HIGH SCHOOL TEACHERS' DEMOGRAPHIC VARIABLES AND TECHNOSTRESS IN THE POST-PANDEMIC EDUCATIONAL ENVIRONMENT

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Abstract: This study generally investigated the technostress and demographic variables among high school teachers in the southern districts of the Department of Education- Division of Bukidnon and the whole of the Division of Valencia City, Bukidnon, Mindanao, Philippines. A total of 169 teachers were the participants of the study. The Technostress survey questionnaire adapted from Chen (2018) was utilized for the purpose of this investigation.

The statistical tools used in treating the data for analysis were the descriptive statistics (frequency, mean and percentile).

The results of the study revealed an overall mean of teachers' technostress on techno-overload is 3.07; on techno-complexity 2.61; on techno-insecurity 2.33; and techno-uncertainty 3.51. The average mean of the teachers' technostress is 2.89 which corresponds to "moderately affected by stress".

The study revealed that the greatest percentage (45.60 %) out of the total of one hundred sixty-nine (169) participants was within the 30-39 years old. Those within the age range of 40-49 years old followed with a percentage of 15.40, 14.8 % was recorded for the age range of 25-29 years old, 14.30 % falls on the age range of 24 years old and below. Those who belonged to the 50 years old and above were only 10.20 %. On the part of gender, majority of them are female constituting 97 participants (57.40 %) out of the 169 participants whereas the remaining 42.60 % or 72 participants are male.

Keywords: teachers' demographics, technostress and post pandemic

1. INTRODUCTION

The integration of technology and digitization in teaching is described as Technological Pedagogical and Content Knowledge (TPACK) (Anud, 2022). Digitalization in the education-training process decreases the teacher's workload and creates opportunities for collaboration. On the other hand, the need to learn information and skills regarding new technologies constantly causes teachers stress, such as higher work load and time pressure (Tarafdar et al., 2015; Anud & Caro, 2022). This expectation for the efficient use of ICTs in the education and training of today's teachers and the increasing pressures in this direction lead to instructors with insufficient knowledge and abilities to integrate the technology and may generate teacher technostress (Joo et al., 2016). Brod (1984) developed the notion of technostress, which emerged as a result of the deliberate and successful use of current technology, and classified it as a modern adaption disease coming from the inability to employ current computer technologies properly. Berger et al. (2016) also updated this definition to describe technostress as the feeling of individual stress generated by the usage of ICT technology.

The studies conducted to determine the negative effects of technostress on individuals revealed that technology caused individuals to experience negative emotions such as skepticism and inefficiency, mental fatigue, and anxiety (Agogo & Hess, 2015; Salanova et al., 2018), reducing the satisfaction of users either directly or indirectly (Tarafdar et al. 2015), and negatively affecting the users' job satisfaction and corporate loyalty (Jena, 2015). Despite the fact that numerous studies (Agogo & Hess, 2015; Salanova et al., 2013; Tarafdar et al., 2011) have identified the negative effects of technostress on individuals working in various sectors, it has been determined that there are very few studies demonstrating the method for determining teachers' technostress levels and how to deal with this stress (Fuglseth & Sreb, 2014; Jena, 2015; Joo et al., 2016). Nevertheless, research investigations that were carried out within the framework of technostress and teachers' demographic profile suggest that there is a need for studies that investigate the impact of individual characteristics and educational environmental factors in a comprehensive manner.

To put this into context, the purpose of this study determined whether or not there is a correlation between the variables such as individual characteristics to the technostress of high school research teachers.

2. MATERIALS AND METHODS

A total of three hundred and sixty-nine (169) high school teachers participated in the study. The participants were chosen through total sampling procedure.

This study made use of descriptive design to determine the level of teachers' technostress and demographic variables. The technostress research instrument used was adapted from Chen (2018).

Following are the scale from Chen (2018) which was used in measuring the technostress of high school Research Teachers:

1- I never experience or feel this way
2- I rarely experience or feel this way
3- I occasionally experience or feel this way
4- I frequently experience or feel this way
5- I very frequently experience or feel this way

In the other hand, the following qualitative interpretation (adopted from Kader et al., 2022) which was used in interpreting the results from the technostress questionnaire:

1.00-1.50 – Not affected by stress at all (NA)
1.51-2.50 – Least affected by stress (LA)
2.51-3.50- Moderately affected by stress (MA)
3.51-4.50 – Highly affected by stress (HA)
4.51-5.00- Very highly affected by stress (VHA)

3. RESULTS AND DISCUSSION

3.1 Technostress level of High School Teachers

Table 1 displays the summary of the variables of teachers' technostress. The overall mean of teachers' technostress on techno-overload is 3.07; on techno-complexity 2.61; on techno-insecurity 2.33; and techno-uncertainty 3.51. The average mean of the teachers' technostress is 2.89 which corresponds to "moderately affected by stress".

Table 1. High School Teachers' Technostress level

Technostress variables	Mean	Qualitative Interpretation
Techno-uncertainty	3.51	HA
Techno-overload	3.07	MA
Techno-complexity	2.61	MA
Techno-insecurity	2.33	LA
Overall mean	**2.89**	**MA**

As gleaned from the data, it is evident that teachers from the Divisions of Bukidnon and Valencia City, Philippines experienced/felt technological stress which is a manifestation of the key points from the principle of Technostress by Brod (1984). Though it has been observed that teachers are really doing great lengths of patience to acquire technological skills, they are still lacking provision of technological training-both in basic and in very technical tools (Bass, 2015) resulting to them experiencing or feeling stressed in the premise of not having the full knowledge of what technological tool "should" be used to effectively help them do their job efficiently. This is now the techno-uncertainty that teachers are experiencing. It is empirical then that teachers be given due attention so that they will be able to acquire and master technological skills and at the same time lowering the stress that they may experience. Although there are a lot of debatable topics in the field of education, most people can agree on one thing: the quality of the teacher is the single most essential component in determining a student's educational experience. It doesn't matter if your classroom is equipped with the most cutting-edge technology in the world if you don't have a teacher who is able to correctly administer it and who can motivate their students to get enthused about learning (Venkatesh et al. 2003). Without that, the benefits of the technology won't be realized as being depicted on the Unified Theory of Acceptance and Use of Technology.

3.2 Teachers' Demographic Variables

3.2.1 Age

Table 2 revealed that the greatest percentage (45.60 %) out of the total of one hundred sixty-nine (169) participants was within the 30-39 years old. Those within the age range of 40-49 years old followed with a percentage of 15.40, 14.8 % was recorded for the age range of 25-29 years old, 14.30 % falls on the age range of 24 years old and below. Those who belonged to the 50 years old and above were only 10.20 %.

Table 2. High school teachers' demographic variable in term of Age

Teachers' age	Frequency	Percentage
24 years old and below	24	14.30
25-29 years old	25	14.80
30-39 years old	77	45.60
40-49 years old	26	15.40
50 years old and above	17	10.20
TOTAL	**169**	**100.00**

This study showed that most of the teachers of the present generation belongs to the age range of 30-39 years old which is similar with the study of Balog (2019) where she stated that the highest percentage of the teachers teaching in the Department of Education were those within the ages 30-35. Further, this study showed that teachers start with their professional career at an early age of 24 years of age and even below. This is also in consonance with the study of Aquino (2015) where teachers and school leaders alike tend to start with their professional career as early as the ages between 21-45 years old.

As evident in the study conducted, it can be seen that teachers belonging to age 30-39 years old significantly dominate the number of participants. This could be an important factor affecting their working place' environment and culture since it is established in the study of Nizami (2015) that there is a significant relationship between age and the school's culture where ages 39 years old down to 30 years old would likely to expressed a futuristic mindset. This is also evident with the study of Rice (2018) where they stated that younger teachers have higher fluid intelligence and develop necessary skills through their role modelling perceptions as they get mature.

3.2.2 Gender

Even at the early years of investigations, teachers have been found to have been showing a significant relationship on their performance/productivity (Delgado, 2016), competence (Elam et al., 2016), and involvement (Amosun et al., 2015) with that of their gender. Table 3 shows the distribution of the participants according to their gender. Majority of them are female constituting 97 participants (57.40 %) out of the 169 participants whereas the remaining 42.60 % or 72 participants are male.

Table 3. High school teachers' demographic variable in term of Gender

Teachers' age	Frequency	Percentage
Female	97	57.40
Male	72	42.60
TOTAL	**169**	**100.00**

This shows a dominion of women in the educational system as far as this investigation is concerned. They have been recorded to be the leading gender in the workplace that pretty much utilizes technological tools and thus also directly been affected by the stress of such tools for instruction and assessment. The environment, decision making and even that of the curriculum could very much be affected by the point of view of the women in the system. In consonance to this, the viewpoint of Ongaki (2015) and Agbayani (2016) stated that women have a good grapple with performance, leadership and involvement both in educational system and the corporate world of the 21st century settings. In addition, Parham (2018) stated that women manifest competencies like taking initiatives, high integrity and honesty, drive for results, practice for self-development, and establishing stretch goals. However, a contrasting idea was formulated by Laspinas (2015) where they found out that good and effective leadership were very much confined to men.

4. CONCLUSIONS AND RECOMMENDATIONS

Based on the above findings, the conclusions were drawn as follow:

The findings of the research showed that teachers' technostress is 3.07 for techno-overload, 2.61 for techno-complexity, 2.33 for techno-insecurity, and 3.51 for techno-uncertainty. Mean score technostress for teachers is 2.89, which corresponds to "moderately affected by stress."

Among the total of one hundred sixty-nine (169) participants, the largest proportion (45.60%) was between the ages of 30 and 39. Following with a percentage of 15.40 are those between the ages of 40 and 49, followed by those between the ages of 25 and 29 (14.8%) and those aged 24 and younger (14.30%). Only 10.20% of the population was comprised of those 50 and older. In terms of gender, 97 (57.40%) of the 169 participants are female, while the remaining 72 (42.60%) participants are male.

The secondary public teachers of the Department of Education - Bukidnon and Valencia City divisions in the Province of Bukidnon, Philippines are encouraged to avail of virtual trainings and seminars on how they can improve their efficacy on the knowledge domains of technology. Trainings and seminars in the planning, designing and implementation of effective online learning environments may be given to the teachers to improve their efficacy in the teaching coupled with technology utilization and lessen technostress.

Likewise, trainings for teachers during INSET and during LAC sessions may consider putting emphasis on the sharing of skills, knowledge and competences in the areas of Pedagogy, Content and Technology. These activities should consider allowing younger generations of teachers to mingle with each other and allowing them too to "mentor" or "guide" traditional and/or conventional teachers in utilizing technological tools for instruction and assessment.

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