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RESEARCH ARTICLE

TECHNOSTRESS AND ITS INFLUENCE ON TEACHER'S COMMITMENT

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Abstract

It is not a new impression that technological stress in schools is continually rising to unheard-of levels. Yet, technological stress and its impact on critical instructional characteristics need a review in fresh scenarios like the global COVID-19 issue. This paper focuses on the influence of technological stress to teacher's commitment in the context of the challenges face by the teachers inside the classroom. Teachers from Bulacan were selected as a sample in accordance with a descriptive-correlational research methodology. Descriptive and inferential statistics were used to process the data gathered utilizing the instruments that were used. The results showed that the teachers experience moderate level of technostress and a great extent of career commitment. Finally, it was discovered that technostress has no significant influence to teacher's commitment. At the conclusion of the study, the practical consequences of these findings on the professional growth of the teachers in this setting are discussed.

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Introduction:-

One of the fundamental goals of education is teaching, although this goal is sometimes overlooked and neglected in favor of research activities, which attract much more attention. The emergency exposed some weaknesses in different schools, but it also made them more resilient because, in a short period of time, most of them were able to continue their teaching activities by substituting online learning for in-person instruction.

Lecturers had to plan and construct new types of instruction that would guarantee student attendance and high levels of learning in addition to the challenges associated with accepting and utilizing digital technologies. Many types of technological stress and its effects on students' and their families' wellbeing are receiving more and more attention. Little focus has been placed on how technostress impacts the work-life balance and quality of work for academics.

The term "technostress" describes the adverse psychological, physiological, and behavioral effects that people encounter as a result of using technology. The COVID-19 pandemic has elevated the danger of technostress by significantly increasing the use of technology for employment, education, socializing, and other activities.

Technology is one of the possibilities employed to close the gap brought on by these problems(Starkey, 2021). Technology is praised by academics as a powerful tool for transforming the nature of education in the post-COVID-19 era (Anoba&Cahapay, 2020). The technostress, however, is one of the unfavorable effects of implementing electronic instructional delivery options in the current context(Penadoet al., 2021).

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Fornite, et al. (2020) claim that the pandemic has in fact caused a rise in technological stress among Filipino workers. The study found out the three most frequent causes of technostress are information overload, task pressure brought on by growing use of technology, and difficulty adjusting to new technologies. Another study of Mahinay, et al. (2021) indicated that technostress had a detrimental impact on Filipino workers' ability to maintain a healthy work-life balance, particularly for those who had to work from home.

Employees are expected to adhere to the organizational culture that exists inside their organizations. Employee compliance with innovations, new regulations, and structuring is necessary. Schools are one of the organizational structures that help to preserve business culture in this way. Schools are institutions of higher learning that exhibit specific organizational tendencies. Teachers are the ones who work in schools' personnel context in this regard, together with the administration level. The institutional conduct of instructors within the school determines the quality of educational institutions and may cause an improvement or decline in educational quality. Teachers hold a crucial position in educational institutions with a variety of ambitions, including leading the use of technology and assisting students.

In alignment with this, teachers need to adapt to a more demanding work and equip themselves with new platforms and instructional materials to cope up to the drastic change. During the pandemic most teachers experienced unexpected upheaval to our education system that caused many of our teachers to relearn technology, particularly ICT and to some it has an emotional effect. Technostress affects many, including many people in the education field.

This study aims to determine the effects of technological adaptation to our teachers psychological and physical well-being and how this technostress affects the performance of teachers in their profession and commitment.

In addition, this research study can be a guide in determining the effects of technostress on the well-being and performance of our teachers for their job. Furthermore, this study can also be reference to the future studies related to technostress.

Statement of the Problem

As the study aims to identify the levels of technostress and its relationship to teacher commitment, the researchers sought answer to the following questions:

1. What are the levels of technostress of teachers in terms of the following parameters?
 - 1.1 Techno-overload
 - 1.2 Techno-invasion
 - 1.3 Techno-complexity
2. What are the levels of commitment of teachers in terms of:
 - 2.1 Affective
 - 2.2 Continuance
 - 2.3 Normative
3. Does technostress level exert significant influence on teachers' commitment?
4. Based on the findings of the study, what implications may be drawn?

Methodology:-

The study aims to identify the correlation between technostress and its influence on teachers' commitment. The study made use of a descriptive-correlational method. According to Buzz (2022), a descriptive correlational study is a study in which the primary goal is to describe connections between variables without attempting to establish a causal relationship. The researchers used a standardized questionnaire as the primary research tool. The data collected in the study provided a vivid presentation of the technostress and its influence on teachers' commitment (independent variable) and influence on teachers' commitment (dependent variable).

Respondents of the Study

The researchers used total population sampling, commonly referred to as census sampling, entails choosing every person in a population to participate in a study. When the population is small, sampling is inexpensive, or the study is intended to include the entire population, this kind of sample is appropriate. Total population sampling has the benefit of being able to give a thorough and accurate representative of the population under study.

The respondents of the study were public - school teachers in the secondary level from Bulacan. From a population of 59 public school teachers, only 58 teachers participated in this study, 24 teachers from School A, 15 teachers from School B and 19 teachers from School C. One teacher from School A chose not to participate in the study. Table 1 shows the distribution of respondents from the three secondary public schools.

Table 1:- Respondents of the Study.

School	N
A	25
B	15
C	19
Total	59

Instruments of the Study

Data was collected using an online questionnaire. Participants were asked to indicate the extent of their stress to each statement in the questionnaire based on a five-point numerical scale ranging from 1 (No stress) to 5 (Highly stressed). The statements measuring technostress level were adapted from Westermann (2017) which aims to determine the level of technostress. The instrument comprised 12 items which were grouped into three dimensions. These dimensions were techno-overload, techno-invasion and techno-complexity. This is highly reliable as evidenced by the .98 Cronbach alpha. Using a 5-level mean score scale developed by Westermann (2017), the level of technostress experienced is interpreted below.

Rating Scale for Technostress

Range	Level
4.50-5.00	Highly Stressed
3.50-4.49	Stressed
2.50-3.49	Moderately Stressed
1.50-2.49	Mild Stressed
1-1.49	No stress

Participants were also requested to denote the extent of their commitment to each statement based on a four-point numerical scale ranging from 1 (Not at all) to 4 (Very great extent). The statements measuring the teacher's commitment were adapted from Werang& Agung (2017) which aims to determine the level of commitment.

The instrument included 19 items which were grouped into three dimensions. These dimensions were affective, continuance and normative commitment. This is highly reliable as evidenced by the .7 Cronbach alpha. Using a 4-level mean score scale developed by Werang& Agung (2017), the level of commitment is interpreted below.

Rating Scale for Teacher's Commitment

Range	Level
3.50-4.00	Very great extent
2.50-3.49	Great extent
1.50-2.49	Some extent
1-1.49	Not at All

Results and Discussion:-

This study generally aimed to investigate the influence of technostress on career commitment of the teachers. Thus, the researchers present and discuss the results and findings by describing the teachers' commitment as influenced by technological stress, and its possible implication that may be drawn based on the results.

Technostress

Table 2:- Technostress of teachers in terms of Techno-overload.

Indicators	Mean	Interpretation
1. I am forced by this technology to do more work than I can handle.	2.79	Moderately Stressed
2. I am forced by this technology to work with very tight time schedules.	2.88	Moderately

		Stressed
3. I am forced to change my habits to adapt to new technologies.	2.84	Moderately Stressed
4. I have a higher workload because of increased complexity of this technology.	2.79	Moderately Stressed
Weighted mean	2.82	Moderately Stressed

As indicated in table 2, Technostress of teachers in terms of Techno-overload, the weighted mean of the numerical scales of fifty-eight (58) public school teachers as respondents is 2.82, interpreted as Moderately Stressed. The first indicator has a mean of 2.79, the second has a mean of 2.88, the third has a mean of 2.84, and the fourth has a mean of 2.79, therefore, they are all classified as moderately stressed which means that they are likely to experience some amount of stress daily.

The term technostress was created by Brod (1982) who labeled it as a phenomenon that prompted stress when technology users had trouble in using new technology. reported that technostress can be predicted when certain conditions exist. He asserted that the conditions were associated with the age and technology experience of users and the perceived ability to accomplish tasks using technology given to users. It means that work overload brought by this technology is somehow a burden of spending more time with it. Often find our schedule very hectic adapting to this technology, giving up some of the routine activities just to learn more about this technology. And overloaded with work to perform since it needs extra effort to get familiar with this technology.

Table 3:- Technostress of teachers in terms of Techno-invasion.

Indicators	Mean	Interpretation
1. I have to be always available due to this technology.	3.00	Stressed
2. I have to sacrifice time to keep current on new technologies.	2.93	Moderately Stressed
3. I feel my personal life is being invaded by this technology.	2.86	Moderately Stressed
Weighted mean	2.93	Moderately Stressed

Table 3 shows the "Technostress of Teachers in Terms of Techno-invasion." It shows that the weighted mean of the numerical scales of (58) public school teachers as respondents is 2.93, which is considered highly stressed. The first indication has a mean of 3.00, which indicates that it is stressed, the second has a mean of 2.93, which indicates that it is moderately stressed, and the third has a mean of 2.86, indicating that it is also moderately stressed.

As revealed by Tarafdar&Ragu-Nathan (2007) techno-invasion deals with how the technology used in their work has encroached into their personal life. It is a bit stressful that it needs to be always available every time there is an introduction of new technology just to adapt to it. It causes stress to teachers who need to sacrifice their time for other things that are also important. Somehow technology causes stress to the point of spending extra time studying it just to be updated especially with the current trend in technology.

Table 4:- Technostress of teachers in terms of Techno-complexity.

Indicators	Mean	Interpretation
1. I do not know enough about this technology to handle it satisfactorily.	2.47	Mild Stressed
2. I need a long time to understand and use new technologies.	2.35	Mild Stressed
3. I do not find enough time to study and upgrade my technology skills	2.60	Moderately Stressed
4. I find others know more about this technology than I do.	2.72	Moderately Stressed
5. I often find it too complex for me to understand and use new technology	2.47	Mild Stressed
Weighted mean	2.52	Moderately Stressed

Table 4 illustrates the "Technostress of Teachers in Terms of Techno-complexity," showing that the weighted mean of the numerical scales of (58) public school teachers as respondents is 2.52, indicating that they are moderately

stressed. There are five indicators, with the first having a mean of 2.47 indicating mild stress, the second that had a mean of 2.35 indicating mild stress, the third that had a mean of 2.60 indicating moderate stress, the fourth that had a mean of 2.72 indicating moderate stress, and the fifth that had a mean of 2.47 indicating mild stress.

Techno-complexity deals with the perception of the users towards the complexity of the technology adopted and whether they feel that their skills now are adequate or otherwise. Technostress anxiety, according to Okolo et al., (2018) revealed a strain that is caused by the lack of knowledge of individuals to cope and adapt to the use of technologies. Sometimes we get disappointed when we can't do things satisfactorily when using technology. It always finds that it will need someone who is computer techy and understands its concepts. When the schedule is so hectic, and it often causes stress when accompanied by the desire to learn more about new technology which would require us to spend more time and effort. It's disappointing to see others learn faster than we do when it comes to technology applications and feel that lagging. Sometimes it gets stressed when it needs to do more research just to learn and adapt to new technology. It is always hard at the start of learning new things when it comes to technology applications. Even a simple technology seems to be a big one.

Teachers' Commitment

Table 5:- Teachers' commitment of teachers in terms of Affective.

Indicators	Mean	Interpretation
1. Teaching profession is important to teachers " self-image.	3.54	Very Great Extent
2. Teachers believe that school image is teachers" image.	3.28	Great Extent
3. Teachers are proud to be in their teaching profession.	3.56	Very Great Extent
4. Teaching profession has a great deal of personal meaning for teachers.	3.51	Very Great Extent
5. Teachers are emotionally attached to teaching.	3.11	Great Extent
6. Teachers encourage each other to complete the task timely with full dedication and accuracy to increase productivity of school.	3.37	Great Extent
7. Teachers do not mix their feelings, emotions, and personal problems in professional work.	3.04	Great Extent
8. To deal with the future of the school.	3.30	Great Extent
9. To perceive the school as the best one among the others.	3.28	Great Extent
Weighted mean	3.33	Great Extent

Commitment is a multifaceted and complex factor that creates a psychological bond between teachers to their profession (Choi & Tang, 2009). This may be characterized by showing passion, loyalty and exhibiting internal driving force towards the institution. Table 5 shows the teacher's commitment in terms of their emotional attachment to their profession. The table showed a weighted average mean of 3.33 which was translated to "Great Extent". Majority of the participants indicated that they are proud of their teaching profession with a mean average of 3.56 which verbally was described as "Great Extent." Existing studies like Zulaekhah et. al (2022) and Rayo et. al (2022) in their individual works mentioned that employees who are highly committed show more satisfaction and contribute to a positive effect in an individual's job performance. On the other hand, teachers showed least commitment in terms of letting their feelings, emotions and personal problems mixed in their professional work. This garnered a mean of 3.04. Based on the findings of the study, exhibited in Table 5, it implies that participants are highly motivated and showed a strong desire to remain in the organization.

Table 6:- Teachers' commitment of teachers in terms of Continuance.

Indicators	Mean	Interpretation
1. Changing teaching profession now would be difficult for teachers.	2.65	Great Extent
2. Too much of teachers" life would be disrupted if teachers" were to change their teaching profession now.	2.61	Great Extent
3. For teachers" personally, the cost of leaving teaching would be far greater than the benefit.	2.82	Great Extent
4. Teachers would not leave teaching right now because teachers" have a sense of obligation to teaching.	2.98	Great Extent
5. Teachers will not change teaching if teachers" offered better working condition and safety in some other sector.	3.32	Great Extent

Weighted mean	2.88	Great Extent
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Organizational commitment, as an important factor in employee retention and motivation, and is considered one of the most important areas of study for many researchers and organizations. As such, researchers and practitioners are interested in understanding the factors that influence an employee's decision to stay or to leave (Beck & Wilson, 2000). Table 6 shows a teacher's commitment in terms of their continuance. The table showed a weighted average of 2.88 which was interpreted as 'Great Extent.' Most of the respondents will stay in the profession regardless of challenges brought by the challenges.

Table 7:- Teachers' commitment in terms of Normative.

Indicators	Mean	Interpretation
1. Teachers" would feel guilty if they left teaching profession	2.60	Great Extent
2. Teachers are in the teaching profession because they have a sense of loyalty to it.	3.00	Great Extent
3. Teachers" a strong sense of belonging to teaching.	3.16	Great Extent
4. Teachers dislike those who hamper the image of teaching.	3.07	Great Extent
Weighted mean	2.96	Great Extent

Employees' perceptions of how long they should stay at their company are referred to as normative commitment. The majority of normatively committed employees believe they should stick with their companies. Normally dedicated workers feel guilty about the prospect of leaving their company since they believe doing so would have terrible repercussions. Table 7 showed a weighted mean of 2.96 which was translated as "Great Extent". The majority of the participants concurred that they feel a strong sense of belongingness to teaching showing as 3.16 as descriptive value. On the other hand, they agreed that teachers would feel guilty if they left their profession which has a value of 2.16. From the study of Pawel Kot (2022) there is a positive correlation between factors that contribute to technological stress and unproductive behavior and a negative correlation between those that inhibit technological stress and counterproductive behavior. By preventing the occurrence of Technostress generators and reinforcing Technostress inhibitors, these results can be applied in organizations to reduce the probability of counterproductive behaviors.

Table 8:- Regression analysis of Technostress on Teachers' commitment.

Variables	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	3.279	.205		15.992	.000
Techno-overload	-.071	.088	-.160	-.809	.422
Techno-invasion	.023	.082	.053	.276	.784
Techno-complexity	-.036	.069	-.080	-.520	.605
R = .176					
R-squared = .031					
F-value = .565					
p-value = .641					
alpha = 0.05					

Table 8 shows the regression analysis of different kinds of Technostress to the mean of Teacher's commitment. The R-value of 0.176 shows a Very Low level of correlation as it is between 0 and 0.25. Existing studies such as from Kiran, et. al (2019) and Lambert, et.al (2017), indicated the Occupational Stress has a significant relationship to the employee's level of commitment. The studies (respectively) are concerned about the effect of stressors on employees in the medical field and public service.

However, the R-Squared value of 0.031 shows that the data collected are not very close to the regression line, which means to say that even though there is a significant relationship between the variables. Consequently, the said value would mean that the variable of technostress only constitutes around 3.1% of factors that actually affect the teacher's commitment. This is supported by the beta coefficients scores playing around 8% to 16%.

This is then incongruent to the context of teachers experiencing technostress. Data showed that Moderate levels of Technostress (as seen in Table 2 – 4) has no significant effect on the different levels of commitment of teachers. Statistically, the P-value supports this with data showing 0.641 which is greater than the level of significance. Hence, it affirms the null hypothesis.

Conclusions:-

The purpose of the study is to identify the correlation between technostress and its influence on teachers' commitment. Based on the analysis conveyed, the following can be concluded:

1. Technostress among teachers is moderate, but of the three components, technological invasion is the highest. The majority of their time is spent on it, which is made worse by their inability to fully utilize new technology due to learning gaps.
2. The three domains in teachers' commitment are to a great extent. The highest is the affective component which makes them committed and dedicated to their teaching career. That quitting their career is extremely unlikely.
3. As a result, despite the stress they are under, teachers have a very high level of devotion and are still willing to adopt new technologies for the benefit of the students.
4. The commitment of the educators in giving quality education to the learners is almost invincible even in the abrupt changes brought by innovations in technology. Nevertheless, other factors/issues may directly/indirectly affect the teachers' commitment and should be taken into account in further research.

Recommendations:-

The following are the recommendations of the researcher based on the findings:

1. It is recommended to do an assessment regarding the degree and effects of technostress to the well-being of teachers and academe to formulate programs and activities that will ease teachers' burden related to technological adaptation.
2. It is necessary to conduct programs and seminars that will ease teachers' stress and anxiety caused by technological adaptation. Seminars that focus on stressless technological change and how to cope up to it.
3. It is also suggested to give educators and academies a break or time limit in using technology during working hours and encourage simple exercises for a few minutes to their workplace.
4. It also recommended school-based training to teachers in using technology effectively that will help them to be more confident and comfortable.
5. The research recommends a future study may be conducted focusing on technostress and its effect on the teachers' performance.

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