AN INVESTIGATION INTO FACULTY RESILIENCE, TECHNOSTRESS AND ADAPTIVE COPING STRATEGIES IN THE CONTEXT OF POST-DIGITAL TRANSFORMATION

A

DISSERTATION

SUBMITTED TO THE MIER COLLEGE OF EDUCATION (AUTONOMOUS)

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

BACHELOR OF ARTS (HONOURS WITH RESEARCH)

IN

PSYCHOLOGY

SUPERVISOR

Dr. Taniya Raina

Assistant Professor

INVESTIGATOR

Vanshika Kotwal

Roll No. 2208053

Sem. VIII

MIER COLLEGE OF EDUCATION (Autonomous)

JAMMU – 180001

2026

MIER COLLEGE OF EDUCATION
Autonomous
Accredited by the NAAC with 'A+' Grade

Recognised by the J&K Government
Permanently Affiliated to the University of Jammu
Recognised by the UGC under Section 2(f) & 12(B)

SUPERVISOR'S CERTIFICATE

This is to certify that **Ms. Vanshika Kotwal,** student of **Bachelor of Arts (Honours with Research) in Psychology Semester VIII, Session 2022-2026**, bearing **Roll No 2208053,** has worked under my supervision on her dissertation entitled**:**

"AN INVESTIGATION INTO FACULTY RESILIENCE, TECHNO STRESS AND ADAPTIVE COPING STRATEGIES IN THE CONTEXT OF POST-DIGITAL TRANSFORMATION".

Her dissertation is fit for submission, in partial fulfillment of the requirements for the award of the Degree in **Bachelor of Arts (Honours with Research) in Psychology**

DATE:

(Dr. Taniya Raina)
SUPERVISOR

Head,
School of Social Sciences and Humanities

श्रेष्ठ
B.C. Road Jammu
180 001
Ph.: 0191-2546078,2565098
Fax:0191-2548239
Email:principal@miercollege.in
Website: www.miercollege.in

DECLARATION BY THE CANDIDATE

I hereby declare that the work presented in the dissertation entitled:

"**AN INVESTIGATION INTO FACULTY RESILIENCE, TECHNOSTRESS AND ADAPTIVE COPING STRATEGIES IN THE CONTEXT OF POST- DIGITAL TRANSFORMATION**" submitted in partial fulfillment of the requirements for the award of the Degree of [Bachelor of Psychology (Honours with Research)], to MIER College of Education (Autonomous), is an authentic record of my own research work carried out under the supervision of **Dr. Taniya Raina; Assistant Professor, Psychology**.

I further declare that the work embodied in the present dissertation:

a) Is my original work and has not been copied from any research journal, dissertation, thesis, or book; and
b) Has not been submitted by me for the award of any other Degree/Diploma/Certificate of any University or Institution.
c) All sources of information used in this study have been duly acknowledged.

Date: _____ Signature of the Candidate

ACKNOWLEDGEMENT

I express my sincere gratitude to all those who supported and guided me throughout the completion of this dissertation. This work would not have been possible without their encouragement and guidance.

I am deeply grateful to my supervisor, **Dr. Taniya Raina** , for her invaluable guidance and constant support. Her dedication to academic excellence inspired me to approach this research with confidence, perseverance, and a commitment to quality. I sincerely appreciate the time and effort she devoted to guiding me through this journey.

I would like to express my special thanks to **The Chairperson, Dr. Renu Gupta**, and **Prof. Adit Gupta**, for their encouragement and support. I extend my gratitude to **MIER College of Education** and the Head, School of Social Sciences & Humanities, **Dr. Monika Bajaj**, for providing a supportive academic environment.

I am thankful to the Almighty for providing me with strength and perseverance during this journey.

A heartfelt thanks to my family for their unconditional support and belief in me, their belief in me kept me motivated and helped me overcome every challenge throughout this journey.
I am especially thankful to my friends, particularly **Ansh, Stuti and Sehaj** , for their emotional and mental support throughout this journey

Lastly, I would like to appreciate myself for staying dedicated and successfully completing this work.

TABLE OF CONTENTS

CERTIFICATE ii
DECLARATION BY THE CANDIDATE iii
ACKNOWLEDGEMENT iv
LIST OF TABLES viii
LIST OF FIGURES ix
LIST OF ABBREVATIONS x
LIST OF APPENDICES xi
ABSTRACT xii
INTRODUCTION 2
1.1 FACULTY IN HIGHER EDUCATION 3
1.2 RESILIENCE AMONG FACULTY MEMBERS 4
1.3 TECHNOSTRESS IN THE POST-DIGITAL ERA 5
1.4 ADAPTIVE COPING STRATEGIES 9
1.5 INTERRELATION AMONG THE VARIABLES 9
1.6 THEORETICAL FRAMEWORK 12
1.7 STATEMENT OF THE PROBLEM 12
1.8 OPERATIONAL DEFINITIONS OF THE STUDY 13
1.9 OBJECTIVES OF THE STUDY 14
1.10 HYPOTHESES OF THE STUDY 14
1.11 DELIMITATIONS OF THE STUDY 14
1.12 SIGNIFICANCE OF THE STUDY 15
REVIEW OF LITERATURE 17
2.1 TECHNOSTRESS AND CHALLENGES IN POST-DIGITAL TRANSFORMATION AMONG FACULTY 17
2.2 INSTITUTIONAL SUPPORT AND RESILIENCE BUILDING IN FACULTY 24
2.3 ADAPTIVE COPING STRATEGIES AND PSYCHOLOGICAL FACTORS INFLUENCING FACULTY WELL-BEING 25
2.4 RESEARCH GAP 26
RESEARCH METHODOLOGY 29
3.1 RESEARCH DESIGN 29
3.2 POPULATION AND SAMPLE 29
3.2 SAMPLING TECHNIQUE 31

3.3 RESEARCH TOOLS AND DESCRIPTION 31
3.3.1 CONNOR-DAVIDSON RESILIENCE SCALE (CD-RISC 25) 32
3.3.2 BRIEF COPE INVENTORY 32
3.3.3 THE TECHNOSTRESS CREATORS INVENTORY (TCI) 33
3.4 STATISTICAL TECHNIQUE EMPLOYED 34
ANALYSIS & INTERPRETATION OF DATA 36
4.1 DEMOGRAPHIC PROFILE OF THE SAMPLE 36
4.2 PREVALENCE OF RESILIENCE, TECHNOSTRESS, PROBLEM FOCUSED COPING (PF), EMOTION FOCUSED COPING (EF), AVOIDANT COPING (AC) 38
4.3 RELATIONSHIP BETWEEN RESILIENCE, TECHNOSTRESS. PROBLEM FOCUSED COPING, EMOTION FOCUSED COPING AND AVOIDANT COPING 41
4.4 GENDER DIFFERENCES IN TECHNOSTRESS, RESILIENCE, PROBLEM-FOCUSED COPING, EMOTION FOCUSED COPING AND AVOIDANT COPING 46
4.5 SUMMARY OF THE FINDINGS 47
FINDINGS ,CONCLUSIONS, FUTURE IMPLICATIONS & SUGGESTIONS 49
5.1INTERPRETATION OF THE FINDINGS 50
5.2PREVALENCE OF RESILIENCE, TECHNOSTRESS, AND ADAPTIVE COPING STRATEGIES 50
5.3 RELATIONSHIP AMONG RESILIENCE, TECHNOSTRESS, AND ADAPTIVE COPING STRATEGIES 52
5.4GENDER DIFFERENCES IN TECHNOSTRESS, RESILIENCE, AND ADAPTIVE COPING STRATEGIES 54
5.5 IMPLICATIONS FOR THEORY AND RESEARCH 55
5.6 PERSON-ENVIRONMENT FIT THEORY 55
5.7 TRANSACTIONAL MODEL OF STRESS AND COPING 55
5.8 IMPLICATIONS FOR PRACTICE 56
5.9 LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH 57
5.10 CONCLUSION 58
SUMMARY 61
REFERENCE 64
APPENDIX-A 72
CONNOR-DAVIDSON RESILIENCE SCALE (CD-RISC 25) 72
APPENDIX-B 73
BRIEF COPE INVENTORY 73

APPENDIX-C 74
TECHNOSTRESS INVENTORY 74

LIST OF TABLES

Table 4.1 Demographic profile of the respondents 36

Table 4.2 Prevalence of Technostress, Resilience, Problem-focused, Emotion focused coping and Avoidant Coping Among Faculty
.....39

Table 4.3 Pearson Correlation Matrix for resilience, technostress. Problem focused coping, emotion focused coping and avoidant coping 41

Table4.4 Independent Samples t-Test: Gender Differences in Tecnostress, Resilience, Problem-focused, Emotion focused and Avoidant Coping
.....46

LIST OF FIGURES

Figure 4.1 Demographic characteristics and Work experience of participants 38

Figure 4.2 Prevalence of Resilience, Technostress, and Coping Strategies among participants 40

Figure4.3 Scatterplot Showing the Relationship Between Technostress and Avoidant Coping Among Faculty 42

Figure 4.4 Scatterplot Showing the Relationship Between Emotion focused Coping and Avoidant Coping Among Faculty 43

Figure 4.5 Scatterplot Showing the Relationship Between Resilience and Problem-Focused Coping Among Faculty 44

Figure 4.6 Scatterplot Showing the Relationship Between Technostress and Emotion focused Coping Among Faculty 45

LIST OF ABBREVATIONS

ABBREVATION	FULL FORM
CD-RISC 25	Connor–Davidson Resilience Scale
ERT	Emergency remote teaching
ICT	Information and communication technologies
Brief COPE	Brief coping orientation to problems experienced (inventory)
TCI	Technostress Creators Inventory
PF	Problem focused coping
EF	Emotion focused coping
AC	Avoidant coping
R	Resilience
T	Technostress
F	Frequency
SD	Standard Deviation

LIST OF APPENDICES

APPENDIX	TITLE
APPENDIX- A	(CD-RISC 25) Connor-Davidson Resilience Scale
APPENDIX -B	Brief COPE (Coping Orientation to Problems Experienced) Inventory
APPENDIX- C	(TCI)Technostress Creators Inventory

ABSTRACT

The rapid digital transformation of higher education has significantly increased the use of technology among faculty, leading to the emergence of technostress and the need for effective coping mechanisms. The present study aimed to examine the prevalence of technostress, resilience, and adaptive coping strategies among higher education faculty, as well as to explore gender differences and the relationships among these variables. A quantitative cross-sectional research design was employed, with a sample of 120 faculty members selected using purposive sampling. Data were collected through standardized instruments, including the Connor–Davidson Resilience Scale (CD-RISC 25) and the Brief COPE Inventory.

The findings revealed that a majority of faculty experienced moderate to high levels of technostress, with 44.3% reporting high levels. Despite this, most participants demonstrated above-average resilience, indicating a strong capacity to adapt to digital demands. Problem-focused coping emerged as the most commonly used adaptive strategy, while emotion-focused and avoidant coping were used to varying degrees. Correlation analysis indicated that resilience was positively associated with problem-focused coping, whereas technostress showed strong positive relationships with emotion-focused and avoidant coping strategies. Gender differences were largely non-significant, except for emotion-focused coping, where male faculty reported higher usage.

Overall, the study highlights resilience as a protective factor and technostress as a risk factor influencing coping behaviours among faculty. The findings emphasize the importance of institutional support, training, and the promotion of adaptive coping strategies to enhance faculty well-being and effectiveness in the post-digital era.

Keywords: Technostress; Resilience; Adaptive Coping Strategies; Higher Education Faculty; Digital Transformation; Faculty Well-being.

CHAPTER-I
INTRODUCTION

CHAPTER I

INTRODUCTION

Higher education is undergoing a deep and lasting transformation due to the rapid growth of digital technology. Teaching today extends far beyond physical classrooms and facetoface interaction. Faculty members are now expected to teach through online platforms, manage digital learning systems, respond to constant communication, and continuously update their technological skills. While digitalisation has increased flexibility and access to education, it has also added new pressures to the academic role. As a result, many faculty members experience increased mental load, fatigue, and stress related specifically to the use of technology, a phenomenon widely described as technostress (Tarafdar et al., 2015; Salanova et al., 2013).

This situation became particularly intense during and after the COVID-19 pandemic, when institutions were forced to shift rapidly to online teaching. Faculty members had to redesign courses, adapt to unfamiliar digital tools, and remain constantly available to students, often without adequate training or institutional support. Research suggests that this sudden digital shift significantly increased stress, emotional exhaustion, and feelings of overload among university teachers (Watermeyer et al., 2021; Penado Abilleira et al., 2021). Even in the post-pandemic period, digital demands have remained high, making technostress a continuing concern rather than a temporary challenge.

However, not all faculty members experience digital pressure in the same way. While some struggle to cope with constant technological demands, others demonstrate the ability to adapt, recover, and continue functioning effectively. This difference highlights the importance of faculty resilience, which refers to the capacity to bounce back from stress, adjust to change, and maintain psychological well-being despite ongoing challenges (Connor & Davidson, 2003). In the context of digital transformation, resilience allows educators to manage uncertainty, remain emotionally balanced, and continue performing their academic roles effectively (García-Rivera et al., 2022).

Alongside resilience, adaptive coping strategies play a crucial role in shaping how faculty respond to technostress. Coping strategies include the cognitive, emotional, and behavioural efforts individuals use to manage stressful situations (Lazarus & Folkman, 1984). Faculty members who use adaptive coping methods—such as problem-solving, seeking social and

technical support, positive reframing, and skill development—are better able to reduce the negative effects of technostress and sustain their well-being (Hauk et al., 2019; Stan, 2022). In contrast, ineffective coping can increase emotional exhaustion and reduce job satisfaction.

Cultural and institutional contexts further influence these experiences. In countries like India, faculty members often work under conditions of heavy workload, limited digital resources, and varying levels of technological training. Institutional expectations to remain constantly connected can blur boundaries between professional and personal life, increasing stress levels. Studies indicate that inadequate organizational support significantly intensifies technostress, whereas training, leadership support, and clear digital policies can reduce its impact and promote resilience among faculty (Solís et al., 2023; Spagnoli et al., 2020).

Recent research highlights the seriousness of technostress in higher education. High levels of digital workload and constant connectivity have been linked to burnout, reduced teaching effectiveness, work-family conflict, and lowered job satisfaction among faculty members (Shaukat et al., 2022; Boyer-Davis & Berry, 2022). Despite growing awareness of this issue, there remains a limited understanding of how resilience and adaptive coping strategies work together to protect faculty members in the post-digital academic environment, particularly within the Indian context.

The present study aims to address this gap by investigating faculty resilience, technostress, and adaptive coping strategies in the context of post-digital transformation. It seeks to examine how faculty members experience technology-related stress, the level of resilience they possess, and the coping strategies they use to manage digital demands. By understanding the interrelationship among these variables, this study aims to contribute meaningful insights that can help higher education institutions design supportive interventions, strengthen faculty well-being, and promote sustainable academic performance in an increasingly digital world.

1.1 FACULTY IN HIGHER EDUCATION

Faculty members are the backbone of higher education institutions , entrusted with the critical tasks of teaching, research, mentorship, and service. Traditionally, faculty roles centred on classroom instruction and disciplinary research, but the accelerating pace of digital transformation has profoundly reshaped these responsibilities (Fernández et al.,2023)

With digitization becoming embedded in nearly all academic functions, faculty must master new digital tools and pedagogical practices while balancing their foundational academic missions. Their adaptability in navigating these changes directly influences institutional effectiveness, student experience, and the quality of education delivered (Buzás et al., 2025).

Institutional support plays a very important role in how teachers experience and manage technostress. When teachers receive proper training, clear guidance, and emotional support from their institutions, they feel more confident in using technology and experience lower levels of stress. Factors such as age, digital skills, and emotional well being also influence how teachers handle digital pressure. This shows that a supportive work environment can reduce the negative effects of technostress and help teachers remain motivated, balanced, and effective in their work (Solís et al., 2023).

In the current post-digital transformative era, the role of faculty members has expanded dramatically, with technology integration becoming an indispensable component of academic practice rather than a supplementary tool. Faculty are now compelled to swiftly adapt to evolving digital pedagogies, manage the delicate balance between work and personal life amid continuous digital connectivity, and sustain high levels of performance within increasingly complex technological environments. This transformation necessitates not only technical proficiency but also resilience and adaptive capabilities to navigate the challenges and leverage the opportunities presented by digital innovations in education (Wang & Li, 2024).

1.2 RESILIENCE AMONG FACULTY MEMBERS

Resilience refers to an individual's capacity to adapt, recover, and grow in the face of stress or adversity (Connor & Davidson, 2003).

Resilience among faculty refers to their capacity to absorb, recover, and productively respond to challenges imposed by ongoing digital and organizational transformations. This resilience is both psychological helping faculty manage stress and burnout and professional, enabling them to adjust teaching and research approaches to new realities (García-Rivera et al., 2022).

Faculty resilience is instrumental for sustaining engagement, motivation, and effectiveness despite the disruptions caused by rapid technological changes and increased digital workloads.

Importantly, resilience supports faculty ability to innovate pedagogically as well as to foster positive learning environments amid uncertainty and pressure (MoralesRodríguez, 2021).

The relationship between coping strategies and faculty resilience becomes clear when looking at how teachers respond to digital stress. Faculty members who regularly use positive coping methods such as improving their digital skills, seeking help from colleagues, and staying emotionally balanced are better able to manage technostress. Over time, these healthy coping habits help build resilience and strengthen their ability to adjust to constant technological changes. This shows that resilience develops through daily coping efforts and plays an important role in protecting faculty members from feeling overwhelmed by digital demands (Hauk et al.,2019).

Studies indicate that resilience correlates with lower burnout rates and better adaptation to digital pedagogies and hybrid teaching models, particularly post COVID-19 (García-Rivera et al.,2022).In the context of digital transformation, resilience is especially significant because it allows educators to navigate continuous change and technological pressure without compromising teaching quality or well-being.

1.3 TECHNOSTRESS IN THE POST-DIGITAL ERA

Technostress stress related to the use of technology is an increasingly important issue for faculty amidst digital transformation. It arises from excessive demands to learn and use complex technologies, persistent connectivity blurring work-life boundaries, and fears about job security in technology-mediated environments (Mahboob & Khan., 2016 ; Nang et al., 2022).

Technostress does not only affect individual teachers but also influences the overall working of educational institutions. When faculty members feel constantly stressed due to heavy digital demands, it can reduce their productivity, lower job satisfaction, and weaken teamwork. High levels of technostress can also disturb communication, decision making, and the general work environment within an organization. This shows that technostress is not just a personal issue but a serious organizational concern that needs proper attention and support from institutions (Bencsik & Juhasz, 2023).

Individual differences also influence how people experience technostress. Factors such as age, personality, confidence in using technology, and openness to learning can shape the level and type of stress a person feels. Some individuals may feel anxious due to lack of digital skills, while others

may feel pressured by constant notifications and fast paced digital work. This shows that technostress is not the same for everyone and depends on personal characteristics as well as work demands. Understanding these differences is important for creating support systems that match individual needs (Marchiori et al.,2019).

This type of stressvamong university teachers often develops when there is a mismatch between what the job demands and what teachers feel capable of handling. When teachers are expected to manage heavy digital teaching work without proper skills, time, or support, stress levels increase. Problems such as frequent system changes, high online workload, and pressure to stay updated add to this stress. This shows that technostress grows when there is an imbalance between personal ability and digital work demands (Wang & Li, 2019).

Technostress during the COVID period also affected emotional health, especially among students, showing how deeply digital pressure can impact mental well being. High use of online tools, isolation, and academic pressure led to increased anxiety and low mood. The study also showed that students who used healthy coping methods were better protected from these negative emotional effects. This supports the idea that coping strategies are important not only for teachers but also for individuals across the education system when dealing with technostress (Galvin et al., 2022).

It has also been linked to conflicts between work and personal life, especially during remote working conditions. Teacher educators in Pakistan reported that constant online demands and digital workload increased stress, which affected their family life and overall satisfaction. This shows that technostress can have a strong impact not only on professional performance but also on personal well being (Shaukat et al.,2022).

The use of information and communication technology exposes teachers to occupational risks related to technostress. Teachers in Spain reported that constant interaction with digital tools, pressure to adapt quickly, and high workload contributed to increased stress and physical and mental strain. This highlights the importance of assessing digital work demands and creating supportive environments to reduce stress (Rey-Merchán & LópezArquillos, 2022).

Individual personality traits also influence how technostress affects people. Research using the Big Five personality model shows that characteristics such as emotional stability, openness to experience, and conscientiousness can predict how teachers experience technostress. People with

higher well being and positive traits are better able to cope, while those with less stable traits feel more stress (Cuadrado et al.,2024).

Emotions play a key role in how employees respond to technostress in digital workplaces. During the pandemic, employees who managed their emotions well experienced less negative impact on their mental health, while those struggling with emotional regulation reported higher stress and lower satisfaction. This shows that emotional well being is closely linked to effective coping with digital pressure (Ali et al.,2023).

Technostress can also influence compliance with organizational rules, such as information security policies. Employees under high digital stress may overlook or ignore important procedures, which can create risks for institutions. This highlights that managing technostress is essential not only for personal health but also for maintaining organizational effectiveness and security (Nasirpouri Shadbad & Biros, 2022).

Over the years, technostress has grown as an important area of research across many fields. A large review of previous studies shows that technostress affects employees' mental health, job satisfaction, performance, and work life balance. The review also highlights that the rapid growth of digital tools has made technostress more common and more complex. It further shows that better training, supportive leadership, and healthy coping strategies are key to reducing its negative effects. This confirms that technostress is a serious and growing concern that needs attention from both researchers and institutions (Grummeck Braamt, 2021).

It has many dimensions and affects people in different ways depending on their work environment and level of digital exposure. It can lead to mental fatigue, frustration, reduced job satisfaction, and lower work performance. Continuous use of digital tools, pressure to stay updated, and lack of proper support increase these stress levels. The study also highlights that technostress can be managed through proper training, balanced workload, emotional support, and healthy coping habits. This shows that with the right strategies, the negative effects of technostress can be reduced and overall well being can be improved (Kumar, 2024).

The COVID-19 pandemic intensified technostress by abruptly shifting instruction online, increasing workloads, and requiring rapid acquisition of digital competencies (Penado Abilleira et al., 2021; Saleem et al., 2021).

During the COVID 19 pandemic, remote working increased the use of technology and also raised the level of technostress among employees. Many people worked for longer hours, stayed

constantly online, and found it difficult to separate work from personal life. This created higher stress and signs of overworking. The study also highlighted that the role of leaders was very important during this time. Supportive leaders who gave clear guidance, showed understanding, and respected work boundaries helped reduce technostress, while lack of support made stress worse. This shows that leadership support plays a key role in managing technostress, especially in remote working situations (Spagnoli et al., 2020).

Symptoms of technostress among faculty include burnout, frustration, anxiety, and decreased job satisfaction, which undermine their professional efficacy and well-being (Stan, 2022).

Age also plays a role in how people experience technostress, but coping behaviour explains much of this relationship. Over time, individuals who use positive coping methods such as problem solving, seeking help, and learning new skills are better able to manage technostress, even as digital demands increase. The study shows that it is not age alone that determines stress levels, but how effectively a person responds to technological challenges. This highlights the importance of encouraging healthy coping habits to reduce technostress and support long term well being (Hauk et al., 2019).

Technostress is not always completely negative, as it can have both positive and negative effects on individuals. On one hand, technology related pressure can cause tiredness, stress, and reduced satisfaction at work. On the other hand, when managed properly, it can also encourage learning, skill development, and better performance. This shows that technostress becomes harmful mainly when the pressure is too high and support is limited. With the right guidance, balance, and coping methods, its negative effects can be controlled while the positive outcomes can be strengthened (Califf et al.,2020).

Studies show that excessive exposure to digital tools and a lack of institutional support can lead to decreased job satisfaction, burnout, and reduced teaching effectiveness (BoyerDavis & Berry, 2022).

Understanding these pressures is essential to safeguard faculty health and maintain highquality teaching and scholarship in the age of Education. Therefore, technostress poses a significant challenge to faculty well-being and performance in the post-digital, transformative environment.

1.4 ADAPTIVE COPING STRATEGIES

Coping strategies are the cognitive, emotional, and behavioural efforts used by individuals to manage stressful circumstances (Lazarus & Folkman, 1984).

To mitigate technostress and bolster resilience, faculty employ a range of adaptive coping strategies that encompass personal, social, and organizational dimensions. Effective coping includes seeking social support from colleagues and family, engaging in targeted professional development to build digital skills, practicing stress-reduction techniques, and advocating for institutional resources and sensible workload policies (Stan, 2022; Saleem et al., 2021).

Adaptive coping specifically refers to constructive strategies that enable individuals to deal with stress effectively and maintain psychological equilibrium. In academic settings, faculty adopt various coping strategies to handle technostress—such as improving technological competence, engaging in peer collaboration, practicing mindfulness, and reframing challenges positively (Stanisławski, 2019).

Additionally, organizational interventions such as training programs, technology support, and fostering a culture of continuous learning are critical for enabling adaptive responses and promoting faculty well-being and performance (Fettahoglu & Yikilmaz, 2025).

Evidence suggests that faculty members who use adaptive coping strategies are better equipped to manage technostress and sustain resilience, leading to higher satisfaction and productivity (Ross et al., 2024).

1.5 INTERRELATION AMONG THE VARIABLES

In the post-digital transformative era, the relationship among resilience, technostress, and adaptive coping strategies has become increasingly significant. The rapid technological evolution in higher education creates both opportunities and stressors for faculty members. While digital platforms enhance teaching flexibility, they also increase workload and blur professional boundaries. In such conditions, resilience acts as a protective factor, allowing educators to maintain performance despite technostress (Connor & Davidson, 2003). These variables—faculty resilience, technostress, and adaptive coping—are interconnected in a complex relationship shaped by digital transformation dynamics. Resilience serves both as a buffer against technostress and a product of successful coping strategies, creating a cyclical pathway that

influences faculty performance and psychological health (Zheng et al., 2022; Fettahoglu & Yikilmaz, 2025).

Technostress, resilience, and adaptive coping strategies are closely interconnected in the postdigital academic environment. Technostress arises when faculty members face high expectations to use digital tools, manage online teaching, and stay constantly connected while balancing their personal and professional responsibilities. Research shows that technostress not only affects individual well being but can also disrupt institutional functioning, reducing productivity, job satisfaction, and teamwork (Bencsik & Juhasz, 2023; Kumar, 2024).

In the post-digital era, the relationship between faculty resilience, technostress, and adaptive coping strategies has become increasingly important. Technostress arises when faculty members face high demands to use digital tools, manage online teaching, and stay connected while balancing their work and personal life. Research shows that technostress affects not only individual well being but also institutional functioning, reducing productivity, job satisfaction, and collaboration among colleagues (Bencsik & Juhasz, 2023; Kumar, 2024).

Institutional and leadership support has a strong influence on how faculty experience and manage technostress. Teachers who receive training, clear guidance, and emotional support feel more confident and less stressed in handling digital demands. Supportive leadership, especially during remote work situations, helps faculty maintain balance and prevents burnout, while a lack of guidance and understanding can increase stress levels (Solís et al.,2023; Spagnoli et al., 2020). Studies also suggest that institutions that actively promote skill development and provide technical assistance create an environment where faculty resilience can grow (Juteau, 2019).

Teachers' experience of technostress is influenced by multiple factors, including institutional support, personal characteristics, and leadership guidance. Support from educational institutions, such as training, guidance, and emotional assistance, has been shown to lower levels of technostress and help teachers feel more confident and balanced in managing technology demands (Solís et al., 2023; Spagnoli et al.,2020). Leadership also plays a critical role, especially in remote work settings, where supportive leaders can reduce work pressure and prevent burnout, whereas lack of support can increase stress levels (Spagnoli et al., 2020).

Individual differences further shape how faculty members experience technostress. Factors such as age, personality, digital competence, and emotional well being determine the type and intensity of stress experienced. Positive coping behaviors, such as seeking support, improving skills, and

managing emotions effectively, help faculty adapt to digital challenges and reduce stress, even when technological demands are high (Hauk, Gorzitz, & Krumm, 2019; Marchiori et al., 2019; Cuadrado et al., 2024; Ali et al., 2023). Research also highlights that faculty members who practice regular coping strategies are more likely to develop resilience, which allows them to recover from setbacks and maintain performance under continuous digital pressures (Hauk et al., 2019; Galvin et al., 2022). Technostress affects both personal and organizational outcomes. Faculty members experiencing high digital pressure are more likely to face work–family conflicts, reduced life satisfaction, and emotional exhaustion (Shaukat et al., 2022). Similarly, high technostress can negatively impact organizational functioning, including information security compliance and teamwork (Nasirpouri Shadbad & Biros, 2022; Bencsik & Juhasz, 2023). At the same time, when managed well, technostress can encourage skill development and adaptive learning, showing that its impact can be both negative and positive depending on the coping mechanisms in place (Califf et al., 2020; Kumar, 2024). These studies collectively demonstrate that resilience, coping strategies, and technostress are closely interconnected. Resilience acts as a protective factor that allows faculty members to sustain performance despite high technostress, while adaptive coping strategies enable them to respond constructively to digital demands (Galvin et al., 2022; Hauk et al., 2019). Institutional and leadership support enhances this process, creating an environment where resilience can grow and technostress can be effectively managed (Solís et al., 2023; Spagnoli et al., 2020). Furthermore, individual differences and emotional well being influence how successfully faculty members can translate resilience into action, showing that coping strategies serve as a bridge between stress and positive outcomes (Cuadrado et al., 2024; Ali et al., 2023).

Overall, understanding the interrelation among technostress, resilience, and adaptive coping strategies is critical for higher education institutions aiming to support faculty well being, maintain high teaching quality, and foster a healthy and productive academic environment. By addressing technostress through targeted support, skill development, and promotion of healthy coping practices, institutions can help faculty members not only survive but thrive in the post-digital academic landscape (Wang & Li, 2019; Rey-Merchán & López-Arquillos, 2022; Shaukat et al., 2022).

Digital transformation, while a source of stress, also presents opportunities to enhance digital self-efficacy and innovate teaching, moderating the impact of technostress (Buzás et al., 2025).

Adaptive coping strategies are the mechanisms through which faculty build resilience and manage technostress, highlighting their role in sustaining faculty's professional competence and institutional contributions (Saleem et al., 2021; Stan, 2022). However, resilience alone may not be sufficient—adaptive coping strategies serve as mediators that translate resilience into effective behavioural and emotional responses (Stanisławski, 2019).

1.6 THEORETICAL FRAMEWORK

The present study is based on two important theories:

1.6.1 PERSON-ENVIRONMENT FIT THEORY

This theory explains that stress occurs when there is a mismatch between an individual's abilities and the demands of the environment. In the post-digital era, faculty members face continuous technological demands such as online teaching, digital platforms, and constant connectivity. When these demands exceed their skills or resources, technostress develops. A better fit between faculty abilities and technological demands helps reduce stress and improve resilience.

1.6.2 TRANSACTIONAL MODEL OF STRESS AND COPING

According to this model, stress depends on how individuals perceive and respond to stressful situations. Faculty members first evaluate whether digital demands are stressful and then use coping strategies to manage them. Resilient faculty members are more likely to use adaptive coping strategies such as problem-solving and seeking support, while less resilient individuals may use avoidant coping methods. This theory helps explain the relationship between technostress, resilience, and coping strategies in the present study.

1.7 STATEMENT OF THE PROBLEM

A Study of Technostress, Coping Styles, and Resilience among Faculty Members.

1.8 OPERATIONAL DEFINITIONS OF THE STUDY

Resilience refers to the psychological ability to withstand, adapt to, and recover from stressful or adverse situations. It involves maintaining emotional stability, continuing to function effectively, and even growing stronger in the face of challenges. Individuals with high resilience tend to remain optimistic, flexible, and confident in their ability to handle difficulties.

Technostress refers to the strain and discomfort individuals experience as a result of using modern technologies, especially when they feel unable to cope with technological demands. It arises from factors such as excessive workload due to technology, constant connectivity, complexity of systems, fear of job loss due to technological changes, and frequent updates or changes in digital tools. Dimension of technostress are as follows;

- **Techno-overload:** Feeling pressured to work faster and handle more tasks due to technology.
- **Techno-invasion:** Technology interfering with personal life and boundaries.
- **Techno-complexity:** Difficulty in understanding and using new technologies.
- **Techno-insecurity:** Fear of losing one's job due to lack of technological skills.
- **Techno-uncertainty:** Stress caused by constant technological changes and updates.

Problem-focused coping style involves directly dealing with the source of stress in a practical and solution-oriented manner. Individuals using this approach try to analyze the problem, generate possible solutions, and take concrete steps to resolve it. It reflects a proactive mindset where the person attempts to gain control over the stressful situation rather than simply reacting to it.

Emotion-focused coping is centered on managing the emotional impact of a stressful situation rather than changing the situation itself. Individuals rely on strategies such as seeking emotional support, expressing feelings, acceptance, or using humor and spirituality. This type of coping is especially useful when the stressor cannot be easily controlled.

Avoidant coping refers to efforts to escape or ignore the stressor instead of confronting it. Individuals may distract themselves, deny the problem, withdraw from responsibilities, or

engage in unhealthy behaviors. While it may provide temporary relief, this coping style is generally considered maladaptive because it prevents effective problem resolution.

1.9 OBJECTIVES OF THE STUDY

The objectives of this research project summarizes what is to be achieved by the study . in view of the available literature and the importance of the topic, the following objectives were set:

1. To assess the prevalence of technostress, resilience and adaptive coping strategies among higher education faculty members in the post-digital transformation era.
2. To investigate gender-based differences in technostress among higher education faculty members.
3. To investigate gender-based differences in resilience, among higher education faculty members
4. To investigate gender-based differences in adaptive coping strategies among higher education faculty members
5. To explore the relationship between technostress, resilience, and adaptive copingstrategies among faculty members.

1.10 HYPOTHESES OF THE STUDY

H_{01} There is no significant difference between male and female faculty members in terms of technostress.

H_{02} There is no significant difference between male and female faculty members in terms of resilience

H_{03} There is no significant difference between male and female faculty members in terms of adaptive coping strategies

H_{04} There is no significant correlation between technostress, resilience, and adaptive coping strategies among faculty member

1.11 DELIMITATIONS OF THE STUDY

- Only faculty members in higher education institutions
- Focused only on three variables- resilience, techno stress and adaptive coping strategies

- Small sample size (120)
- Data limited to colleges in Jammu region

1.12 SIGNIFICANCE OF THE STUDY

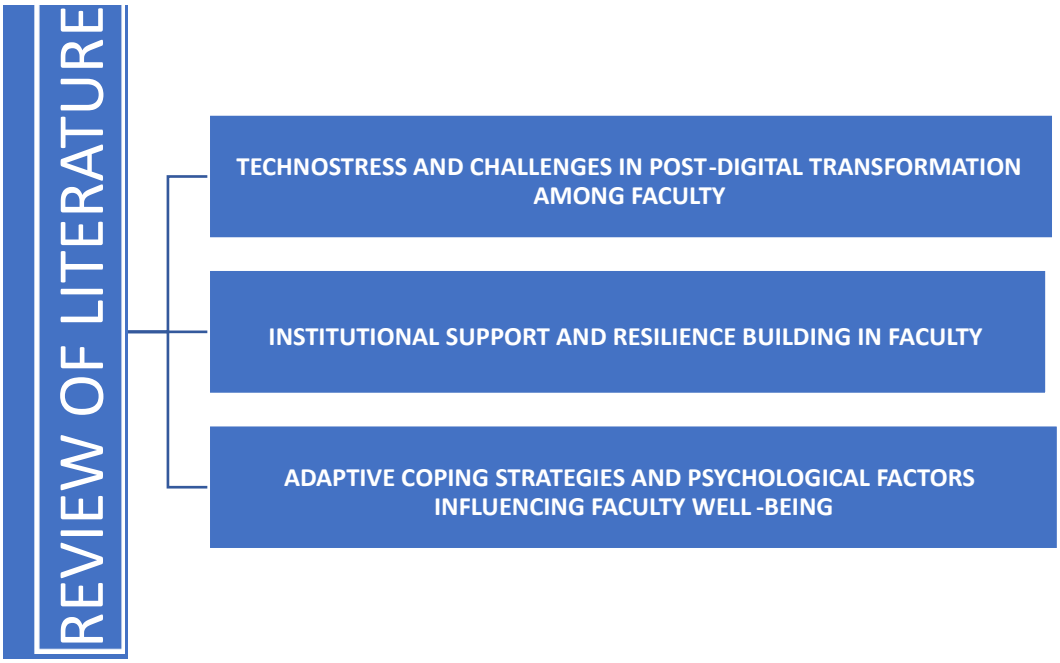
This study is important because it looks at how teachers and faculty members deal with the challenges that come with using more technology in education. After the digital transformation in the education system, teachers have had to adjust to new ways of teaching, learning, and communicating through digital tools. While these tools make work easier in many ways, they also bring new pressures and difficulties, known as technostress. By studying how teachers build their ability to recover from stress and how they use adaptive coping strategies to handle these challenges, this research aims to understand what helps them stay positive and effective in their work. The findings of this study can help colleges and universities create better training programs, support systems, and policies to reduce stress and strengthen teachers' ability to adapt to ongoing technological changes. In the long run, it can contribute to improving teachers' mental well-being, job satisfaction, and the overall quality of education in the post-digital age.

CHAPTER-II
REVIEW OF LITERATURE

CHAPTER II
REVIEW OF LITERATURE

A literature review is a thorough synopsis of earlier studies on a particular subject. Examining scholarly books, journals, and other pertinent materials in the selected subject of study is part of it. The review provides a description, summary, critical analysis, and objective explanation of the existing research. Finding out what knowledge already exists, assessing if the issue has been adequately addressed, and avoiding duplication of effort are the goals of examining related literature. Additionally, it provides comparative insights that help interpret results and improve the researcher's overall scholarly understanding.

The review is organized thematically into three sections.



2.1 TECHNOSTRESS AND CHALLENGES IN POST-DIGITAL TRANSFORMATION AMONG FACULTY

Nascimento et al. (2025) conducted a longitudinal study examining techno-eustress among university teachers during remote work. The study found that moderate technological challenges enhanced motivation, creativity, and performance when supported by digital skills and institutional backing. Teachers who viewed technology positively reported greater job satisfaction.

The research highlights the need for continuous training and suggests exploring how technoeustress may develop into technostress over time.

Yang (2025) performed a systematic literature review revealing technostress effects such as reduced job satisfaction and increased burnout in teachers globally. The review identified key stressors and coping mechanisms but noted inconsistent coping strategy evaluations. The study calls for standardized constructs and empirical validation in faculty contexts.

Kumar (2024) examined technostress by reviewing a wide range of past studies to understand its types, effects, and ways to manage it. The study explained that technostress occurs due to factors like work overload from technology, constant connectivity, difficulty in using new systems, and fear of job insecurity. The findings showed that technostress negatively affects employees' mental health, job satisfaction, and work performance, often leading to burnout and reduced productivity. However, the study also highlighted that proper training, organizational support, flexible work policies, and stress-management techniques can help employees cope better. The review suggests that when organizations actively support their employees, technostress can be controlled and its harmful effects can be reduced.

Cuadrado et al. (2024) studied personality and technostress among university staff and found that certain traits make people more or less vulnerable to technostress. They suggest personal factors matter, but that support and training can help everyone. This means resilience programs should be flexible and personalized to be most effective.

Bencsik and Juhász (2023) explored how technostress influences broader organizational functioning, beyond individual stress. They found that while technology can improve efficiency and information flow, it can also create social and psychological pressures such as communication overload, constant connectivity, and blurred boundaries between work and personal life which harm both individual wellbeing and organizational trust. The study argues organizations should be aware of these hidden costs and design supportive structures (like training, clear tech-use policies) to avoid negative outcomes.

Ali et al. (2023) studied how technostress affected employees' emotional well-being during the pandemic when work became highly digital. They found that heavy technology use increased emotional exhaustion, anxiety, and frustration among employees. Workers who lacked emotional control and support felt the strongest negative effects. However, employees who were emotionally strong and received support from their organization showed better adjustment and mental balance. The study highlights that emotions play a very important role in how employees experience technostress and cope with digital pressure during crisis periods.

Marrinhas et al.(2023) investigated burnout and technostress among Portuguese higher education teachers using a sample of 280 randomly selected faculty. A quantitative correlational design analyzed data via structural equation modeling. Key findings confirmed technostress as a strong predictor of burnout and emotional exhaustion. Research gaps include longitudinal data on recovery mechanisms. The recommendation focused on preventive interventions that reduce stressors.

Solís et al. (2023) examined how perceived organizational support affects technostress among teachers. They found that when teachers feel supported by their institution in terms of guidance, resources, and a supportive environment they tend to report lower levels of technostress. The study also noted that demographic factors (like gender, type of school, and educational stage) influence how strongly technostress is felt. The authors suggest school policies to strengthen organizational support and to pay attention to groups more vulnerable to technostress.

Wang et al.(2023) study focused on primary-school teachers and explored how technostress relates to work-family conflict and health issues (like fatigue, sleep problems). Importantly, school support (institutional support) was shown to reduce negative effects: where support was stronger, health and well-being outcomes were better. The study supports the idea that coping and institutional backing are essential when schools go digital.

Nang et-al.(2022) conducted a systematic review titled "Teacher Technostress and Coping Mechanisms during the COVID-19 Pandemic." The objective was to synthesize research on teachers' technostress challenges and coping strategies during the pandemic. They reviewed

multiple studies; thus, no sample size or sampling technique was applied. The population focused on educators adapting to online teaching amid COVID-19. The qualitative literature-based design involved thematic synthesis. Results highlighted stressors such as workload, technical issues, and work-life imbalance, and coping strategies including social support and self-regulation. The research gap lies in the longitudinal impacts of technostress. The study emphasizes institutional support for faculty coping.

Galvin et al. (2022) looked at how technostress linked to anxiety and depression for university staff working remotely. They found that overload and work-home conflict were tied to more anxious and depressive symptoms, while active coping and getting technical help reduced negative effects. The study highlights that emotional and practical supports together help staff stay mentally healthy during rapid digital change.

Rohwer et al. (2022) conducted a scoping review to understand how organizations and employees can prevent and cope with technostress. They found that training, clear digital workflows, supportive leadership, and fostering digital literacy help reduce stress caused by technology. Individual strategies such as taking breaks, setting boundaries, and using relaxation techniques also improve coping and emotional well-being. The study highlights that combining organizational and personal strategies is the most effective way to manage technostress.

Nasirpouri Shadbad et al. (2022) studied how technostress affects employees' compliance with information security policies. They found that high levels of technology-related pressure, such as frequent system updates and constant connectivity, led to stress that sometimes caused employees to ignore security guidelines. Employees who received clear guidance, proper training, and support from management were better able to follow policies without feeling overwhelmed. The study highlights that managing technostress is essential not only for wellbeing but also for maintaining organizational security standards.

Zheng et al. (2022) examined teaching staff technostress and performance during COVID19, their objective was to identify stressors and impacts on professional outcomes using a sample of 233 faculty from academic institutions selected by stratified sampling. A quantitative crosssectional

survey design with regression analysis was applied. Results pointed to workload, digital skills gaps, and work-life conflicts as stressors impairing performance. The research gap is the need for interventions emphasizing competence building. The study concludes that rigorous institutional support is critical.

Shaukat et al. (2022) focused on teacher educators and found that technostress increased workfamily conflict and lowered life satisfaction for those working from home. Teachers with better institutional support and clearer boundaries reported less conflict. The paper recommends training plus family friendly policies to reduce the heavy personal toll of remote work.

Rey-Merchán et al. (2022) measured technostress risks for school teachers and found common sources such as constant connectivity, lack of training, and unclear expectations. They argue that assessing these occupational risks is the first step toward stronger teacher resilience and recommend concrete supports such as training, tech help desks, and workload adjustments.

Nasirpouri Shadbad et al. (2022) studied how technostress affects employees' compliance with information security policies. They found that high levels of technology-related pressure, such as frequent system updates and constant connectivity, led to stress that sometimes caused employees to ignore security guidelines. Employees who received clear guidance, proper training, and support from management were better able to follow policies without feeling overwhelmed. The study highlights that managing technostress is essential not only for wellbeing but also for maintaining organizational security standards.

Vergine et al. (2022) looked at how teachers felt during the sudden shift to emergency remote teaching (ERT) in the pandemic. They found that many experienced technostress overload, constant connectivity, and lack of control which increased distress. But at the same time, some teachers reported "eustress" (positive stress), feeling challenged yet stimulated by new digital methods when support and training were present. The study highlights that technostress doesn't always lead to negative outcomes; under the right conditions, technology can help teachers grow and adapt.

Abilleira et al.(2021) in "Technostress in University Teachers during the COVID-19 Pandemic" aimed to quantify technostress levels and factors among Spanish university teachers. Using a quantitative survey design, they sampled 367 teachers via convenience sampling. Data were analyzed using descriptive statistics and inferential tests. Key findings showed significant technostress due to work overload and lack of institutional support. The research gap involves adaptive coping strategies needing exploration. The study recommends digital training and emotional support programs.

Grummeck-Braamt (2021) examined how research on technostress has grown over time, mapping 252 publications up to 2019. They analyzed the field's evolution, traced its historical roots mostly in psychology and biology, and identified key clusters of research topics and central influential works. Their review shows that technostress research has become a structured, connected field, rather than a loose collection of studies. This gives a strong base for any study exploring technostress, facility resilience or coping strategies after digital transformation.

Salazar-Concha et al. (2021) reviewed how research on technostress has evolved from 1982 to 2017 by analyzing 246 scientific publications. They mapped out the main themes, how the field grew over time, and the shifts in topics from early work focused on psychological/health effects to later work emphasizing workplace performance, information overload, and organizational factors. This paper shows that technostress is not a one-dimensional issue; its research spans many areas including mental health, work design, technology use, and organizational contexts. The authors suggest future studies should explore how technostress interacts with evolving digital work environments, coping strategies, and long-term wellbeing.

Califf et al. (2020) studied both the positive and negative sides of technostress. They found that while technology can cause pressure and overload, it can also increase learning, speed, and confidence when users feel capable and supported. The study explains that technostress does not always lead to harm. When employees feel in control of digital tools, they can perform better and feel more motivated. The authors highlight the need for balanced use of technology and proper training to reduce negative stress.

Spagnoli et al. (2020) studied technostress and work pressure during remote working conditions. They found that constant connectivity and digital monitoring increased stress and encouraged overworking. Employees who struggled to disconnect from technology reported lower wellbeing and higher fatigue. The study suggests setting clear digital boundaries and promoting work life balance to protect mental health.

Hauk et al. (2019) studied how age, technostress, and coping behaviours are connected over time. They found that older employees initially face more stress from technology, but many also develop better coping skills over time which reduces their strain. Coping strategies, such as planning, problem-solving, or seeking help, help buffer negative effects. This suggests that coping behaviour plays a vital role in turning potential techno-stress into manageable challenges, especially across different age groups.

Marchiori et al. (2019) studied how personal traits influence resistance to digital change in workplaces. They found that fear of failure, low confidence, and poor communication increase stress and resistance toward new technologies. Employees who received good communication and training adapted more easily. The study shows how personal mindset and institutional support together shape technostress and coping during digital change.

Wang et al.(2019) developed a clear framework to understand technostress in university teachers and tested it with 343 instructors. Their study showed technostress comes from several mismatches between what the teacher needs and what technology demands, such as skills gaps, workload increases, and poor fit with tools. Teachers who had better digital skills or clearer supports experienced less negative impact. The paper suggests universities should check where people and systems do not fit and provide targeted training and better tool choices.

Juteau (2019) studied a records-management company undergoing digital transformation, exploring how staff experienced conflicting pressures shifting from analog to digital, adapting skills, and balancing old vs. new workflows. The research shows that these “paradoxes” such as keeping legacy practices while building new digital ones create stress and uncertainty. Employees coped by using strategies like splitting old and new tasks over time or location, relying on internal

and external skills, reframing their work identities, and using communication tools (both online and offline). The study highlights that coping with digital transformation is not only about technology but also about human adaptation and flexibility.

2.2 INSTITUTIONAL SUPPORT AND RESILIENCE BUILDING IN FACULTY

Celbis et al. (2025) conducted a scoping review titled "Resilience in Higher Education during the COVID-19 Pandemic," synthesizing research on conceptualizations and institutional influences on faculty resilience. They found that institutional support via mental health services, flexible policies, and training programs is imperative to foster resilience. The review signals a need for ongoing evaluation of support initiatives to meet faculty needs effectively post-pandemic.

Aad et al.(2024) studied the interplay of institutional support and faculty roles during the COVID19 rapid transition to online teaching through Twitter data and interviews with faculty members. The mixed qualitative methods revealed emotional stressors linked to expanded faculty roles and showed that targeted institutional support eased adaptation. This study underscored the importance of empathy and practical assistance in institutional strategies to reinforce faculty resilience and optimize online teaching outcomes.

Ross et al. (2024) titled "Stress Adaptation and Resilience of Academics in Higher Education" employed qualitative interviews with 45 academics purposefully sampled to explore resilience's socioecological dimensions. The phenomenological design used thematic analysis, revealing that faculty resilience relies heavily on systemic and relational support factors beyond individual efforts. They noted a gap in institutional practices addressing the relational aspect of resilience.

Shaya et al.(2022) explored organizational resilience in higher education institutions during the COVID-19 pandemic through qualitative interviews with university executives. Their phenomenological design identified social resources, such as collegial support and knowledge sharing, as vital contributors to resilience. Power-sharing and expanded decision-making authority

further empowered faculty, promoting institutional adaptability. The study calls attention to strategic crisis leadership and faculty empowerment as central to resilience frameworks.

Walsh et al.(2021) studied "Training Faculty as an Institutional Response to COVID-19" through a mixed-methods framework analyzing faculty preparedness and resilience. Survey and interview data from 150 faculty highlighted that emergency training programs enhanced faculty confidence and adaptation to digital teaching demands. The study emphasizes continuous professional development and institutional backing as foundations for resilience in academic staff.

2.3 ADAPTIVE COPING STRATEGIES AND PSYCHOLOGICAL FACTORS INFLUENCING FACULTY WELL-BEING

Fettahoglu and Yikilmaz (2025) analyzed techno-eustress and job performance among 220 accounting professionals recruited randomly. A quantitative correlational design with SEM methods revealed that positive technostress facilitates engagement and resilience, improving performance. The study suggests organizations foster adaptive stress approaches.

Stan (2022) examined personality traits, technology skills, and coping mechanisms influencing teacher burnout and affective well-being. The sample consisted of 275 teachers from various education levels chosen via purposive sampling. Using SEM analysis of survey data, the study found that high digital competence and adaptive coping reduce burnout. Research gaps include intervention testing.

Garcia-Rivera et al.(2022) quantitatively analyzed resilience's effect on burnout among 200 faculty via convenience sampling. Correlational and regression analyses showed resilience negatively predicts burnout severity. The study called for broader institutional resilience-building research.

Saleem et al.(2021) studied the moderating effects of training and creative self-efficacy on the relationship between technostress and employee performance using a sample of 350 employees selected through multi-stage random sampling across sectors. A quantitative cross-sectional

survey design with structural equation modeling confirmed that training and self-efficacy buffer technostress's' negative impacts on work outcomes. The authors highlighted a gap in longitudinal validation of coping efficacy.

The review of literature shows that rapid digital transformation in higher education has significantly increased technostress among faculty members due to continuous technological demands, online workload, and constant connectivity. Many studies reported that technostress negatively affects teachers' mental health, job satisfaction, work-life balance, and overall well-being. However, research also suggests that resilience acts as a protective factor that helps faculty members adapt successfully to digital challenges. Faculty members who use adaptive coping strategies such as problem-solving, seeking social support, emotional regulation, and improving digital skills are better able to manage stress and maintain professional effectiveness. The literature further highlights the important role of institutional support, training programs, leadership guidance, and positive work environments in reducing technostress and strengthening resilience. Although several studies have examined technostress, resilience, and coping separately, limited research has explored the interrelationship among these variables together, especially among higher education faculty in the Indian post-digital context. Therefore, the present study attempts to fill this gap by examining the relationship between technostress, resilience, and adaptive coping strategies among faculty members.

2.4 RESEARCH GAP

- Most studies on technostress, resilience, and coping strategies have been conducted in Western countries, with limited research available in the Indian higher education context.

- Existing research has largely focused on school teachers, employees, or corporate sectors rather than college and university faculty members, limiting the understanding of technostress among higher education faculty.

- Many previous studies have examined technostress, resilience, and coping strategies separately, while very few studies have explored the interrelationship among all three variables together.

- Gender differences in technostress, resilience, and adaptive coping strategies among faculty members remain underexplored in the existing literature.

- Very limited studies have specifically investigated technostress, resilience, and adaptive coping strategies among faculty members in the post-digital transformation era after the COVID-19 pandemic.

- No significant study was found focusing specifically on higher education faculty members in the Jammu region, making the present study important in addressing this regional and contextual gap.

CHAPTER-III
RESEARCH METHODOLOGY

CHAPTER III
RESEARCH METHODOLOGY

Research methodology is basically the overall plan or blueprint of how a study is conducted. It describes the entire process a researcher follows to collect, analyse, and interpret data in order to answer the research questions. It includes everything from how the sample was selected, what tools were used to collect data, how data was analysed, and what statistical techniques were applied.

3.1 RESEARCH DESIGN

The present study employed a quantitative cross-sectional research design to investigate technostress, resilience, and adaptive coping strategies among higher education faculty members in the context of post-digital transformation. A quantitative approach was used because the study aimed to measure and analyze the relationships among variables using statistical techniques. The cross-sectional design involved collecting data from faculty members at a single point in time to examine the prevalence of technostress, resilience, and coping strategies, along with gender differences and correlations among the variables. This research design was considered appropriate as it allowed the researcher to systematically assess patterns, relationships, and differences within the selected sample efficiently and objectively.

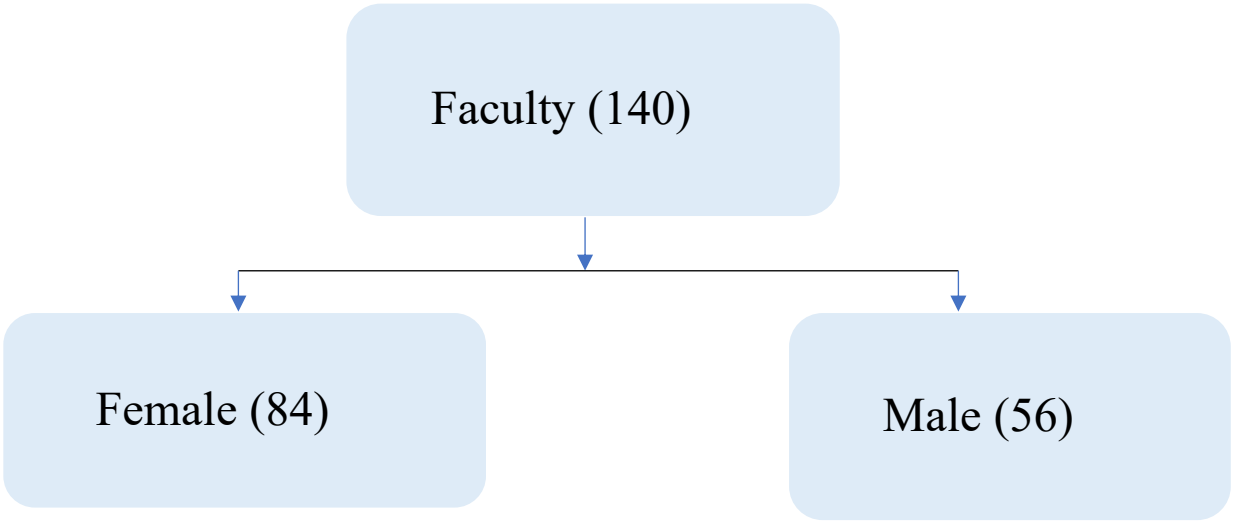
3.2 POPULATION AND SAMPLE

Population refers to the entire group of individuals possessing certain characteristics relevant to the study. In the present research, the population comprised faculty members working in higher education institutions such as colleges and universities in the Jammu region. The study included both male and female faculty members who regularly use information and communication technology (ICT) for academic and professional purposes.

The foundation of every scientific study is sampling. An efficient sample helps save time, cost, and effort while reducing estimation errors. The sample size of a study depends on the objectives

of the research, the methodology used, and the characteristics of the population under investigation. Due to limitations of time and resources, the researcher selected a manageable sample for the present study.

A total of 140 faculty members (N = 140) were selected as participants for the study. The participants included both male and female faculty members belonging to government/public, private, and autonomous higher education institutions. The age group of the participants ranged from 25 to 40 years and above. The participants were selected from different colleges and universities to obtain varied responses regarding technostress, resilience, and adaptive coping strategies in the post-digital educational environment.



3.1.1 INCLUSION CRITERIA

- Faculty members currently employed in higher education institutions (colleges and universities).
- Individuals belonging to public, private, or autonomous institutions.
- Age range of 25 to 40 years .
- Both male and female participants.

- Individuals who are regular users of information and communication technologies (ICT) for academic or professional purposes (e.g., online teaching, digital platforms, emails).
- Participants who are able to understand and respond to self-report questionnaires.
- Individuals who voluntarily consent to participate in the study.

3.1.2 EXCLUSION CRITERIA

- Individuals not currently employed as teaching faculty (e.g., school teachers, administrative staff, technical staff, or retired professionals).
- Participants below 25 years or above 40 years of age.
- Individuals with minimal or no use of technology in their professional work (as technostress is a key variable in the study).
- Faculty members who are on long-term leave or not actively engaged in teaching duties at the time of data collection.
- Participants who fail to provide informed consent.
- Responses that are incomplete or missing significant data on the Brief COPE, CD-RISC 25, or Technostress scale.
- Faculty members from institutions outside the selected geographical area were excluded to maintain sample consistency.

3.2 SAMPLING TECHNIQUE

In the present study, the investigator used Purposive sampling technique for collecting data.

3.3 RESEARCH TOOLS AND DESCRIPTION

Data will be collected through two channels: offline paper-based questionnaires distributed directly to faculty members in college settings, and online Google Forms shared through institutional email lists, student WhatsApp groups, and social media platforms. Both modes will contain identical questions to ensure consistency and comparability of responses.

The selection of appropriate research tools is essential for obtaining valid and reliable data. The choice of tools depends upon the nature and objectives of the problem under investigation. Each tool has been chosen for its relevance, reliability, validity, and appropriateness for the target population.

For the present investigation, the following research tools have been used:

3.3.1 CONNOR-DAVIDSON RESILIENCE SCALE (CD-RISC 25)

The Connor-Davidson Resilience Scale (CD-RISC 25) is a 25-item self-report instrument designed to assess personal resilience, the ability to cope with stress and bounce back from adversity. Each item is rated on a 5-point Likert scale from 0 ("not true at all") to 4 ("true nearly all the time"), yielding a total score between 0 and 100, with higher scores indicating greater resilience. The scale covers five key dimensions: personal competence and tenacity, trust in instincts and tolerance of negative affect, positive acceptance of change and secure relationships, control, and spirituality. The CD-RISC 25 has demonstrated strong psychometric properties across diverse populations. It has high internal consistency, with Cronbach's alpha commonly around 0.89, and good test-retest reliability, supporting its stability over time. Although its original five-factor structure has shown some variability across different samples, the scale consistently exhibits good construct validity and sensitivity to change, making it a reliable and valid measure of resilience in both research and clinical settings.

3.3.2 BRIEF COPE INVENTORY

A 28-item survey called the Brief COPE (Carver, 1997) evaluates a number of coping factors, including active coping, denial, using instrumental and emotional support, substance abuse, and behavioral disengagement. On a 4-point Likert scale, respondents indicate how frequently they employed each tactic. With little strain on respondents, the scale effectively measures a broad variety of coping mechanisms. Its good psychometric qualities have led to its widespread application both internationally and in Indian contexts.

DIMENSIONS OF COPING

The Brief COPE scale developed by Charles S. Carver (1997) consists of 14 coping subscales. Previous studies have commonly grouped these subscales into broader coping dimensions such as problem-focused coping, emotion-focused coping, and avoidance-focused coping for better interpretation and analysis. Studies by Charles S. Carver (1997), N. Bose et al. (2015), and later coping researchers have commonly used this classification in psychological research. In the present study, the coping strategies were categorized into problem-focused, emotion-focused, and avoidance-focused coping dimensions based on these conceptual and empirical classifications.

According to Carver (1997), active coping, planning, and instrumental support are generally categorized under problem-focused coping, whereas acceptance, positive reframing, humor, religion, and emotional support are considered emotion-focused coping strategies. Behavioral disengagement, denial, self-distraction, substance use, and self-blame are often categorized as avoidance or dysfunctional coping strategies.

3.3.3 THE TECHNOSTRESS CREATORS INVENTORY (TCI)

The Technostress Creators Inventory (TCI) is a 23-item self-report measure designed to assess sources of technostress in workplace settings. It evaluates five dimensions: technooverload, techno-invasion, techno-complexity, techno-insecurity, and

technouncertainty. Each item is rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The TCI demonstrates strong reliability, with an overall Cronbach's alpha of 0.91, and subscale alphas ranging from 0.80 to 0.87, indicating excellent internal consistency. Confirmatory factor analysis supports its five-factor structure and shows good model fit. Validity is supported by positive correlations with burnout and negative correlations with work engagement and computer self-efficacy. This makes the TCI a reliable and valid instrument for measuring technostress in diverse occupational groups

3.4 STATISTICAL TECHNIQUE EMPLOYED

To analyse the data, the investigator used the following statistical technique

1. Mean
2. Standard Deviation
3. t-test
4. Pearson's Product Moment Correlation

CHAPTER-IV
ANALYSIS & INTERPRETATION OF DATA

CHAPTER IV
ANALYSIS & INTERPRETATION OF DATA

This chapter presents the analysis and interpretation of the quantitative data collected to address the research questions and hypotheses of the study. The data, obtained through standardized psychological instruments, was systematically processed and analyzed using appropriate statistical techniques. The results are organised in a structured manner, highlighting significant patterns, relationships, and trends identified through the analysis.

4.1 DEMOGRAPHIC PROFILE OF THE SAMPLE

Table 4.1 presents the demographic characteristics of the faculty participants, including distribution by gender, age group, marital status, Years of Teaching/Professional Experience and Type of Institution.

Table 4.1
Demographic profile of the respondents

Demographic Characteristics		Percentages(%)	Total
Gender	Female	60.0%	84
	Male	40.0%	56
Age Group	25-30 years	24.3%	34
	30-35 years	16.4%	23
	35-40 years	23.6%	33
	40 years and above	35.7%	50

Marital Status	Married	72.1%	101
	Single	27.9%	39
Years of Teaching/Professional Experience	6months-1 year	6.4%	9
	1 years-3 years	17.1%	24
	3 years-5 years	18.6%	26
	5 years and above	57.9%	81
Type of Institution	Private	53.6%	75
	Autonomous	12.9%	18
	Government/Public	33.6%	47

Note: N= 140. The majority of participants belonged to the age group of 40 years and above.

The present study was conducted on 140 participants. Table 1 presents the demographic characteristics of the sample. In terms of gender distribution, the sample comprised 60.0% female (n = 84) and 40.0% male (n = 56) participants. Regarding age, the majority of participants (35.7%, n = 50) belonged to the 40 years and above category, followed by 25–30 years (24.3%, n = 34), 35–40 years (23.6%, n = 33), and 30–35 years (16.4%, n = 23). With respect to marital status, most participants were married (72.1%, n = 101), while 27.9% (n = 39) were single. In terms of teaching/professional experience, a majority of the participants (57.9%, n = 81) had more than 5 years of experience, followed by 3–5 years (18.6%, n = 26), 1–3 years (17.1%, n = 24), and 6 months to 1 year (6.4%, n = 9). Regarding type of institution, 53.6% (n = 75) of the participants were from private institutions, 33.6% (n = 47) from government/public institutions, and 12.9% (n = 18) from autonomous institutions. This distribution reflects a diverse cross- section of the faculty population in the target region, illustrated by figure 1.

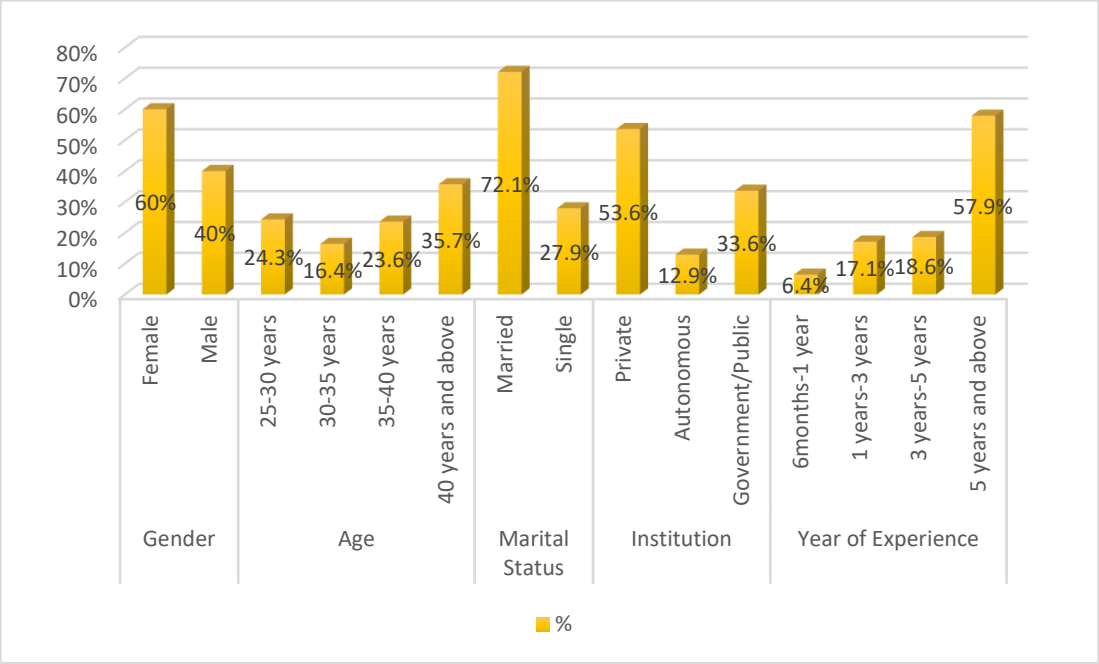


Figure 4.1

Demographic characteristics and Work experience of participants

4.2 PREVALENCE OF RESILIENCE, TECHNOSTRESS, PROBLEM FOCUSED COPING (PF), EMOTION FOCUSED COPING (EF), AVOIDANT COPING (AC)

To examine the prevalence of technostress, resilience, and coping strategies among the faculty sample, frequency distributions were calculated using categorical cutoffs. Participants were classified into different levels (such as low, moderate, and high) based on their scores for each variable. The results are presented in Table4.2.

Table 4.2
Prevalence of Technostress, Resilience, Problem-focused, Emotion focused coping and Avoidant Coping Among Faculty

Variable	Category	F	%
Resilience (R)	Low	8	5.7
	Below average	16	11.4
	Average	43	30.7
	Above average	52	37.1
	High	21	15
Technostress (T)	Low	14	10
	Moderate	52	37.1
	High	62	44.3
	Very high	12	8.6
Problem focused coping (pf)	Very low	2	1.4
	Low	18	12.9
	Moderate	78	55.7
	High	42	30
Emotion focused coping (ef)	Low	16	11.4
	Moderate	97	69.3
	High	27	19.3
Avoidant coping (ac)	Low	52	37.1
	Moderate	65	46.4
	High	23	16.4

As shown in Table 4.2, with respect to Resilience, the majority of faculty (37.1%) fell in the Above Average category, indicating generally good levels of resilience. Additionally, 30.7% reported

Average resilience and 15% reported High resilience, while smaller proportions fell in Below Average (11.4%) and Low (5.7%) categories.

Regarding Technostress, 44.3% of faculty reported High levels, followed by 37.1% in the Moderate category. A smaller proportion reported Low (10%) and Very High (8.6%) technostress, indicating that a considerable number of participants experienced elevated stress related to technology use.

For Problem-Focused Coping, the majority of faculty (55.7%) fell in the Moderate category, followed by 30% in the High category. Only 12.9% and 1.4% reported Low and Very Low levels respectively, suggesting that most participants moderately to actively engage in problem-solving coping strategies.

With respect to Emotion focused Coping, a large majority of faculty (69.3%) reported Moderate levels, followed by 19.3% in the High category and 11.4% in the Low category, indicating generally adequate emotion focused coping effectiveness among the sample.

Regarding Avoidant Coping, 46.4% of faculty reported Moderate levels, while 37.1% fell in the Low category and 16.4% in the High category, suggesting that avoidance strategies are present but not dominant among most participants.

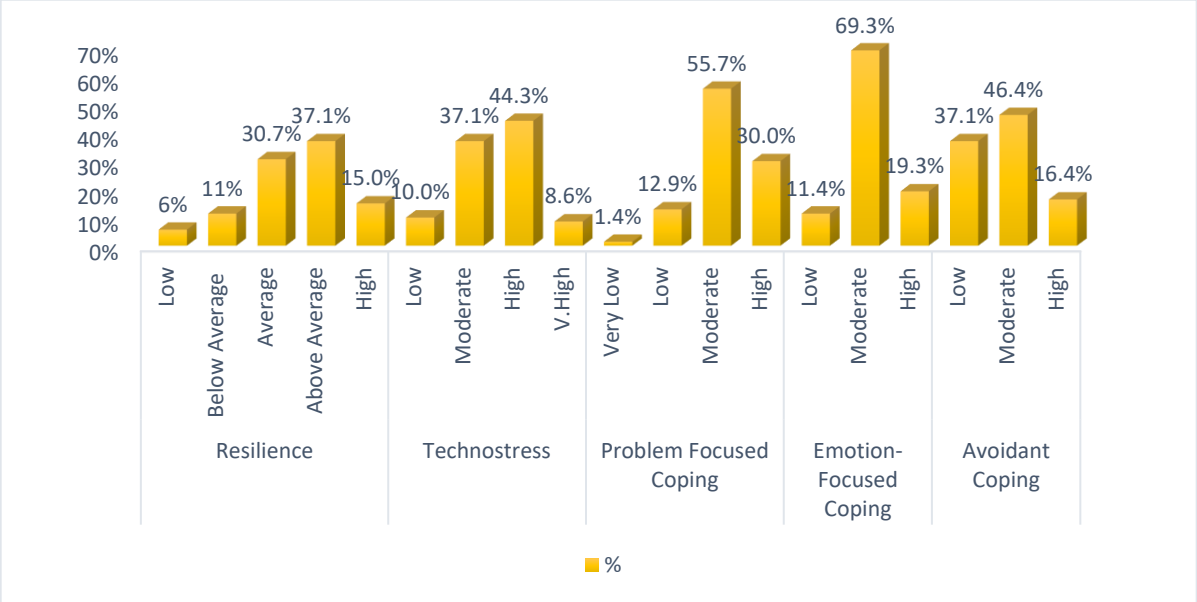


Figure 4.2

Prevalence of Resilience, Technostress, and Coping Strategies among participants

4.3 RELATIONSHIP BETWEEN RESILIENCE, TECHNOSTRESS. PROBLEM FOCUSED COPING, EMOTION FOCUSED COPING AND AVOIDANT COPING

Pearson product-moment correlation coefficients were computed to examine the inter-relationships among resilience, technostress and the three components of the brief cope scale (pf, ef, ac)

The correlation matrix is presented in table 3

Table 4.3

Pearson Correlation Matrix for resilience, technostress. Problem focused coping, emotion focused coping and avoidant coping. (n=140)

Variables	Resilience	Technostress	Problem focused coping	Emotion focused coping	Avoidant Focused coping
Resilience(R)	1	-.093	.368*	.236	.104
Technostress(T)		1	.169	.452*	.606*
Problem-focused coping(pf)			1	.466	.300
Emotion focused coping(ef)				1	.617
Avoidant coping (ac)					1

Note: R=Resilience, T=technostress, pf= problem focused coping, ef= Emotion focused coping and ac= avoidant coping. Correlation is significant at the 0.01 level (2-tailed). Correlation is significant at the 0.05 level (2-tailed).

As presented in Table 4.3, a weak negative correlation was observed between resilience and technostress (r = −.093), indicating a slight inverse but non-significant relationship. Resilience showed a moderate positive correlation with problem-focused coping (r = .368), and weak positive correlations with emotion focused coping (r = .236) and avoidant coping (r = .104).

Technostress was weakly positively correlated with problem-focused coping (r = .169), moderately correlated with emotion focused coping (r = .452), and strongly correlated with avoidant coping (r = .606), suggesting that higher technostress is associated with greater use of avoidant strategies.

A moderate positive correlation was found between problem-focused and emotion focused coping (r = .466), while problem-focused coping had a weak positive correlation with avoidant coping (r = .300). The strongest relationship was observed between emotion focused coping and avoidant coping (r = .617).

Overall, resilience appears to be associated more with adaptive coping, whereas technostress is more strongly related to avoidant coping strategies.

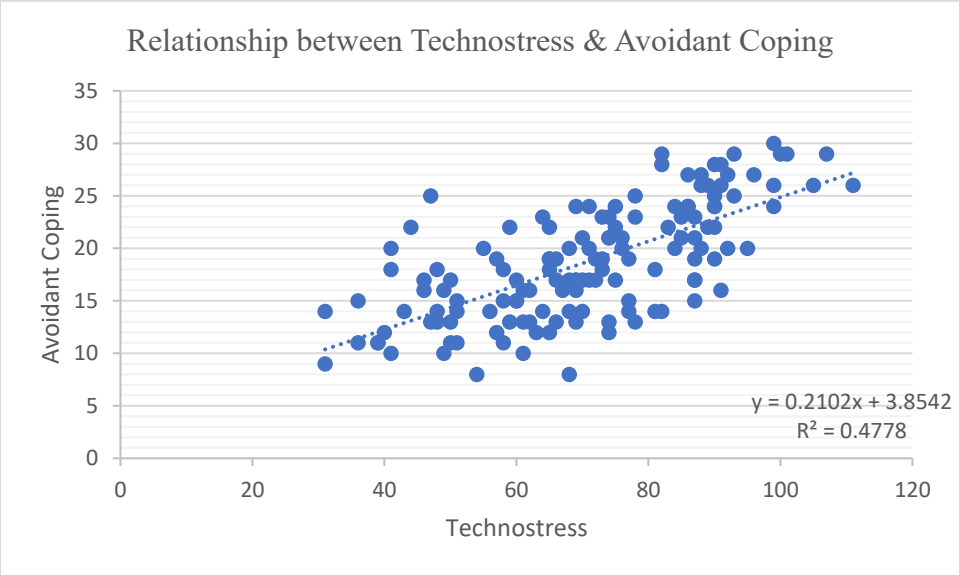


Figure4.3

Scatterplot Showing the Relationship Between Technostress and Avoidant Coping Among Faculty

Note: The regression line indicates a strong positive relationship (r = .606, p < .001). Higher levels of technostress are associated with greater reliance on avoidant coping strategies.

As depicted in Figure 4.3, the scatterplot reveals a clear upward trend, indicating a strong positive relationship between technostress and avoidant coping. The regression equation ($y = 0.210x + 3.85$) suggests that for each one-unit increase in technostress, avoidant coping increases by approximately 0.21 units. The coefficient of determination ($R^2 = .48$) indicates that technostress accounts for about 48% of the variance in avoidant coping. These findings are consistent with the significant positive correlation ($r = .606$, $p < .001$), suggesting that higher levels of technostress are associated with greater reliance on avoidant coping strategies.

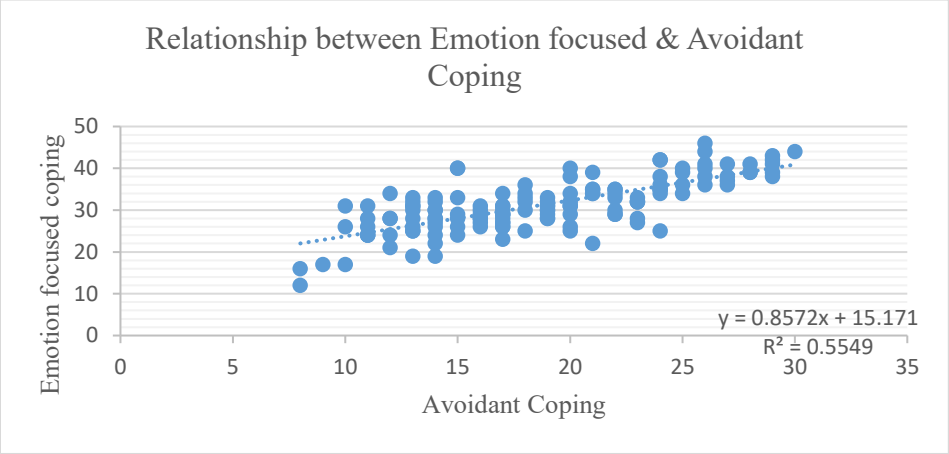


Figure 4.4
Scatterplot Showing the Relationship Between Emotion focused Coping and Avoidant Coping Among Faculty

Note: The regression line indicates the strongest positive correlation in the study ($r = .617$, $p < .001$), suggesting that emotion focused and avoidant coping strategies frequently co-occur among the sample.

As depicted in Figure4.4, the scatterplot shows a clear upward trend, indicating a strong positive relationship between emotion focused coping and avoidant coping. The regression equation ($y = 0.857x + 15.17$) suggests that for each one-unit increase in avoidant coping, emotion focused coping increases by approximately 0.86 units. The coefficient of determination ($R^2 = .55$) indicates that avoidant coping accounts for about 55% of the variance in effective coping. These findings are consistent with the significant positive correlation ($r = .617$, $p < .001$), suggesting that these coping strategies tend to co-occur among individuals.

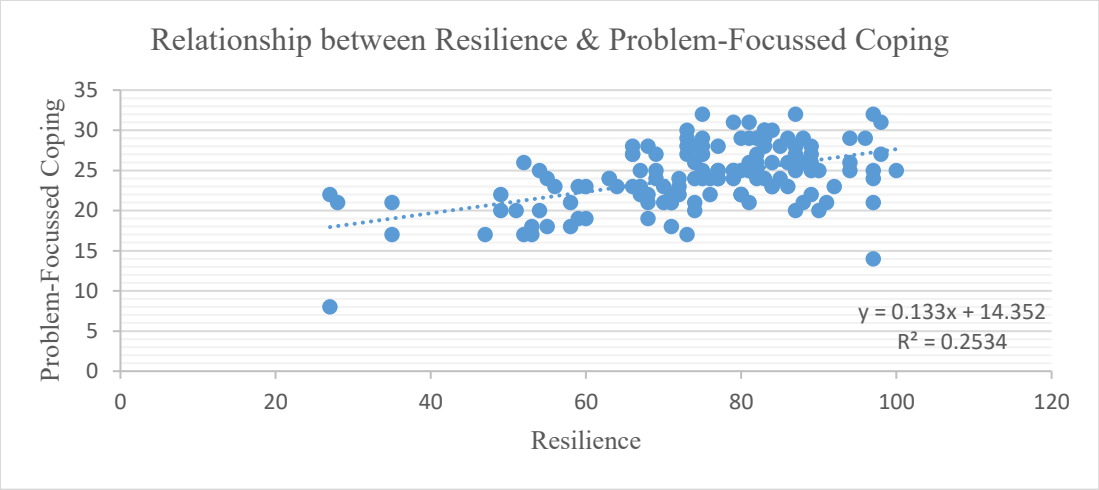


Figure 4.5
Scatterplot Showing the Relationship Between Resilience and Problem-Focused Coping Among Faculty

Note: The regression line reflects a moderate positive relationship ($r = .368$, $p < .001$), indicating that higher resilience is associated with greater use of active, problem-solving coping strategies in response to technostress.

As depicted in Figure 4.5, the scatterplot shows a moderate upward trend, indicating a positive relationship between resilience and problem-focused coping. The regression equation ($y = 0.133x + 14.35$) suggests that for each one-unit increase in resilience, problem-focused coping increases by approximately 0.13 units. The coefficient of determination ($R^2 = .25$) indicates that resilience accounts for about 25% of the variance in problem-focused coping. These findings are consistent with the significant positive correlation ($r = .368$, $p < .001$), suggesting that higher resilience is associated with greater use of problem-focused coping strategies.

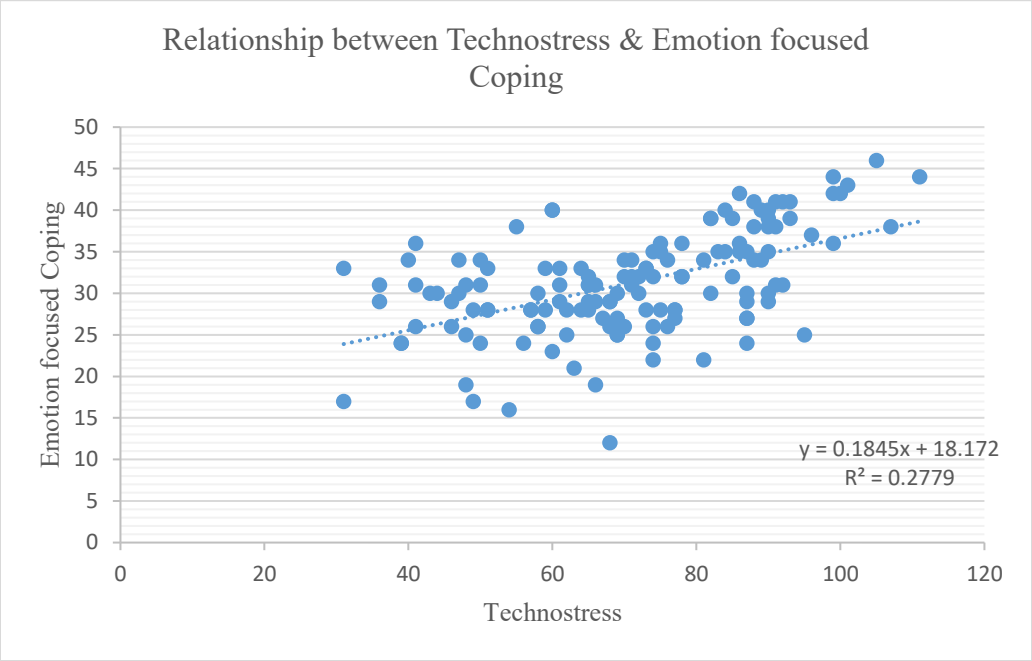


Figure 4.6
Scatterplot Showing the Relationship Between Technostress and Emotion focused Coping Among Faculty

Note: The regression line indicates a moderate positive relationship ($r = .452$, $p < .001$), suggesting that as technostress increases, faculty increasingly adopt emotion focused coping to manage associated psychological distress**.**

As depicted in Figure 4.6, the scatterplot shows a moderate upward trend, indicating a positive relationship between technostress and emotion focused coping. The regression equation ($y = 0.185x + 18.17$) suggests that for each one-unit increase in technostress, emotion focused coping increases by approximately 0.19 units. The coefficient of determination ($R^2 = .28$) indicates that technostress accounts for about 28% of the variance in emotion focused coping. These findings are consistent with the significant positive correlation ($r = .452$, $p < .001$), suggesting that higher levels of technostress are associated with increased use of emotion focused coping strategies.

4.4 GENDER DIFFERENCES IN TECHNOSTRESS, RESILIENCE, PROBLEM-FOCUSED COPING, EMOTION FOCUSED COPING AND AVOIDANT COPING

An independent samples t-test was conducted to examine whether statistically significant gender differences existed in technostress, resilience, problem-focused coping, emotion focused coping, and avoidant coping. Levene's test for equality of variances was examined prior to interpretation. Results indicated equal variances for most variables; therefore, the standard independent samples t-test values are reported. Results are presented in Table 3.

Table4.4

Independent Samples t-Test: Gender Differences in Tecnostress, Resilience, Problem-focused, Emotion focused and Avoidant Coping

Variables	**Male M (SD)** **n = 56**	**Female F (SD)** **n = 84**	**t**	**df**	**p**	**Cohen's d**
Technostress	2.57 (.828)	2.48 (.768)	-.697	138	.487	-.120
Resilience	3.23 (1.009)	3.58 (1.078)	1.937	138	.055	.334
Problem-focused coping	3.23 (.572)	3.08 (.748)	-1.263	138	.209	-.218
Emotion focused coping	2.25 (.580)	1.96 (.502)	-3.011	106.074	**.003***	-.534

Avoidant coping	1.93 (.735)	1.70 (.673)	-1.878	138	.063	-.324

Note: M = Mean; SD = Standard Deviation. Levene's test indicated equal variances for all variables, except emotion focused coping where unequal variances were assumed. Cohen's d interpretation: negligible < .20, small = .20–.49, medium = .50–.79, large ≥ .80 (Cohen, 1988). p < .05. Bold values indicate statistically significant gender differences.

As presented in Table 4.3, male participants reported slightly higher mean scores than female participants on technostress, problem-focused coping, emotion focused coping, and avoidant coping, whereas females reported higher mean scores on resilience. A statistically significant gender difference was observed only for emotion focused coping, $t(106.07) = -3.01$, $p = .003$, Cohen's $d = 0.53$, reflecting a medium effect size. Male participants ($M = 2.25$, $SD = .58$) scored significantly higher on effective coping than female participants ($M = 1.96$, $SD = .50$), indicating greater use of this coping strategy among males.

No statistically significant gender differences were found for technostress, $t(138) = -0.70$, $p = .487$, Cohen's $d = .12$ (negligible); resilience, $t(138) = 1.94$, $p = .055$, $d = .33$ (small); problem-focused coping, $t(138) = -1.26$, $p = .209$, $d = .22$ (small); or avoidant coping, $t(138) = -1.88$, $p = .063$, $d = .32$ (small). Although some mean differences were observed, effect sizes were generally negligible to small, indicating limited practical significance of gender differences across these variables.

4.5 SUMMARY OF THE FINDINGS

Overall, the results indicate that technostress, resilience, and coping strategies are significantly interrelated. Technostress was positively associated with emotion focused and avoidant coping, while resilience was positively related to problem-focused coping, highlighting its adaptive role.

Gender differences were largely non-significant, except for emotion focused coping, where males reported higher scores. The strongest relationships were observed between emotion focused coping and avoidant coping, and between technostress and avoidant coping. These findings underscore resilience as a protective factor and technostress as a risk factor influencing coping behaviors.

CHAPTER-V
FINDINGS, CONCLUSIONS, FUTURE IMPLICATIONS & SUGGESTIONS

CHAPTER V
FINDINGS ,CONCLUSIONS, FUTURE IMPLICATIONS & SUGGESTIONS

The purpose of this quantitative study was to investigate faculty resilience, technostress, and adaptive coping strategies in the context of post-digital transformation in higher education. This chapter includes a discussion of the major findings in relation to existing literature on technostress, faculty resilience, and adaptive coping strategies, along with an examination of theoretical frameworks and practical implications for higher education institutions. Also included is a discussion of the study's connections to established stress and coping theories, followed by recommendations for institutional practice, limitations of the study, directions for future research, and a brief conclusion.

This chapter addresses the following research objectives:

(O1): To assess the prevalence of technostress, resilience, and adaptive coping strategies among higher education faculty members in the post-digital transformation era.

(O2): To investigate gender-based differences in technostress among higher education faculty members.

(O3): To investigate gender-based differences in resilience among higher education faculty members.

(O4): To investigate gender-based differences in adaptive coping strategies among higher education faculty members.

(O5): To explore the relationship between technostress, resilience, and adaptive coping strategies among faculty members.

The results of the study indicated that technostress is widespread among higher education faculty, with over half the sample reporting high or very high levels of technology-related stress, even as the majority demonstrated above-average resilience. Adaptive coping strategies, particularly problem-focused approaches, were significantly associated with higher resilience,

while technostress was strongly associated with avoidant coping. Gender differences were minimal across most variables, with the only significant finding being greater emotion-focused coping among male faculty. The relationship between resilience and technostress was non-significant, suggesting that resilience functions as a reactive psychological resource rather than a preventive buffer against digital stress.

5.1 INTERPRETATION OF THE FINDINGS

The following sections present an interpretation of the major findings in relation to the five research objectives. Although the sample comprised faculty members from diverse institutional settings within the Jammu region, the findings reflect patterns that are broadly consistent with international research on technostress and faculty well-being in digitally transforming academic environments. Each major finding is discussed in the context of the existing literature.

5.2 PREVALENCE OF RESILIENCE, TECHNOSTRESS, AND ADAPTIVE COPING STRATEGIES

The findings revealed that the majority of faculty members in this sample demonstrated above-average or high levels of resilience, with 37.1% falling in the above-average category and an additional 15% in the high category. Only 5.7% reported low resilience. This pattern suggests that as a professional group, faculty members have developed considerable psychological capacity to absorb and recover from the demands of digital transformation. This aligns with García-Rivera et al. (2022), who found that resilience is a significant protective factor against occupational stress among academic professionals, and with Ross et al. (2024), who identified resilience as particularly important for sustaining professional efficacy amid ongoing institutional disruption. The high prevalence of resilience in this sample may also be partly attributable to its experience profile: 57.9% of participants had more than five years of teaching experience, and sustained professional engagement is associated with the consolidation of adaptive psychological resources over time (Celbis et al., 2025).

Despite these encouraging resilience levels, technostress was pervasive. A total of 44.3% of faculty reported high technostress and an additional 8.6% reported very high levels, meaning that

over half the sample (52.9%) experienced considerable technology-related stress. Only 10% fell in the low-technostress category. This finding is consistent with Zheng et al. (2022), who documented high levels of technostress among university faculty during the COVID-19 pandemic, attributing these to workload expansion, digital skills gaps, and blurred boundaries between professional and personal life. That such stress persists in the post-pandemic period aligns with Wang and Li (2019), who argued that technostress in higher education arises from enduring mismatches between institutional digital demands and faculty competencies. Kumar (2024) further confirmed that technostress continues to negatively affect employees' mental health, job satisfaction, and performance across occupational contexts, reinforcing that the digital pressures that intensified during the pandemic have not substantially receded. Penado Abilleira et al. (2021) similarly found that Spanish university teachers reported significant technostress due to work overload and insufficient institutional support, a pattern that appears to generalise to the Indian higher education context.

Regarding coping strategies, most participants reported moderate use of problem-focused coping (55.7% moderate; 30% high), indicating that the majority of faculty engage constructively with digital stressors at least some of the time. Emotion-focused coping was similarly moderate for most (69.3%), with 19.3% in the high category. Avoidant coping was present but not dominant, with 37.1% in the low and 46.4% in the moderate category, and only 16.4% reporting high avoidant coping. These patterns suggest that faculty predominantly rely on adaptive regulatory strategies, with avoidance serving as a secondary and less prevalent response. Hauk et al. (2019), in a longitudinal study, found that coping behaviour mediates the relationship between technostress and strain across age groups, and that individuals who consistently employ active coping strategies are better protected from the long-term effects of digital overload. Stan (2022) similarly demonstrated that high digital competence combined with adaptive coping reduces burnout risk among educators, underscoring that the coping profile observed in the present sample reflects a meaningfully functional, if not uniformly optimal, response to digital stress.

5.3 RELATIONSHIP AMONG RESILIENCE, TECHNOSTRESS, AND ADAPTIVE COPING STRATEGIES

Pearson correlation analyses revealed a theoretically coherent pattern of relationships among the study variables. Resilience showed a moderate positive correlation with problem-focused coping ($r = .368$, $p < .001$), indicating that faculty who possess greater psychological resilience are more likely to adopt active, constructive strategies — such as problem-solving, resource acquisition, and skill development — when confronting digital stressors. This finding corroborates the theoretical framework of Lazarus and Folkman (1984), which positions active, problem-focused coping as a primary mechanism of effective stress management, and is consistent with the view that resilient individuals preferentially engage with challenges rather than avoiding them. Stanisławski (2019), drawing on an integrative coping circumplex model, similarly situated adaptive approach-oriented coping as a hallmark of psychologically resourced individuals. Saleem et al. (2021) further confirmed that adaptive coping, mediated by self-efficacy, significantly buffers the negative impact of technostress on work outcomes, reinforcing the protective function of problem-focused strategies among educators.

Technostress showed a moderate positive correlation with emotion-focused coping ($r = .452$, $p < .001$) and a strong positive correlation with avoidant coping ($r = .606$, $p < .001$). This pattern indicates that as digital stress intensifies, faculty increasingly resort to managing emotional distress or disengaging from stressors rather than actively confronting the sources of pressure. This finding is consistent with Ali et al. (2023), who found that emotional exhaustion arising from heavy technology use during the pandemic drove employees toward emotional dysregulation and less effective coping responses. Bencsik and Juhász (2023) similarly observed that persistent technostress disrupts organisational functioning and interpersonal dynamics, creating conditions in which avoidant disengagement becomes an understandable, if ultimately maladaptive, coping response. The particularly strong association between technostress and avoidant coping ($R^2 = .48$) is a noteworthy and concerning finding: it suggests that nearly half the variance in avoidant coping can be accounted for by technostress levels alone. Nang et al. (2022), in a systematic review of teacher technostress during the COVID-19 pandemic, identified avoidance and disengagement as recurring responses to persistent digital overload, particularly when institutional coping support was absent.

Importantly, the correlation between resilience and technostress was weak and non-significant ($r = -.093$, $p > .05$). This finding indicates that in the present sample, higher resilience did not translate into meaningfully lower levels of perceived technostress. A more precise interpretation, consistent with Zheng et al. (2022) and Fettahoglu and Yikilmaz (2025), is that resilience functions primarily as a reactive resource — one that shapes how faculty respond to and recover from stress — rather than a preventive shield that reduces the initial experience of digital pressure. Califf et al. (2020) made a related distinction in their investigation of the bright and dark sides of technostress, finding that personal resources modulate the individual's response to technological demands but do not necessarily reduce the perception of those demands when they are structurally embedded in the work environment. This interpretation has important practical implications: building faculty resilience, while valuable, is unlikely to reduce technostress unless it is accompanied by structural institutional changes that address the sources of digital overload (Wang et al., 2023; Rohwer et al., 2022).

The strongest relationship in the correlation matrix was found between emotion-focused coping and avoidant coping ($r = .617$, $p < .001$). The co-occurrence of emotion-focused and avoidant strategies is theoretically interpretable: when active problem-solving is unavailable or insufficient, faculty may first seek to regulate their emotional response to digital demands, and if this too proves inadequate, progressively withdraw from the stressor altogether. This sequential escalation from regulatory to avoidant responses under sustained stress aligns with the transactional model of Lazarus and Folkman (1984) and with the findings of Galvin et al. (2022), who observed that technostress-related overload and work-home conflict in university staff were associated with anxious and depressive symptoms, while active coping and technical support mitigated these negative outcomes. The interplay among these findings illustrates a cyclical dynamic: resilient faculty are more likely to respond to digital stress with active problem-solving; however, when technostress is high and sustained, both emotion-focused and avoidant coping escalate regardless of resilience level, underscoring that individual psychological resources alone are insufficient without adequate institutional and structural support (Solís et al., 2023; Spagnoli et al., 2020).

5.4 GENDER DIFFERENCES IN TECHNOSTRESS, RESILIENCE, AND ADAPTIVE COPING STRATEGIES

Independent samples *t*-tests indicated no statistically significant gender differences in technostress [$t(138) = -0.70$, $p = .487$, Cohen's $d = .12$], resilience [$t(138) = 1.94$, $p = .055$, $d = .33$], problem-focused coping [$t(138) = -1.26$, $p = .209$, $d = .22$], or avoidant coping [$t(138) = -1.88$, $p = .063$, $d = .32$]. These findings reflect growing evidence that digital competence and stress exposure are now shared experiences across genders in academia (Solís et al., 2023; Wang & Li, 2024). This is consistent with Yang (2025), whose systematic literature review found that technostress effects on job satisfaction and burnout were not uniformly differentiated by gender, and with Cuadrado et al. (2024), who found that personality traits rather than gender were the more meaningful predictors of technostress vulnerability among university staff.

There was, however, one statistically significant gender difference: male faculty reported significantly greater use of emotion-focused coping than female faculty [$t(106.07) = -3.01$, $p = .003$, Cohen's $d = 0.53$], with males ($M = 2.25$, $SD = .58$) scoring higher than females ($M = 1.96$, $SD = .50$). Emotion-focused coping encompasses strategies aimed at regulating the internal emotional distress associated with a stressor — including reframing, seeking social and emotional support, and emotional venting — rather than directly resolving the stressor itself. The finding that male faculty employed such strategies more frequently challenges the conventional assumption that women engage more readily in emotion-focused responses. It may reflect evolving professional norms in Indian academia where men increasingly seek emotional support from colleagues and reframe technological challenges positively. Marchiori et al. (2019) noted that individual characteristics, including communication styles shaped by professional socialisation, significantly influence how employees respond to digital change and that these patterns do not always conform to traditional gender stereotypes. The medium effect size ($d = 0.53$) suggests this difference is practically meaningful and deserving of further qualitative investigation.

5.5 IMPLICATIONS FOR THEORY AND RESEARCH

Chapter II included descriptions of several theoretical frameworks relevant to technostress, resilience, and coping, including the Person-Environment Fit Theory, the Transactional Model of Stress and Coping, and Job Demands-Resources Theory. How the findings of the present study relate to these frameworks is discussed in the following sections.

5.6 PERSON-ENVIRONMENT FIT THEORY

The Person-Environment Fit Theory, as applied to technostress by Wang and Li (2019), proposes that technostress arises when there is a mismatch between the demands of the digital work environment and the individual's skills, values, or needs. The present study's finding that over half the sample experienced high or very high technostress, even in a sample characterised by above-average resilience, strongly supports this theoretical position. The stress observed is not a failure of individual resilience but a reflection of a structural mismatch between what digital transformation demands of faculty and what institutional systems provide in terms of training, support, and workload rationalisation. Wang and Li (2019) specifically found that faculty who experienced greater skill-demand mismatches reported the highest technostress, and that providing targeted support and better technology choices reduced stress significantly. The present findings extend this framework by demonstrating that even experienced and resilient faculty are not immune to this mismatch, reinforcing the need for organisational-level interventions that address fit rather than focusing solely on individual-level coping capacity.

5.7 TRANSACTIONAL MODEL OF STRESS AND COPING

Lazarus and Folkman's (1984) transactional model of stress and coping positions stress as arising from the individual's cognitive appraisal of a demand as exceeding their coping resources, with coping representing the cognitive, emotional, and behavioural efforts deployed to manage this appraisal. The present findings are broadly consistent with this model. The significant positive associations between resilience and problem-focused coping, and between technostress and both emotion-focused and avoidant coping, align with the model's prediction that individuals with greater internal resources engage in more adaptive coping, while those

appraising demands as overwhelming shift toward regulatory or disengagement strategies. However, the non-significant relationship between resilience and technostress introduces an important qualification: resilience, in this sample, appears to influence secondary appraisal — specifically, the individual's belief in their ability to cope — rather than primary appraisal of the demand as threatening. This distinction suggests that interventions should target both the structural stressors driving primary appraisal and the psychological resources shaping secondary appraisal, rather than focusing exclusively on one pathway.

5.8 IMPLICATIONS FOR PRACTICE

Technostress is increasingly understood not merely as an individual psychological problem but as an institutional and structural challenge requiring organisational solutions (Rohwer et al., 2022; Spagnoli et al., 2020). The present findings suggest several concrete directions for higher education institutions seeking to support faculty well-being in the post-digital environment.

The strong positive relationship between technostress and avoidant coping (r = .606) indicates that when digital demands exceed manageable levels, faculty disengage — from their work, their students, and their professional responsibilities. This represents a serious risk to teaching quality and institutional effectiveness (Boyer-Davis & Berry, 2022). Institutions should therefore invest in targeted digital upskilling programmes that reduce the competence mismatch underlying technostress, provide clear institutional guidance on digital tool use and workload boundaries, and ensure that faculty are not required to adapt to new systems without adequate preparation time and support (Nang et al., 2022; Nascimento et al., 2025).

The significant positive association between resilience and problem-focused coping (r = .368) underscores the value of structured resilience training as part of faculty development. Since resilience does not reduce the perception of technostress directly, such training must be paired with institutional efforts to reduce the sources of digital stress rather than simply equipping faculty to endure them. Workshops incorporating mindfulness, problem-focused reframing, and collaborative peer support should be embedded in ongoing professional development frameworks rather than offered as isolated one-off events (Stan, 2022; Fettahoglu & Yikilmaz, 2025). Saleem et al. (2021) demonstrated that training and creative self-efficacy significantly

moderate the negative impact of technostress on employee performance, confirming that skill development and confidence-building are practical, evidence-based tools for managing digital stress.

The absence of meaningful gender differences across most variables reinforces the case for universal, inclusive faculty wellness strategies rather than gender-segregated programming. Access to counselling, peer support networks, and occupational well-being services should be made visible, accessible, and destigmatised at the institutional level (Ross et al., 2024). Finally, leadership plays a critical role in shaping the technostress environment. Spagnoli et al. (2020) found that supportive leaders who model healthy technology use, set clear digital boundaries, and acknowledge digital fatigue significantly reduce technostress among their teams. Higher education institutions should incorporate technostress awareness and digital well-being into leadership training for department heads and programme coordinators.

5.9 LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

While the present study provides valuable empirical insights into the interrelationship among faculty resilience, technostress, and adaptive coping strategies, several methodological limitations must be acknowledged. The sample of 140 faculty members was recruited through purposive sampling and was geographically restricted to higher education institutions in the Jammu region. This limits the generalisability of the findings to the broader Indian academic context or to faculty in different cultural, linguistic, or institutional settings. Future research should employ stratified probability sampling across multiple regions, institutional types, and academic disciplines to enable more representative and comparative conclusions.

The cross-sectional research design captures a snapshot of faculty experiences at a single point in time and therefore cannot establish causal or longitudinal relationships among the three variables. Longitudinal designs tracking the same faculty across academic semesters or through periods of institutional digital change would be better suited to addressing questions of developmental trajectory and causal direction. Grummeck-Braamt (2021) noted, in a comprehensive bibliometric review of the technostress literature, that longitudinal research

remains a significant gap in the field, making this a particularly important direction for future inquiry.

The reliance on self-report psychometric instruments introduces the risk of social desirability bias and common method variance. Future studies should consider supplementing self-report data with objective indicators such as absenteeism records, performance evaluations, or institutional digital usage data to triangulate and strengthen the validity of findings. Mixed-methods designs incorporating qualitative interviews would add important depth to the quantitative patterns observed, particularly for understanding the gender difference in emotion-focused coping and the lived experience of technostress among Indian faculty.

Finally, the study did not include measures of key contextual variables including institutional digital infrastructure quality, leadership support, discipline-specific digital demands, and workload that are theoretically central to the Person-Environment Fit and Job Demands-Resources frameworks. Future research should incorporate validated measures of these contextual factors to enable a more complete test of the mechanisms through which resilience and coping interact with technostress under varying institutional conditions (Wang et al., 2023; Solís et al., 2023).

5.10 CONCLUSION

The findings of the present study suggest that technostress is a persistent and widespread occupational challenge for higher education faculty in the post-digital transformation era, affecting over half the sample at elevated levels despite generally strong levels of resilience. Resilience, while meaningfully associated with problem-focused coping, did not significantly predict lower technostress levels — a finding that challenges the assumption that building individual psychological resources alone is sufficient to address digitally driven occupational stress. Rather, the results indicate that resilience functions primarily as a reactive resource, enabling faculty to cope more constructively once stress is experienced, while the sources of that stress remain structurally rooted in institutional digital demands that exceed available competencies and support.

The strong association between technostress and avoidant coping is the most practically significant finding of this study. It suggests that when digital demands become overwhelming

and go unaddressed, faculty progressively disengage — a pattern that carries serious implications for teaching quality, student engagement, and institutional effectiveness. Addressing this requires not only supporting faculty psychological resilience but fundamentally rethinking how institutions design digital work environments, allocate technological training, and structure faculty workloads in an era of permanent digital transformation (Rohwer et al., 2022; Nascimento et al., 2025).

The largely gender-neutral picture that emerged across most variables confirms that digital stress is a shared professional challenge, while the counterintuitive finding that male faculty reported greater emotion-focused coping invites further investigation into the evolving professional norms and cultural dynamics shaping coping behaviour in Indian academia. Ultimately, this study affirms that sustaining faculty well-being in the post-digital era is not a peripheral concern but a strategic institutional priority. Educators who are equipped with both strong psychological resources and meaningful institutional support are far better positioned to manage the demands of digital transformation, maintain teaching effectiveness, and contribute productively to their institutions over the long term. Universities that invest in this dual approach — building individual resilience while systematically reducing structural sources of digital stress — will be most effective in creating academic environments where faculty can not only cope with digital transformation but genuinely thrive within it.



SUMMARY

SUMMARY

The present study was undertaken to examine the interrelationship among technostress, resilience, and adaptive coping strategies among higher education faculty members in the context of post-digital transformation. The rapid integration of digital technologies into higher education has significantly transformed the academic environment, requiring faculty members to continuously adapt to online teaching platforms, digital communication systems, and technology-mediated instructional practices. While digital transformation has enhanced accessibility and flexibility in education, it has simultaneously increased workload, blurred work–life boundaries, and intensified technology-related stress among faculty members. Following the COVID-19 pandemic, these digital demands became even more pronounced, making technostress a growing concern in higher education institutions worldwide. In the Indian context, limited institutional support, heavy workloads, and varying levels of digital competence further influence how faculty members experience and manage technology-related stress. Despite increasing research on technostress, relatively few studies have examined how resilience and adaptive coping strategies interact to protect faculty well-being in the post-digital academic environment. The present study was therefore conducted to address this gap.

The problem was formally stated as “A Study of Technostress, Coping Styles, and Resilience among Faculty Members.”

Five objectives guided the investigation, namely:

* To assess the prevalence of technostress, resilience, and adaptive coping strategies among higher education faculty members in the post-digital transformation era.
* To investigate gender-based differences in technostress among higher education faculty members.
* To investigate gender-based differences in resilience among higher education faculty members.

* To investigate gender-based differences in adaptive coping strategies among higher education faculty members.
* To explore the relationship between technostress, resilience, and adaptive coping strategies among faculty members.

Four corresponding null hypotheses were formulated, stating that:
* There is no significant difference between male and female faculty members in terms of technostress (H01).
* There is no significant difference between male and female faculty members in terms of resilience (H02).
* There is no significant difference between male and female faculty members in terms of adaptive coping strategies (H03).
* There is no significant correlation between technostress, resilience, and adaptive coping strategies among faculty members (H04).

A quantitative cross-sectional survey design was employed for the study. A total of 140 faculty members, comprising 84 female and 56 male participants aged between 21 and 60 years, were selected using convenience sampling from higher education institutions in the Jammu region, including private, government/public, and autonomous institutions. Data were collected using standardized psychological instruments, namely the Connor-Davidson Resilience Scale (CD-RISC 25), the Brief COPE Inventory, and the Technostress Creators Inventory (TCI). Statistical analysis included descriptive statistics, Pearson's product moment correlation, and independent samples t-tests.

The findings revealed that the majority of faculty members demonstrated above-average resilience, indicating that most participants possessed a relatively strong capacity to adapt to digital and professional challenges. At the same time, a considerable proportion of faculty reported moderate to high levels of technostress, suggesting that technology-related demands continue to exert significant psychological pressure in the post-digital academic environment. Among coping strategies, problem-focused coping emerged as the mo…

REFERENCES

REFERENCE

Aad, S., Ginzarly, M., & Jordan Srour, F. (2024). The interplay of institutional support and faculty roles during the COVID-19 pandemic: implications for the future of online teaching and learning. *Online Learning*, *28*(1). https://doi.org/10.24059/olj.v28i1.3911

Ali, F., Nisar, Q. A., & Nasir, S. (2023). Do emotions matter in digitized workplace? Technostress and employees' emotional well-being during the pandemic. *Kybernetes*, *52*(12), 6122-6143.. https://doi.org/10.1108/K-10-2021-1000

Bencsik, A., & Juhasz, T. (2023). The impact of technostress on organizational functioning. *Problems and Perspectives in Management*, *21*(1), 230. http://dx.doi.org/10.21511/ppm.21(1).2023.20

Bose, C. N., Bjorling, G., Elfstrom, M. L., Persson, H., & Saboonchi, F. (2015). Assessment of coping strategies and their associations with health related quality of life in patients with chronic heart failure: The Brief COPE restructured. *Cardiology research*, *6*(2), 239. doi: 10.14740/cr385w

Boyer-Davis, S., & Berry, K. (2022). Technostress creators in higher education during the Covid-19 pandemic: A comparison of faculty perceptions and experiences. *Journal of Higher Education Theory and Practice, 22*(10), 1–15.

Buzás, B., Simon, A. C., Kiss, O. E., & Faragó, K. (2025). Navigating the digital landscape: unraveling the interplay of challenge and hindrance components of technostress on employee voice behavior. *Frontiers in Psychology*, *16*, 1434275.https://doi.org/10.3389/fpsyg.2025.1434275

Califf, C. B., Sarker, S., & Sarker, S. (2020). The bright and dark sides of technostress: A mixed-methods study involving healthcare IT. *MIS Quarterly, 44*(2), 809–856. https://doi.org/10.25300/MISQ/2020/14818

Celbis, O., van de Laar, M., & Volante, L. (2025). Resilience in higher education during the COVID-19 pandemic: A scoping literature review with implications for evidence-informed policymaking. *International Journal of Educational Research Open, 8*, 100392. https://doi.org/10.1016/j.ijedro.2024.100392

Cuadrado, D., Otero, I., Martínez, A., París, T., & Moscoso, S. (2024). Predicting technostress: The Big Five model of personality and subjective well-being. *PloS ONE, 19*(11), e0313247. https://doi.org/10.1371/journal.pone.0313247

Fernández, A., Gómez, B., Binjaku, K., & Meçe, E. K. (2023). Digital transformation initiatives in higher education institutions: A multivocal literature review. *Education and information technologies*, *28*(10), 12351-12382. https://doi.org/10.1007/s10639-022-11544-0

Fettahoglu, S., & Yikilmaz, I. (2025). Reframing technostress for organizational resilience: The mediating role of techno-eustress in the performance of accounting and financial reporting professionals. *Systems, 13*(7), 550. https://doi.org/10.3390/systems13070550

Galvin, J., Evans, M. S., Nelson, K., Richards, G., Mavritsaki, E., Giovazolias, T., & Vallone, F. (2022). Technostress, coping, and anxious and depressive symptomatology in university students during the COVID-19 pandemic. *Europe's Journal of Psychology, 18*(3), 302–318. doi: 10.5964/ejop.4725

García-Rivera, B. R., Mendoza-Martínez, I. A., García-Alcaraz, J. L., Olguín-Tiznado, J. E., Camargo Wilson, C., Araníbar, M. F., & García-Alcaraz, P. (2022). Influence of resilience on burnout syndrome of faculty professors. *International Journal of Environmental Research and Public Health, 19*(2), 910. https://doi.org/10.3390/ijerph19020910

Garista, P., & Pocetta, G. (2014). Digital Resilience: meanings, epistemologies and methodologies for lifelong learning. In *Conference paper*.

Grummeck-Braamt, J. V. (2021). *Technostress: A bibliometric review and a meta-analysis of a growing research field* (Doctoral dissertation, The University of Newcastle).

Hauk, N., Göritz, A. S., & Krumm, S. (2019). The mediating role of coping behavior on the age-technostress relationship: A longitudinal multilevel mediation model. *PloS one*, *14*(3), e0213349. https://doi.org/10.1371/journal.pone.0213349

Juteau, S. (2019). Nature, dynamics and coping strategies in the face of paradoxes in a digital transformation: A records management case study. https://aisel.aisnet.org/mcis2019/6

Kumar, P. S. (2024). Technostress: A comprehensive literature review on dimensions, impacts, and management strategies. *Computers in Human Behavior Reports, 16*, 100475. https://doi.org/10.1016/j.chbr.2024.100475

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer. https://doi.org/10.1007/978-3-030-39903-0_215

Mahboob, A., & Khan, T. (2016). Technostress and its management techniques: A literature. *Journal of Human Resource Management*, *4*(3), 28-31. doi: 10.11648/j.jhrm.20160403.12

Marchiori, D. M., Mainardes, E. W., & Rodrigues, R. G. (2019). Do individual characteristics influence the types of technostress reported by workers? *International Journal of Human-Computer Interaction, 35*(3), 218–230. https://doi.org/10.1080/10447318.2018.1449713

Marrinhas, D., Santos, V., Salvado, C., Pedrosa, D., & Pereira, A. (2023). Burnout and technostress during the COVID-19 pandemic: The perception of higher education teachers and researchers. *Frontiers in Education, 8*, 1144220. https://doi.org/10.3389/feduc.2023.1144220

Morales-Rodríguez, F. M. (2021). Fear, stress, resilience and coping strategies during COVID-19 in Spanish university students. *Sustainability*, *13*(11), 5824. https://doi.org/10.3390/su13115824

Nang, A. F. M., Maat, S. M., & Mahmud, M. S. (2022). Teacher technostress and coping mechanisms during Covid-19 pandemic: A systematic review. *Pegem Journal of Education and Instruction, 12*(2), 200–212. https://doi.org/10.47750/pegegog.12.02.20

Nascimento, L., Correia, M. F., & Califf, C. B. (2025). Techno-eustress under remote work: A longitudinal study in higher education teachers. *Education and Information Technologies*, 1–38. https://doi.org/10.1007/s10639-025-13459-y

Nasirpouri Shadbad, F., & Biros, D. (2022). Technostress and its influence on employee information security policy compliance. *Information Technology & People*, *35*(1), 119-141. https://doi.org/10.1108/ITP-09-2020-0610

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*, 617650. https://doi.org/10.3389/fpsyg.2021.617650

Ragu-Nathan, T. S., Tarafdar, M., Ragu-Nathan, B. S., & Tu, Q. (2008). The consequences of technostress for end users in organizations: Conceptual development and empirical validation. *Information systems research*, *19*(4), 417-433. https://doi.org/10.1287/isre.1070.0165

Rey-Merchán, M. D. C., & López-Arquillos, A. (2022). Occupational risk of technostress related to the use of ICT among teachers in Spain. *Sustainability, 14*(14), 8746. https://doi.org/10.3390/su14148746

Rohwer, E., Flöther, J. C., Harth, V., & Mache, S. (2022). Overcoming the "dark side" of technology — A scoping review on preventing and coping with work-related technostress. *International Journal of Environmental Research and Public Health, 19*(6), 3625. https://doi.org/10.3390/ijerph19063625

Ross, P. M., Scanes, E., & Locke, W. (2024). Stress adaptation and resilience of academics in higher education. *Asia Pacific Education Review, 25*(4), 829–849. https://doi.org/10.1007/s12564-023-09829-1

Salanova, M., Llorens, S., & Cifre, E. (2013). The dark side of technologies: Technostress among users of information and communication technologies. *International journal of psychology*, *48*(3), 422-436.https://doi.org/10.1080/00207594.2012.680460

Saleem, F., Malik, M. I., Qureshi, S. S., Farid, M. F., & Qamar, S. (2021). Technostress and employee performance nexus during COVID-19: Training and creative self-efficacy as moderators. *Frontiers in Psychology, 12*, 595119. https://doi.org/10.3389/fpsyg.2021.595119

Sari, T., & Nayır, F. (2020). Challenges in distance education during the (Covid-19) pandemic period. *Qualitative Research in Education*, *9*(3), 328-360..https://doi.org/10.17583/qre.2020.5872

Shaukat, S., Bendixen, L. D., & Ayub, N. (2022). The impact of technostress on teacher educators' work-family conflict and life satisfaction while working remotely during COVID-19 in Pakistan. *Education Sciences, 12*(9), 616. https://doi.org/10.3390/educsci12090616

Shaya, N., Abukhait, R., Madani, R., & Khattak, M. N. (2023). Organizational resilience of higher education institutions: An empirical study during COVID-19 pandemic. *Higher education policy*, *36*(3), 529-555. https://doi.org/10.1057/s41307-022-00272-2

Solís, P., Lago-Urbano, R., & Real Castelao, S. (2023). Factors that impact the relationship between perceived organizational support and technostress in teachers. *Behavioral Sciences, 13*(5), 364. https://doi.org/10.3390/bs13050364

Spagnoli, P., Molino, M., Molinaro, D., Giancaspro, M. L., Manuti, A., & Ghislieri, C. (2020). Workaholism and technostress during the COVID-19 emergency: The crucial role of

the leaders on remote working. *Frontiers in Psychology, 11*, 620310. https://doi.org/10.3389/fpsyg.2020.620310

Stan, R. (2022). Personality traits, technology-related teaching skills, and coping mechanisms as antecedents of teachers' job-related affective well-being and burnout in compulsory and higher education online teaching settings. *Frontiers in Psychology, 13*, 792642. https://doi.org/10.3389/fpsyg.2022.792642

Stanisławski, K. (2019). The coping circumplex model: An integrative model of the structure of coping with stress. *Frontiers in Psychology, 10*, 694. https://doi.org/10.3389/fpsyg.2019.00694

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

Walsh, L. L., Arango-Caro, S., Wester, E. R., & Callis-Duehl, K. (2021). Training faculty as an institutional response to COVID-19 emergency remote teaching supported by data. *CBE—Life Sciences Education*, *20*(3), ar34.https://doi.org/10.1187/cbe.20-12-0277

Wang, X. L., & Li, J. (2024). Digital transformation in higher education: An ArchiMate-based business architecture case study. *IEEE Access*. https://doi.org/10.1109/ACCESS.2024.3369366

Wang, X., & Li, B. (2019). Technostress among university teachers in higher education: A study using multidimensional person-environment misfit theory. *Frontiers in Psychology, 10*, 1791. https://doi.org/10.3389/fpsyg.2019.01791

Wang, Z., Zhang, L., Wang, X., Liu, L., & Lv, C. (2023). Navigating technostress in primary schools: A study on teacher experiences, school support, and health. *Frontiers in Psychology, 14*, 1267767. https://doi.org/10.3389/fpsyg.2023.1267767

Watermeyer, R., Crick, T., Knight, C., & Goodall, J. (2021). COVID-19 and digital disruption in UK universities: Afflictions and affordances of emergency online migration. *Higher education*, *81*(3), 623-641. https://doi.org/10.1007/s10734-020-00561-y

Yang, D., Liu, J., Wang, H., Chen, P., Wang, C., & Metwally, A. H. S. (2025). Technostress among teachers: A systematic literature review and future research agenda. *Computers in Human Behavior*, 108619. https://doi.org/10.1016/j.chb.2025.108619

Zheng, M., Asif, M., Tufail, M. S., Naseer, S., Khokhar, S. G., Chen, X., & Naveed, R. T. (2022). COVID academic pandemic: Techno stress faced by teaching staff for online academic activities. *Frontiers in Psychology, 13*, 895371. https://doi.org/10.3389/fpsyg.2022.895371

APPENDICES

APPENDIX-A

CONNOR-DAVIDSON RESILIENCE SCALE (CD-RISC 25)

Please check the number that best describes how true each statement has been for you. 0 = Not true at all 1 = Rarely true 2 = Sometimes true 3 = Often true 4 = True nearly all the time

1. I am able to adapt when changes occur.	0 1 2 3 4
2. I have one close and secure relationship.	0 1 2 3 4
3. Sometimes fate or God helps me.	0 1 2 3 4
4. I can deal with whatever comes my way.	0 1 2 3 4
5. Past successes give me confidence.	0 1 2 3 4
6. I try to see the humorous side of things when faced with problems.	0 1 2 3 4
7. Having to cope with stress can make me stronger.	0 1 2 3 4
8. I tend to bounce back after illness, injury or hardships.	0 1 2 3 4
9. I believe most things happen for a reason.	0 1 2 3 4
10. I make my best effort, no matter what.	0 1 2 3 4
11. I believe I can make my goals, even if there are obstacles.	0 1 2 3 4
12. Even when hopeless, I do not give up.	0 1 2 3 4
13. In times of stress, I know where to find help.	0 1 2 3 4
14. Under pressure, I stay focused and think clearly.	0 1 2 3 4
15. I prefer to take the lead in problem solving.	0 1 2 3 4
16. I am not easily discouraged by failure.	0 1 2 3 4
17. I think of myself as a strong person when dealing with life's challenges.	0 1 2 3 4
18. I make unpopular or difficult decisions.	0 1 2 3 4
19. I am able to handle unpleasant feelings like sadness, fear and anger.	0 1 2 3 4
20. I have to act on a hunch.	0 1 2 3 4
21. I have a strong sense of purpose in life.	0 1 2 3 4
22. I feel like I am in control.	0 1 2 3 4
23. I like challenges.	0 1 2 3 4
24. I work to attain goals.	0 1 2 3 4
25. I take pride in my achievements.	0 1 2 3 4

APPENDIX-B

BRIEF COPE INVENTORY

Please read each statement and indicate how much you have been doing each behavior when dealing with stress. 1 = I haven't been doing this at all 2 = A little bit 3 = Medium amount4 =Doing this a lot

1. I've been turning to work or other activities to take my mind off things.	1 2 3 4
2. I've been concentrating my efforts on doing something about the situation I'm in.	1 2 3 4
3. I've been saying to myself 'this isn't real.'	1 2 3 4
4. I've been using addictive behaviors or substances to make myself feel better.	1 2 3 4
5. I've been getting emotional support from others.	1 2 3 4
6. I've been giving up trying to deal with it.	1 2 3 4
7. I've been taking action to try to make the situation better.	1 2 3 4
8. I've been refusing to believe that it has happened.	1 2 3 4
9. I've been saying things to let my unpleasant feelings escape.	1 2 3 4
10. I've been getting help and advice from other people.	1 2 3 4
11. I've been using alcohol or other drugs to help me get through it.	1 2 3 4
12. I've been trying to see it in a different light, to make it seem more positive.	1 2 3 4
13. I've been criticizing myself.	1 2 3 4
14. I've been trying to come up with a strategy about what to do.	1 2 3 4
15. I've been getting comfort and understanding from someone.	1 2 3 4
16. I've been giving up the attempt to cope.	1 2 3 4
17. I've been looking for something good in what is happening.	1 2 3 4
18. I've been making jokes about it.	1 2 3 4
19. I've been doing something to think about it less.	1 2 3 4
20. I've been accepting the reality of the fact that it has happened.	1 2 3 4
21. I've been expressing my negative feelings.	1 2 3 4
22. I've been trying to find comfort in my religion or spiritual beliefs.	1 2 3 4
23. I've been trying to get advice or help from other people about what to do.	1 2 3 4
24. I've been learning to live with it.	1 2 3 4
25. I've been thinking hard about what steps to take.	1 2 3 4
26. I've been blaming myself for things that happened.	1 2 3 4
27. I've been praying or meditating.	1 2 3 4
28. I've been making fun of the situation.	1 2 3 4

APPENDIX-C

TECHNOSTRESS INVENTORY

Please read each statement carefully and indicate the extent to which you agree with each statement using the following scale: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

1. I am forced by this technology to work much faster.	1 2 3 4 5
2. I am forced by this technology to do more work than I can handle.	1 2 3 4 5
3. I am forced by this technology to work with very tight time schedules.	1 2 3 4 5
4. I am forced to change my work habits to adapt to new technologies.	1 2 3 4 5
5. I have a higher workload because of increased technology complexity.	1 2 3 4 5
6. I spend less time with my family due to this technology.	1 2 3 4 5
7. I have to be in touch with my work even during my vacation due to this technology.	1 2 3 4 5
8. I have to sacrifice my vacation and weekend time to keep current on new technologies.	1 2 3 4 5
9. I feel my personal life is invaded by this new technology.	1 2 3 4 5
10. I do not know enough about this technology to handle my job satisfactorily.	1 2 3 4 5
11. I need a long time to understand and use new technologies.	1 2 3 4 5
12. I do not find enough time to study and upgrade my technology skills.	1 2 3 4 5
13. I find new recruits to this organization know more about computer technology than I do.	1 2 3 4 5
14. I often find it too complex for me to understand and use new technologies.	1 2 3 4 5
15. I feel constant threat to my job security due to new technologies.	1 2 3 4 5
16. I am threatened by co-workers with newer technological skills.	1 2 3 4 5
17. I do not share my knowledge with my co-workers for fear of being replaced.	1 2 3 4 5
18. I feel there is less sharing of knowledge among co-workers for fear of being replaced .	1 2 3 4 5
19. There are always new developments in the technologies we use in our organization.	1 2 3 4 5
20. There are constant changes in computer software in our organization.	1 2 3 4 5
21. There are constant changes in computer hardware in our organization.	1 2 3 4 5
22. There are frequent upgrades in computer networks in our organization.	1 2 3 4 5