

Impact of Techno-Stress on Job Satisfaction of Teachers in Government Schools in Sri Lanka: Evidence from Kurunegala Educational Zone

W.D.A.D. Ranathunga

*BSc Scholar, Department of Business Management, Faculty of Management Studies,
Rajarata University of Sri Lanka*

asharanathunga1997@gmail.com

K.A.K.S. Rathnakara

*Lecturer (Temp.), Department of Human Resource Management, Faculty of Management
Studies, Rajarata University of Sri Lanka*

sakurathnakara@gmail.com

Abstract

The way young people learn has altered due to mobile device use. Children readily use a smartphone or tablet PC to obtain information, regardless of age or location. According to studies, adopting mobile technology for learning enables young children to take charge of their education, engage in more active social interactions, access more resources, increase their research analysis abilities, and think critically and solve problems more efficiently. Conversely, teachers are stressed as these young students become more acclimated to learning with mobile technology. Techno-stress is the term for this. Five factors—techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty—are thought to contribute to techno-stress, which is defined as a person's incapacity to deal with new technology healthily. This study looks at how technical stress affects teachers' job satisfaction in Sri Lanka's public schools, particularly in the Kurunegala Educational Zone. Furthermore, determining the effects of techno-creators on government school teachers' job satisfaction are the sub objectives of the study. The study's target population is Sri Lankan government school teachers, and the sample consists of 350 government school teachers in the Kurunegala Education Zone. Convenient sampling strategy was utilized, and data was collected through a questionnaire. The findings showed that factors considered under the study impacted teachers' job satisfaction. The results have some repercussions for the teachers and administrators of Sri Lankan government schools, particularly those who intend to integrate mobile technology (such as digital textbooks) into the classrooms. Teachers must comprehend how mobile technology works, how it may be used for instruction, and how useful it is for pupils if they are to minimize technological stress.

Key Words: Job Satisfaction, Government Teachers, Techno-Stress

Background of the Study

Information and Communication Technology (ICT) is a scientific, technological, and engineering discipline and management technique used in handling information and application and association with social, economic, and cultural matters (UNESCO, 2002). Every aspect of modern society is becoming increasingly dependent on technology. The world's rapid technological growth has profoundly impacted personal and professional lives. There are far too many parts of our daily lives that are affected by cutting-edge information and communication technology, including the internet, mobile phones, and wireless technologies. Thanks to ICT, people can now connect anytime, anywhere. Rapid technology innovation has drastically changed people's work and personal life (Hoffman, Novak, and Venkatesh, 2004). Because they cannot adjust to their technical abilities and the rate at which ICT is growing, many employees have a terrible connection with ICT. Collaboration technology like voicemail and instant messaging improve corporate productivity and make decision-making easier (communication). It also has a dark side, which might have unfavorable effects. Technology is increasingly being used in numerous industries due to its rapid advancement. Some people experience stress as a result of using ICT. This is referred to as "techno-stress." Information technology was simple and effective, but teachers experienced difficulties utilizing the new tool. A modern sickness of adaptation known as "technostress" is brought on by an inability to adapt to the latest computer technology healthily (Jena, 2015). Stressful circumstances arise for those unable to meet corporate ICT needs successfully. Scholars' attention has shifted more and more to technological stress in recent years.

The frequency of ICT usage by employees may be rising, which could exacerbate the unfavorable effects of ICT use on people. Employee satisfaction with the system they use at work and their ability to use it effectively to fulfill their jobs are therefore critical for the system to increase productivity (Huang, Yang, Jin, and Chiu, 2004). According to a prior study, technological stress has been associated with reduced job satisfaction, subpar performance, disruptive behavior, low commitment, and a desire to leave the organization (Qiang, Kanliang, and Qin, 2005). It is crucial to comprehend the idea of techno-stress and its adverse effects on people and organizational outcomes. In addition, it is crucial to investigate ways to lessen the adverse effects of technological stress in order to enhance organizational performance, as research repeatedly shows that companies with content staff are more productive. Many classrooms in schools today still follow the archaic teaching model from decades ago, which involved a teacher instructing twenty or more kids at a time with chalk and a board. However, many schools use information and communication technology as a teaching strategy. ICT made self-study learning possible. Learning on one's own is now possible for students who previously learned mainly by reading textbooks or listening to lectures from teachers in a classroom (Traxler, 2007). Researchers claim that these educational changes have a far more significant impact than standard pedagogy (Singh, 2003). Because of this, pupils believe that mobile gadgets are much more motivating and exciting than conventional classroom materials (Henderson and Yeow, 2012).

Even if students are familiar with using mobile devices in their daily lives, teachers still need to go beyond technical abilities to prepare them with the appropriate pedagogy for using mobile technology in various situations (Ertmer and Ottenbreit-Leftwich, 2010). The use of

technology in the classroom should continue, and instructors must be able to use it effectively and deal with any stress it may cause. Teachers have made significant sacrifices recently to integrate technology into their instruction. The use of numerous technologies, including multimedia and digital textbooks, is expected of teachers nowadays and is regarded as one of their fundamental competencies. In other words, the effort to replace current information and communication technologies makes teachers feel threatened. All of the factors above can result in teachers losing faith in their ability to use ICT and overall job happiness. They then experience self-doubt as a result. The use of new technologies may be resisted as well. To prevent the negative impacts of information and communication technology on them from worsening, teachers must build daily interactions with ICT. In order to maximize their satisfaction with the system they work in and their capacity to do their duties efficiently, instructors must employ suitable systems. There are numerous components of technology that help lower stress levels, according to research in the field of education. Stand-alone computers gave way to highly portable, wireless gadgets now found in every classroom as educational equipment (Maxwell, 2021). Previous studies have revealed that techno-stress may result in poor performance, disruptive behavior, a desire to leave the company, and a decline in job satisfaction with technology (Qiu, 2013). The effectiveness of teachers has a considerable impact on the outcome of any educational process. Teacher satisfaction is one of the most critical factors in accomplishing the targeted goals. If teachers' job satisfaction is disregarded, efforts to increase school performance will never be successful. Job satisfaction is characterized by how an individual feels about their job in the workplace. In the context of schooling, job satisfaction testing is equally crucial (Qiu, 2013) because it demonstrates the teachers' dedication and length of service.

Research Problem

Today's society is incorporating technology into every aspect of life. The modern workplace environment is also dynamic. The increased usage of information and communication technologies is primarily to blame. The management of these changes is gaining more and more attention. Teachers' responses to technological stress impact their long-term mental, physical, and behavioral health. In order to comprehend the strain brought on by information and communication technology and how it affects teachers' job happiness, this study is becoming increasingly crucial. A teacher's job satisfaction may suffer due to techno-complexity, techno-uncertainty, techno-overload, and techno-insecurity if they cannot adapt to these technological advances (Jena, 2015).

However, it is crucial to thoroughly examine the factors contributing to technological stress and how they affect teachers' job satisfaction in a school setting. Every teacher experiences some level of technological stress. We must take into account the things that affect it in order to overcome it. There has not been much research on how technology stress affects teachers' job satisfaction. Determining the factors impacting teachers' job satisfaction in government schools in the Kurunegala Educational Zone due to technological stress is thus the research gap of this study. So, according to the researchers, it is necessary to investigate how technological stress impacts teachers' job satisfaction.

Research has repeatedly shown that schools with satisfied teachers are more successful and productive in their studies. The impact of technological stress on teachers' job satisfaction has grown to be a significant problem. The term "technology" is widely

understood and frequently used by people (Turney, 2008). Because of this, people may have different thoughts and ideas (Turney, 2008). However, misuse could lead to issues or injure people. In other words, technology refers to a group of methods, procedures, and processes employed in producing goods and services or accomplishing objectives. An illustration of that detail is techno-stress. Today's young generations are regarded as "digital natives," and they possess technical abilities that are far more sophisticated than those of earlier generations due to their early exposure to technology (Thompson, 2013). Unquestionably, technology has integrated itself into every area of our lives. Technology usage has become more efficient, but because it is evolving so quickly, many individuals are experiencing techno-stress.

The primary goal of this study is to examine how technological stress affects teachers' job satisfaction in Sri Lankan public schools. Therefore, the study's central question is: "Does technological stress affect teachers' job satisfaction in Sri Lankan government schools?"

The following are the specific research questions.

- I. Is there an impact of techno-overload on job satisfaction among government school teachers?
- II. Is there an impact of techno-invasion on job satisfaction among government school teachers?
- III. Is there an impact of techno-complexity on job satisfaction among government school teachers?
- IV. Is there an impact of techno-insecurity on job satisfaction among government school teachers?
- V. Is there an impact of techno-uncertainty on job satisfaction among government school teachers?

Objectives of the Study

This research was conducted to study the impact of techno-stress on job satisfaction of teachers in government schools in Sri Lanka. So, the main objective is to identify the impact of techno-stress on job satisfaction of teachers in government schools in Sri Lanka.

The sub-objectives can be mentioned as follows:

- I. To identify the impact of techno-overload on job satisfaction among government school teachers.
- II. To identify the impact of techno-invasion on job satisfaction among government school teachers.
- III. To identify the impact of techno-complexity on job satisfaction among government school teachers.
- IV. To identify the impact of techno-insecurity on job satisfaction among government school teachers.
- V. To identify the impact of techno-Uncertainty on job satisfaction among government school teachers.

Literature Review

Job satisfaction is a pleasant or positive affection state, which grows in evaluating an individual's work experience (Locke, 1976). Organ and Near (1985) recognized that job

satisfaction could be defined from the perspective of affection or explored in the perspective of cognition. Based on the perspective of cognition, job satisfaction is interpreted as an understanding of a psychological process of recognition, including consciousness, perception, reasoning, judgment, and other aspects. Others have asserted that a person's overall assessment of their employment includes how they feel about things like their coworkers, pay, managers, and customers (Boles, Wood, and Johnson, 2003). Additionally, there are instances where a worker's poor job satisfaction results in losses for the business because of its effect on performance. The precise circumstances under which employees carry out their jobs are the main focus of job satisfaction.

An employee's emotional commitment to work is called job satisfaction (Jena, 2015). Specifically, this refers to how content a person is with their position. From person to person, this varies. In other words, job satisfaction might be either high or low. Employees can feel either positive or negative emotions related to their jobs, depending on their level of job satisfaction. Numerous studies have discovered that a satisfied employee maintains a high level of job performance. In other words, job satisfaction significantly impacts how productive an employee is. Due to employee performance and contributions to goals, researchers have also revealed a significant concern for job satisfaction. When discussing job satisfaction, the idea of a teacher's job contentment has recently attracted much attention. Previous studies have explored factors that affect a teacher's job satisfaction. According to Locke's (1976) definition of job satisfaction, teachers' positive emotional state due to their gratitude for being instructors could be called job satisfaction (Gu, 2016). Dinham and Scott (1998) classified the factors that contribute to teacher job satisfaction into three categories: (a) intrinsic teaching rewards, (b) extrinsic school variables, and (c) school-based components.

Hoppock (1935) claimed that job satisfaction results from a combination of environmental, psychological, and physiological factors and was the first to use survey methodology to examine the multidimensional aspects of job satisfaction. According to the study, 20 factors affect job satisfaction, including the utilization of skills, achievement, activity, innovation, authority, system policies and practices, benefit, coworkers, creativity, independence, moral values, recognition, responsibility, security, social service, social status, supervision-human relations, supervision-technical, variety, and working conditions (Lee, 2017). Numerous additional variables have been used to gauge job satisfaction in addition to those mentioned above. According to the definition of job satisfaction, what one desires from a job and what one believes it offers are in conflict (Locke, 1969). According to Locke, it is a general evaluation or emotional condition of a person's job experience.

Additionally, several individuals thought that teacher autonomy was one of the most crucial components of a happy workplace (Skaalvik and Skaalvik, 2009). Others claimed positive school climates and great interpersonal connections with parents, coworkers, and school administration help. A teacher's job happiness is influenced by a variety of factors, including pay, chances for advancement, a professional challenge, professional autonomy, the working environment, interactions with coworkers, and student engagement, according to Kim and Loadman (1994). Later, in 1996, Clerk and Loadman explored work

happiness by creating a new instrument based on Kim and Loadman called the Teacher Job Satisfaction Subscale (TJSS) (1994).

Then, according to Zymbylas and Papanastasiou (2006), factors including student achievement, decision-making abilities, personal development, and other factors are related to teachers' job satisfaction. Additionally, they mentioned how crucial social relationships are for instructors. Among the topics that instructors always discuss for their job satisfaction are relationships with students, relationships with social groups, and opportunities to contribute to the personal development of individuals and society (Zembylas and Papanastasiou, 2006). Researchers have identified various variables that affect teachers' job happiness. According to Herzberg, job satisfaction is correlated with five primary motivators: achievement, acknowledgment, work itself, responsibility, and advancement. Following Herzberg, Vroom cites seven factors that affect job satisfaction, including management, progression, and the nature of the job, supervisors, pay, and working environment (Aziri, 2011). Teachers are also satisfied by marginal benefits, educational policy, administration, increased opportunities, recognition, and responsibility in addition to the ones described above (Talabi, 2016).

Rahman (2008) examined teacher satisfaction and dissatisfaction when examining work satisfaction among Bangladeshi public and private college teachers. Rahman (2008) found that age and job experience had less impact on job satisfaction than gender. In comparison to their male counterparts, female respondents claimed to be happier. On the other hand, it was shown that the type of college attended was a strong predictor of overall work satisfaction. The results show that instructors are worried about their pay. The analysis also indicated that private college teachers had access to more current classroom equipment and technology facilities than public college teachers, resulting in dissatisfaction among public school teachers (Rahman, 2008). In 1984, Craig Brod coined the phrase "techno-stress." He described techno-stress as a contemporary illness brought on by a person's incapacity to use ICT healthily. Technology has grown at a rapid rate since 1988. Early researchers indeed thought of technology as a disease. Later scholars, however, perceived it as more of an inability to adjust to the changes brought about by ICT.

The most widely used digital technology today among many people is mobile devices. Additionally, they are adept at using these mobile gadgets for any situation. Additionally, mobile devices are a source of knowledge for today's learners, who use them to chat with friends, play games, and learn and find information. Any learner can utilize these wireless gadgets whenever and wherever they choose. That is a significant benefit in this situation. Using YouTube, Google, and Wikipedia, students can get any knowledge they desire. Furthermore, we can now communicate with anyone and advance our knowledge through social media sites like Facebook and Twitter.

Students may access many of the resources they require for their education through technology, and by using them, they can expand their knowledge. According to studies, these various techniques can help students get more out of their education. It is crucial to teach children how to utilize technology to take advantage of its numerous advantages, including the capacity to engage in active social interaction, have quick access to new

knowledge, and apply critical thinking to challenges. However, teachers who guide how to use technology to facilitate work also play a role in determining the learning impact on students. Schools are important institutions that extensively use ICT resources to increase productivity and provide information to people worldwide. Most teachers at government schools do not always try to use technology to teach, even though some teachers employed by private educational institutions have already begun. They do not like how things turn out. Some claim that educators do not quite understand how to incorporate technology into the classroom (Bauer and Kenton, 2005). Others claim that due to inadequate planning or support, instructors are not always thrilled about "having to use technology" in the classroom (Lee, 2017). Initially defined as "any combination of psychological, physiological, and environmental factors that leads a person to state, "I am content with my job honestly," job satisfaction was first defined by Hoppock (1935).

Nevertheless, despite criticism that "techno-stress" is most frequently employed in technological stress research, Brod's definition has not changed. Later, in 1997, Weil and Rosen widened the term techno-stress to encompass negative psychological impacts, attitudes, and thoughts. They defined it as any adverse effect that technology has, either directly or indirectly, on attitudes, beliefs, behaviors, or psychology, as well as the "Arousal level seen in some individuals who rely heavily on computers in their jobs" (Arnetz and Wiholm, 1997).

According to Davis-Millis, techno-stress is the pressure to adopt new technology, mainly when the technical standards and assistance for training are insufficient. Techno-stress was defined by Tarafdar, Ragu-Nathan, and Ragu-Nathan (2006) as "an issue of adaptation caused by a person's inability to cope with or to get used to technology." Experts and remote workers who utilize ICT are more likely to experience the negative impacts of techno-stress, such as reduced job satisfaction, productivity, workload, and work-home conflict. Managing technological stress is essential. This impacts people's well-being, productivity, performance, and satisfaction. Sinha found in 2012 that workers who experience technological stress are less productive and dissatisfied with their jobs.

Additionally, Ayyagari found a connection between job happiness and technological stress that same year. He continued by saying that rapid technological change strongly predicted employee job dissatisfaction. The most recent definition of "techno-stress" classifies it as a group of connected psychological elements that negatively affect employees—also defined as "any physical, behavioral, and psychological strain in response to the information and communication technology-dependence, the increasing techno-complexity, and changes," (Atanasoff and Venable, 2017). Although automation and digital learning are now commonplace in academic settings, many academics are still experiencing the negative impacts of techno-stress. The use of ICT in academics in various ways, including teaching, learning, and research, has led to technological stress. Accordingly, another research finding (Thathsarani and Praveeni, n.d.) demonstrated that while technological stress negatively influenced work-life balance, organizational support, flexibility, and household characteristics considerably had a beneficial impact. It is simple to balance job schedules, organizational support, and domestic responsibilities between personal (family) life and business.

Therefore, a poor person-technology fit results in techno-stress, which can be avoided by constructing the optimal person-technology environment. It is challenging to imagine life now without technology. Every industry inclines to use technology. The application of this technology is not without its drawbacks. People there struggle with issues related to techno-stress, such as stress. When they cannot incorporate new technology into the classroom, teachers experience techno-stress. Because such psychological (anxiety and depression) stress will lead to discontent, absenteeism, and staff turnover, teacher stress must be thoroughly studied. This psychological stress will subsequently have an impact on the teacher's behavior (alcoholism, smoking, lifestyle, and sleep issues), as well as their physical health (headache, tachycardia, excessive stress, and hypertension) (Lee, 2017). Teachers' stress impacts the effectiveness of the classroom. As a result, it is essential to deal with and manage teacher stress. Although access to technology in schools has increased over time, the stress it causes seems to have remained constant. Scholars provided factual information on the origins and effects of technological stress on school instructors in recent years to support their assertion. Viaduţ and Kallay (2010) claim that teachers are upset and have a terrible attitude towards using technology in the classroom (Lee, 2017). In collaborative teaching and learning situations, Jena (2015) found a significant correlation between techno-stress makers, techno-stress inhibitors, and techno-stress consequences among Indian academics. In order to study techno-stress, Ragu-Nathan, Ragu-Nathan, and Tu developed a comprehensive survey in 2002. They defined the five techno-dimensions: technological overload, technological invasion, technological complexity, technological insecurity, and technological uncertainty (Tu, Ragu-Nathan, and Ragu-Nathan, 2002). Techno-overload is used to describe instances when workers are required to work more quickly or even multitask to meet job requirements (Tarafdar, Qiang, Ragu-Nathan, and Ragu-Nathan, 2011). In a contemporary workplace, technological overload may be exacerbated by work and information overload (Ayyagari, Grover, and Purvis, 2011).

Techno-overload could be brought on by work overload using information and communication technology. Consider general technology applications as an illustration (Word, Excel spreadsheet, and PowerPoint). Nowadays, when using technology, people are exposed to an excessive amount of information that their brains cannot correctly and effectively handle, which may cause information fatigue, one indicator of technostress (Tarafdar, Qiang, Ragu-Nathan, and Ragu-Nathan, 2011). Therefore, the increased effort could cause stress for certain people (Ayyagari, Grover, and Purvis, 2011).

The term "techno-invasion" refers to situations when people can be reached at any time and location thanks to technology (Tarafdar, Qiang, Ragu-Nathan, and Ragu-Nathan, 2011). Long-term internal suffering would be detrimental to one's physical and mental well-being (Mawhinney, 2014). People felt they had less autonomy at work and less control over their surroundings due to the stress they were experiencing at the time (Tarafdar, Qiang, Ragu-Nathan, and Ragu-Nathan, 2011). The research results confirmed the negative relationship between technological invasion and job satisfaction (Tarafdar, Ragu-Nathan, and Ragu-Nathan, 2007). Some businesses have also put a monitoring system to control and oversee the quality of their products. However, it might be considered an invasion of privacy (Ayyagari, Grover, and Purvis, 2011).

Techno-complexity is the term used to describe situations where professionals must spend more time and effort studying and mastering the information and skills needed to address technical issues (Tarafdar, Qiang, Ragu-Nathan, and Ragu-Nathan, 2011). The inability to meet the demand for work, or the gap between a person's identified work capacity and that demand, stresses them out. People would be worn out or burned out (Ayyagari, Grover, and Purvis, 2011). According to Ayyagari (2011), people who actively work through technological problems might not view the complexity associated with technology negatively. Their general job performance and happiness may suffer as a result. Contrarily, the research results did not consistently support the idea that technological complexity and job satisfaction are negatively correlated (Tarafdar, Ragu-Nathan, and Ragu-Nathan, 2007). As information and communication technologies advance, more people believe they lack the abilities, knowledge, or skills to use them effectively. This situation is known as techno-insecurity (Ragu-Nathan, Ragu-Nathan, and Tu, 2002). People may feel technologically insecure because they have little influence over work-related technology restrictions on their employment (Tarafdar, Ragu-Nathan, and Ragu-Nathan, 2007). Technology is constantly evolving.

Consequently, it is imperative to deal with them successfully. Techno-insecurity, however, may result from the technology's quick change. It might make them less satisfied with their jobs (Chandra, Srivastava, and Shirish, 2015). They found a poor correlation between job satisfaction and technological insecurity. Technological uncertainty describes circumstances when people are under stress due to the faster speed of change brought on by regular adjustments and quick technology updates (Tarafdar, Ragu-Nathan, and Ragu-Nathan, 2007). Studies have demonstrated that workplace technological developments can lead to ambiguity in job management and learning objectives (Ayyagari, Grover, and Purvis, 2011). People could also feel they cannot keep up with or control the unpredictable.

A person's mistrust of technology is the foundation of techno-uncertainty. The term "distrust" alludes to a technology's astonishing range of functions and capabilities. For instance, consider computer system failure, computer program/system failure, and flaws and issues with technological applications (Ayyagari, Grover, and Purvis, 2011). This mistrust's uncertainty can make people angry, anxious, and frustrated. According to Smith and Carayon (1995), stress brought on by technology is associated with a high level of dissatisfaction at work, and changes in how workers perform due to the advent of computers are linked to job satisfaction. Doll and Torkzadeh (1989) found a negative correlation between employee job satisfaction and the stress of using technology because it provides excessive information, constantly requires users to upgrade their operating systems or applications and blurs the boundaries between work and home. Technology-induced stress is viewed negatively. According to some researchers, it may raise the risk of memory loss, irritability with other people, and an inability to relax (Raiien and Jonuaskas, 2013). Employees who experience stress when utilizing technology at work have lower levels of job satisfaction, which affects the company's overall productivity, claims Tarafdar (2007). Ragu-Nathan et al. (2008) found a negative relationship between technological stress and job satisfaction, which impacts organizational commitment and continuing commitment. The study also found that businesses can help reduce the detrimental

effects of technological stress on job satisfaction by implementing techno-stress inhibitors.

The effects of techno-stress on employee satisfaction and the utilization of information were then specifically discussed by Tarafdar et al. (2010). As they spend more time becoming more familiar with information and communication technology to adapt to company needs, employees can experience anxiety and unhappiness. Techno-stress producers are stressors connected to the use of information and communication technology, according to Tarafdar, Ragu-Nathan, and Ragu-Nathan (2007). Techno-stress contributes to end-user unhappiness in several ways. Due to duplicate information and multitasking, the end user is burdened using modern information and communication technology. You have to put in more time and effort using technology. They cannot accurately identify information that is helpful to the organization because of the tremendous workload. It makes them unhappy at work. ICT usage might have aggressive adverse effects. Internal networks, virtual private networks, wide area networks, mobile communications devices, and computer peripherals comprise most of the present business infrastructure. Actively maintaining a consistent and comprehensive relationship is beneficial. Additionally, many cases—particularly in the private sector—reported findings about the connection between technological stress and job satisfaction (Ayyagari, Grover, and Purvis, 2011).

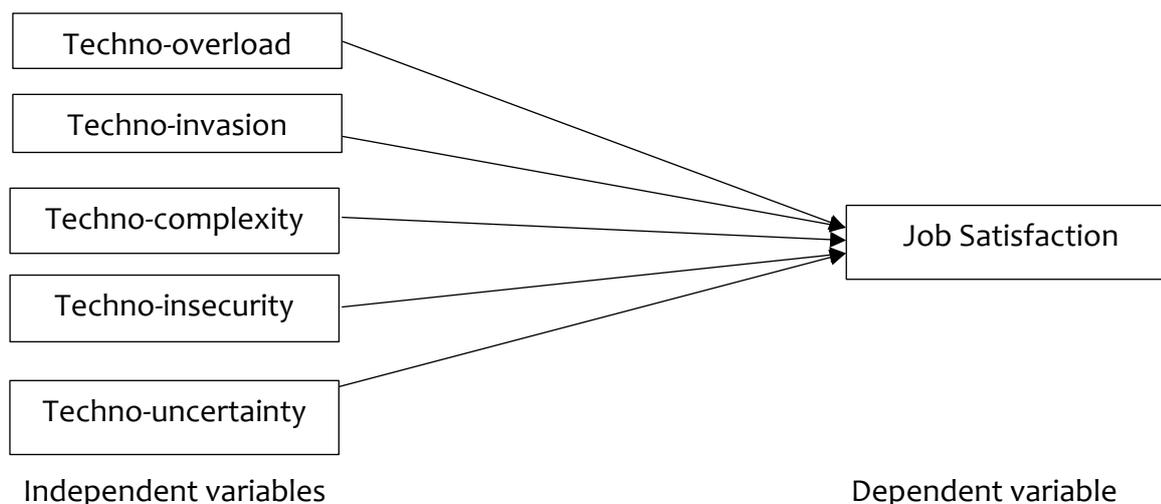
To determine whether technological stress impacts workers' job satisfaction, several academics in Korea have run many tests. Park and Choi (2013) found that technical support breaks the association between technical stress and job satisfaction or personal productivity, whereas technological stress affects job satisfaction and personal productivity. A negative association between techno-stress and job satisfaction was also found by Kim and Kim (2014), as well as a negative relationship between techno-stress and commitment to the company and continued commitment. Then, Oh, Kim, and Park (2015) examined the connections between job satisfaction, connectivity at work after hours, and technological stress inhibitors. These specialists have verified that technological stress impacts employees' job happiness based on the tests mentioned above. Work overload is one of the critical reasons technology professionals grow weary of using information and communication technology. According to Ayyagari's (2012) study of working professionals, information overload or technological overload positively correlates with stress. Techno-overload or work overload can cause anxiety and tension, leading to discontent by necessitating long, demanding working hours and the need to work extra. Information and job overload can increase stress levels, leaving people dissatisfied and angry at work. Techno-stress has become more significant despite the growing usage of technology in enterprises, posing a danger to workers' job satisfaction and garnering more academic attention. According to Liu and Ramsey, teachers were unhappy with their working circumstances, poor time management, and heavy workloads (2008). According to Moomaw and Pearson (2005), low job satisfaction may result in stress and burnout if an organization does not address the problems immediately. The relationship between stress and job happiness has been well-established in the literature. Teachers who had high levels of total teaching stress had lower work satisfaction, according to Klassen and Chiu's (2010) research.

Additionally, research has shown that several factors contribute to job stress. According to a study by Kyriacou and Chien (2004), teaching is very stressful or extremely stressful. They also found that the government's evolving educational policies were the cause of stress. According to Koustelios, female teachers (both elementary and secondary) were happier with their working conditions than male teachers (2001). Teachers who are not computer literate will need to put in much time to perform their jobs, and almost all of them will do so at home or after school. As a result, teachers will be required to work long hours after school or even on weekends.

While some research found that male employees are more satisfied with their jobs (Crossman and Harris, 2006), women feel higher stress levels than men (Kamper and Steyn, 2006). According to Koustelios, female teachers (both elementary and secondary) were happier with their working conditions than male teachers (2001). Teachers who are not computer literate will need to put in much time to perform their jobs, and almost all of them will do so at home or after school. As a result, teachers will be required to work long hours after school or even on weekends. While some research found that male employees are more satisfied with their jobs (Crossman and Harris, 2006), studies have revealed that women feel higher stress levels than men (Kamper and Steyn, 2006). General teacher techno stress levels were found by Coklar and Akçay (2016) to be ordinary; they did not differ by gender or years of employment but did change significantly by Internet use time (Coklar and Akçay, 2016).

Conceptual Framework

Today's society is incorporating technology into every aspect of life. The modern workplace environment is also dynamic. The increased usage of information and communication technologies is primarily to blame. The management of these changes is gaining more and more attention. Teachers' responses to technological stress impact their long-term mental, physical, and behavioral health to comprehend the strain brought on by information and communication technology. The conceptual framework was created to explain the connections between the many parts, ideas, and variables. Based on their literature review, the researchers determined that technological invasion, technological complexity, technological insecurity, and technological uncertainty influence teachers' job satisfaction. The conceptual framework demonstrates the connection between the techno-creators influencing a teacher's job satisfaction and that relationship rationally. The conceptual framework logically explains how technological overload, invasion, complexity, insecurity, and uncertainty affect teachers' job satisfaction in Sri Lankan government schools. The study aims to determine how teachers' job satisfaction is impacted by technological stress. Techno-overload, -invasion, -complexity, -insecurity, and -uncertainty are independent variables (Khan, Rehman, and Rehman, 2013). Meanwhile, the dependent variable of the study is teachers' job satisfaction.

Figure 1. Conceptual Framework

In this study, the government teachers' technostress dimensions were identified as the independent variables, and their job satisfaction was considered the dependent variable. Job satisfaction is defined as the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values (Locke, 1969). Techno-stress is defined as any physical, behavioural, and psychological strain in response to the information and communication technology-dependence, the increasing techno-complexity, and changes (Atanasoff and Venable, 2017).

The dimensions of techno-stress are techno-overload, techno invasion, techno-complexity, and techno-insecurity. Techno-overload is defined as situations in which workers are expected to work more and quicker, or even multitask, to meet the expectations of the job (Tarafdar, Qiang, RaguNathan, and Ragu-Nathan, 2011). The next dimension is techno-invasion, defined as constant connectivity without boundaries of space and time, which maintains that employees are continuously available to work (Tarafdar et al., 2007; Ragu-Nathan et al., 2008; Gaudioso et al., 2017). Techno-complexity is the next dimension, and it refers to conditions in which professionals must devote greater time and effort to learning and mastering the necessary information and skills to address technical problems (Tarafdar, Qiang, Ragu-Nathan, and Ragu-Nathan, 2011). Techno-insecurity is another dimension of the study. It is defined as a condition in which, as information and communication technologies improve, people grow to assume that they lack the necessary skills, knowledge, or ability to use them (Ragu-Nathan, Ragu-Nathan, and Tu, 2002) effectively. Techno-uncertainty refers to situations in which the accelerated pace of change stresses humans as a result of frequent modifications and rapid device updates (Tarafdar, Ragu Nathan, and Ragu-Nathan, 2007).

Hypotheses Development

Technostress is considered to be a negative thing. According to some specialists, it can lead to feelings of memory loss, irritability toward other people, and a worsening difficulty in relaxing (Raiien and Jonuaskas, 2013). Ragu-Nathan et al. (2008) cite ICT use's high-stress level as a factor that may contribute to employee dissatisfaction. Tarafdar et al.

(2010) identified areas where techno-stress negatively impacts an employee's job dissatisfaction, specifically concerning ICT use.

In a study on computer-related techno-stress, Tu et al. (2005) found that organizations that give their employees incentives for developing their computer literacy and skills frequently lead to employees experiencing noticeably more techno-stress because incentives encourage users to work longer than they are capable of. In addition, Moore (2000) found that work-overload was the leading cause of fatigue among technology workers in a study of IT managers and professionals from various American companies. The survey of working professionals conducted by Ayyagari (2012) also found a connection between technological stress and information overload, or techno-overload. Long, rigid work hours, the need to put in extra hours, technological overload, or work overload can all lead to anxiety and tension, making people unhappy. Poor performance at work and health issues are consequences of dissatisfaction. As a result, job satisfaction declines (Altaf and Awan, 2011). Overwhelmed by work and information, people may feel stressed out and dissatisfied at work. Pradana and Salehudin (2013) mentioned that organizations are expected to operate without interruption, employees must ensure they are always reachable in today's more competitive business environment. This enables businesses to control the time and location of IT professionals who cannot spend enough time with their family and friends (Smith and Salvendy, 2013). Hence, the first hypothesis can be developed as follows.

H1: There is a negative impact of techno-overload on job satisfaction of government school teachers in Sri Lanka.

Techno-invasion is caused by the ease with which employees can connect to the business at all times and never feel cut off from technology because of the availability of computer equipment, intranet, extranet, and mobile communication. ICT invasion of employees' privacy blurs the barriers between their personal and professional lives, which increases stress and affects morale. Employees could become unable to manage time and space due to constant connectedness. End users experience technological invasion when they feel that they are never "free" of technology, like they are constantly being watched over or "on call," and like their environment has been invaded (Tarafdar, Tu, and Ragu-Nathan, 2010). They consider it to be a breach of privacy. As a result, there is a blurring of the lines between home and work, which causes them to be dissatisfied with the programs they use (Tarafdar, Tu, and Ragu-Nathan, 2010). These results allow us to build the second hypothesis in the manner described below.

H2: There is a negative impact of techno-invasion on job satisfaction of government school teachers in Sri Lanka.

Employees may experience anxiety and dissatisfaction due to spending more time learning about ICT to accomplish organizational goals; the knowledge they acquire soon becomes outdated, leading to techno-complexity. According to employees, various apps and services have been more complex regarding technical vocabulary and capabilities (Ibrahim, Yusoff, and Othman, 2014). Many workers are unaware of how this technology

should be applied in their workplace. In light of this, the third hypothesis can be formed as follows.

H3: There is a negative impact of techno-complexity on job satisfaction of government school teachers in Sri Lanka.

Due to their technological insecurity, end users worry that they may lose their jobs if they cannot meet the learning requirements and work-process modifications associated with new and evolving ICT. Technological unease leads to negative evaluations of system usability and the level of computer expertise, which results in dissatisfaction with the programs used (Tarafdar, Tu, and Ragu-Nathan, 2010). Employees are scared and uneasy about losing their jobs as new ICT is installed or about other employees replacing them with better and newer technology skills (techno-insecurity). The increased workplace discontent results from users of information technology's high levels of techno-insecurity (Oncioiu, 2013). If they cannot cope with their learning requirements and adjust to new work practices employing new technology, they will gradually get disillusioned with their jobs. Because a job is a source of stability, social interaction, and self-efficacy, job instability is linked to lower job satisfaction (Reisel, Probst, Maloles, and König, 2010). The above studies can be used to build the following hypothesis.

H4: There is a negative impact of techno-insecurity on job satisfaction of government school teachers in Sri Lanka.

Almost all businesses regularly upgrade and roll out new systems and applications to stay abreast of technology and meet client expectations. However, this breeds technological uncertainty. The fact that employees must continuously update their knowledge frustrates them. Increased work unhappiness can also be a result of the adoption of new technology. According to a study done by Jayaraman and Maheshkumar (2013) to gauge the degree of job satisfaction of library professionals in Coimbatore regarding work-related features, the respondents were less satisfied with the stress they felt as a result of technological changes and the ongoing training they needed to handle their tasks related to digital libraries. In their 2011 study of IT users from two companies, Tarafdar et al. found that technological stress factors reduce end users' satisfaction, which affects individual productivity within the organization. These results allow us to create the fifth hypothesis, which is as follows.

H5: There is a negative impact of techno-uncertainty on job satisfaction of government school teachers in Sri Lanka.

Method

Population and Sample

The selected population in this research are teachers who teach in government schools in the Kurunegala Educational Zone. The population of teachers teaching in government schools in the Kurunegala Educational Zone is around to 4500. A sample of 254 government teachers was selected for data collection purpose as per the Morgan table (Krejcie and Morgan, 1970).

Unit of Study

Individual government teachers in the Kurunegala Educational Zone can be identified as the unit of study of the research.

Data Collection Instruments

Standard questionnaire developed by Lee (2017) was utilized to measure techno-stress and the standard questionnaire developed by Qiu (2013) was utilized to measure job satisfaction.

Results

The construct that utilized to measure the critical statistical variables is examined in this part to determine its internal consistency. The Cronbach's Alpha test was run to achieve this. The summary of reliability statistics for the dependent variable (Teachers' job satisfaction) and independent variables (Techno overload, Techno invasion, Techno complexity, Techno insecurity, and Techno uncertainty) are presented in Table 2 and the table shows that the Cronbach's Alpha values of all variables are comparatively higher than the general cut-off 0.7 and it can be concluded that all of those instruments are acceptable to measure the particular variable and the dimensions.

Table 2. Reliability Analysis Results

Variables	No of items	Cronbach's Alpha
Techno Overload	5	0.763
Techno Invasion	4	0.795
Techno Complexity	5	0.841
Techno Insecurity	5	0.813
Techno Uncertainty	4	0.755
Teachers' Job Satisfaction	28	0.872

Demographic Profile of the Respondents

According to the school census and statistics report, nearly 4500 teachers work in those three educational divisions in the Kurunegala education zone (2020). (Kurunegala, Mawathagama, and Polgahawela). The sample size for the Morgan table is 354 people. However, 350 of the 360 questionnaires sent to instructors in the Kurunegala education zone for the study were returned, representing a 93.9 percent response rate. In order to process 350 questionnaires for the analysis, In this study, gender, age category, type of school, and work Experience have been taken as the demographic factors. Table 3 shows the profile of the sample.

Table 3. Demographic Profile of the Respondents

Factors	Percentage (%)
Gender	
Male	41.9
Female	58.1
Age	
Below 25 years	9.7
25 – 35 years	35.5
35 – 45 years	34.2
45 – 55 years	20.6
Nature of the Institute	
National Schools	44.5
Provincial Schools	51.0
Pirivenas	4.5
Experience	
1 – 5 years	36.1
6 – 10 years	39.4
Above 11 years	24.5

58.1 percent of respondents were female teachers, and 41.9 percent were male teachers when comparing the gender of instructors working in government schools in the Kurunegala Education Zone. Additionally, 35.5 percent, or the bulk of the teachers in the four age groups, are between the ages of 25 and 35. The closest respondents, however, ranged in age from 35 to 45. 34.2% is the percentage. It demonstrates the small number of answers from teachers under the age of 25. Less than 10% make up the total. Ninety percent of the responders were older than 25.

Most of the study's respondents were provincial school teachers. It represents 51% of those surveyed. Less than 5% of the Kurunegala education zone's prevent-teaching teachers have answered this study. The majority of responders had between six and ten years of experience compared to the employment experience of those teachers. 39.4% is the percentage. Similarly, the average work experience of teachers with 1 to 5 years of experience and those with more than 11 years of experience is 36.1 percent and 24.5 percent, respectively.

Descriptive Analysis

The basic character of the research variables was determined using descriptive analysis. The dependent and independent variables' mean, standard deviation, and skewness were also calculated. The results are reported in Table 4.

Table 4. Descriptive Statistics for Independent Variable

Variables	N	Mean	Standard Deviation
Techno overload	350	4.1458	0.645
Techno invasion	350	4.1532	0.714
Techno complexity	350	4.0439	0.768
Techno insecurity	350	4.0323	0.759
Techno uncertainty	350	4.1274	0.668

According to Table 4, when considering the techno stress, all the factors' Mean Values ranged between 4.0-4.20. Techno invasion (TI) shows the highest mean, while techno insecurity (TS) shows the lowest mean of 4.03. The Standard deviation (SD) of techno stress shows values less than 1.

Correlation Analysis

The link between two variables is evaluated using correlation analysis. The bivariate associations between all the variables are indicated by the Pearson correlation's direction, strength, and significance.

Table 5. Pearson Correlation Coefficients

Variable	TO	TI	TC	TS	TU	JS
Techno-Overload	1					
Techno- Invasion	.706**	1				
Techno-Complexity	.631**	.663**	1			
Techno insecurity	.584**	.621**	.779**	1		
Techno uncertainty	.595**	.709**	.619**	.558**	1	
Job Satisfaction	-.560**	-.464**	-.542**	-.562**	-.552**	1

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

Regression Analysis

The relationship between essential study factors was examined in the previous section. Regression analysis will be used in this part to investigate those connections. The impact of technological stress on teachers' job satisfaction in Sri Lankan government schools has been examined using regression analysis to determine the effects of independent variables (Techno-overload, Techno-invasion, Techno-complexity, Techno-insecurity, and Techno-uncertainty) on the dependent variables (Teachers' Job Satisfaction). The outcomes of multiple regression analysis are shown in the table below.

Table 6. Model Summary of Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig. F
1	.667 ^a	.445	.427	.20738	23.928	.000 ^b
a. Predictors: (Constant), E, D, A, B, C						

The summary provides R, adjusted R Square, and standard error of the estimate, using the model above. R denotes the various correlation coefficients that represent all variables collectively.

The proportion of the dependent variable's (teachers' job satisfaction) variance that the independent variables can account for is known as the R² value (Techno-overload, Techno-invasion, Techno-complexity, Techno-insecurity, and Techno-uncertainty). The R Square value, which represents the variation in the factors' effects on teachers' job satisfaction, is 0.445.

Table 7. Coefficient Results of Multiple Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.951	.120		24.511	.000
Techno-overload	-.129	.039	-.305	-3.335	.001
Techno-invasion	-.070	.040	-.183	-1.764	.080
Techno-complexity	-.025	.039	-.069	-.637	.525
Techno-insecurity	-.099	.036	-.273	-2.723	.007
Techno-uncertainty	-.125	.037	-.306	-3.365	.001
a. Dependent Variable: Teachers' Job Satisfaction					

The preceding table shows that Techno-overload has an unstandardized coefficient with a significant value of 0.001, which is less than the 0.005 level of consideration; it strongly influences Teachers' job satisfaction. It has a -0.129 unstandardized coefficient.

Techno-unstandardized invasion's coefficient is 0.070, and its significant value is 0.080. The Techno-invasion has no significant impact on the teachers' job satisfaction because the significant value exceeds 0.05. Techno-complexity has an unstandardized coefficient of -0.025 and a significant value of 0.525. Given that the mean value exceeds 0.005 levels. Therefore, technological complexity has had a very marginal impact on teachers' job satisfaction in public schools. Technological insecurity has a significant value of 0.007. Therefore, it exceeds the 0.05 level of significant, the Techno-insecurity does not significantly influence to the Teachers' job satisfaction. The variable of techno-uncertainty is significant to the Teachers' job satisfaction (0.001) as it does not exceed the level of 0.05.

Hypotheses Testing

There are five hypotheses in this research study. The primary goal of this study is to determine how technological stress affects teachers' job satisfaction in Sri Lankan government schools, emphasizing the Kurunegala Education Zone.

Table 8. Summary of the hypotheses testing

Hypothesis	Regression Analysis		Accept/Reject
	β	P	
H1: There is a negative impact of techno-overload on job satisfaction of government school teachers in Sri Lanka.	-.129	.001	Accept
H2: There is a negative impact of techno-invasion on job satisfaction of government school teachers in Sri Lanka.	-.070	.080	Reject
H3: There is a negative impact of techno-complexity on job satisfaction of government school teachers in Sri Lanka.	-.025	.525	Reject
H4: There is a negative impact of techno-insecurity on job satisfaction of government school teachers in Sri Lanka.	-.099	.007	Accept
H5: There is a negative impact of techno-uncertainty on job satisfaction of government school teachers in Sri Lanka.	-.125	.001	Accept

Discussion

This study aimed to identify the impact of techno-stress on teachers' job satisfaction who use technology in public schools in Sri Lanka's Kurunegala Education Zone. Here, teachers' usage of technology has the potential to impact several aspects of their job satisfaction. Many teachers have had the chance to use technology to teach because of the current expansion of the COVID-19 pandemic in the nation. This technological stress may significantly impact teachers' job satisfaction. Among the aspects considered, the researchers have chosen technological creators such as technological overload, technological invasion, technological complexity, technological insecurity, and technological uncertainty. The primary goal is to determine how studies on the influence of technological stress on teachers' job satisfaction in Sri Lankan government schools have affected their profession. Teachers from public schools in the Kurunegala Education Zone

made up the study's sample. The researchers have chosen 350 respondents from the three divisions mentioned above based on the Morgan graphic (Kurunegala, Mawathagama, and Polgahawela).

A correlation analysis was used to determine the link between independent and dependent variables. All variables' Pearson correlation values show a significant negative association with the dependent variable (Techno-overload, Techno-invasion, Techno-complexity, Techno-insecurity, and Techno-uncertainty). The study's regression analysis reveals that Techno-overload significantly affects the job satisfaction of teachers. The technological invasion did not significantly impact the teachers' job satisfaction. In Sri Lanka's public schools, techno-insecurity significantly impacted teachers' job satisfaction. However, because the techno-complexity did not go above the significant value level of 0.05, it had a negligible effect on the teachers' job satisfaction. Teachers' technological uncertainty has significantly affected their job satisfaction in Sri Lankan government schools. As a result, two were disproved, while three (Techno-overload, Techno-insecurity, and Techno-uncertainty) were accepted (Techno-invasion and Techno-complexity). Although previous studies used the five dimensions to quantify techno-stress, the individual effects of each size in educational settings have not gotten enough attention; hence, there are few cases to compare the results with (Chandra, Srivastava, and Shirish, 2015).

Additionally, researchers in other fields who examined the impact of each techno-stress generator as a variable discovered contradictory results, demonstrating that techno-stress creators are highly context-specific. Employee productivity has a positive correlation with technological overload but a negative correlation with technological invasion/techno-insecurity, according to Tu, Wang, and Shu (2005). They further asserted that technological complexity and overload did not impact the outcome. On the other side, techno-uncertainty was found to be a significant predictor of employee work discontent by Ayyagari, Grover, and Purvis (2011). According to Fuglseth and Sorebo (2014), the reason for the inconsistent results may be that measuring techno-stress is very context-dependent.

The results of this study demonstrated that technological savvy could affect the connections between technological overload, technological insecurity, and job satisfaction. However, it can be noted that the impact of dimensions of techno-stress on job satisfaction of the government teachers is significant. This finding is interesting for the future researchers as this finding is contradictory with the previous findings in the same area of study. Future researchers can focus on this point and conduct qualitative studies to further analyze this scenario.

References

- Arnetz, B., and Wiholm, C. (1997), Technological stress: Psychophysiological symptoms in modern offices, *Journal of Psychosomatic Research*, Vol. 43, No. 1, pp. 35-42.
- Atanasoff, L., and Venable, M. (2017), Technostress: Implications for Adults in the Workforce, *The Career Development Quarterly*, Vol. 65, No. 4, pp. 326-338.

- Ayyagari, R., Grover, V., and Purvis, R. (2011), Technostress: technological antecedents and implications, *MIS Quarterly*, pp. 831-858.
- Aziri, B. (2011), Job satisfaction: a literature review, *Management Research and Practice*, Vol. 3, No. 4, pp. 77-86.
- Bauer, J., and Kenton, J. (2005), Toward technology integration in the schools: why it isn't happening, *Technology and Teacher Education*, Vol. 13, No. 4, pp. 519-546.
- Boles, J., Wood, J., and Johnson, J. (2003), Interrelationships of role conflict, role ambiguity, and work-family conflict with different facets of job satisfaction and the moderating effects of gender, *Journal of Personal Selling and Sales Management*, Vol. 23, No. 2, pp. 99-113.
- Brennan, F. (2021), Technostress and leadership: a case study in higher education during the COVID-19 crisis, *Technostress Leadership*, pp. 1-78.
- Chandra, S., Srivastava, S., and Shirish, A. (2015), Do technostress creators influence employee innovation, *Pacific Asia Conference on Information Systems*, Association for Information System.
- Chandra, S., Srivastava, S., and Shirish, A. (2015), Do technostress creators influence employee innovation?, *In Proceedings Pacific Asia Conference on Information Systems (PACIS)*.
- Çoklar, A., and Akçay, A. (2016), Investigation of Techno-Stress Levels of Teachers Who were Included in Technology Integration Processes, *Turk Online J Educ Technol*.
- Crossman, A., and Harris, P. (2006), Job satisfaction of secondary school teachers, *Educational Management Administration and Leadership*, Vol. 38, No. 1, pp. 29-46.
- Ertmer, P., and Ottenbreit-Leftwich, A. (2010), Teacher technology change: How knowledge, confidence, beliefs, and culture intersect, *Journal of Research on Technology in Education*, Vol. 42, No. 3, pp. 255-284.
- Giga, S., Jain, A., and Cooper, C. (2008), State-of-science review - working longer: hours of work and health, A Science Review for the Foresight Project on Mental Capital and Mental Wellbeing, *Report for the UK Government Office for Science*.
- Gu, X. (2016), Teacher Job Satisfaction In Public Schools: The Relation to the Years of Teaching Experience, *Elementary Education and Reading Theses, Paper 1*, pp. 4-6.
- Henderson, S., and Yeow, J. (2012), iPad in education: A case study of iPad adoption and use in a primary school, *In Proceedings of the 45th Annual Hawaii International Conference on System Sciences*, pp. 78-87.
- Hoffman, D., Novak, T., and Venkatesh, A. (2004), Has the internet become indispensable, *Commun, ACM*, Vol. 47, No. 7, pp. 37- 42.
- Huang, J., Yang, C., Jin, B., and Chiu, H. (2004), Measuring satisfaction with business-to-employee system, *computers in human behavior*, Vol. 20, No. 1, pp. 17-35.
- Ibrahim, H., Yusoff, Y., and Othman, N. (2014), The Influence of Techno stress and Organizational Related Support on User Satisfaction in Government Organizations: A Proposed Model and Literature Review, *Information Management and Business Review*, Vol. 6, No.2, pp. 63-71
- Jena, R. K. (2015), Impact of technostress on job satisfaction: An empirical study among Indian academicians, *The International Technology Management Review*, Vol. 5, No. 3, pp. 117-124.
- Johnson, S., and Birkeland, S. (2003), The schools that teachers choose, *Educational Leadership*, Vol. 60, No. 8, pp. 20-24.
- Kamper, G., and Steyn, G. (2006), Understanding occupational stress among educators: An overview, *African Education Review*, Vol. 3, No. 1, pp. 113-133.
- Khan, A., Rehman, H., and Rehman, D. (2013), An Empirical Analysis of Correlation Between Technostress and Job Satisfaction: A Case of KPK, Pakistan, *Pakistan Journal of library and Information Science*.
- Krejcie, R. V. and Morgan (1970), Determining Sample Size for Research Activities, *Educational and Psychological Measurement*, DOI: 10.1177/001316447003000308
- Lee, M. (2017), An Investigation of the Predictive Power of Technostress Creators in Job Satisfaction and Teacher Efficacy of Primary School Teachers in Korea.

- Locke, E. (1969), What is job satisfaction? *Organizational behaviour and human performance* , Vol. 4, No. 4, pp.309-336.
- Mawhinney, L. (2014), Techno-change: A new study of the cause of technostress, University of Derby, School of Business.
- Maxwell, E. E. (2021), Technostress Factors as Predictors of Job Satisfaction Among Teachers in K-12 Education, pp. 3-5.
- Oncioiu, I. (2013),
business innovation, development, and advancement in the digital economy, Hershey, PA: IGI.
- Qiang, T., Kanliang, W., and Qin, S. (2005), Computer- related technostress in China, *Communications of the ACM*, Vol. 48, No. 4, pp. 77-81.
- Qiu, W. (2013), The impact of techostress on job satisfaction and organizational commitment, pp. 9-12.
- Ragu-Nathan, B., Ragu-Nathan, T., and Tu, Q. (2002), A Large-scale multinational investigation of techno-stress and its impact on information,Technology (IT) workforce productivity.
- Rahman, M. (2008), Job satisfaction among public and private college teachers of Dhaka City: a comparative analysis, SSRN.
- Raišienė, A., and Jonušauskas, S. (2013), Silent issues of ICT era: Impact of techno-stress to the work and life balance of employees, *Entrepreneurship and Sustainability Issues*, No. 1, pp. 108-115.
- Raišienė, A., and Jonušauskas, S. (2013), Silent issues of ICT era:Impact of techno-stress to the work and life balance of employees, *Entrepreneurship and Sustainability Issues*, pp. 108-115.
- Reisel, W., Probst, T., Maloles, C., and König, C. (2010), The Effects of Job Insecurity on Job Satisfaction , Organizational Citizenship Behavior, Deviant Behavior, and Negative Emotions of Employees, *International Studies of Management and Organization*, Vol. 40, No. 1, pp. 74-91.
- Singh, H. (2003), Building effective blended learning programs, *Educational Technology*, Vol. 43, No. 6, pp. 51-54.
- Skaalvik, E., and Skaalvik, S. (2009), Does school context matter? Relations with teacher burnout and job satisfaction, *Teaching and Teacher Education*, Vol. 25, No. 3, pp. 518-524.
- Smith, M., and Salvendy, G. (2013), Human-computer interaction, Amsterdam:Elsevier,
- Talabi, A. (2016), Job satisfaction and work performance of public secondary school teachers in Akoko North West local government area of Ondo state, *Journal of Arts and Humanities*, Vol. 5, No. 8, pp. 39-49.
- Tarafdar, M., Qiang, T., Ragu-Nathan, T., and Ragu-Nathan, B. (2011), Crossing to the dark side: examining creators, outcomes, and inhibitors of Technostress, *Communications of the ACM*, Vol. 54, No. 9, pp. 113-120
- Tarafdar, M., Ragu-Nathan, B., and Ragu-Nathan, T. (2007), The impact of technostress on role stress and productivity, *Journal of Management Information Systems*, Vol. 24, No. 1, pp. 301-328.
- Tarafdar, M., Tu , Q., and Ragu-Nathan, T. (2010), Impact of Technostress on End-User Satisfaction and Performance, *Journal of Management Information Systems*, Vol. 27, No. 3, pp. 303-334.
- Thathsarani, N. A. N., and Praveeni, S. M. N. (2021), Impact of work from home on work-life balance during COVID-19: A study on ICT sector employees in Western Province, Sri Lanka, Annual Research Symposium in Management.
- Thompson, P. (2013), The digital natives as learners: Technology use patterns and approaches to learning, *Computers and Education* ,Vol. 65, pp.12-16.

Traxler, J. (2007), Defining, discussing and evaluating mobile learning: The moving finger writes and having write, *The International Review of Research in Open and Distributed learning*. Vol. 8, No. 2, pp. 1-12.

UNESCO (2002), ICT in education, Retrieved from: <https://en.unesco.org/themes/ict-education>

Zembylas, M., and Papanastasiou, E. (2006), Sources of teacher job satisfaction and dissatisfaction in Cyprus, *Compare: A Journal of Comparative and International Education*, Vol. 43, No. 3, pp. 229-247.