	27.45	5.478
3. MBI-ES			-	75.91	13.795

Note. ** Correlation is significant at the 0.01 level (2-tailed).

TSS= Techno-stress scale, TJSS=Teacher’s Job Satisfaction, MBI-ES=Maslach Burnout Inventory-Educators Survey

Table 2*Table 1.2 Model summary for regression analysis*

Model	R	R square	Adjusted R square	Std. Error of the Estimate	F
TSS	0.348a	0.121	0.111	5.164	12.413

Table 3*Table 1.3. Predictors of Job satisfaction*

Predictors	SE	Beta Coefficient	t	p
TJSS (Constant)	0.084	0.024	3.523	0.01

Table 4*Table 1.4. Predictor of occupational burnout*

Model	SE	Beta Coefficient	t	Sig.
MBI-ES	0.064	0.089	0.849	0.398