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Consequences of Technological Stress? (an
Experiment Study on Auditors' Working
Engagement in Indonesia)

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DOES TRANSFERENCE MITIGATE THE HARMFUL CONSEQUENCES OF TECHNOLOGICAL STRESS? (AN EXPERIMENT STUDY ON AUDITORS' WORKING ENGAGEMENT IN INDONESIA)

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ABSTRACT

This study examines auditors' cognitive distortion by examining the nation of technostress, a sort of transference that happens as a self-defense mechanism (SDMs) when using information and communication technology (ICT). This study explores the relationship between ICT stress and transference and its efforts on auditors' work engagement.

Methodology: This study utilizes an experimental and technical framework that integrates complexity, uncertainty, insecurity, invasion, and task overload. This study employed a 2x2 matrix to measure technostress and transference, which were then utilized to evaluate the level of work engagement among auditors.

This study's auditors have less technostress and high transference, indicating they see their profession as superior to others. SDMs are a cognitive state that dramatically improves auditors' engagement level. Moreover, this study has shown that transference is the fundamental origin of negative emotions, which subsequently impacts the coping behavior of auditors. This study finds that implementing transference decreases technical stress, leading to a faster resolution of audit concerns.

Keywords: Technostress, Transference, Auditor, Work Engagement

1. INTRODUCTION

1.1. Research Background

This study centers on the working engagement concept and individual cognition development through active involvement, enthusiasm, commitment, and participation (Getenet et al., 2024). Furthermore, it emphasizes the importance of individuals' endeavors to improve their skills and expertise to achieve optimal work involvement, particularly for auditors. Furthermore, a conducive and efficient environment or ecosystem enhances team member involvement and productivity (Chen, 2017). ICT has a simultaneous impact on auditors, causing them to experience technostress as they struggle to adjust to rapid technological developments (Li & Wang, 2021). Auditors will likely feel negatively when information and communication technology (ICT) is further impacted. Subsequently, these adverse emotions amplify the auditors' skewed perception, leading to diminished productive involvement in their tasks (Sumiyana & Sriwidharmanely, 2020). This article presents the research conducted by Sumiyana & Sriwidharmanely, 2020 and Sriwidharmanely et al., 2022, which demonstrate the harmful effects of technostress on users of information and communication technology (ICT). This study focuses explicitly on the engineering process of auditors when they experience unpleasant emotions. Therefore, it ensures the continued and enhanced sustainability of their professional involvement while using ICT.

This study asserts the necessity of its conduction for multiple reasons. Most existing research does not provide detailed information on how SDMs utilize negative emotions to overcome technostress or the coping mechanisms they employ to enhance working engagement. Prior studies have thoroughly examined the correlation between work conditions and engagement (del Pozo-Antúnez et al., 2021). The authors contend that cognitive distortions have arisen; nevertheless, auditors likely possess self-defense mechanisms (SDMs) that they employ to alleviate their technostress. Furthermore, auditors encounter operational systems incorporating kinetic-active working inside the office environment (Aroonsri & Crocco, 2024). Auditors must utilize information and communication technology (ICT) during their work, which significantly influences their strategy and methodology adjustments (Rodrigues et al., 2023). Nevertheless, this study demonstrates that these effects influence the occurrence of technostress, resulting in a decrease in their level of involvement in work (Rodrigues et al., 2023).

Second, this study shows how SDMs can help auditors mitigate the effects of technological stress. The data demonstrates that SDMs elicit either happy or negative feelings based on the outcome of success or failure. Simply said, SDMs enhance auditors' ability to generate accurate beliefs, helping them overcome psychological and technological stress. It's ultimately leads to improved performance (King & Mertens, 2023). From a behavioural standpoint, auditors modify their beliefs, attitudes, and actions by effectively managing negative and positive emotions. Auditors' SDMs prioritise positive emotions over the threat of technostress in order to effectively address the immediate problem at hand (Sriwidharmanely et al., 2022). At this point, their SDMs effectively mitigate the negative impact of technostress by employing behaviour theory as a strategic tool to regulate their emotions. This approach has been supported by research conducted by (Abdullah & Almaqtari, 2024; Taha et al., 2021). Ultimately, the authors illustrate that SDMs intervene in both negative and positive emotions in order to promote worker engagement through a balancing mechanism.

Third, the behaviour theory is invoked by this research to explain why people require an emotional attachment in order to dedicate themselves to their work (Kim et al., 2015). The text emphasises the limited engagement of auditors in ICT networks, as indicated by (Arfaoui & Kammoun, 2023; Fraser, 2012). This lack of involvement leads to unpleasant feelings stemming from low motivation and participation. Furthermore, the authors contend that by applying the behaviour

theory to social networks, auditors might enhance their psychophysiology and obtain information incentives to alleviate their SDMs (Cramer, 2015). As a result, auditors mitigate their psychological and technological pressures, particularly negative emotions, in order to prevent decreased work involvement. Therefore, the authors emphasise that technostress is a negative mental condition experienced by individuals. Technostress are alleviated when auditors utilise their SDMs to effectively manage and enhance their problem-solving abilities. SDMs refers to the coping mechanisms used by auditors to regulate their negative or positive emotions.

This research addresses the crucial requirement for preserving environmental ecosystems, where SDMs should be maintained, during the working of sustainable practices. When SDMs works within stable and well-functioning environments to promote productivity, auditors utilise their cognitive biases to create innovative methods for managing stress. SDMs assist auditors in effectively handling technological stressors by expediting the development of coping mechanisms (Kumar et al., 2023). Therefore, this study concludes that SDMs maintain and enable individuals to participate in extremely dynamic learning. Nevertheless, when SDMs operate in unstable environments for auditors' professional involvement, they seek coping mechanisms to alleviate technostress (Nascimento et al., 2024), such as undergoing training or attending short courses to enhance their job performance. Ultimately, the authors conclude that cognitive distortions in the context of SDMs is advantageous in functioning ecosystems because they serve as coping mechanisms, particularly for problem-solving in a collaborative setting (Ayyagari et al., 2011).

This study specifically examines negative feelings within the context of transitioning from a state of low working engagement to a state of high working engagement. The inference of this study is that auditors' negative emotions are harnessed and internalised to enhance their work's reflexivity. Auditors experience a transformation of bad emotions caused by ICT's technostress into pleasant feelings, as observed by Lau et al. (2024), and Salavera & Urbón (2024). Subsequently, they intensify their laborious endeavours, clearly demonstrating their ability to resolve the issue (Almohesh & Altamimi, 2024). They opt for behavioural reflexivity as a means to address technostress, in order to avoid any accusations of unprofessionalism.

2. LITERATURE REVIEW

2.1. *Technostress and Coping Strategy from the Perspective of Behaviour Theory*

The behavioural theory elucidates how an individual's behaviour is shaped by their surroundings through the process of learning. The references cited are Cropanzano & Mitchell (2005), and Mousa et al. (2023). Thoughts, expectations, beliefs, and pictures are cognitive events that act as discriminative stimuli, affecting behaviour. To put it simply, cognition serves as a guiding principle that influences an individual's behaviour (Harunavamwe & Kanengoni, 2023). According to behavioural theory, this study contends that individual behaviour is directly influenced by natural consequences. If individuals frequently experience undesirable outcomes such as weariness, bewilderment, or annoyance as a result of using technology, they are likely to suffer from technostress (Mert et al., 2023). In relation to technostress, positive reinforcement can be employed to enhance desirable behaviour and alleviate stress. For instance, providing incentives or acknowledgement to auditors who effectively acquire proficiency in new technology can enhance motivation and alleviate technostress (Taha et al., 2021). Auditors with SDMs transference can alleviate technostress by transferring unfavourable emotions or responses triggered by technostress to a different situation. For instance, receiving social support from colleagues or supervisors might serve as a type of positive

transference. This assistance can mitigate the adverse consequences of technostress by offering positive reinforcement contingencies, such as emotional and practical support. The study suggests that auditors who use SDMs experience technostress and employ coping techniques to address their technostress issues. SDMs can be employed as a strategic measure to mitigate technostress.

2.2. SDMs Mitigating Technostress

This study proposes the theory of (Kirsch & Cummings, 1996), which explains how ICT users who possess self-control make efforts to enhance organizational performance. An individual experiences SDMs transference as emotional responses when faced with stress, threats, and conflicts (Goldstein & Hays, 2011). Individual self-control is contingent upon one's capacity to regulate their emotions, exercise restraint over their desires, and make judicious decisions (Corey, 2011; Fonagy et al., 2018). Furthermore, individuals safeguard their drive to attain achievement by cultivating their self-defence mechanisms, which include denial, distortion parataxic, transference, and psychological projection (Ankli & Palliam, 2012; Huang et al., 2018; Schauenburg et al., 2007). This study specifically examines the process of transference SDMs models. Transference is the psychological phenomenon in which an individual unknowingly transfers their feelings, thoughts, or attitudes about anxiety and issues onto another person or object. Subsequently, the distressing emotions have a persistent impact on the individual's cognitive processes. Transference refers to the act of projecting bad feelings and past experiences onto present relationships or items. In this study, technology is considered an authoritarian figure. Auditors may encounter technostress due to the sense of being inundated by the intricate nature of the technology they are required to become professional in. They regard "authoritarian figures" as being challenging to comprehend and difficult to control. Technostress can lead to the projection of negative emotions such as irritation, rage, or powerlessness onto the technology. Skinner's behavioural theory posits that human behaviour can be influenced and melded by the consequences that occur from the behaviour (Delprato & Midgley, 1992). If a behaviour is reinforced by positive stimuli (such as praise or prizes), it is more likely to be repeated. On the other hand, if negative reinforcement (such as punishment) is used after the behaviour, it is more likely that the behaviour will be avoided (Leeder, 2022). Transference, within the framework of technostress, might be understood as a manifestation of operant conditioning. For example, if an auditor regularly experiences a sense of inadequacy when confronted with unfamiliar technology (negative reinforcement), they may then avoid tasks that require the use of technology, thus perpetuating the negative pattern. Skinner's behavioural theory offers a valuable framework for understanding the impact of transference on individual behaviour, specifically in the case of auditors who encounter technostress (Leeder, 2022). By utilizing the concept of operant conditioning, we may assist auditors in altering their mentality and behaviour, so enhancing work engagement and mitigating the adverse effects of technostress. In conclusion, the authors assert that SDMs serve as cognitive assets that individuals utilize as cognitive capital to alleviate technological stress.

2.3. Impacting on Working Engagement

Technostress induces adverse emotional states in individuals, subsequently impacting their level of work engagement. Nevertheless, the impact of negative emotions on work engagement can be mitigated by an individual's capacity to manage technostress (Chen, 2017). This study highlights that auditors are actively involved in their work, while also experiencing technostress, which affects their level of enthusiasm, motivation, and commitment to resolving work-related issues. Technostress has been found to have a detrimental impact on an individual's work engagement, specifically leading to a decrease in their job engagement and happiness (Govender & Mpungose, 2022). This study posits that technostress can impact work engagement due to social interactions

facilitated by technology, namely through the mechanism of negative reinforcement of behaviour. People engage in data and information exchange to alleviate their technostress. Consequently, they actively participate in organisational tasks (Tarafdar et al., 2010). From a cognitive distortion standpoint, persons with SDMs can transform technostress into a dynamic response through transference. Technostress can have a perplexing effect on auditors, either diminishing or enhancing their work involvement. Therefore, auditors who experience high levels of technostress can transition to low levels and vice versa, depending on how they utilise their SDMs. For instance, when individuals engage in positive transference reinforcement through social events and by offering praise and appreciation for the little achievements of their coworkers, it can serve as an effective form of positive reinforcement. This can assist in altering auditors' perceptions of their proficiency in managing technology. Hence, individuals that employ their SDMs traits develop adaptive behaviours and are able to mitigate technostress.

2.4. Hypotheses Developments

This study suggests that according to Ragu-Nathan et al. (2008), technostress has a negative impact on the work engagement of those with minimal ICT usage. ICT users, including auditors, experience stress due to rapidly changing technology and practical uncertainty, both of which decrease their level of involvement (Ayyagari et al., 2011). When auditors perceive a lack of competence, they resort to avoidance, taking into account the fundamental expansion of ICT. Put simply, individuals are experiencing technostress, leading to decreased participation. Hence, this study posits that auditors who fail to utilise their people resources in addressing ICT technostress will exhibit a reluctance to enhance their work performance. Thus, this study formulates the subsequent hypotheses.

H1: Auditors who experience low levels of technostress exhibit higher levels of work engagement in comparison to auditors who experience high levels of technostress.

The study makes the case that auditors with the SDMs transference type do a better job than those who don't have it. Transference is when a person unintentionally shifts their thoughts, feelings, frustration, anxiety, or even anger to something else, even technology (Tremolada et al., 2016). As a result, this study shows that auditors who use SDMs transference as a defence in their work are the most correct and stable ones. They are, however, affected by group cognition from outside sources. In addition, the following hypotheses are made from this work.

H2: Auditors with a high SDMs transference type are more performed in working engagement than those with a low SDMs transference type.

The study makes the case that auditors with low technostress and high SDMs transference have more freedom to do their work when the reasons from hypotheses H1 and H2 are put together. From an adaptive point of view, when they are in a state of low technostress and high transference, they can come up with new ideas and adapt to their work, which leads to better performance at work (Jackson & Allen, 2024; Skhepehe & Matashu, 2021). The study also says that auditors who are not stressed by technology and have a good transference type of SDMs are better at their jobs than auditors who are stressed by technology. Free from technostress and have a positive transference type of SDMs, it will affect how well auditors do their job. This study comes up with the formulates the following hypothesis.

H3: auditors with low technostress and high transference type of SDMs have higher work engagement than those with high technostress and low transference type

3. METHODOLOGY

In order to study auditors' technostress, this study was conducted as a true experiment (Sriwidharmanely et al., 2022; Sumiyana & Sriwidharmanely, 2020). This investigation evaluated the degree of transference that individuals demonstrated in their SDMs processes. Thus, a 2x2 matrix was generated, as illustrated in Figure 1. The authors subsequently recruited individuals to populate each individual cell of this matrix. The purposive sampling method was employed to establish the criteria for participant selection. (3) Auditors who have completed courses related to behavior; (2) individuals who are currently pursuing master's or doctorate degrees; and (1) auditors who possess advanced degrees such as master's or doctorate degrees. This research introduces a website, that can be utilized for data collection.

Figure 1 Matrix Design

		SDMs Transference	
		Low	High
Technostress	Low	Cell 1	Cell 3
	High	Cell 2	Cell 4

3.2. Measurement, Treatment and Manipulation Check

This study used an online platform to gather detailed data from participants. This study evaluated the transfer of human resources among auditors using the CD Quest and Defence Style Questionnaire, as described by Fernbach et al. (2014). We carefully chose eight topics that pertain to transference, with a particular emphasis on denial, parataxis, and psychological projection. At present, we maintain the use of both English and Indonesian to ensure the material and presentation are genuine. Following the assessment phase, this study employed random assignment to separate participants into low and high treatment groups. When participants encountered technostress, they were randomly allocated to either high or low levels of technostress. We managed to regulate the intensity of technostress by employing the factors of complexity (Tarafdar et al., 2007), uncertainty (Arfaoui & Kammoun, 2023), and workload (Ayyagari et al., 2011). These manipulations refer to the ability of a computer program to distract participants with high levels of complexity, noise, and workload.

The participants enter their primary tasks in the procedural experiment by correlating matched integers. Nevertheless, they have a strict time constraint of 10 seconds to accomplish three tasks. They will accomplish these jobs by acquiring the accurate solution on two occasions. After two unsuccessful attempts to finish the assignment, the computer program grants them a final opportunity to try again. After completing three initial tasks, the computer software disrupts participants with a high level of difficulty, uncertainty, and workload. The computer software iterates the primary task as the third instance among three situations. The program once again disrupts the users' thought process by using the same method as the initial disruption. Upon completion of the treatment, the computer program does a manipulation check to verify ethical clearance. This is done by asking questions related to several aspects, including freedom from coerced labor, inconvenience caused by obligatory chores during holidays, interference with ICT task instructions, and working under pressure related to ICT

skills.

4. RESULTS AND DISCUSSION

4.1. Descriptive Statistics

The research successfully recruited 175 individuals. However, it was determined that only 169 (97%) participants met the requirements to be included in the statistical analyses. All participants were either auditors in Indonesia, have doctorate degrees, or were enrolled in doctoral studies. The authors allocated these subjects randomly to groups, as indicated in Table 1. As an illustration, we clarified that Cell-1 consisted of participants who had both low levels of technostress and low levels of transference SDMs. Therefore, we allocated 54 participants at random to this group, which had a mean working engagement value of 4.973 and a variance of 1.178. The authors deduced that the statistical data spread among these cells would substantiate all the hypotheses.

Table 1 Descriptive Statistics

		Transference SDMs (Measured)	
		Low	High
Technostress	Treated (Low)	Cell-1	Cell-3
		n = 54	n = 31
	$\bar{x} = 4,973$	$\bar{x} = 2,960$	
	$\sigma = 1,178$	$\sigma = 2,637$	
Treated (High)	Cell-2	Cell-4	
	n = 34	n = 50	
$\bar{x} = 4,664$	$\bar{x} = 5,241$		
$\sigma = 1,287$	$\sigma = 1,185$		

Note: SDM (self-defence mechanism), n (participant numbers), \bar{x} (mean of working engagement), and σ (variance).

Prior to analyzing the mean comparisons, the study conducted reliability and validity tests, which are presented in Table 2 below. The study circumvented the concerns regarding face and content validities by employing multilingual questions in both Indonesian and English. The reliability test results indicated Cronbach's alpha values of 0.898 and 0.616 for technostress and SDMs, respectively. The authors deduced that all the assessed variables possessed sufficient reliability to undergo further analysis. Furthermore, this study conducted tests to assess the convergent and discriminant validity, which involved analyzing loading factors and corrected item-total correlations. After excluding Trans1, Trans6, and Trans7, the results of this study's analysis demonstrated convergent and discriminant validities. The conclusive convergent and discriminant validities are displayed in Table 2 below.

Table 2 Validity and Reliability Results

Variables	Item	Loading Factor	Corrected Item-Total Correlation	Cronbach's Cronbach's Alpha
Technostress	TO1	0.624	0.424	0.898
	TO2	0.622	0.600	
	TO3	0.743	0.680	
	TO4	0.679	0.580	
	TO5	0.616	0.615	
	TI1	0.779	0.558	
	TI2	0.542	0.493	
	TI3	0.741	0.648	
	TI4	0.629	0.598	
	TC1	0.692	0.533	
	TC2	0.829	0.627	
	TC3	0.723	0.500	
	TC4	0.526	0.402	
	TC5	0.537	0.466	
	Tly1	0.643	0.631	
	Tly2	0.785	0.241	
	Tly3	0.749	0.509	
	Tly4	0.650	0.478	
	Tly5	0.614	0.397	
	TU1	0.709	0.251	
TU2	0.842	0.410		
TU3	0.827	0.345		
TU4	0.725	0.327		
Transference	Trans2	0.692	0.245	0.616
	Trans3	0.840	0.291	
	Trans4	0.675	0.382	
	Trans5	0.695	0.255	
	Trans8	0.810	0.335	
	Trans9	0.736	0.345	
	Trans10	0.697	0.247	
	Trans11	0.665	0.416	

Note: TO: Techno-Overload, TI: Techno-Invasion, TC: Techno-Complexity, TU: Techno-Uncertainty, Tly: Techno-Insecurity, Trans: Transference

4.2. Statistical Result

The outcomes of all the hypothesis tests are displayed in Table 4. This study originated from the

standpoint of technostress. The explanation that auditors with low technostress completed working engagements with t-values of 4.036, which were significant at the 1% level, supported Hypothesis H1. The authors deduced that technostress is a tangible phenomenon that impacts work performance. This study also confirmed Hypothesis H2, which suggests that auditors with a high transference self-efficacy could experience greater levels of work engagement compared to those with a low transference self-efficacy. The statistical analysis yielded t-values of 1.951, which were found to be statistically significant at the 5% level of significance. Subsequently, we deduced that the primary impacts were appropriately confirmed by demonstrating the significant consequences of technostress and low-high transference SDMs. This hypothesis posits that accounting instructors who experience high levels of technostress and high levels of transference SDMs can still enhance their workplace engagement process. This analysis elucidated that Hypothesis H3 was the pinnacle of critical reasoning for this investigation. This study investigated the impact of both technostress and transference SDMs on auditors, specifically focusing on the influence of social exchanges within social networks. Therefore, auditors who experience high levels of technostress and have high transference of their skills and knowledge performed their working engagements more well compared to those with low transference. The results indicate that there is a relationship between high levels of technostress and high levels of transference SDMs, which leads to increased working engagements. The statistical analysis showed a t-value of 9.667, which is significant at the 1% level, providing support for Hypothesis H3.

Table 3 Statistical Results

Hyp.	Mean	Comparison	"n	Mean	"t-values	Significance	
H1	Cell 1; 3	> Cell 2; 4	85 84	118, 8303	5,0075	4,036	0.000***
H2	Cell 1; 2	< Cell 3; 4	88 81	4,8535	5,2045	1,951	0.053**
H3	Cell 1	< Cell 2; 3; 4	54 115	49.731	89,153	9.667	0.007***

Sig Level: *)0.10; **)0.05; ***)0.01.

4.3. Finding and Implications

All the theories were confirmed by this investigation, suggesting that technostress was the cause of the auditors' behavioral formulations. Furthermore, it elucidates the responsibilities and purposes of SDMs in alleviating technostress from a cognitive behavioral standpoint. Overall, it recognizes that technostress is a detrimental aspect in work-related commitments. The transference of SDMs results in a decline in working performance. Ultimately, it fulfils the roles and functions of SDMs in influencing the connections between technostress and work engagement. Therefore, it encompasses the unaddressed discussions of existing research (Ayyagari et al., 2011; Getenet et al., 2024; Sriwidharmanely et al., 2022; Sumiyana & Sriwidharmanely, 2020). Therefore, the research findings and conclusions primarily centre on the effectiveness of transference SDMs in reducing technostress in cognitive behavioral discussions. Concise explanations are provided below.

First, high transference SDMs make the link between technostress and work involvement weaker. The writers also think that transference SDMs is a situational mental state that makes ICT users' cognitive technostress worse (Alwali, 2024). This research suggests that technostress changes auditors in the usual ways, causing them to feel complicated, uncertain, invaded, overloaded, and insecure. The transference SDMs make these common technological pressures stronger by emphasising them.

According to (Harrison et al., 2023), the cognitive distortions of transference SDMs make people's feelings worse, which makes it impossible for them to focus on the learning materials. Because of this, there is low working performance. When it comes to a person's self-control, transference SDMs are a state of low self-control that makes them feel worse, changes how they act and keeps them from working at their best. That is, technostress changes the way people think, but the transference SDM helps auditors keep up with work performance a lot (Alwali, 2024). The transference SDMs make it harder for inspectors to build up cognitive capital from an adaptive behavioral point of view. So, technostress and transference SDMs affect people's thinking in ways that make intelligence less sharp.

The results of this study suggest approaches to decrease technostress and tactics to enhance job engagement resulting from technostress and the transfer of SDMs. This study utilizes coping techniques to mitigate technostress, as it elicits negative emotions, employing healthy SDMs as a means of transference. Transferring high and healthy SDMs might effectively mitigate harmful technostress by serving as a counter-intuitive coping technique that minimizes its detrimental effects in specific settings. Effective and positive transference enables auditors to project their feelings onto the technology they are using, allowing them to develop an emotional connection with the technology and maybe anthropomorphize it. Humanizing technology involves attributing human characteristics to technology, such as perceiving computers as friends. This can lead auditors to develop a stronger sense of connection and empathy for the technology. This helps alleviate feelings of exasperation or isolation that frequently emerge from contact with robots. By channeling these emotions into technology, individuals can prevent interpersonal disputes and foster positive connections with coworkers. This also enables auditors to participate in social communities by exchanging information and knowledge (Fei & Abdullah, 2023). Subsequently, they acquire knowledge from the continuous influx of information inside the community. The consequences of this study pertain to the transmission of information in the context of SDMs, which promotes auditors' experience-based value and fosters their engagement in higher-level work. This is supported by the findings of Collie et al. (2017), and Latha & Nisha (2024). Ultimately, this study highlights the crucial necessity of effectively controlling the dissemination of knowledge, particularly the transference SDMs content, in order to foster a positive sense of morale.

5. CONCLUSION

This study shows that technological stress and SDMs transference have significant impacts on work engagement. This study also emphasizes that the presence of high-low technological stress and SDMs transference emphasizes the need for ICT users to actively participate in their work. In addition, this study uses SDMs transference as a means to reduce the detrimental correlation between technological stress and work engagement. This study effectively shows that the inclusion of SDMs reduces this relationship. Consequently, this study finds that technological stress enhances the cognitive abilities of ICT users who work without engaging in knowledge-seeking behavior.

This study suggests that future research should consider including self-fulfilling prophecy SFP as an additional criterion for assessing auditor work engagement. Furthermore, this study uses SDMs Transference because of the challenges associated with recruiting subjects who exhibit forms of psychological projection, parataxic thinking, and other denials. Future research presents the possibility of inducing these types through concrete experimental designs. Based on the author's/author's observation of age, it is known that auditors with an average age tend to have SDMs transference. Therefore, in order to implement various forms of SDMs, it is necessary to have ICT

users who are in tune with the specific applications and age groups they serve.

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Reference

- Abdullah, A. A. H., & Almaqtari, F. A. (2024). The impact of artificial intelligence and Industry 4.0 on transforming accounting and auditing practices. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(1), 100218. <https://doi.org/10.1016/j.joitmc.2024.100218>
- Almohesh, A. R. I., & Altamimi, J. A. H. (2024). Wow, I cannot stop: a concentration on vocabulary learning via instagram and its effects on informal digital learning of english, technostress, and on-line engagement. *BMC Psychology*, 12(1), 8. <https://doi.org/10.1186/s40359-023-01503-w>
- Alwali, J. (2024). Innovative work behavior and psychological empowerment: the importance of inclusive leadership on faculty members in Iraqi higher education institutions. *Journal of Organizational Change Management*, 37(2), 374–390. <https://doi.org/10.1108/JOCM-03-2023-0084>
- Ankli, R. E., & Palliam, R. (2012). Enabling a motivated workforce: exploring the sources of motivation. *Development and Learning in Organizations: An International Journal*, 26(2), 7–10. <https://doi.org/10.1108/14777281211201169>
- Arfaoui, F., & Kammoun, I. (2023). Did accounting education remain resistant to digitalization during COVID-19? An exploratory study in the Tunisian context. *Journal of Accounting Education*, 65, 100874. <https://doi.org/10.1016/j.jaccedu.2023.100874>
- Aroonsri, P., & Crocco, O. S. (2024). Workplace learning and information exchange among gig workers: crowdsourcing and the social media advantage. *Journal of Workplace Learning*, 36(1), 77–95. <https://doi.org/10.1108/JWL-03-2023-0049>
- Ayyagari, Grover, & Purvis. (2011). Technostress: Technological Antecedents and Implications. *MIS Quarterly*, 35(4), 831. <https://doi.org/10.2307/41409963>
- Chen, I. S. (2017). Computer self-efficacy, learning performance, and the mediating role of learning engagement. *Computers in Human Behavior*, 72, 362–370. <https://doi.org/10.1016/j.chb.2017.02.059>
- Collie, R. J., Holliman, A. J., & Martin, A. J. (2017). Adaptability, engagement and academic achievement at university. *Educational Psychology*, 37(5), 632–647. <https://doi.org/10.1080/01443410.2016.1231296>
- Corey, G. (2011). *Theory and Practice of Counseling and Psychotherapy*. <https://thuvienso.hoasen.edu.vn/handle/123456789/9237>
- Cramer, P. (2015). Defense mechanisms: 40 years of empirical research. In *Journal of Personality Assessment* (Vol. 97, Issue 2, pp. 114–122). Routledge. <https://doi.org/10.1080/00223891.2014.947997>
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An Interdisciplinary review. In *Journal of Management* (Vol. 31, Issue 6, pp. 874–900). <https://doi.org/10.1177/0149206305279602>
- del Pozo-Antúnez, J. J., Molina-Sánchez, H., Ariza-Montes, A., & Fernández-Navarro, F. (2021).

- Promoting work Engagement in the Accounting Profession: a Machine Learning Approach. *Social Indicators Research*, 157(2), 653–670. <https://doi.org/10.1007/s11205-021-02665-z>
- Delprato, D. J., & Midgley, B. D. (1992). Some fundamentals of B. F. Skinner's behaviorism. *American Psychologist*, 47(11), 1507–1520. <https://doi.org/10.1037/0003-066X.47.11.1507>
- Fei, W., & Abdullah, H. (2023). Applications of Self-Fulfilling Prophecies to School Education (pp. 89–123). <https://doi.org/10.4018/978-1-6684-8837-9.ch005>
- Fernbach, P. M., Hagmayer, Y., & Sloman, S. A. (2014). Effort denial in self-deception. *Organizational Behavior and Human Decision Processes*, 123(1), 1–8. <https://doi.org/10.1016/j.obhdp.2013.10.013>
- Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2018). *Affect Regulation, Mentalization, and the Development of the Self* (P. Fonagy, G. Gergely, & E. L. Jurist, Eds.). Routledge. <https://doi.org/10.4324/9780429471643>
- Fraser, M. (2012). "Fleshing out" an engagement with a social accounting technology. *Accounting, Auditing & Accountability Journal*, 25(3), 508–534. <https://doi.org/10.1108/09513571211209626>
- Getenet, S., Cante, R., Redmond, P., & Albion, P. (2024). Students' digital technology attitude, literacy and self-efficacy and their effect on online learning engagement. *International Journal of Educational Technology in Higher Education*, 21(1), 3. <https://doi.org/10.1186/s41239-023-00437-y>
- Goldstein, N. J., & Hays, N. A. (2011). Illusory Power Transference: The Vicarious Experience of Power. *Administrative Science Quarterly*, 56(4), 593–621. <https://doi.org/10.1177/0001839212440972>
- Govender, R., & Mpungose, C. (2022). Lecturers' technostress at a South African university in the context of coronavirus (COVID-19). *Cogent Education*, 9(1). <https://doi.org/10.1080/2331186X.2022.2125205>
- Harrison, T. J., Ginsburg, G. S., Smith, I. C., & Orlando, C. M. (2023). Youth stress generation: an examination of the role of anxiety, anxiety symptoms and cognitive distortions. *Anxiety, Stress, & Coping*, 36(3), 304–319. <https://doi.org/10.1080/10615806.2022.2076083>
- Harunavamwe, M., & Kanengoni, H. (2023). Hybrid and virtual work settings; the interaction between technostress, perceived organisational support, work-family conflict and the impact on work engagement. *African Journal of Economic and Management Studies*, 14(2), 252–270. <https://doi.org/10.1108/AJEMS-07-2022-0306>
- Huang, P.-S., Liu, C.-H., Chen, H.-C., & Sommers, S. (2018). Attentional bias of students toward negative feedback in bad outcome situations: the mechanism of self-defense. *Social Psychology of Education*, 21(3), 565–583. <https://doi.org/10.1007/s11218-018-9429-y>
- Jackson, D., & Allen, C. (2024). Enablers, barriers and strategies for adopting new technology in accounting. *International Journal of Accounting Information Systems*, 52, 100666. <https://doi.org/10.1016/j.accinf.2023.100666>
- Kim, T. Y., Liu, Z., & Diefendorff, J. M. (2015). Leader-member exchange and job performance: THE effects of taking charge and organizational tenure. *Journal of Organizational Behavior*, 36(2), 216–231. <https://doi.org/10.1002/job.1971>
- King, O. C., & Mertens, M. (2023). Self-fulfilling Prophecy in Practical and Automated Prediction. *Ethical Theory and Moral Practice*, 26(1), 127–152. <https://doi.org/10.1007/s10677-022-10359-9>
- Kirsch, L. J., & Cummings, L. L. (1996). Contextual influences on self-control of is professionals engaged in systems development. *Accounting, Management and Information Technologies*, 6(3), 191–219. [https://doi.org/10.1016/0959-8022\(96\)00018-5](https://doi.org/10.1016/0959-8022(96)00018-5)

- Kumar, A., Krishnamoorthy, B., & Bhattacharyya, S. S. (2023). Machine learning and artificial intelligence-induced technostress in organizations: a study on automation-augmentation paradox with socio-technical systems as coping mechanisms. *International Journal of Organizational Analysis*. <https://doi.org/10.1108/IJOA-01-2023-3581>
- Latha, P., & Nisha, R. (2024). An exploratory research on resilience and emotional intelligence among teaching professionals in the educational sector. *International Journal of Innovation and Learning*, 35(2), 177–198. <https://doi.org/10.1504/IJIL.2024.136472>
- Lau, C. H.-H., Ahn, B. "Tony", Maurice-Ventouris, M., & Harley, J. M. (2024). Latent profiling students' emotions towards media literacy and examining its relationship to media credibility. *European Journal of Psychology of Education*. <https://doi.org/10.1007/s10212-024-00796-8>
- Leeder, T. M. (2022). Behaviorism, Skinner, and Operant Conditioning: Considerations for Sport Coaching Practice. *Strategies*, 35(3), 27–32. <https://doi.org/10.1080/08924562.2022.2052776>
- Li, L., & Wang, X. (2021). Technostress inhibitors and creators and their impacts on university teachers' work performance in higher education. *Cognition, Technology & Work*, 23(2), 315–330. <https://doi.org/10.1007/s10111-020-00625-0>
- Mert, İ. S., Şen, C., & Abubakar, A. M. (2023). Impact of social Media usage on technostress and cyber incivility. *Information Development*. <https://doi.org/10.1177/02666669231204954>
- Mousa, M., Althalathini, D., & Abdelgaffar, H. (2023). The gendered use of cronyism in academic contexts: does social exchange really matter? *International Journal of Educational Management*, 37(5), 968–985. <https://doi.org/10.1108/IJEM-04-2022-0165>
- Nascimento, L., Correia, M. F., & Califf, C. B. (2024). Towards a bright side of technostress in higher education teachers: Identifying several antecedents and outcomes of techno-eustress. *Technology in Society*, 76, 102428. <https://doi.org/10.1016/j.techsoc.2023.102428>
- 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>
- Rodrigues, M., Oliveira, C., Borges, A., Franco, M., & Silva, R. (2023). What exists in academia on work stress in accounting professionals: a bibliometric analysis. *Current Psychology*, 42(26), 22478–22495. <https://doi.org/10.1007/s12144-022-03301-w>
- Salavera, C., & Urbón, E. (2024). Emotional wellbeing in teachers. *Acta Psychologica*, 245, 104218. <https://doi.org/10.1016/j.actpsy.2024.104218>
- Schauenburg, H., Willenborg, V., Sammet, I., & Ehrenthal, J. C. (2007). Self-reported defense mechanisms as an outcome measure in psychotherapy: A study on the German version of the Defence Style Questionnaire DSQ 40. *Psychology and Psychotherapy: Theory, Research and Practice*, 80(3), 355–366. <https://doi.org/10.1348/147608306X146068>
- Skhepehe, M., & Matashu, M. (2021). The Use of Technology in Accounting Classrooms During COVID-19: What Do Accounting Teachers in the Eastern Cape, South Africa, Have to Say? *Research in Social Sciences and Technology*, 6(2), 267–278. <https://doi.org/10.46303/ressat.2021.30>
- Sriwidharmanely, S., Sumiyana, S., Mustakini, J. H., & Nahartyo, E. (2022). Encouraging positive emotions to cope with technostress's adverse effects: insights into the broaden-and-build theory. *Behavior and Information Technology*, 41(10), 2187–2200. <https://doi.org/10.1080/0144929X.2021.1955008>
- Sumiyana, S., & Sriwidharmanely, S. (2020). Mitigating the harmful effects of technostress: inducing chaos theory in an experimental setting. *Behavior and Information Technology*, 39(10), 1079–

1093. <https://doi.org/10.1080/0144929X.2019.1641229>
- Taha, A. A. D., Ramo, W., & Alkhaffaf, H. H. K. (2021). Impact of external auditor–cloud specialist engagement on cloud auditing challenges. *Journal of Accounting & Organizational Change*, 17(3), 309–331. <https://doi.org/10.1108/JAOC-08-2020-0111>
- Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The impact of technostress on role stress and productivity. *Journal of Management Information Systems*, 24(1), 301–328. <https://doi.org/10.2753/MIS0742-1222240109>
- Tarafdar, M., Tu, Q., & Ragu-Nathan, T. S. (2010). Impact of Technostress on End-User Satisfaction and Performance. *Journal of Management Information Systems*, 27(3), 303–334. <https://doi.org/10.2753/MIS0742-1222270311>
- Tremolada, M., Bonichini, S., & Taverna, L. (2016). Coping Strategies and Perceived Support in Adolescents and Young Adults: Predictive Model of Self-reported Cognitive and Mood Problems. *Psychology*, 07(14), 1858–1871. <https://doi.org/10.4236/psych.2016.714171>