PROJECT REPORT

ON

"EXPLORING THE EFFECT OF TECHNO STRESS ON USER EXPERIENCE IN CHATGPT INTERACTIONS OF COLLEGE TEACHERS"

Submitted in partial fulfilment of the requirements for the award of degree of Master of commerce of the University of Calicut

Submitted by

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P. VEMBALLUR- 680671 2022-2024

CERTIFICATE

This is to certify that the project report entitled "EXPLORING THE EFFECT OF TECHNOSTRESS ON USER EXPERIENCE IN CHATGPT INTERACTIONS OF COLLEGE TEACHERS" is a bonafide record of project work carried out by FIDHA P S in partial fulfilment of her Master of Commerce of the University of Calicut.

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CERTIFICATE

| This is to certify that the project report entitled "EXPLORING THE EFFECT O | F |
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| COLLEGE TEACHERS" is bonafide record of project work carried out by FIDHA P | S |
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DECLARATION

I, FIDHA P S, hereby declare that report entitled "EXPLORING THE EFFECT OF TECHNO STRESS ON USER EXPERIENCE IN CHATGPT INTERACTIONS OF COLLEGE TEACHERS" is bonafide record of project work carried out by me under the supervision and guidance of Dr. SEFIYA K M Assistant Professor, M.E. S Asmabi College P. Vemballur. The information and data given in the report is authentic to the best of my knowledge.

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1.1 INTRODUCTION

In today's world, technology is integral to work, entertainment, and communication, making it a major part of our daily lives. However, this heavy reliance on technology can adversely affect our behaviors, attitudes, thoughts, and lifestyles. Rapid technological advancements, particularly in fast-growing companies, can be challenging for employees to keep up with. As influencers of future generations, it is crucial to identify the signs of technostress among teachers and address the root causes of these issues.

In recent years, the integration of technology into educational settings has revolutionized the way teachers interact with students. With the advent of digital platforms and AI-driven tools like ChatGPT, educators now have unprecedented access to resources that enhance their teaching methodologies and facilitate communication with students. However, as technology becomes more ingrained in educational practices, it also brings forth a new set of challenges and complexities, one of which is the phenomenon known as "techno stress."

Techno stress refers to the psychological strain experienced by individuals due to their interactions with technology. While the benefits of technological integration in education are widely acknowledged, little attention has been paid to the potential stressors embedded within these interactions, particularly within the context of ChatGPT-mediated interactions communication among college educators.

Understanding the effects of technostress on user experience in ChatGPT interactions among college teachers is of paramount importance for several reasons. Firstly, college teachers have a vital role in shaping the academic and professional development of their students, and any factors impeding their ability to effectively utilize educational technologies can have significant repercussions on the quality of education delivered. Secondly, given the increasing reliance on AI powered 17 tools like ChatGPT in

educational settings, it is imperative to identify and mitigate any potential sources of stress or discomfort that may arise from their use.

1.2 STATEMENT OF THE PROBLEM

This study delves into the multifaceted realm of techno stress within the specific domain of ChatGPT interactions among college teachers. Through analyzing the effects of technostress on user experience, this research aims to illuminate the intricacies of human-computer interactions in educational settings. This implies a comprehensive examination of the various dimensions of techno stress and its potential consequences on the users' interactions with ChatGPT.

1.3 OBJECTIVES OF THE STUDY

- 1. To determine the level of technostress experienced by teachers.
- 2. To examine the differences in technostress across the sample characteristics of the teachers, such as age, gender, and teaching experience.
- 3. To analyze the influence of technostress on user experience.

1.4 HYPOTHESES

H01: The technostress experienced by teachers is not equal to average.

H02: There is no significant difference in technostress levels between female and male teachers.

H03: There is no significant difference in levels of technological stress experienced by teachers of different age groups.

H04: There is no significant difference in technostress levels among teachers with different levels of teaching experience

H05: Technostress has no significant influence on user experience.

1.5 SIGNIFICANCE OF THE STUDY

This research contributes to the understanding of the challenges faced by college teachers in leveraging AI-driven technologies for instructional purposes. By elucidating the effects of technostress on user experience in ChatGPT interactions, this study informs the development of strategies to support educators in effectively incorporating technology into their teaching methods. Ultimately, the findings aim to enhance the quality of education delivery and promote the successful adoption in the context of AI tools in higher education.

1.6 SCOPE OF THE STUDY

The study will focus on college teachers working in undergraduate and postgraduate institutions. It will include both public and private universities and colleges. The sample will comprise teachers from different disciplines and fields of study like sciences, social sciences, arts and humanities, management etc. Both men and women college teachers will be included in the study sample. Various dimensions of technostress like techno overload and techno-insecurity will be examined. Many AI tools are available for educational purposes. However, for this study we only examined the ChatGPT.

1.7 RESEARCH METHODOLOGY

1.7.1 Research design

The study is descriptive and empirical in nature.

1.7.2 Type of data is used

Primary data for the study collected through questionnaires using Google form.

1.7.3 Tools for data collection

Questionnaires are used to collect the data.

1.7.4 Questionnaire construction

The questionnaire is constructed by using scales of previous studies. 5-point Likert scales were used for this study.

1.7.5 Population of the study

Teachers of various government, aided, and private colleges working in colleges constitute the population.

1.7.6 Sampling technique

Non probability sampling is used.

1.7.7 Sampling method

The convenience sampling method is used.

1.7.8 Sample size

The sample size is 60

1.7.9 Tools for data analysis

Percentage analysis, ANOVA, regression, mean, standard deviation and independent sample t test was used for analyzing the data. The analyses were done using Jamovi 2.3.28

1.7.10 Period of the study

The study was conducted over a period of six months.

1.7.11 Variables used in the study

Technostress and user experience were variables used in the study.

1.8 LIMITATIONS OF THE STUDY

• The sample may not capture the full diversity of college teachers across different

regions, institutions, and disciplines.

• Focusing specifically on ChatGPT interactions may limit the generalizability of the

findings to other AI-driven educational technologies.

• Collecting data solely through questionnaires using Google Forms may limit the depth

of information obtained.

1.9 CHAPTERISATION

Chapter I: Introduction

Chapter II: Review of literature

Chapter III: Theoretical framework

Chapter IV: Data Analysis and Interpretation

Chapter V: Findings, Suggestion and Conclusion

5

Skjuve and Brandtzaeg (2023) conducted a study with 194 ChatGPT users investigates their experiences through a thematic analysis and pragmatic-hedonic framework. Results reveal user satisfaction stems from pragmatic attributes like utility for work or school tasks and hedonic aspects, including entertainment and creative interactions. This emphasizes the significance of practical attributes in assessing conversational AI user experiences.

Khlaif and Mageswaran (2023) investigated technostress among 692 academics from Arab countries during COVID-19, exploring factors and their impact on mobile technology integration in education. Findings reveal techno-stressors like schedule overload, complexity, and invasion. The study emphasizes managing technostress for improved online learning quality, considering its mental and physical effects on students.

Wang and Zhao (2023) examined the impact of technostress creators on teachers' attitudes toward and adoption intentions of ICT. Analyzing data from 289 Chinese teachers, it reveals techno-complexity and techno-insecurity negatively affect attitudes, while techno invasion and techno-overload positively influence adoption intentions. Implications for managing technostress creators are discussed, highlighting age-related variations.

Sanmugam and Ayyoub (2023) explored technostress as a boundary condition affecting teachers' attitudes and continuance intentions in using mobile technology in Palestine. Findings suggest that technostress adversely affects perceived usefulness and attitudes, which in turn indirectly influence continuance intentions. Longitudinal studies are recommended to gain a deeper understanding of the relationship between perceived usefulness and technostress.

Maipita et al. (2023) investigated how organizational support affects Technological Pedagogical Content Knowledge (TPACK) and its impact on teacher performance and technostress amid the COVID-19 pandemic. Results demonstrate that organizational support and TPACK have a beneficial effect on teacher performance, while although

technostress is observed, it does not notably impair performance. Recommendations include prioritizing teachers' knowledge and support and developing strategies to manage technostress. Upcoming studies should delve into critical factors for effective technostress management among teachers.

Adeshola (2023) The launch of OpenAI's ChatGPT has sparked concerns in academia due to potential academic cheating. This study, analyzing 3870 tweets using topic modeling and sentiment analysis, finds a majority expressing positive views on ChatGPT. To safeguard academic integrity, institutions should establish clear policies and design assessments resistant to AI generated text manipulation.

Zhai (2022) ChatGPT's potential impact on education is explored by piloting the tool for academic paper writing. Findings indicate ChatGPT's ability to produce coherent and informative content efficiently. The study reflects on educational implications, suggesting a shift in learning goals towards using AI tools for subject-domain tasks while highlighting critical thinking and creativity concerns about students outsourcing assessments prompt a call for new assessment formats.

Ranathunga and Rathnakara (2022) Mobile technology has transformed young learners' education, fostering independence and critical thinking. However, this shift has led to technostress among teachers, impacting job satisfaction. Examining this in Sri Lanka's Kurunegala Educational Zone, the study identifies techno- overload, invasion, complexity, insecurity, and uncertainty as contributors to teachers' dissatisfaction. The results underscore the importance for educators in government schools to comprehend and adjust to mobile technology, aiming to alleviate technostress and boost job satisfaction."

Siddiqui and Arif (2022) The COVID-19 outbreak has altered everyday routines prompting shifts to online education. This study explored the impact of computer-assisted teaching on technostress among Pakistani teachers during the pandemic. Findings identify factors like Learning Teaching Process Orientation and the inclination towards

Technical Issues Orientation contributes to both technostress and the intention to leave the teaching profession, along with the motivation to do so. Moreover, teacher's self-efficacy in computer use shows an inverse relationship with technostress. Recommendations include computer-based instructional coaching for teachers to enhance computer self-efficacy and foster a robust digital infrastructure, preventing technostress development.

Lee and you (2022) This research analyzed the impact of five technostress creators on a study of job satisfaction and teacher effectiveness among Korean primary school teachers integrating mobile technology. With data from 164 teachers, techno complexity emerged as the sole predictor, underscoring the importance of comprehensive training and assisting to address the complexity of utilizing mobile technology into teaching and enhancing teachers' well-being.

Kader et al. (2022) examined how technostress affects the online learning experiences of undergraduate students amidst the COVID-19 pandemic. Utilizing a sample of 212 Diploma students from UiTM Pahang, the research incorporates teaching-related factors, price value, and technostress into the Unified Theory of Acceptance and Use of Technology (UTAUT). Structural equation modeling indicates a notable association between technostress and the intention to engage in online learning, underscoring the significance of addressing technostress in higher education.

Sanmugam et al. (2022) investigated teachers' technostress in adopting emerging technologies in education. Involving 70 teachers through open-ended questionnaires, thematic analysis reveals the impact of school support, professional identity, technology characteristics, and privacy concerns on technostress. Colleague support and open educational resources mitigate technostress. The research underscores the importance of enhancing support systems and considering professional identity in the integration of technology. Recommendations for future studies encompass employing mixed methods methodologies and widening the inclusion of teachers.

Ishola (2022) Human-Computer Interaction (HCI) in education, explored through a nonexperimental survey with 313 final-year undergraduates, reveals positive perceptions of technology-induced stress. Gender and age differences are non-significant. Stakeholders must formulate policies to guide students' technology interaction for learning, mitigating potential negative impacts on mental well-being.

Chou and Chou (2021) Online teaching, a response to COVID-19, poses challenges for teachers, requiring technical skills and time. This study, rooted in person-environment fit theory, explores factors influencing teachers' aim to remain online teaching. Findings indicate technostress affecting privacy and self-efficacy, with varied impacts across teaching levels. Teachers value resources and flexibility, but concerns include student performance and assessment effectiveness. Recommendations for policymakers and teachers are discussed.

Abilleria (2021) The Spanish government's shift to virtual teaching throughout the COVID-19 period impacted university teachers' job performance, revealing technostress differences. A sample of 239 teachers highlighted challenges, with older, experienced, female teachers from face to-face universities facing more issues. A decrease in job performance was associated with the mismatch between individuals and technology, as well as with technostress. Subsequent studies should take into account technostress factors to facilitate the effective integration of technology into teaching practices.

Li and Wang (2021) This study, used structural equation modeling, examined that the effects of factors that alleviate technostress (such as literacy facilitation, technical support, and involvement facilitation) and those that induce it (including techno-overload, techno- complexity, techno-insecurity, and techno-uncertainty) on the work performance of 312 university teachers. Involvement facilitation and providing technical assistance mitigate certain technostress creators, while literacy facilitation may contribute to their development. Techno-complexity and techno-insecurity negatively affect work performance, while techno-overload has a positive association. Literacy and involvement facilitation positively influence work performance. Senior teachers may experience

amplified effects of literacy facilitation on certain technostress creators. Gender differences in technostress were not observed. These findings inform ICT integration strategies in higher education.

Ladakis et al. (2021) This paper introduced a VR-based gamified approach using a standalone VR headset to mitigate workplace stress. The system incorporates immersive virtual environments, guided deep breathing exercises, and monitors stress levels through heart rate (HR) and electrodermal activity (EDA) sensors. Experiments with volunteers assessed stress responses before, during, and after VR-based relaxation, following the simulation of stress-inducing scenarios. The results 5 inform the development of a practical tool for real-time stress estimation and immediate stress reduction in various environments, with a particular focus on workplaces.

Wang and li (2019) A study validating a multidimensional person-environment misfit framework among 343 academic instructors in China investigates technostress. highlighting person organization, person-technology, and person-people misfits as contributors to technostress. Results show the impact of technostress on job performance, emphasizing the significance of ICT requirements and suitability. Higher grade university teachers experience greater technostress related to ICT management.

Hsiao (2017) explored the influence of personality traits (Big Five), materialism, and an external locus of control on excessive mobile app usage. It examines the bidirectional relationship by investigating how compulsive usage affects technostress, revealing the intricate dynamics between individual characteristics and mobile technology behaviors, extending beyond considerations of system and interface design.

Efilti et al. (2017) The research presents the "Teachers' Techno-stress Levels Defining Scale (TTLDS)" designed to evaluate the impact of technology on teachers. Utilizing a sample of 395 participants, this 28-item scale delineates five dimensions, including "Learning-Teaching Process Oriented" and "Technical Issue Oriented. "High reliability

(Cronbach Alpha = 0.917, Spearman Brown = 0.845) validates its effectiveness in measuring techno-stress levels.

Tarafdar and Cooper (2017) This paper addressed technostress, defined as stress arising from Information Systems (IS) use, proposing a framework—the "technostress trifecta"—comprising techno eustress, techno-distress, and IS design principles for technostress. Contrary to prevailing notions, it argues that technostress can yield positive outcomes, influencing effectiveness and innovation. The framework advocates expanding the role of IS to not only induce stress but also alleviate its negative effects through thoughtful design. The interdisciplinary approach fosters discourse between IS and psychological stress literatures, offering guidance for future studies concerning technostress within organizational environments.

Arif (2016) examined Technostress, a modern adaptation disorder stemming from challenges in adjusting to emerging technologies, particularly affecting teachers due to initiatives like the FATIH project in Turkey. Surveying 370 teachers, findings reveal medium techno-stress levels, varying by aspects such as learning-teaching process, technical issues, and social factors, with minimal differences based on gender and service length but influenced by average Internet use time.

Syvänen (2016) investigated technostress among 2,741 Finnish educators in schools amid the rapid incorporation of ICT into educational practices. Subject teachers, female educators, and those with 16–30 years of experience reported higher technostress levels. Predictors of technostress include Competency in ICT, integration of ICT with teaching approach, support from the educational institution, and attitudes towards the ICT use in education. High competence, alignment, support, and positive attitudes correlate with lower technostress. 9 The findings underscore the importance of tackling these elements to ensure the successful implementation of ICT, guiding educational policies and strategies. Pullins and

Nathan (2014) examined the impact of technostress creators on technology-enabled innovation, performance, and overall performance in the context of institutional sales professionals. Results reveal there is a detrimental link between factors causing technostress and performance. Effort-based mechanisms like building technology competence mitigate effects on innovation and performance, while empowering strategies such as enhancing technology self-efficacy and IS literacy are crucial for overall performance in the challenging professional sales context.

Ayyagari (2011) The increasing reliance on digital technologies has led to technostress, impacting individuals' well-being and productivity. This draws from studies on information systems and stress, utilizing the person environment fit model to examine technostress factors. The model links technology characteristics (usability, intrusiveness, and dynamism) to various stress-inducing factors such as excessive workload, unclear job roles, privacy intrusion struggle between balancing work and personal life, and employment uncertainty. Analysis of data from 661 professionals supports the widespread occurrence of technostress, pinpointing excessive workload and unclear job roles as significant stress factors, with intrusive technology features being key predictors.

Qiang Tu et al. (2005) With the widespread integration of IT, technostress, stemming from the negative impacts of technology on human attitudes and behaviors, 17 has emerged as a notable issue in China and the Internet. The country's top 100 enterprises invest \$10–\$15 billion annually in new IT applications, constituting 25% of China's GDP. China leads the world in mobile phone subscriptions, boasting 380 million users reported in 2002, and experienced a substantial increase in internet users, reaching 87 million in 2004, a 27.9% rise from 2003.

TECHNOSTRESS

Technostress is defined as adverse psychological connection between individuals and the integration of new technologies. While ergonomics concentrates on the manner in which humans interact with and fit into machinery in their surroundings, technostress arises from altered behaviors due to the utilization of modern technologies in both professional and personal settings.

People undergo technostress when they struggle to adapt to or promote health through information technologies. This may manifest as a compulsive need to remain constantly connected, an obligation to respond to work- related information immediately, or a tendency towards habitual multitasking. The demand to work at a quicker pace, driven by the swift influx of information, allows limited space for prolonged contemplation and innovative analysis.

Craig Brod, a leading expert in technostress studies, defines it as 'a modern adaptation disorder resulting from an in capacity to manage new computer technologies in a healthy manner.' Early research in Management Information Systems suggests that initially, technostress was perceived as an adverse consequence of using computing and communication devices such as computers, tablets, and smartphones. However, recent empirical studies indicate that technostress encompasses both beneficial and detrimental aspects. Furthermore, studies indicate that technostress levels vary depending on 4 factors such as gender, age, and computer proficiency. Typically, women experience lower levels of technostress compared to men, older individuals exhibit reduced technostress in work environments compared to younger counterparts, and those with advanced computer skills tend to encounter less technostress.

Technostress can manifest in various symptoms, impacting both mental and physical well-being. For example, those suffering from technostress related anxiety may also experience physical symptoms like sleep disturbances, irritability, frustration, higher

likelihood of errors, and reduced job performance. This can result in decreased satisfaction with one's job, commitment to the organization, and overall productivity.

In today's world, individuals who use technology at work are particularly vulnerable to technostress. Extended exposure to computer screens can cause emotional strain, impacting people's emotions in professional settings.

Several factors contribute to technostress, including the rapid pace of technological advancement, inadequate training in technology use, heavier workloads, lack of consistency in technology, and issues with hardware and software reliability.

Technostress can be classified into three aspects physical, emotional, and psychological. Physical symptoms include eye strain, headaches, neck pain, muscle tension, and keyboard-related injuries. Emotional aspects encompass irritability, anxiety, frustration, and depression. Psychological aspects involve information overload, job security concerns, professional jealousy, demotivation, and uncertainty about job roles arising from extensive technology use.

Here are five conditions categorized as "technostress creators":

- **1. Techno-overload**: This refers to situations where using computers leads to increased workload and pressure to work faster.
- **2. Techno-invasion**: This describes the feeling of always being reachable and connected, resulting in extended work hours and difficulty disconnecting from work.
- **3. Techno-complexity**: This pertains to the complexity of computer systems at work, requiring individuals to invest time and effort into learning new applications and skills. The variety of functions and jargon can be overwhelming, causing stress.
- **4. Techno-insecurity**: This involves feeling threatened about job security 4 due to the perception that others have better understanding and proficiency with new technology.

5. Techno-uncertainty: This relates to the rapid changes and upgrades in computer systems, leading to a lack of opportunity to gain experience with a particular system. This constant need to adjust and acquire knowledge quickly can be unsettling and stressful as knowledge becomes outdated rapidly.

POTENTIAL CAUSES OF TECHNOSTRESS

- **1.Data Overload**: A significant contributor to technostress among employees is the inundation of digital communication, including notifications and emails. This continuous influx of information disrupts concentration and undermines productivity. Deloitte's research indicates that it takes between 15 to 23 minutes to regain productivity after an interruption.
- **2. Persistent Connectivity**: Workers in organizations lacking clear technological boundaries often feel obligated to remain consistently connected and promptly respond to messages, even beyond regular working hours. This continuous connectivity exacerbates technostress among staff.
- **3. Swift Technological Evolution**: Abrupt changes in technology introduce uncertainty and anxiety among employees. Adapting to new technologies in the workplace can be stressful, necessitating the implementation of digital adoption platforms and structured plans for technology integration to address these concerns.
- **4. Inadequate User Experience and Interface Design**: Poorly designed user interfaces can lead to confusion and frustration among users, hindering their ability to navigate tasks effectively and diminishing overall productivity. This may result in feelings of uncertainty, anxiety, and a lack of direction.
- **5. Technology Apprehension**: Fear of technology arises when employees encounter unresponsive, unfriendly, or inadequately feedback-equipped technology. Difficulty completing tasks under such circumstances contributes to technostress among employees.

THEORIES RELATED TO THE EFFECT OF TECHNOSTRESS ON USER EXPERIENCE

- 1. Cognitive Load Theory- Cognitive load theory posits that individuals have a limited capacity for processing information, and when this capacity is exceeded, it may result in cognitive overload and decreased learning outcomes. In the context of ChatGPT interactions, techno stress may increase cognitive load for college teachers, as they grapple with unfamiliar technology, navigate complex interfaces, and manage multiple tasks simultaneously. This increased cognitive load can impair their capacity to effectively utilize ChatGPT and diminish their overall user experience.
- 2. The Technology Acceptance Model (TAM) proposes that individuals' acceptance and adoption of new technologies are influenced by their perceptions of usefulness and ease of use. In the context of college teachers experiencing technostress during interactions with ChatGPT, their perception of the technology's ease of use may be compromised, resulting in decreased acceptance and usage. Moreover, if they perceive ChatGPT as less beneficial due to stress-related issues, they may be less motivated to incorporate it into their teaching practices, thereby affecting their overall user experience.
- 3. Stress and Coping Theory Stress and Coping- Theory posits that individuals experience stress when they perceive a misalignment between the requirements of a circumstance and their available resources for coping. In the setting of interactions with ChatGPT, techno stress may arise from various sources such as technical glitches, linguistic misunderstandings, or concerns about job security. College teachers may employ coping mechanisms such as seeking support from colleagues, adapting their teaching strategies, or seeking professional development opportunities to mitigate techno stress and enhance their user experience with ChatGPT.
- **4.** User Experience (UX) Theory User Experience Theory highlights the significance of understanding users' perceptions, emotions, and behaviors when interacting with technology. Techno stress can significantly influence the overall user experience of

college teachers engaging with ChatGPT, affecting their satisfaction, efficiency, and effectiveness. By examining factors such as perceived usability, emotional responses, and task performance, researchers can acquire understanding of how " technostress" shapes the UX of ChatGPT interactions for college teachers and identify opportunities for improvement.

5. Job Demands-Resources (JD-R) Model -The Job Demands- Resources Model proposes that job-related stress arises from the interplay between job demands and job resources. In the scenario of ChatGPT interactions, job demands could involve acquiring proficiency in new technology, handling communication with students, and delivering quality instruction. Conversely, job resources may entail access to training programs, technical assistance, and autonomy in decision-making. Techno stress among college teachers may arise when perceived job demands outweigh available resources, highlighting the significance of support from the organization and resource allocation in mitigating stress and enhancing the user experience with ChatGPT.

USER EXPERIENCE

User Experience (UX) refers to the complete satisfaction and experience users have when engaging with a product, application, system, or service. It encapsulates various factors, including the ease of navigation, usability, relevance of displayed content, and overall effectiveness in meeting user needs. In essence, UX reflects the holistic impression users form as they engage with a particular entity, encompassing both tangible and intangible aspects of their interaction. It extends beyond mere functionality to consider the emotional and psychological responses elicited by the user's interaction, striving to guarantee the user's experience is instinctive, engaging, and ultimately fulfilling.

There are seven factors that characterize User Experience (UX):

1. Value: When users feel enriched and satisfied using a product or service, it ensures value. This occurs when a productor service addresses a problem or enhances life,

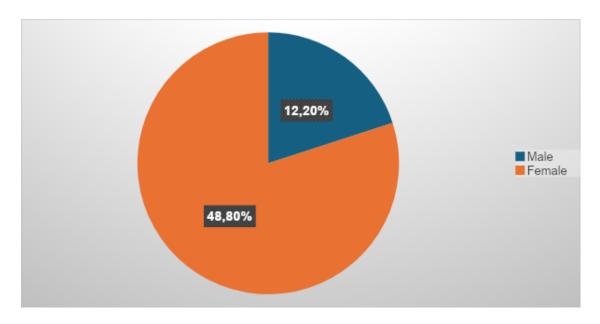
delivering value to both the organization and the user throughout the product or service's lifecycle.

- **2.** Accessibility: An offering or commodity intended for everyone should be accessible to all, including individuals with disabilities. Ensuring accessibility demonstrates care for all users, benefiting the brand significantly.
- **3. Desirability**: An item or service that helps users achieve their aspirations is desirable. Desirability is communicated through design elements such as branding, aesthetics, and emotional design.
- **4. Usefulness**: A product or service that serves a purpose is valuable to many and is thus suitable for widespread adoption.
- **5. Findability**: Findability refers to the ease of locating the product, and for digital products, it includes easy access to content within them.
- **6. Credibility**: Credibility pertains to users' ability to trust the product or service they are using.
- **7. Usability**: Usability involves enabling users to efficiently and effectively accomplish their goals with the product.

Table 4.1 Shows the no. of respondents based on gender.

| Gender | No. of respondents | Percentage |
|--------|--------------------|------------|
| Male | 12 | 20 |
| Female | 48 | 80 |
| Total | 60 | 100 |

Figure 4.1 Shows the No.of respondents based on gender.



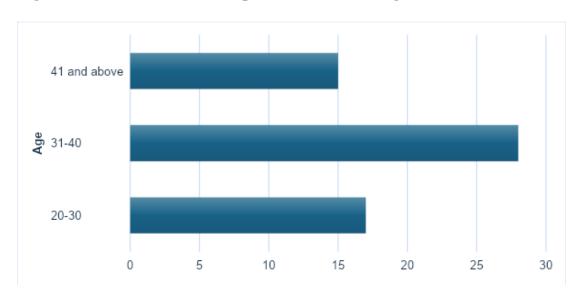
Interpretation

The table shows that the survey had a higher proportion of female respondents compared to male respondents, with females comprising the majority at 80%.

Table 4.2 shows the No. of respondents based on age.

| Age | No. of respondents | Percentage |
|--------------|--------------------|------------|
| 20-30 | 17 | 28.3 |
| 31-40 | 28 | 46.6 |
| 41 and above | 15 | 25 |
| Total | 60 | 100 |

Figure 4.2 shows the No. of respondents based on age



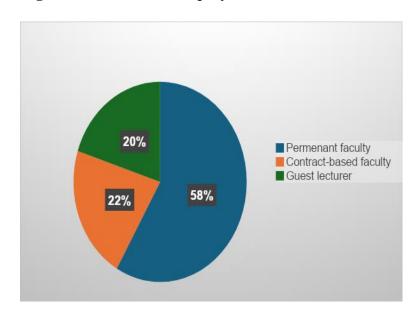
Interpretation

It's evident that the majority of respondents (31-40 age group) are in their thirties to forties, followed by those in their twenties (20-30 age group), and then those aged 41 and above.

Table 4.3 shows the employment status

| Employment status | No. of respondents | Percentage |
|--------------------------|--------------------|------------|
| Permanent faculty | 35 | 58.3 |
| Contract-based faculty | 13 | 21.7 |
| Guest lecturer | 12 | 20 |
| Total | 60 | 100 |

Figure 4.3 shows the employment status



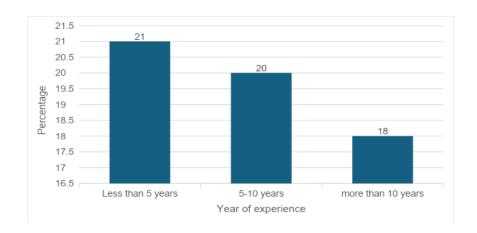
Interpretation

It can be inferred that permanent faculty members constitute the largest proportion of the surveyed population, followed by contract-based faculty and guest lecturers. Permanent faculty members make up the majority, with 35 respondents, constituting 58.3% of the total respondents. Contract-based faculty members represent 13 respondents, accounting for 21.7% of the total. Guest lecturers comprise 12 respondents, making up 20% of the total.

Table 4.4 shows the year of teaching experience.

| Year of teaching experience | No. of respondents | Percentage |
|-----------------------------|--------------------|------------|
| Less than 5 years | 21 | 35 |
| 5-10 years | 20 | 33.3 |
| more than 10 years | 18 | 30 |
| Total | 60 | 100 |

Figure 4.4 shows the year of teaching experience.



Interpretation

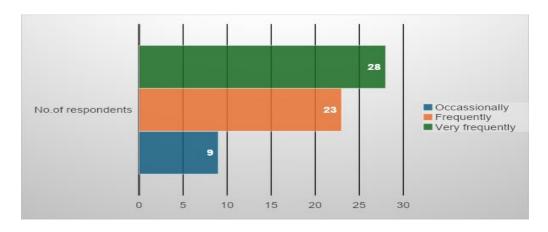
The table shows that 35% of the respondents (21 out of 60) have less than 5 years of teaching experience.33.3% of the respondents (20 out of 60) have between 5 to 10 years of teaching experience.30% of the respondents (18 out of 60) have more than 10 years of teaching experience.

From this data, it's evident that there is a somewhat even distribution of teaching experience among the surveyed population. However, the largest group falls into the category of less than 5 years of teaching experience, followed closely by those with 5-10 years of experience, and then those with more than 10 years of experience.

Table 4.5 shows the usage of technology.

| Technology usage | No. of respondents | Percentage |
|------------------|--------------------|------------|
| Occasionally | 9 | 15 |
| Frequently | 23 | 38.3 |
| Very frequently | 28 | 46.6 |
| Total | 60 | 100 |

Figure 4.5 shows the usage of technology.



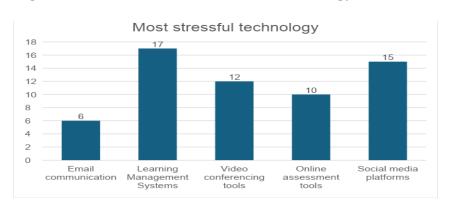
Interpretation

This table shows that 15% of the respondents (9 out of 60) use technology occasionally.38.3% of the respondents (23 out of 60) use technology frequently.46.6% of the respondents (28 out of 60) use technology very frequently. From this data, it's evident that the majority of respondents, nearly half of them, use technology very frequently. A significant portion also uses technology frequently, while a smaller percentage uses it occasionally.

Table 4.6 shows the most stressful technology.

| Most stressful technology | No. of respondents | Percentage |
|-----------------------------|--------------------|------------|
| Email communication | 6 | 10 |
| Learning Management Systems | 17 | 28.3 |
| Video conferencing tools | 12 | 20 |
| Online assessment tools | 10 | 16.6 |
| Social media platforms | 15 | 25 |
| Total | 60 | 100 |

Figure 4.6 shows the most stressful technology.



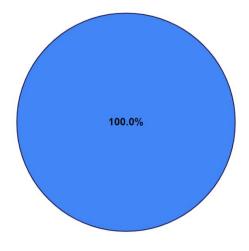
Interpretation

The table shows that 10% of respondents (6 out of 60) find email communication to emerge as most stress-inducing technology.28.3% of respondents (17 out of 60) find LMS to emerge as stress-inducing technology.20% of respondents (12 out of 60) find video conferencing tools to emerge as the most stress-inducing technology.16.6% of respondents (10 out of 60) find online assessment tools to emerge as the most stress-inducing technology.25% of respondents (15 out of 60) find social media platforms to emerge as the most stress-inducing technology.

Table 4.7 shows using the ChatGPT as a tool in teaching.

| Particulars | No. of respondents | Percentage |
|-------------|--------------------|------------|
| Yes | 60 | 100 |
| No | 0 | 0 |
| Total | 60 | 100 |

Figure 4.7 shows the employing ChatGPT as a teaching aid.



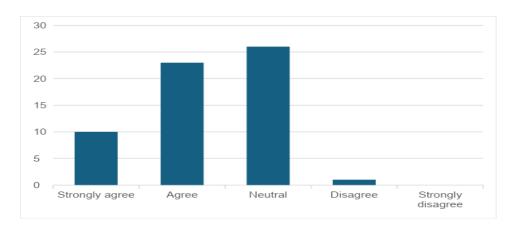
Interpretation

The table shows that their teaching experience has been improved by using ChatGPT.

Table 4.8 shows the use of ChatGPT enhances the overall teaching and learning experience.

| Particulars | No. of respondents | Percentage |
|-------------------|--------------------|------------|
| Strongly agree | 10 | 16.6 |
| Agree | 23 | 38.3 |
| Neutral | 26 | 43.3 |
| Disagree | 1 | 1.6 |
| Strongly disagree | 0 | 0 |
| Total | 60 | 100 |

Figure 4.8 shows the use of ChatGPT enhances the overall teaching and learning experience.



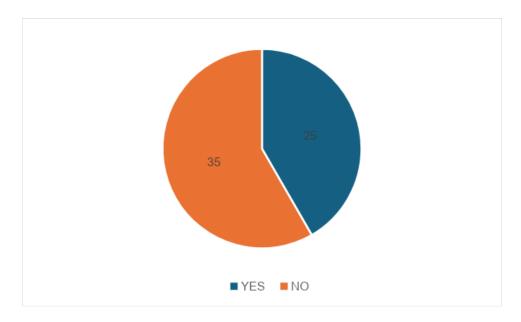
Interpretation

The table shows that 16.6% of respondents (10 out of 60) strongly agree that their teaching and learning experience has been improved by using ChatGPT. 38.3% of respondents (23 out of 60) agree with the statement.43.3% of respondents (26 out of 60) neither agree nor disagree with the statement.1.6% of respondents (1 out of 60) disagree with the statement.

Table 4.9 shows the experienced physical or psychological symptoms due to the integration of technology in teaching roles.

| Particulars | No. of respondents | Percentage |
|-------------|--------------------|------------|
| YES | 25 | 41.6 |
| NO | 35 | 58.3 |
| Total | 60 | 100 |

Figure 4.9 shows the experienced physical or psychological symptoms due to the integration of technology in teaching roles.



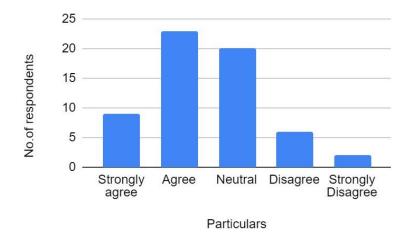
Interpretation

The table shows that 41.6% of respondents experienced physical or psychological symptoms due to incorporation of technology in teaching roles. 58.3% of respondents (35 out of 60) were not affected by this.

Table 4.10 shows feel overwhelmed by the use of technology in teaching

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 9 | 15 |
| Agree | 23 | 38.3 |
| Neutral | 20 | 33.3 |
| Disagree | 6 | 10 |
| Strongly Disagree | 2 | 3.3 |
| Total | 60 | 100 |

Figure 4.10 shows feel overwhelmed by the use of technology in teaching



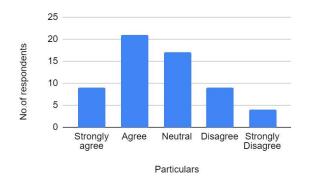
Interpretation

The majority (53.3%) indicated agreement (15% strongly agreeing, 38.3% agreeing) with feeling overwhelmed, while 13.3% disagreed (10% disagreeing, 3.3% strongly disagreeing). Notably, 33.3% remained neutral on the matter.

Table 4.11 shows Technology-related issues often lead to frustration and tension.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 9 | 15 |
| Agree | 21 | 35 |
| Neutral | 17 | 28.3 |
| Disagree | 9 | 15 |
| Strongly Disagree | 4 | 6.6 |
| Total | 60 | 100 |

Figure 4.11 shows Technology-related issues often lead to frustration and tension.



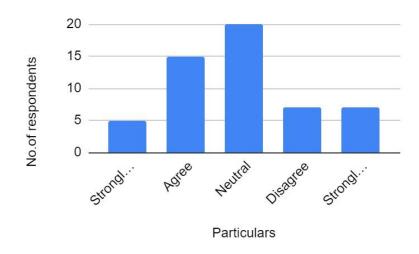
Interpretation

The data reveals that 50% of respondents (15% strongly agreeing, 35% agreeing) perceive technology as often causing frustration and tension. Additionally, 28.3% remained neutral, while 21.6% disagreed (15% disagreeing, 6.6% strongly disagreeing) with this assertion.

Table 4.12 shows Using technology in work often causes anxiety.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 5 | 8.3 |
| Agree | 15 | 25 |
| Neutral | 20 | 33.3 |
| Disagree | 7 | 11.6 |
| Strongly Disagree | 7 | 11.6 |
| Total | 60 | 100 |

Figure 4.12 shows Using technology in work often causes anxiety.



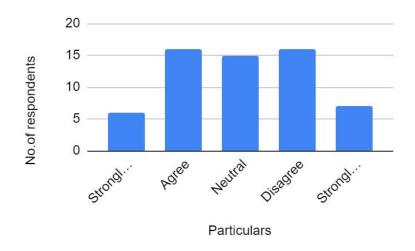
Interpretation

The data reveals that 41.6% of participants agree that using technology at work often causes anxiety, while 23.2% disagree.

Table 4.13 shows how to effectively integrate technology into teaching roles.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 6 | 10 |
| Agree | 16 | 26.6 |
| Neutral | 15 | 25 |
| Disagree | 16 | 26.6 |
| Strongly Disagree | 7 | 11.6 |
| Total | 60 | 100 |

Figure 4.13 shows how to effectively integrate technology into teaching roles.



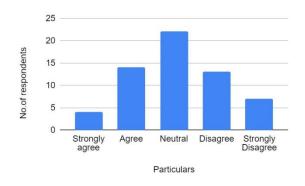
Interpretation

This data from 60 participants shows a split view on the effectiveness of technology integration in teaching roles. While 36.6% agree, 26.6% disagree, and 25% remain neutral.

Table 4.14 shows Uncertainty about the role of technology in work adds to stress.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 4 | 6.6 |
| Agree | 14 | 23.3 |
| Neutral | 22 | 36.3 |
| Disagree | 13 | 21.6 |
| Strongly Disagree | 7 | 11.6 |
| Total | 60 | 100 |

Figure 4.14 shows Uncertainty about the role of technology in work adds to stress.



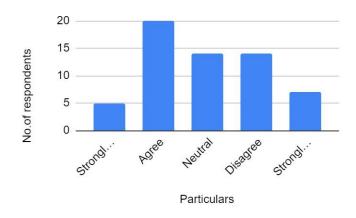
Interpretation

Among the 60 respondents, 30% agreed (6.6% strongly agreeing, 23.3% agreeing) that uncertainty about the role of technology in work contributes to stress. Conversely, 33.2% disagreed (21.6% disagreeing, 11.6% strongly disagreeing), indicating a lack of consensus. Additionally, 36.3% remained neutral on the matter.

Table 4.15 shows experience confusion about the expectations related to technology use.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 5 | 8.3 |
| Agree | 20 | 33.3 |
| Neutral | 14 | 23.3 |
| Disagree | 14 | 23.3 |
| Strongly Disagree | 7 | 11.6 |
| Total | 60 | 100 |

Figure 4.15 shows experience confusion about the expectations related to technology use.



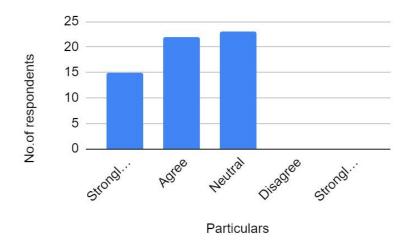
Interpretation

The data indicates a significant portion of respondents feel confusion about technology use expectations, with 41.6% agreeing or strongly agreeing. However, there's diversity in opinions, with 34.9% either neutral or disagreeing.

Table 4.16 shows easy to integrate Chat GPT into teaching activities

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 15 | 25 |
| Agree | 22 | 36.6 |
| Neutral | 23 | 38.3 |
| Disagree | 0 | 0 |
| Strongly Disagree | 0 | 0 |
| Total | 60 | 100 |

Figure 4.16 shows easy to integrate Chat GPT into teaching activities



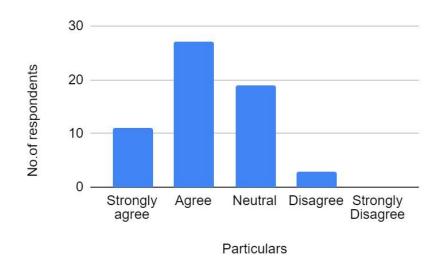
Interpretation

The majority of respondents find integrating ChatGPT into teaching activities easy or at least not difficult. With 61.6% agreeing or strongly agreeing, and no disagreement expressed, it suggests ChatGPT is perceived as a user-friendly and effective tool for educational settings.

Table 4.17 shows the use of ChatGPT enhances the efficiency of teaching process

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 11 | 18.3 |
| Agree | 27 | 45 |
| Neutral | 19 | 31.6 |
| Disagree | 3 | 5 |
| Strongly Disagree | 0 | 0 |
| Total | 60 | 100 |

Figure 4.17 shows the use of ChatGPT enhances the efficiency of teaching process



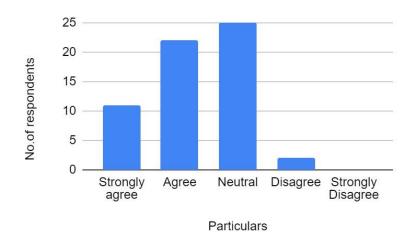
Interpretation

The majority (63.3%) either agree or strongly agree that ChatGPT enhances teaching efficiency, with only 5% expressing disagreement. This indicates broad support for ChatGPT's efficacy in improving the teaching process, with some remaining neutral.

Table 4.18 shows ChatGPT to suit specific teaching needs.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 11 | 18.3 |
| Agree | 22 | 36.6 |
| Neutral | 25 | 41.6 |
| Disagree | 2 | 3.3 |
| Strongly Disagree | 0 | 0 |
| Total | 60 | 100 |

Figure 4.18 shows ChatGPT to suit specific teaching needs.



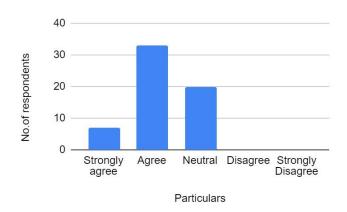
Interpretation

The data indicates that a majority of respondents (55%) either agree or strongly agree that ChatGPT can be tailored to suit specific teaching needs. With only a small percentage (3.3%) expressing disagreement, there's general consensus or at least no strong dissent regarding ChatGPT's adaptability for educational purposes.

Table 4.19 shows the responses generated by ChatGPT were clear and understandable.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 7 | 11.6 |
| Agree | 33 | 55 |
| Neutral | 20 | 33.3 |
| Disagree | 0 | 0 |
| Strongly Disagree | 0 | 0 |
| Total | 60 | 100 |

Figure 4.19 shows the responses generated by ChatGPT were clear and understandable.



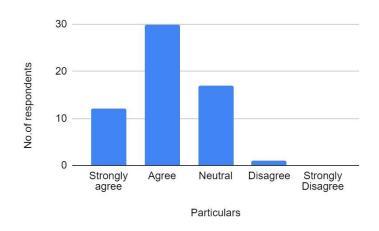
Interpretation

The majority (66.6%) either agree or strongly agree that the responses generated by ChatGPT were clear and understandable. With no disagreement expressed, it indicates widespread satisfaction with the clarity of ChatGPT's responses among respondents

Table 4.20 shows the interface for interacting with ChatGPT is user-friendly.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 12 | 20 |
| Agree | 30 | 50 |
| Neutral | 17 | 28.3 |
| Disagree | 1 | 1.6 |
| Strongly Disagree | 0 | 0 |
| Total | 60 | 100 |

Figure 4.20 shows the interface for interacting with ChatGPT is user-friendly.



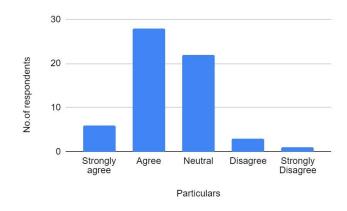
Interpretation

The majority (70%) either agree or strongly agree that the interface for interacting with ChatGPT is user-friendly. With only a small percentage (1.6%) expressing disagreement, there's general consensus or at least no strong dissent regarding the interface's ease of use.

Table 4.21 shows the responses generated by ChatGPT is reliable

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 6 | 10 |
| Agree | 28 | 46.6 |
| Neutral | 22 | 36.6 |
| Disagree | 3 | 5 |
| Strongly Disagree | 1 | 1.6 |
| Total | 60 | 100 |

Figure 4.21 shows the responses generated by ChatGPT is reliable



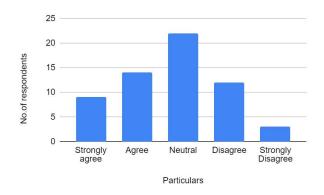
Interpretation

The majority (56.6%) either agree or strongly agree that the responses generated by ChatGPT are reliable. With only a small percentage (8.2%) expressing disagreement, there's a general consensus or at least no strong dissent regarding the reliability of ChatGPT's responses among respondents.

Table 4.22 shows the rapid advancements in technology compel educators to work at an accelerated pace.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 9 | 15 |
| Agree | 14 | 23.3 |
| Neutral | 22 | 36.6 |
| Disagree | 12 | 20 |
| Strongly Disagree | 3 | 5 |
| Total | 60 | 100 |

Figure 4.22 shows the rapid advancements in technology compel educators to work at an accelerated pace.



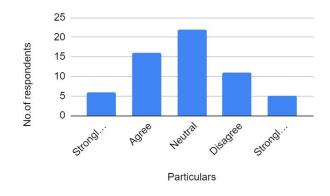
Interpretation

The data indicates that while some respondents (38.3%) perceive rapid technological advancements as necessitating educators to work faster, a significant portion (36.6%) are neutral on the matter, and 25% disagree. This suggests varying perspectives on whether technology accelerates educators' workload.

Table 4.23 shows the demands of modern technology often compel individuals to undertake workloads that exceed their capacity.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 6 | 10 |
| Agree | 16 | 26.6 |
| Neutral | 22 | 36.6 |
| Disagree | 11 | 18.3 |
| Strongly Disagree | 5 | 8.3 |
| Total | 60 | 100 |

Figure 4.23 shows the demands of modern technology often compel individuals to undertake workloads that exceed their capacity.



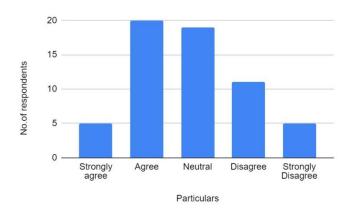
Interpretation

The data suggests a mixed perception regarding whether modern technology often leads individuals to undertake workloads beyond their capacity. While 36.6% are neutral, 36.6% agree or strongly agree with this notion, and 26.6% either disagree or strongly disagree.

Table 4.24 shows the integration of technology necessitates working within very tight time schedules.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 5 | 8.3 |
| Agree | 20 | 33.3 |
| Neutral | 19 | 31.6 |
| Disagree | 11 | 18.3 |
| Strongly Disagree | 5 | 8.3 |
| Total | 60 | 100 |

Figure 4.24 shows the integration of technology necessitates working within very tight time schedules.



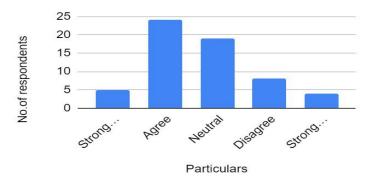
Interpretation

The data suggests varying perspectives on whether technology integration imposes tight time schedules. While 41.6% either agree or strongly agree, 31.6% are neutral, and 26.6% either disagree or strongly disagree. This indicates a diverse range of opinions among respondents regarding the time constraints associated with technology integration.

Table 4.25 shows the adoption of new technologies compels individuals to alter their work habits.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 5 | 8.3 |
| Agree | 24 | 40 |
| Neutral | 19 | 31.6 |
| Disagree | 8 | 13.3 |
| Strongly Disagree | 4 | 6.6 |
| Total | 60 | 100 |

Figure 4.25 shows the adoption of new technologies compels individuals to alter their work habits.



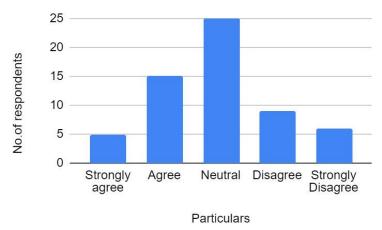
Interpretation

The data indicates that a majority (48.3%) either agree or strongly agree that the adoption of new technologies compels individuals to alter their work habits. While 31.6% are neutral, suggesting uncertainty or a lack of strong opinion, only 20% either disagree or strongly disagree, indicating a minority who do not perceive significant changes in work habits due to technology adoption.

Table 4.26 shows the increased complexity of technology has resulted in a higher workload.

| Particulars | No.of respondents | Percentage |
|-------------------|-------------------|------------|
| Strongly agree | 5 | 8.3 |
| Agree | 15 | 25 |
| Neutral | 25 | 41.6 |
| Disagree | 9 | 15 |
| Strongly Disagree | 6 | 16 |
| Total | 60 | 100 |

Figure 4.26 shows the increased complexity of technology has resulted in a higher workload.



Interpretation

The data shows varying viewpoints regarding whether the increased complexity of technology has led to a higher workload. While 33.3% agree, 41.6% are neutral, indicating uncertainty, and 31.6% disagree. This underscores the differing opinions among respondents regarding the relationship between technological complexity and workload.

One sample t-test

 H_{01} : The technostress encountered by teachers is not equal to average.

Descriptives of technostress

| | N | Mean | Median | SD | SE | |
|--------------|----|------|--------|-------|-------|--|
| TECHNOSTRESS | 60 | 2.91 | 2.92 | 0.799 | 0.103 | |

The table presents descriptive statistics for the variable "TECHNOSTRESS" based on a sample of 60 observations. The average value of "TECHNOSTRESS" is 2.91, with a median of 2.92, suggesting a relatively symmetric distribution. The measure of variability of 0.799 indicates moderate variability in the data, while the standard error of 0.103 estimates the variability of the average of the sample mean.

One Sample T-Test

| | | Statistic | df | p |
|--------------|-------------|-----------|------|-------|
| TECHNOSTRESS | Student's t | -0.882 | 59.0 | 0.381 |

Note. $H_a~\mu \neq 3$

The table presents the results of a one-sample t-test conducted to assess whether the sample mean of the variable "TECHNOSTRESS" significantly differs from a hypothesized population mean of 3. The calculated t-statistic is -0.882 with 59 degrees of

freedom, resulting in a p-value of 0.381. Since the p-value is greater than the conventional significance level of 0.05, there is insufficient evidence to reject the null hypothesis. Therefore, based on this test, we can conclude that teachers do experience an average level of technostress.

Independent sample t-test

 H_{02} : There is no significant difference in technostress levels between male and female teachers.

Group Descriptives of Technostress Levels among Male and Female Teachers

| | Group | N | Mean | Median | SD | SE |
|--------------|--------|----|------|--------|-------|-------|
| TECHNOSTRESS | FEMALE | 48 | 2.88 | 2.88 | 0.716 | 0.103 |
| | MALE | 12 | 3.03 | 3.08 | 1.10 | 0.318 |

The table presents descriptive statistics for the variable "TECHNOSTRESS" broken down by gender groups, Female and Male. The average "TECHNOSTRESS" score is slightly higher for males (3.03) compared to females (2.88). Additionally, there are differences in the variability of "TECHNOSTRESS" scores within each group, as shown

Independent Samples T-Test

| | | Statistic | df | р |
|--------------|-------------|-----------|------|-------|
| TECHNOSTRESS | Student's t | -0.593 | 58.0 | 0.555 |

Note. $H_a \mu_2 \neq \mu_1$

by the standard deviation and standard error values.

The independent samples t-test assesses the differences in means between two groups, categorized by the variable "TECHNOSTRESS. The obtained t-statistic of -0.593, with 58 degrees of freedom, yields 7 a p value of 0. 555.Because this p-value of 6 is higher than the standard significance level of 0.05, there isn't enough evidence to reject the null hypothesis. Thus, according to the test, the means of the two groups don't show significant differences regarding the variable "TECHNOSTRESS."

One-way ANOVA

 H_{03} : There is no significant difference in technostress levels among teachers of different age groups.

Group Descriptives of Levels of Technostress among Teachers of different Age Groups..

| | AGE | N | Mean | SD | SE |
|--------------|--------------------|----|------|-------|-------|
| TECHNOSTRESS | 20-30 | 16 | 2.90 | 0.850 | 0.213 |
| | 31-40 | 28 | 3.00 | 0.730 | 0.138 |
| | 41 and above | 15 | 2.78 | 0.914 | 0.236 |

The table displays summary statistics for the variable "TECHNOSTRESS" among three different age categories. It provides information on the number of observations, mean age, standard deviation, and standard error within each group. The age group 20-30 has a mean technostress of 2.90 with a standard deviation of 0.850 and a standard error of 0.213. Similarly, In the 31-40 age bracket, the average technostress is 3.00, with a measure of variability 0.730 and a standard error of 0.138, while the 41 and above age group shows an average technostress of 2.78, with a measure of variability 0.914 and a standard error of 0.236. Overall, these findings suggest that technostress levels may vary across different age groups of teachers, with those in the 31-40 age range reporting slightly higher levels on average.

One-way ANOVA

| | F | df1 | df2 | р |
|--------------|-------|-----|------|-------|
| TECHNOSTRESS | 0.321 | 2 | 29.0 | 0.728 |

In this table, the F-statistic for technostress levels among different age groups is 0.321, with degrees of freedom of 2 and 29.0 for the numerator and denominator, respectively. Since the p-value (0.728) is greater than the typical significance level of 0.05, we fail to reject the null hypothesis. Therefore, based on this analysis, there is no significant evidence to suggest that there is a difference in technostress levels among teachers of different age groups.

One-way ANOVA

H₀₄: There is no significant difference in technostress levels among teachers with different levels of teaching experience.

Summary statistics of levels of Technostress among Teachers with different levels of teaching experience..

| | Year of Experience | N | Mean | SD | SE |
|--------------|--------------------|----|------|-------|-------|
| TECHNOSTRESS | < 5 years | 20 | 2.80 | 0.890 | 0.199 |
| | 5 - 10 years | 21 | 3.08 | 0.626 | 0.140 |
| | > 10 years | 19 | 2.87 | 0.884 | 0.203 |

The table displays summary statistics 5 for the technostress variable across three distinct groups. Teachers with 5-10 years of experience had the highest mean technostress level (3.08) compared to those with less than 5 years (2.80) or more than 10 years (2.87) of experience. The standard deviation was smallest for the 5–10-year group (0.626), indicating that technostress levels were closely clustered around the mean for this group compared to the other experience level groups. The standard errors were relatively low for all groups (around 0.2), indicating that the sample means are likely to be accurate estimates of the true population mean.

One-Way ANOVA

| | F | df1 | df2 | р |
|--------------|-------|-----|------|-------|
| TECHNOSTRESS | 0.740 | 2 | 35.9 | 0.484 |

The F-statistic for technostress levels among teachers with different levels of teaching experience is 0.740. The p-value linked to the F-statistic is 0.484. As this p value (0.484) exceeds the standard significance level of 0.05, We find no evidence to reject the null hypothesis. The data available are insufficient to make a conclusive statement regarding the impact of teaching experience. significantly influences technostress levels among teachers.

Regression

H₀₅: technostress has no significant influence on user experience.

Model Fit Measures

| | | | Overall Model Test | | | |
|-------|--------|----------------|--------------------|-----|-----|-------|
| Model | R | \mathbb{R}^2 | F | df1 | df2 | p |
| 1 | 0.0688 | 0.00474 | 0.271 | 1 | 57 | 0.604 |

Based on the table provided, the model fit measures of regression analysis between technostress and user experience, R is 0.0688, indicating a very weak positive correlation. R2 is 0.00474, suggesting that only about 0.474% 8 of the variance in user experience can be explained by technostress. The F-value is 0.271 with 1 and 57 degrees of freedom, resulting in a p-value of 0.604. This indicates that the overall regression model is not statistically significant at the typical significance level of 0.05.

Model Coefficients

| Predictor | Estimate | SE | t | p |
|-----------|----------|-------|--------|-------|
| Intercept | 3.2478 | 0.642 | 5.059 | <.001 |
| UX | -0.0873 | 0.168 | -0.521 | 0.604 |

The intercept is 3.2478, with a standard error (SE) of 0.642. The t-value associated with the intercept is 5.059, and the p-value is less than 0.001, indicating that the intercept is statistically significant. The coefficient for user experience is -0.0873, with a standard error of 0.168. The negative sign suggests that, on average, as technostress increases, user experience decreases. However, the t-value for user experience is -0.521, and the associated p-value is 0.604, which is greater than 0.05. This indicates that the coefficient for user experience is not statistically significant. Therefore, based on this analysis, there is no evidence to support the hypothesis that technostress has a significant influence on user experience.

FINDINGS

- The survey had 21 a higher proportion of female respondents (80%) compared to male respondents.
- The majority of respondents fall into the 31-40 age group, followed by the 20-30 age group, and then those aged 41 and above.
- Permanent faculty members constitute the largest proportion of the surveyed population (58.3%), followed by contract-based faculty (21.7%) and guest lecturers (20%).
- The majority of teachers use technology very frequently (46.6%), followed by those who use it frequently (38.3%), and a smaller percentage who use it occasionally (15%).
- LMS and social media platforms are the most stressful technologies for a notable portion of teachers. Email communication is the least stressful technology among teachers.
- ChatGPT has enhanced the teaching and learning experience of the teachers.
- Most teachers have not experienced physical or psychological symptoms due to teaching roles

in technology use.

- College teachers do experience a moderate degree of technostress in their interactions with AI driven technologies like ChatGPT.
- Both male and female college teachers experience similar degrees of technological stress in their interactions with AI-driven technologies like ChatGPT.
- Technostress appears to be relatively consistent across age demographics within the sample population
- The year of experience does not influence the teacher's technostress.
- Technostress does not significantly predict user experience among college teachers

SUGGESTIONS

The project "Exploring the Effect of Technostress on User Experience in ChatGPT Interactions of College Teachers" has provided valuable insights into a fascinating area of technostress and user experience.

- 1. Conduct qualitative research to explore specific technologies used by faculty 21 and their impact on teaching practices.
- 2. Offer training and support programs to help faculty navigate stressful technologies like LMS and social media platforms.
- 3. College teachers face moderate technostress, highlighting the need for support to manage stress and enhance user experience with AI technologies.
- 4.Approaches for assisting teachers in managing technostress should be inclusive and address common stressors experienced by both male and female college teachers.
- 5. The findings suggest that other factors beyond technostress may play a more substantial role in shaping user experience in the context of AI-driven technologies like ChatGPT. So further studies to be conducted.

By integrating these suggestions into the project, it can not only provide more comprehensive insights into the subject matter but also offer actionable recommendations for.

CONCLUSION

The study aimed to assess technostress among college teachers, examining its variation across demographic factors and its influence on user experience with AI-driven technologies. Results indicate a moderate level of technostress, with LMS and platforms for social media being the most stressful technologies. However, email communication was found to be the least stressful. Interestingly, it was noted that ChatGPT improved teaching and learning experiences. Gender, age, and teaching experience did not significantly impact technostress levels, suggesting a universal experience among teachers. While technostress did not directly predict user experience, it underscored the need for supportive strategies to manage stress and optimize technology integration. Notably, further research is warranted to explore additional factors influencing user experience with AI technologies. In summary, the results highlight the importance of holistic support mechanisms tailored to address common stressors faced by both male and female college teachers, ensuring effective utilization of AI technologies in education.

APPENDIX

EXPLORING THE EFFECT OF TECHNOSTRESS ON USER EXPERIENCE IN CHATGPT INTERACTIONS OF COLLEGE TEACHERS

1.Age

- 20-30
- 31-40
- 41-50
- 51-60
- Above 61

2.Gender

- MALE
- FEMALE
- OTHER

3.Employment status

- Permanent faculty
- Contract-based faculty
- Guest lecturer

4. Years of teaching experience

• Less than 5 years

| • 5-10 years |
|---|
| • 10-15 years |
| • 15-20 years |
| • More than 20 years |
| 5. How frequently do you use technology (e.g., computers, smartphones, tablets) for |
| teaching-related activities? |
| • Rarely |
| Occasionally |
| • Frequently |
| • Very frequently |
| 6. Which specific technology do you find most stressful to use in your teaching role? |
| Email communication |
| • Learning Management Systems (e.g., Moodle, Blackboard) |
| • Video conferencing tools (e.g., Zoom, Microsoft Teams) |
| Online assessment tools |
| Social media platforms |
| 7. Have you experienced any physical or psychological symptoms that you attribute |
| to the use of technology in your teaching role? (anxiety, burnout etc.) |
| • YES |
| • NO |
| 8. Have you ever used ChatGPT tool in your teaching? |
| • YES |

• NO

9. Do you believe that the use of ChatGPT enhances the overall teaching and learning experience?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

10. Perceived techno stress

| | | | | agree |
|---|---|---|---|-------|
| О | 0 | 0 | 0 | 0 |
| | | | | |
| | | | | |
| O | О | 0 | 0 | 0 |
| | | | | |
| | | | | |
| O | O | 0 | 0 | 0 |
| | | | | |
| | | | | |

11. Role ambiguity and use of technology.

| Statements | Strongly | Disagree N | eutral | Agree | Strongly |
|--------------------------|----------|------------|--------|-------|----------|
| | disagree | | | | agree |
| I find it unclear how to | О | 0 | O | 0 | O |
| effectively integrate | | | | | |
| technology into my | | | | | |
| teaching role. | | | | | |
| Uncertainty about the | О | 0 | o | 0 | О |
| role of technology in my | | | | | |
| work adds to my stress. | | | | | |
| I often experience | 0 | 0 | O | 0 | o |
| confusion about the | | | | | |
| expectations related to | | | | | |
| technology use. | | | | | |
| | | | | | |

12. Your experience of using Chat GPT

Indicate your experience of integrating Chat GPT into your teaching

| | Strongly | | | | Strongly |
|---|----------|-------|---------|----------|----------|
| | agree | Agree | Neutral | Disagree | disagree |
| It is easy to integrate Chat GPT into my teaching activities | | | | | |
| The use of ChatGPT enhances the efficiency of my teaching process | | | | | |
| I can adapt ChatGPT to suit my specific teaching needs | | | | | |

| The responses generated by ChatGPT | | | |
|---------------------------------------|--|--|--|
| were clear and understandable | | | |
| The interface for interacting with | | | |
| ChatGPT is user-friendly | | | |
| The responses generated by ChatGPT is | | | |
| reliable | | | |

13. Technostress creators

Techno-overload:

| | Strongly | | Neutra | Disagre | Strongly |
|--|----------|-------|--------|---------|----------|
| | agree | Agree | 1 | e | disagree |
| I am forced by this technology to work much faster. | | | | | |
| I am forced by this technology to do more work than I can handle. | | | | | |
| I am forced by this technology to work with very tight time schedules. | | | | | |
| I am forced to change my work habits to adapt to new technologies. | | | | | |
| I have a higher workload because of increased technology complexity | | | | | |

14. Techno-insecurity:

| | Strongly | Agree | Neutral | Disagree | Strongly disagree |
|---|----------|-------|---------|----------|-------------------|
| I feel constant threat to my job security due to new technologies | | | | | |
| I have to constantly update my skills to avoid being replaced. | | | | | |
| I am threatened by coworkers with newer technology skills. | | | | | |
| I do not share my knowledge with my coworkers for fear of being replaced. | | | | | |
| I feel there is less sharing of knowledge among coworkers for fear of being replaced. | | | | | |

REFERENCES

Adeshola, I., & Adepoju, A. P. (2023). The opportunities and challenges of ChatGPT in education. *Interactive Learning Environments*, $\theta(0)$, 1–14. https://doi.org/10.1080/10494820.2023.2254858

Ayyagari, R., Grover, V., & Purvis, R. (2011). Technostress: Technological Antecedents and Implications. *MIS Quarterly*, *35*(4), 831–858. https://doi.org/10.2307/41409963

Chou, H.-L., & Chou, C. (2021). A multigroup analysis of factors underlying teachers' technostress and their continuance intention toward online teaching. *Computers & Education*, 175, 104335. https://doi.org/10.1016/j.compedu.2021.104335

Kader, M. A. R. A., Aziz, N. N. A., Zaki, S. M., Ishak, M., & Hazudin, S. F. (2022). THE EFFECT OF TECHNOSTRESS ON ONLINE LEARNING BEHAVIOUR AMONG UNDERGRADUATES. *Malaysian Journal of Learning and Instruction*, 19(1), Article 1. https://doi.org/10.32890/mjli2022.19.1.7

Khlaif, Z. N., Sanmugam, M., Hattab, M. K., Bensalem, E., Ayyoub, A., Sharma, R. C., Joma, A., Itmazi, J., Najmi, A. H., Mitwally, M. A. A., Jawad, A. A., Ramadan, M., & Bsharat, T. R. K. (2023). Mobile technology features and technostress in mandatory online teaching during the COVID-19 crisis. *Heliyon*, *9*(8). https://doi.org/10.1016/j.heliyon.2023.e19069

Khlaif, Z. N., Sanmugam, M., Joma, A. I., Odeh, A., & Barham, K. (2023). Factors Influencing Teacher's Technostress Experienced in Using Emerging Technology: A Qualitative Study. *Technology, Knowledge and Learning*, 28(2), 865–899. https://doi.org/10.1007/s10758-022-09607-9

Lee, M., & Lim, K. Y. (2020). Do the Technostress Creators Predict Job Satisfaction and Teacher Efficacy of Primary School Teachers in Korea? *Educational Technology International*, 21(1), 69–95. https://doi.org/10.23095/ETI.2020.21.1.069

Maipita, I., Rahman Dongoran, F., Husrizal Syah, D., & Hafiz Sagala, G. (2023). TPACK, Organizational Support, and Technostress in Explaining Teacher Performance During Fully Online Learning. *Journal of Information Technology Education: Research*, 22, 041–070. https://doi.org/10.28945/5069

Penado Abilleira, M., Rodicio-García, M.-L., Ríos-de Deus, M. P., & Mosquera-González, M. J. (2021). Technostress in Spanish University Teachers During the COVID-19 Pandemic. *Frontiers in Psychology*, 12. https://doi.org/10.3389/fpsyg.2021.617650

Salo, M., Pirkkalainen, H., Chua, C. E. H., & Koskelainen, T. (2022). Formation and mitigation of technostress in the personal use of IT. *Mis Quarterly*, 46(2).

Siddiqui, S., Arif, I., & Hinduja, P. (2023). Technostress: A catalyst to leave the teaching profession - A survey designed to measure technostress among teachers in Pakistan during COVID-19 pandemic. *E-Learning and Digital Media*, 20(1), 53–79. https://doi.org/10.1177/20427530221107506

Skjuve, M., Følstad, A., & Brandtzaeg, P. B. (2023). The User Experience of ChatGPT: Findings from a Questionnaire Study of Early Users. *Proceedings of the 5th International Conference on Conversational User Interfaces*, 1–10. https://doi.org/10.1145/3571884.3597144

Tarafdar, M., Cooper, C. L., & Stich, J.-F. (2019). The technostress trifecta - techno eustress, techno distress and design: Theoretical directions and an agenda for research. *Information Systems Journal*, 29(1), 6–42. https://doi.org/10.1111/isj.12169

Tarafdar, M., Pullins, E. Bolman., & Ragu-Nathan, T. S. (2015). Technostress: Negative effect on performance and possible mitigations. *Information Systems Journal*, 25(2), 103–132. https://doi.org/10.1111/isj.12042

Tu, Q., Wang, K., & Shu, Q. (2005). Computer-related technostress in China. Communications of the ACM, 48(4), 77–81. https://doi.org/10.1145/1053291.1053323

Wang, Q., & Zhao, G. (2023). Exploring the influence of technostress creators on inservice teachers' attitudes toward ICT and ICT adoption intentions. *British Journal of Educational Technology*, 54(6), 1771–1789. https://doi.org/10.1111/bjet.13315



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