The adverse consequences of technostress on strain and turnover intentions among auditors: the mitigating effect of segmentation mindset

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Abstract

Research question: Does technostress have an impact on burnout and turnover intentions among auditors? And does segmentation mindset moderate the relationship between technostress and turnover intentions?

Motivation: Technostress became omnipresent in various occupations. Focusing on auditing setting in particular allows us to identify the impact of technostress on turnover intentions considered as a severe problem for audit companies. Examining the moderating role of segmentation mindset in the relationship between technostress and turnover intentions can help audit firms foster a segmentation culture to mitigate the impact of technostress on burnout and turnover intentions.

Idea: This paper explores the moderating role of the segmentation mindset in the relationship between technostress creators and turnover intentions among Tunisian audit professionals.

Data: Drawing on the transactional model of stress and coping, 290 valid responses were collected from Tunisian practicing financial auditors.

Tools: An online survey was used to validate the proposed model.

Findings: The results suggest that burnout fully mediates the association between technostress creators and turnover intentions. Second, the study supports the positive association between technostress creators and job burnout and between burnout and turnover intentions. Further analysis using the Hayes Process model reveals that the positive effect of technostress creators on turnover intentions is dampened for auditors who score high on segmentation mindset.

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Contributions: The results of this study provide empirical evidence that audit companies should promote practices to reduce levels of job burnout, which could decrease turnover intentions. Implementing segmentation strategies is of paramount importance since individual segmentation can alleviate the technological stress's detrimental effects on turnover intentions.

Keywords: Technostress, Burnout, Turnover intentions, Segmentation mindset, Auditing

JEL Codes: M420, M150.

1. Introduction

Information and Communication Technologies (ICT) development in the Internet age has enabled an increasing number of employees to utilize ICT for their work, both during off-site hours and in the physical workplace. However, "this constant connectivity while on vacation may lessen the recovery benefits of vacation and lead to exhaustion" (Pflügner *et al.,* 2021:13).

Expecting employees to respond quickly to job demands places an excessive amount of pressure on them, which can lead to a form of stress known as "technostress" (Xie *et al.,* 2017) that stems from the use of technologies (Turel *et al.*, 2019). Financial auditors like many other professions suffer from technostress caused by using Information and Communication Technologies (ICTs) and the long working hours and unexpected time schedules especially during busy seasons (Jones *et al.,* 2010). Therefore, auditing differs from other professionals and should be considered separately.

Despite the seriousness of that rapidly expanding global problem, only Boyer-Davis (2019) examined the association between technostress and turnover intentions in accounting.

Examining the relationship between technostress creators and turnover intentions within the auditing profession is essential since audit companies have continuously encountered a severe turnover problem (Smith *et al.,* 2018).

Furthermore, only some experience physical, emotional and cognitive fatigue to the same degree (Khedhaouria & Cucchi, 2019). Some individuals create a mental dividing line between their personal and professional lives. They keep working at work, and home at home (Kreiner, 2006). Examining how a segmentation mindset can moderate the relationship between technotress and turnover intentions is relevant. Auditors with a segmentation mindset set clear limits between professional and personal domains and are willing to prevent work issues from spilling into their

private lives. Accordingly, this mindset may help auditors overcome the harmful effects of technostress so that they will be less able to exhibit job burnout. It may also be an appropriate solution for audit companies to avoid high turnover rates by enhancing this mindset among auditors by enabling them to turn off their phones after regular working hours.

This study extends previous studies by drawing on the transactional model of stress and coping of Lazarus and Folkman (1984) to explain the moderating role of a segmentation mindset in the relationship between technostress creators (environmental factors), job burnout (strain resulting from cognitive appraisal) and turnover intentions (copying behavior). Using a survey approach, the analysis of data collected from Tunisian practicing financial auditors showed that the positive association between technostress creators and turnover intentions is fully mediated by job burnout and that the positive effect of technostress creators on turnover intentions is dampened for auditors who score high on segmentation mindset.

This research contributes to the existing literature on technostress by examining the situations under which technostress creators lead to higher turnover intentions depending on the level of segmentation mindset.

The remainder of this paper is organized as follows. Section 2 discusses the literature review and hypotheses development. Section 3 describes the methodology design. In section 4, the research results are reported and discussed. The final section discusses the theoretical and practical implications, limitations and conclusions.

2. Literature review and hypotheses development

Technostress refers to "the inability of an individual or organization to adapt to the introduction and operation of new technology" (Brod, 1982: 754). Arnetz and Wiholm (1997: 36) described technostress as "the state of mental and physiological arousal observed in certain employees who are heavily dependent on computers in their work". They added that it is observed when "employees perceive their [sic] job as stimulating simultaneously as they feel they do not quite master the necessary skills".

Across the literature, technostress operationalization is performed by assessing of technostress creators (e.g., Qi, 2019; Maier *et al.,* 2019; Khedhaouria *et al.,* 2024). Tarafdar *et al.* (2007) identify five technostress creators: techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty. They define technostressors as follows: "Techno-overload describes situations where ICTs force users to work faster and longer. Techno-invasion describes the invasive effect of ICTs in situations where employees can be reached anytime and feel the need to be constantly connected, thus blurring work-related and personal contexts. Techno-complexity describes situations where the complexity associated with ICTs makes

users feel inadequate about their computer skills and forces them to spend time and effort learning and understanding ICTs. Techno-insecurity is associated with situations where users feel threatened about losing their jobs, either because of automation from ICTs or to other people who have a better understanding of ICTs. Techno-uncertainty refers to contexts where continuing ICT changes and upgrades unsettle users and create uncertainty, so they must constantly learn and educate themselves about new ICTs" (Tarafdar *et al.* (2007: 313).

On the other hand, job burnout is a critical outcome widely studied in organizational and psychological literature. It consists of continuously depleting energetic resources resulting from physical, emotional and cognitive exhaustion (Shirom, 2003). The lack of harmony between the individual and external job demands may lead to severe stress responses. When the workplace imposes high job expectations (high productivity and work efficiency because of ICT use, employees are obliged to make sustainable efforts to cope with the demanding environment, which results in stress (Brod, 1984).

The present study draws upon Lazarus and Folkman's transactional model of stress and coping (1984) and emphasizes the bidirectional character of the relationship between the person and the environment. It suggests that individuals respond in two ways when facing a stressful situation and/or a significant environmental change: cognitive appraisal and coping. The cognitive appraisal process implies an assessment of the event's relevance to an individual's well-being and how it would be (Folkman *et al.,* 1986). The cognitive appraisal may be primary or secondary. A primary appraisal is that the individual assesses whether a potential benefit or damage results from this event (Major *et al.,* 1998). For instance, individuals may be contacted for work purposes anywhere and anytime, which would be invasive to their personal lives (techno-invasion). If the stressor is perceived as threatening, the person initiates the secondary appraisal by assessing whether they can control the situation, or increase the chances of taking full advantage of the problem (Major *et al.,* 1998). According to this approach, the transactional model assumes that balancing the individual's needs and the environment's requirements will decrease stress. In contrast, a mismatch will result in the opposite.

People who appraise the use of ICTs as harmful and realize they cannot overcome this uncomfortable situation begin to experience stress. Therefore, we hypothesize that:
H1. Technostress creators enhance job burnout within the auditing profession.

The auditing profession has long been known to be tied to burnout concerns because of long exposure to stress (Hermanson *et al*., 2016). As a result of burnout status, individuals look for other employment opportunities as a copying behavior to escape the uncomfortable situation. Turnover intention is "the last in a sequence of withdrawal cognitions, a set to which thinking of quitting and intent to search for

alternative employment also belongs" (Tett & Meyer, 1993: 262). Nouri and Parker (2020) confirm that the firm loses substantial costs incurred for recruiting and training employees when the employee leaves. Therefore, we hypothesize:

H2. *Job burnout enhances turnover intentions within the auditing profession.*

The effect of these technostress creators on job burnout (Khedhaouria and Gucci, 2019; Maier *et al.,* 2019; Pflügner *et al.,* 2021) is well established in the IS literature. On the other hand, evidence is provided on the impact of job burnout on turnover intentions (Smith *et al.,* 2018). However, the literature often overlooks the mediating effect of job burnout in the relationship between technostress creators and turnover intentions.

Prior studies provide evidence establishing burnout as a mediating construct between role stressors (role ambiguity, role conflict and role overload) and job outcomes (Smith *et al.,* 2018; Bonache, 2024). Tarafdar *et al.* (2007) show that technostress directly impacts role stress. The introduction of ICT in the work environment is dramatically changing our daily lives. The increased workload because of the vast amount of information flow, blurred boundaries between work and home domains because of the intrusion of privacy and the frustration of feeling compelled to cope with the complexity and new developments in ICT increase the stress perceived by employees. Furthermore, role stressors positively correlate with turnover intentions (Smith *et al.,* 2018). Accordingly, technostress may have a positive impact on turnover intentions. Indeed, Boyer-Davis (2019) suggests a positive and significant association between technostress and turnover intentions in the accounting profession. Similarly, we hypothesize that:

H3. *Job burnout mediates the relationship between technostress creators and turnover intentions within the auditing profession.*

The moderating role of the segmentation mindset
Kreiner (2006) defines segmentation as "the degree to which aspects of each domain (such as thoughts, concerns, physical markers) are kept separate from one another—cognitively, physically, or behaviorally". Thus, it seems that the segmentation mindset as an individual factor may alleviate the adverse effect of technostress creators because segmenters can easily psychologically detach and recover from work demands (Park *et al.,* 2011).

A recent survey by the Institute of Chartered Accountants in England and Wales revealed that 38% of accountants check their email correspondence daily outside working hours, with 33% engaging in email correspondence while on sick leave or annual leave (Mansour *et al.,* 2021). However, "the invasive effect of ICTs in situations where employees can be reached anytime and feel the need to be constantly connected, thus blurring work-related and personal contexts" (Tarafdar *et al.*, 2007, p.313) can have less harmful effects on auditors with a segmentation mindset. Segmenters try to set limits between the two domains by trying not to think

about the issues of one domain while in the other (Nippert-Eng, 1996). The presence of a segmentation mindset hinders the development of job stress when exposed to technostress creators. Conversely, integrators cannot easily "switch off" from work demands during non-work hours. Accordingly, they may suffer from the adverse effects of technostress because stress stemming from the professional domain can spill over into the personal domain, which results in increased stress. Although one may bear the stressful situation when he has sufficient resources to face the demanding environment, people who are less able to make the separation between the two domains are more prone to experiencing burnout. The preceding discussion leads to the following hypotheses:

H4a. *The segmentation mindset negatively moderates the relationship between technostress creators and job burnout within the auditing profession, such that technostress creators influence job burnout less strongly when the segmentation mindset is higher.*

Faced with the burnout feeling, individuals struggle to cope with this situation. Coping represents cognitive and behavioral attitudes an individual exerts to deal with a stressful change in the environment (Lazarus & Folkman, 1984). Individuals with segmentation or integration preferences may appraise incoming events differently and react differently. So, they do not appraise technostress creators as threatening as much as integrators do because they know in advance that these environmental factors are kept outside of their private lives. Consequently, the probability of exhibiting burnout is reduced. So, they feel less compelled to look for a coping behavior. Conversely, the absence of a segmentation mindset blurs the boundaries between the two domains. These people take the whole workday issue back home, which increases tensions and negatively influences their well-being. Being unable to psychologically detach from the harmful thoughts and problems they have had during the working day, they are unable to recharge their energy for the next workday (Sonnentag *et al.,* 2008). Depleting their physical and cognitive resources induces them to cope with this situation and overcome its detrimental effects. We expect job burnout to be associated with lower turnover intentions for individuals scoring high in segmentation mindset:

H4b. *The segmentation mindset negatively moderates the relationship between job burnout and turnover intentions within the auditing profession such that job burnout influences turnover intentions less strongly when the segmentation mindset is higher.*

Moderated mediation
By integrating the literature from the preceding two hypotheses (see also Figure 1), we form a final hypothesis, in which we aim to test whether the segmentation mindset moderates the mediated relationship (job burnout as a mediator) between technostress creators and turnover intentions. Since ICT can enable work continuity outside the traditional office, individuals face the challenge of detaching from work. At the same time, they continue to receive messages and reply to work-related emails at home. These habits may increase physical resource depletion and enhance mental

fatigue. Drawing on the transactional model of stress and coping (Lazarus & Folkman, 1984), people struggle to cope by looking for a behavior to escape this pervasive trend. They may then have more turnover intentions than their peers. However, segmenters are likely to stay at the company. In contrast, work can be performed during the off-the-job time because they can organize themselves better and set clear differences between stress induced during work time and psychological mood when coming home. Köffer *et al.* (2014) find that organizational encouragement for dual use of mobile IT for work and non-work-related purposes increases work-to-life conflict more strongly for people who have segmentation preferences.

As discussed above, the segmentation mindset is supposed to moderate the direct relationship between technostress creators and job burnout and the direct relationship between job burnout and turnover intentions. It is also supposed to moderate the indirect relationship between technostress creators and turnover intentions.

H4c. a segmentation mindset negatively moderates the relationship between technostress creators and turnover intentions within the auditing profession mediated by job burnout. Technostress creators influence turnover intentions less strongly when the segmentation mindset is higher, mediated through less job burnout.

The research model of technostress in the audit working setting (Figure 1) includes contextually relevant technostressors and outcomes and involves the concepts embedded in the holistic technostress model. These technostressors identified by Tarafdar *et al.* (2007) involve techno-invasion, techno-overload, techno-complexity, techno-uncertainty and techno-insecurity.
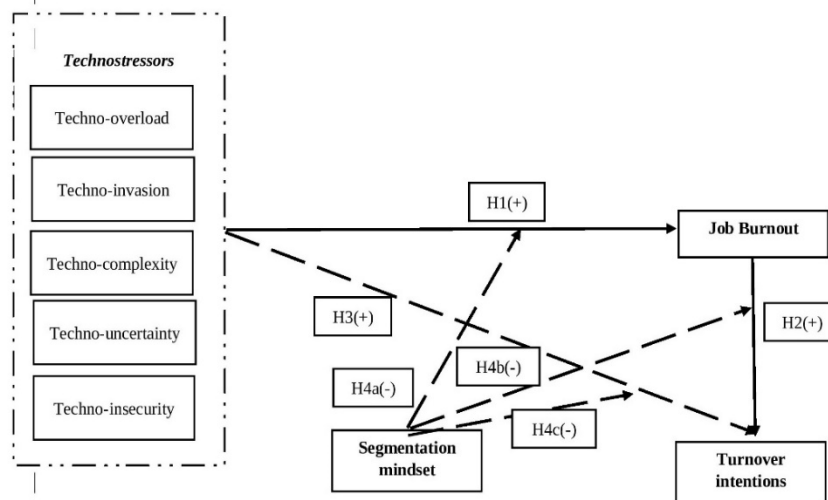
Figure 1. Research model

Note: A "+"symbol indicates a positive relationship as hypothesized, and a "-" symbol indicates a negative relationship as hypothesized.

3. Methodology

3.1 Participants

Professional auditors in Tunisian audit firms have been invited to participate in this study. They are asked to indicate their agreement with each statement using a seven-point Likert-type scale ranging from (1) "strongly disagree" to (7) "strongly agree". The study is performed between October and December, 2021. The survey instrument package is created using the Sphinx® online platform and is sent to participants via a link embedded in an email invitation. We conducted a pre-test with 17 participants. The structure of the pre-test sample is aligned with the final sample. This pre-test sample comprises three PhD students, five university professors and nine professional auditors. We asked respondents to feel free to comment on the survey draft. Comments are a valuable tool for dealing with problems of questions formulation. Then, in the final survey, 3240 auditors received an invitation. A follow-up reminder was sent a week later. Participants are then automatically directed to the web-based survey. Four hundred sixty professional auditors practicing in audit companies complete the survey with a response rate of 14%. Missing values were dropped. The final sample size based on the retained observations equals 290 after removing outliers.

3.2 Construct measurement

The independent variables are technostress creators. They are measured using five dimensions developed by (Tarafdar *et al.,* 2007): Techno-overload (5 items, a sample item: "I am forced by ICTs to work much faster"), techno-invasion (four items, a sample item: "Because of ICTs, I feel my personal life is being invaded", techno-complexity (five items, a sample item: "I need a long time to understand and use new ICTs", techno-uncertainty (four items, a sample item : "In our organization, there are always constant changes in ICT software", and techno-insecurity (five items, a sample item: "Because of new ICTs, I feel constant threat to my job security". These technostressors are widely used in the literature and are successfully applied to accounting studies (Boyer-Davis, 2019).

The mediator variable, job burnout, is measured using the Shirom-Milamed Burnout Measure (SMBM; Shirom & Melamed, 2006). The SMBM comprises three distinct dimensions: physical exhaustion, cognitive fatigue, and emotional exhaustion. The SMBM consists of three subscales: physical fatigue (six items, e.g., "I feel tired"; "I feel burned out "), emotional exhaustion (three items, e.g., "I feel I am not capable of being sympathetic to co-workers and customers"), and cognitive weariness (five items, e.g., "I feel I am not focused in my thinking"). The outcome variable, turnover intentions, is measured using three items developed by Viator (2001). A sample item is "I will probably look for a job with another firm within the next three years".

According to Kreiner (2006), the moderator variable, segmentation mindset, is measured using four items. A sample item is "I am able to prevent work issues from creeping into my home life". The measures of the variables used are provided in the appendix.

3.3 Statistical analysis

In order to examine the structural and measurement model and hypotheses testing, we conduct structural equation modeling analyses and the PLS-SEM approach using smartPLS (v. 3.3.3) software. That is why, we run Exploratory Factorial Analysis (individual item reliability, internal consistency reliability). To support individual item reliability, factor loadings should be higher than 0.6. Since factor loadings of Seg_mind_1, TOVE_1 and TCOM_5 are less than 0.6, they were removed. The composite scale reliability index (CSRI) exceeds 0.7, ensuring all constructs' internal reliability. Exploratory factor analysis (EFA) aims to identify the smallest number of latent variables that explain the economic covariation observed among manifest variables. Then, we move to confirm measuring instruments by assessing convergent and discriminant validity. Convergent validity is assessed by each construct's average variance extracted (AVE). Table 1 indicates that the AVE of all constructs is higher than 0.5 (Fornell & Larcker, 1981), suggesting that the items better represent constructs than the error terms. Discriminant validity is established since the HTMT ratio is below 0.85 and « root AVE » is greater than correlations with other constructs (see Table 2).

Table 1. Reliability and validity of first and second order constructs

	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
CW	0.951	0.962	0.835
EE	0.898	0.936	0.831
PHYS			
FAT	0.946	0.957	0.790
SEG	0.809	0.852	0.598
TCOM	0.802	0.865	0.567
TINS	0.761	0.838	0.510
TINV	0.819	0.880	0.649
TOVE	0.739	0.798	0.456
TUNC	0.829	0.887	0.662
TURN	0.870	0.920	0.793
BURN	0.875	0.923	0.800
TS	0.709	0.747	0.595

Notes: CW= Cognitive weariness, EE=Emotional exhaustion, Phys_Fat=Physical fatigue, SEG=Segmentation mindset, TOVE=Techno-overload, TCOM=Techno-complexity, TINV=Techno invasion, TINS=Techno-insecurity, TUNC=Techno-uncertainty, TS=Technostress; BURN=Burnout.

Table 2. Discriminant validity

	BURN	SEG_MIND	TS	TURN
HTMT				
BURN				
SEG_MIND	0.160			
TS	0.627	0.221		
TURN	0.430	0.015	0.234	
Fornell and Larcker				
	BURN	SEG_MIND	TS	TURN
BURN	**0.895**			
SEG_MIND	-0.156	**1.000**		
TS	0.482	0.005	**0.617**	
TURN	0.405	-0.015	0.199	**1.000**

Notes: TS=Technostress; SEG_MIND=Segmentation mindset; BURN=Job burnout; TURN=Turnover.

4. Results

4.1 Descriptive statistics

As shown in Table 3, the present study sample includes auditors in both junior and senior positions, each representing approximately 25% of the total sample. Auditors in manager and partner positions fall within a similar range, 22% and 20%, respectively. The participants in this study come from diverse professional backgrounds, including trainee public accountants and accountants (25% of the sample), and memorialist public accountants (13%). Most respondents (52%) hold a master's degree and a Chartered public accountant degree (29%). Additionally, the survey participants were predominantly male, making up 72% of the total respondents, and predominantly single.

Table 1. Descriptive statistics

	Frequency	%
Organizational level		
Junior	73	25.2
Senior	72	24.8
Manager	63	21.7
Partner	59	20.3
Other	11	3.8
Trainee	10	3.4
NS	2	0.7
Professional status		
Trainee public accountant	74	25.5
Auditor (Accountant)	72	24.8
Certified Public Accountant	53	18.3
Other	50	17.2
Memorialist public accountant	39	13.4

	Frequency	%
NS	2	0.7
Education		
Master degree	151	52.1
Chartered public accountant degree	84	29.0
Bachelor's degree	42	14.5
Other	11	3.8
NS	2	0.7
Gender		
Male	208	71.7
Female	80	27.6
NS	2	0.7
Marital status		
Single	159	54.8
Married	117	40.3
Other	11	3.8
NS	3	1.0

Note: NS = Not specified

4.2 Hypotheses testing results

To test the hypotheses, we examine the significance of the path coefficients of the structural model using the bootstrap method with 5,000 samples. Second-order constructs are created for technostress and burnout using latent variable scores of the first-order constructs. All variables are presented as reflective. Table 4 shows the SmartPLS data analysis results. As expected, the results indicate that technostress positively and significantly impacts job burnout ($\beta=0.492$, p=0.000) (H1 is supported).

This result corroborates Srivastava *et al.,* (2015) and Kim *et al.* (2015), who found that technostress creators positively influence job burnout. Similarly, job burnout positively and significantly impacts turnover intentions ($\beta=0.388$, p=0.000) (H2 is supported). This finding is consistent with prior research (e.g., Califf & Brooks, 2020; Harris *et al.,* 2021).

Table 4. Summary of path coefficients

	B	Standard deviation (STDEV)	T statistics	P values
SEG -> TURN	0.012	0.078	0.155	0.877
SEG -> BURN	-0.171**	0.076	2.261	0.024
TS -> TURN	0.015	0.076	0.201	0.841
TS -> BURN	0.492***	0.047	10.519	0.000
BURN -> TURN	0.388***	0.070	5.516	0.000

Notes: TS=Technostress; BURN=Burnout; TURN=Turnover; CW=Cognitive weariness, EE=Emotional exhaustion; PF=Physical fatigue; TCOM=Techno-complexity; TINS=Techno-insecurity; TINV=Techno-invasion; TOVE=Techno-overload; TUNC=Techno-uncertainty; *** means significant at 0.01 level; ** means significant at 0.05 level.

We performed further analyses by incorporating various control variables, including gender, marital status and education to examine their impact on technostress. Results show that gender ($\beta = -0.140$, p >0.1), marital status ($\beta = -0.104$, p >0.1) and education ($\beta = -0.137$, p >0.1) have no significant effect on perceived technostress which means that perceptions of technostress do not vary according to the profiles of auditors.

4.3 Mediation analysis

Mediation analysis is performed to assess the mediation role of job burnout. The results (see Table 5) reveal that job burnout fully mediates the relationship between technostressors and turnover intentions ($\beta = 0.204$, t = 4.826, p<0.01). The total effect of technostressors on turnover intentions is significant ($\beta = 0.198$, t = 3.137, p<0.01). Including the mediator, the direct effect is insignificant ($\beta = 0.015$, t = 0.201, p>0.1). These results support H3. This study complements prior work by Fogarty *et al*. (2000) and Smith *et al.* (2018) who show that job burnout fully mediates the relationship between role stressors and job outcomes.

Table 5. Summary of mediation path coefficients

Total effect (TS → TURN)			Direct effect (TS → TURN)			Indirect effect (TS →BURN→ TURN)		
Coefficient	T-value	P-value	Coefficient	T-value	P-value	Coefficient	T-value	P-value
0.198***	3.137	0.002	0.015	0.201	0.841	0.204***	4.826	0.000

Notes: TS =Technostress; TURN =Turnover; BURN=Burnout; *** means significant at 0.01 level.

4.4 Moderation analysis

Recent studies increasingly investigate moderation and mediation models (Cheung & Lau, 2015). Mediation and moderation can be integrated into a single model, whereby the same moderator influences the relationship between the independent variable and the mediator, the mediator and the dependent variable and between the independent variable and the dependent variable.

Although structural equation modeling (SEM) is believed to be widely used to estimate structural parameters, a central critical issue is related to testing latent interactions. Within organizational and psychological studies, variables are not directly observable. The interaction of latent variables, performed to examine the moderating or mediating effect, consist of multiplication of indicators of the two latent variables resulting in the product of the indicators of two latent variables. Hayes (2013) developed the PROCESS macro, which became popular in business and marketing as witnessed by publications in various business journals and academic conferences. PROCESS does not consider latent variables. Rather, it

transforms latent variables into observed variables using sum scores or averages of indicators.

Specifically, we apply PROCESS Model 59 to test the remaining hypotheses. Further, using 5000 iterations of bootstrapping, we generate bootstrap-based bias corrected confidence intervals (95%) for the indirect effects.

Simple slope tests revealed that respondents with a high segmentation mindset and relatively high technostress had significantly lower turnover intentions. Segmentation mindset significantly dampens the positive effect of technostress creators on turnover intentions as the slope coefficients move from 0.395 at the low segmentation mindset level (one standard deviation below the mean) to 0.188 at the high segmentation mindset level (one standard deviation above the mean) (see Table 7). Therefore, H4(c) is supported. In other words, the conditional indirect effect of technostress on turnover intentions mediated by job burnout depends on the strength of the segmentation mindset. A high segmentation mindset slows the development of turnover intentions, which results from exposure to technostress. Auditors who score high in segmentation mindset are willing to set separate boundaries for private and professional domains and prevent the tensions of one domain from spilling over into the other domain. So, work issues are left behind once back home and vice versa. Accordingly, the positive effect of technostress creators on turnover intentions is dampened for auditors having a high segmentation mindset (see Figure 2).

This result is consistent with previous results of Powell and Greenhaus (2010). Kreiner (2006) states that individuals with a segmentation mindset keep work at work, and home at home. They strive to prevent what happens at work from entering their personal life by adopting daily practices such as not answering work-related calls or reading work emails at home. Moreover, this result reflects the mindset of the Tunisian workforce. Participants in the survey typically do not get overwhelmed by professional duties. They do not let themselves be-carried-by the pace of work. They usually set well-defined limits to protect their private lives from being invaded by work-related issues.

Table 6. Moderating effect tests results using Hayes Process Macro

Predictors	On job burnout				On turnover intentions			
	β	T	P	95% CI	B	T	p	95% CI
Technostress	0.406	7.257	<0.01	[0.296, 0.516]	-0.004	-0.041	0.967	[-0.217, 0.208]
Segmentation	-0.069	-1.190	0.235	[-0.182, 0.045]	0.097	0.925	0.356	[-0.109, 0.303]
TS X Seg	-0.066	-1.358	0.176	[-0.161, 0.030]	-0.065	-0.684	0.495	[-0.253, 0.122]
Burn X Seg					-0.142	-1.381	0.168	[-0.345, 0.060]
R2	19.5%		<0.01		26.5%			<0.01
F	5.544				6.992			

Table 7. Moderated mediation model results using Hayes Process Macro

	FAC_seg level	Effect	SE	95% CI
INDIRECT EFFECT: TS_FS ->BURN ->TURN	-1.002	0.395	0.100	[0.219, 0.616]
	0.000	0.282	0.066	[0.168, 0.431]
	1.002	0.188	0.080	[0.056, 0.371]
DIRECT EFFECT: TS_FS -> TURN	-1.002	0.061	0.148	[-0.231, 0.353]
	0.000	-0.004	0.108	[-0.217, 0.208]
	1.002	-0.070	0.140	[-0.345, 0.205]
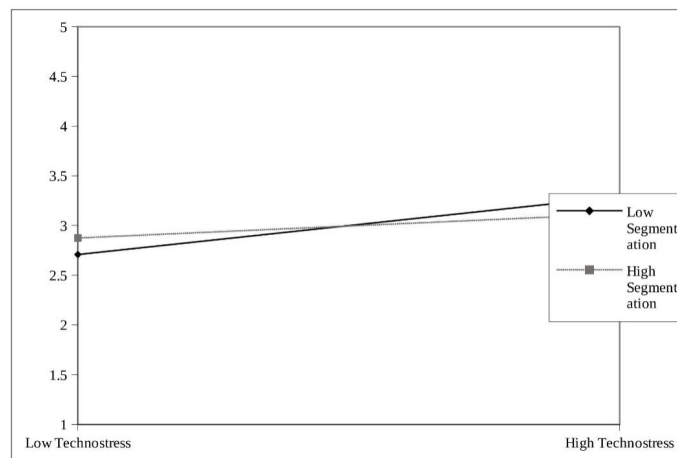
Figure 2. Turnover intentions as a function of technostress creators and segmentation mindset

Most previous studies on technostress have been limited in investigating its potential drawbacks. Still, little attention has been paid to the factors that may mitigate the adverse effects of technostress. This study highlights the role of a segmentation mindset in the relationship between technostress creators and turnover intentions mediated by job burnout. Based on a sample of 290 responses from Tunisian auditors, findings show that technostress positively impacts job burnout. The study also confirms the positive influence of job burnout on turnover intentions and the mediating role of job burnout in the relationship between technostress and turnover intentions. Finally, the segmentation mindset alleviates the strength of the impact that has technostress on turnover intentions.

4. Discussion and conclusion

This study extends previous studies supporting the mediating role of job burnout in the relationship between technostress creators and turnover intentions. While the previous research is limited to the direct effect of technostress creators on job outcomes (e.g., Maier *et al.,* 2019; Qi, 2019), this study is the first to focus on the mediated relationship using job burnout. Therefore, it extends prior research establishing burnout as a mediating construct between traditional role stressors and job outcomes (Fogarty *et al.,* 2000; Jones *et al.,* 2010; Smith *et al.,* 2018).

While there is accumulating research evidence for the moderating role of individual factors in the relationship between technostressors and job outcomes (e.g., Khedhaouria & Cucchi, 2019; Maier *et al.,* 2019), these studies have been limited to personality traits (assessed by the five-factor model). As a result, more needs to be known about the role of the segmentation mindset as a personal characteristic and its influence on the detrimental effects of technostress.

A segmentation mindset may prevent the positive spillover of work issues into the family domain within an active segmentation policy. Moreover, this study provides a holistic view of the technostress process using Lazarus and Folkman's (1984) transactional model of stress and copying while considering the role of the segmentation mindset.

Additionally, technostress among auditors cannot be understood by extrapolating the findings of technostress studies on general ICT users since auditors spend long working hours within unexpected time schedules especially during busy seasons (Jones *et al.,* 2010). The study's findings help audit companies overcome the severe turnover problem by identifying the predictors of turnover intentions. For instance, companies should foster a segmentation culture by enabling auditors to turn off their phones outside working hours or turn off some functions in smartphones and laptops after work.

Several limitations are identified in all such empirical studies, but they should be considered as potential avenues for future research. As in every cross-sectional study, this study incorporates self-reported responses, which may be subject to the influence of common methods variance (Smith *et al.,* 2018). However, several methods are applied to offset this problem. First, the measures used in this study have been proven valid and reliable in prior research. Moreover, tests are performed to ensure that common methods variance is not an issue. Longitudinal studies are, however, highly requested to assess the evolution of technostress creators, job burnout, turnover intentions and segmentation mindset over time.

Additionally, organizational factors that may mitigate the technostress should be incorporated in future studies (Ragu-Nathan *et al.,* 2008). For instance, segmentation

culture and personality traits, may affect the individual's attitude and help auditors prevent work issues from spilling over their personal lives and vice versa.

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Appendix: List of constructs and items

	Items
TOVE_1	I am forced by ICTs to work much faster
TOVE_2	I am forced by ICTs to do more work than I can handle
TOVE_3	I am forced by ICTs to work with very tight time schedules
TOVE_4	I am forced by ICTs to change my work habits to adapt to new technologies
TOVE_5	I am forced by ICTs to handle higher workload because of increased technological complexity
TINV_1	Because of ICTs I spend less time with my family
TINV_2	Because of ICTs I have to be in touch with my work even during my vacation
TINV_3	Because of ICTs I have to sacrifice my vacation and weekend time to keep current on new ICTs
TINV_4	Because of ICTs I feel my personal life is being invaded
TCOM_1	I do not know enough about the new ICTs to handle my job satisfactorily
TCOM_2	I do not find enough time to study and upgrade my ICT skills
TCOM_3	I need a long time to understand and use new ICTs
TCOM_4	I often find it too complex for me to understand and use new ICTs
TCOM_5	I find new recruits to this organization know more about ICTs than I do
TINS_1	Because of new ICTs, I feel constant threat to my job security
TINS_2	Because of new ICTs, I need to update my skills to avoid being replaced.
TINS_3	Because of new ICTs, I feel constant threat by coworkers with newer ICT skills
TINS_4	For fear of being replaced I do not share my knowledge with my coworkers
TINS_5	For fear of being replaced I feel there is less sharing of knowledge amongst coworkers
TUNC_1	In our organization, there are always new developments in the ICTs we use
TUNC_2	In our organization, there are always constant changes in ICT software
TUNC_3	In our organization, there are always constant changes in ICT hardware
TUNC_4	In our organization, there are always frequent upgrades in ICT networks
Physi_fat_1	I feel tired

Physi_fat_2	I have no energy to go to work in the morning
Physi_fat_3	I feel physically drained
Physi_fat_4	I feel fed up
Physi_fat_5	I feel like my "batteries" are "dead".
Physi_fat_6	I feel burned out.
Cogn_wear_1	My thinking process is slow
Cogn_wear_2	I have difficulty concentrating.
Cogn_wear_3	I feel I'm not thinking clearly.
Cogn_wear_4	I feel I'm not focused in my thinking
Cogn_wear_5	I have difficulty thinking about complex things.
Emot_exhaus_1	I feel I am unable to be sensitive to the needs of coworkers
Emot_exhaus_2	I feel I am not capable of investing emotionally in coworkers
Emot_exhaus_3	I feel I am not capable of being sympathetic to coworkers
Turnover_1	I often think about leaving my firm
Turnover_2	I will probably look for a job with another firm within the next three years
Turnover_3	I am tempted to investigate other job openings
Seg-mind_1	I don't think about work while I'm at home
Seg-mind_2	I keep work life at work
Seg-mind_3	I am able to prevent work issues from creeping into my home life
Seg-mind_4	I am able to leave work behind when I go home