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Technostress Management at the Workplace: A Systematic Literature Review

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Abstract. Technostress is a major problem for employees and organizations, as it impairs employee health and weakens organizational performance. Therefore, it is relevant to effectively manage technostress and reveal ways for mitigating the adverse consequences. Seeing that previous studies on technostress management have provided a foundation for review work, we conduct a systematic literature review and integrate the scholarly findings of 22 research articles of different disciplines on technostress management strategies at the workplace. Our work provides an overview of technostress management strategies highlighting that technostress management strategies address the user, the technological, organizational, or the social environment. Moreover, we shed light on discipline-specific investigations of technostress management and derive five distinct avenues for future research. Our work thereby guides researchers to fill the identified research gaps and extend the understanding of ways for mitigating technostress.

Keywords: Technostress, technostress management, mitigation, literature review.

1 Introduction

Technostress – which is stress due to the use of information systems (IS) [1] – is a major concern for employees and organizations as practical reports point out the adverse consequences of technostress on employee health and organizational performance. Business smartphones blur the boundaries between work and private life, threatening an employee's work-life balance [2]. Changes in digital reporting tools drain an employee's energy, thereby fostering job burnout [3], and a vast amount of incoming emails makes it difficult for employees to complete assigned work tasks [4], impairing productivity. These practical indications are reinforced by empirical evidence gathered in technostress research that revealed the causes of technostress, also called technostressors, and found technostress leading to job burnout and low job performance, besides others [5, 6]. Not surprisingly, practitioners and researchers call for insights into ways for mitigating technostress, which we name technostress management strategies, to reduce those adverse consequences [2, 7].

Technostress management strategies have gained increasing attention throughout the last couple of years due to their practical relevance. Seeing that previous studies have

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provided a foundation for review work, we conduct a systematic literature review on technostress management strategies at the workplace covering the research fields of information systems (IS), organizational behavior (OB), and psychology. This is relevant due to three reasons. The literature review provides an overview of existing studies and reveals the variety of technostress management strategies that can be used to mitigate technostress. Existing technostress literature reviews either focus on the causes and consequences of technostress or, in general, on factors that influence technostress which are not necessarily malleable [1, 7, 8]. We take an action perspective - by investigating technostress management strategies, we specifically focus on factors that are malleable and can be changed or implemented to mitigate technostress rather than being fixed. Following an interdisciplinary approach, we integrate the scholarly findings of three disciplines, which provides more comprehensive insights and sheds light on differences between the disciplines. Moreover, we identify potential research gaps that might be addressed in future research to extend the understanding of ways to mitigate the unintended adverse consequences of technostress. Finally, the review will help managers in practice to understand and select the ways to reduce technostress at the workplace.

For conducting this systematic literature review, we follow the guidelines from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement and the guidelines provided by Webster and Watson [9] to collect and analyze prior research. We do not select a specific occupational group or business unit but focus on technostress at the workplace. Opposed to the private context where IS use is optional and users have the option to stop using the IS when they are stressed, IS use in the work context is often mandatory to accomplish work purposes. Thus, the users may not have the option to refrain from using IS but regularly work with IS, making technostress especially relevant in the work context.

We next present the research background for a common understanding of technostress, followed by a transparent description of our methodological approach. The presentation of the results provides an overview of existing studies on technostress management strategies, which leads us to discuss the contributions of our work and illustrate avenues for future research.

2 Research Background

After these introductory remarks, we provide the theoretical background knowledge on the causes and consequences of technostress, which helps us delineate research on technostress management strategies.

When using IS, a user is confronted with multiple perceived IS characteristics, e.g., the perceived pace of changes in the IS [10]. Based on these IS characteristics, users evaluate whether their abilities and values match with the demands and supplies that are provided by the IS. For instance, users evaluate whether their skills match the demands of the changes in the IS. In case of a mismatch, users perceive technostressors [1, 10].

Technostressors are perceived stimuli, events, or demands induced by the IS [11] and are the causes of technostress [1]. Previous IS research has discussed multiple technostressors prevalent in the work context and most commonly focused on five technostressors [5, 6, 12]. The technostressor techno-overload describes situations in which users face increased work amount and speed due to IS. Techno-invasion refers to situations where users feel the need to be permanently connected to work and where the line between work and personal life becomes blurred due to IS. Techno-complexity describes situations where IS-related complexity leads users to the feeling of inadequate skills and the need to spend time as well as effort to understand the different aspects of IS. Techno-insecurity refers to situations where users fear losing their job due to other employees with better IS skills or due to the replacement by an IS. Finally, technouncertainty describes situations where users feel uncertainty because of ongoing changes in IS and where they are constantly forced to adapt, learn, and educate themselves about new IS [1, 11]. Along with these technostressors, further technostressors have received attention in IS research [13], e.g., unreliability [14] or interruptions due to IS [15, 16] as well as context-specific technostressors, e.g., security-related technostressors [17, 18], technostressors specific for a particular technology, e.g., email stressors [19, 20], and subdimensions of a specific technostressor, e.g., communication overload [21]. Psychology literature more likely terms this concept IS demands and in this vein has studied further demands such as IS hassles, IS learning expectations, or response expectations [22, 23]

The perception of technostressors leads to technostrain, which is a psychological, behavioral, or physiological reaction to technostressors [12]. Psychological technostrain incorporates feelings of exhaustion and burnout [5, 6] as well as reduced IS- or job satisfaction [12, 24]. Behavioral technostrain includes reactions such as decreased performance or nonadherence to IS use requirements [12, 17]. Physiological technostrain includes endocrinological changes like an incidence in stress hormones [25, 26]. Technostrain can also spill over and manifest itself at home in private life, such as impairing partnership satisfaction [27]. In sum, technostressors and their adverse reactions highlight that it is relevant to intentionally mitigate technostress consisting of technostressors and technostrain, which leads us to look into technostress management strategies.

We refer to technostress management strategies as ways for mitigating technostress, which can be initiated by the user, system developers, the organization, or the social environment. We consider coping strategies, which are actions or emotions users apply to handle the perceived threat from technostressors [28], as a subaspect of technostress management strategies initiated by the user. Insights into technostress management strategies are essential for preventing or reducing health impairment and financial losses that arise from technostress. Our literature review provides an overview of technostress management strategies to mitigate these adverse consequences. Existing technostress literature reviews either focus on the causes and consequences of technostress or, in general, on factors that influence technostress, which are not necessarily malleable. Our focus on technostress management strategies provides an action perspective meaning that we reveal factors that are malleable and can therefore be intentionally initiated to mitigate technostress. As technostress management is an

interdisciplinary topic studied by different disciplines, it is not enough to solely focus on IS literature. We, therefore, integrate the contributions from IS, OB, and psychology literature.

3 Methods

As emphasized by Webster and Watson [9], the major contributions are likely to be published in the leading journals of the field. Therefore, we used the databases Business Source Ultimate and PsycInfo and searched the leading journals of each discipline, which we selected based on the AIS basket-of-eight journals, the Financial Times ranking lists, and journals previously searched for in review papers [1]. We searched the title, abstract, and keywords for the keyword string (see Table 1).

We selected empirical research studies examining knowledge workers in the working age, i.e., between 18 and 65 years. Turning to the study design, we did not limit our review to a specific design. We included articles that study technostress arising from the work-related usage of IS. Regarding report characteristics, we included peer-reviewed articles reported in English that were published between January 2007, the year when the technostress measure was developed [11, 29], and July 2021. Our literature review focuses on technostress management strategies but also incorporates findings on factors reinforcing technostress. We chose to include factors reinforcing technostress because these findings strengthen our understanding of how technostress can be influenced and provide a first indication that their counterparts might be worth investigating for technostress management.

After a screening of the titles and abstracts of the keyword hits, we excluded articles due to the following reasons: The article does not deal with stress or strain, e.g., uses the keyword stress in a different meaning, such as the verb "to stress"; the article deals with other forms of stress, e.g., stress on the environment, or stress experienced by professionals but not due to the use of IS; the article is an Editorial or Opinion paper; the article focuses on technostress in the private context; the article does not deal with aspects of mitigation, reduction or coping. Moreover, we excluded articles that deal with non-malleable factors such as the Big Five personality traits because they cannot be changed and are therefore not considered to be technostress management strategies.

After that, we obtained full texts for all hits that met the inclusion criteria or where there was uncertainty about the inclusion. The screening of the full texts led to 10 valid articles that fulfill the inclusion criteria out of the 66 retrieved ones from IS journals, 1 out of 9 from OB journals, and 3 out of 11 from psychology journals. To detect further relevant articles, we conducted a backward and forward search, which led to 7 further articles by the backward search and 1 further article by the forward search as well as one additional journal (see Table 1). In total, we identified 22 valid articles that set the grounding for our literature review.

For data extraction, we used an apriori developed and standardized form refined during the piloting of extraction. We extracted the methodological approach and design of the study, mitigation/reinforcement details, as well as the technostressors and technostrain aspects studied. For parsimony and reduced complexity, we subsumed IS

demands, stressors, and technostressors under one aspect, although they are conceptually different. While psychology literature tends to study IS demands as aspects of the IS that are not necessarily appraised as threatening, IS literature tends to study technostressors that are based on its definition already appraised as threatening [1]. Moreover, stressors can also arise without using IS, but as they are studied as a result of technology [10], we view them as conceptually close enough to subsume these aspects.

In sum, our methodological approach follows the guidelines from the PRISMA statement and the guidelines provided by Webster and Watson [9].

Table 1. Search Strategy

	IS	OB	Psychology	
Keyword	technostress OR stress	(techno OR ICT OR	Same like for OB	
string	OR strain AND (coping	telework OR telecommut		
	OR cope OR mitigat*	OR "e-mail" OR		
	OR reduc* OR inhibit*	electronic) AND		
	OR moderat* OR	(technostress OR stress		
	interven* OR manag*)	OR strain AND (coping		
		OR cope OR mitigat*		
		OR reduc* OR inhibit*		
		OR moderat* OR		
		interven* OR manag*))		
Journals/	MIS Quarterly,	Organization Science,	Work and Stress,	
Conferences	Information Systems	Administrative Science	Stress and Health,	
	Research,	Quarterly,	Journal of	
	Journal of the	Academy of	Occupational	
	Association for	Management Review,	Health	
	Information Systems,	Academy of	Psychology,	
	Journal of Management	Management Journal,	International	
	Information Systems,	Organization Studies,	Journal of Stress	
	European Journal of	Human Relations	Management,	
	Information Systems,		Journal of	
	Information Systems		Applied	
	Journal,		Psychology,	
	Journal of Information		Personnel	
	Technology,		Psychology,	
	Journal of Strategic		Organizational	
	Information Systems		Behavior &	
	Computers in Human		Human Decision	
	Behavior*		Processes	
Hits	66	9	11	
Relevant hits	10	1	3	
Back-/forward	8			
Sum	22			
Note: *Journal in	Note: *Journal in which part of the backward search articles was published.			

4 Results

We next present the main characteristics and core findings of the studies included in our literature review (see Table 2). We start by presenting the methodological approach and design of the studies. Next, we structure the core findings on the basis of the grounding of the strategies – the user and the environment, while we subdivide the environment into the technological, organizational, and social environment. To conclude, we illustrate specific strategies for certain technostressors.

4.1 Methodological Approach

Regarding the methodological approach of the studies, almost all of them used a survey methodology, with distinct exceptions. One intervention study used a pre- and post-intervention measure [20], and two studies conducted experiments [15, 25]. Turning to the design of the study, the majority of studies used a cross-sectional design, focusing on interindividual differences, while some studies conducted a longitudinal study, which allows studying intraindividual [16, 23, 27] or long-term effects [5, 30]. These characteristics are consistent across all three disciplines.

4.2 Strategies Grounded in the User

Dispositional factors such as capabilities, beliefs, and malleable personality traits of a user influence the extent to which a user perceives technostress. Users with higher *computer experience*, meaning that the user has been using IS over their lifetime, and higher *computer self-efficacy*, implying that the user believes in their own ability to use IS successfully, perceive less psychological technostrain from technology-mediated interruptions [15]. Fortunately, research has revealed that a user's capabilities are not fixed, but can be trained, thereby mitigating technostress. For instance, a *cognitive behavior skills training*, which helps users improve their IS competencies, personal workflow, and email literacy, leads to a reduction of behavioral technostrain and that email-overload less strongly leads to behavioral technostrain [20].

Turning to malleable personality traits, the willingness to try out new IS (*personal innovativeness in information technology*) and the focus on the present and attention to details of the IS (*IT mindfulness*) lead users to perceive lower technostressors [5]. Also grounded in the user, the *promotion focus* of a user, which refers to a user's intention to integrate him or herself with a goal, as opposed to a prevention focus, which refers to a user's intention to prevent adverse events in life, reduces that technostressors lead to psychological technostrain [18].

Next to these dispositional factors, user actions influence technostress perception. Research has identified multiple email capabilities, i.e., actions users take to process their messages while dealing with email interruptions. While some increase psychological technostrain, *deleting the emails* decreases users' psychological technostrain [16].

Besides these actions, users also enact coping strategies, which are actions or emotions they apply to handle the technostressors [1]. Adaptive coping strategies, i.e.,

attempts that focus on the problem, decrease psychological technostrain [31]. More specifically, several coping strategies reduce that technostressors lead to behavioral technostrain: expressing own feelings about upsetting aspects verbally (distress venting), separating oneself from the stressful situation (distancing from IS), giving stressful situations a positive meaning (positive reinterpretation), and having control over performing a specific IS use behavior (IS control) [28]. Similarly, we see that resource control, meaning that users remove themselves from the technostressor by relaxing or engaging in activities not involving IS, decreases the effect of users' perceived techno-overload on physiological technostrain. Method control, meaning that users control which methods they use for completing their work tasks, reduces the effect of users' perceived techno-conflict on physiological technostrain [25].

Next to these technostress management strategies grounded in the user, some factors reinforce technostress, which may give insights into factors that should be avoided to reduce technostress. Users who *leave their emails in the inbox* or *communicate in parallel* perceive more psychological technostrain [16]. In contrast to adaptive coping strategies, *maladaptive coping strategies*, i.e., disengaging or ignoring technostressors, increase psychological technostrain [31]. Turning to coping strategies in response to context-specific technostressors, *moral disengagement* in response to security-related technostressors leads to higher behavioral technostrain [17]. Technostressors during work lead to *negative affect*, which spills over into private life as it increases psychological technostrain at home [23, 27]. Moreover, negative affect from technostressors more strongly leads to psychological technostrain at home for users who integrate aspects of work and home and remove boundaries between the two domains, referred to as *work-home role integration* [27].

4.3 Strategies Grounded in the Technological Environment

The IS employees use for work feature specific IS characteristics that shape the perception of technostressors. The IS characteristics *usefulness*, i.e., the IS enhances job performance, *reliability*, i.e., IS features and capabilities are dependable, and *anonymity*, i.e., the users' exact use of the IS is not identifiable, reduce that users perceive technostressors [10]. The possibility to decide when to view and respond to messages incoming by IS, referred to as *timing control*, reduces that frequent interruptions lead users to perceive techno-overload [25].

In contrast, the IS characteristics *presenteeism*, meaning that the IS enables users to be reachable, and a high *pace of change*, meaning that the users perceive IS changes as rapid, amplify users' perception of technostressors.

4.4 Strategies Grounded in the Organizational Environment

Turning to the organizational environment, research informs us about the technostress-reducing effects of organizational efforts such as technical help for users through help desks (*technical support provision*), facilitating the sharing of technical knowledge (*literacy facilitation*), and training and facilitating user involvement as well as experimentation with IS (*involvement facilitation*). These factors were found to

reduce both – technostressors as well as psychological and behavioral technostrain [11, 12, 32, 33]. Similarly, *IS support*, implying personal assistance and resources/upgrades support like training, online support, help desk support, and change management support reduces psychological and behavioral technostrain [22, 30]. Moreover, users perceiving *boundary control* as they perceive autonomy over the timing, frequency, and direction of transitions between work and nonwork domains experience less psychological technostrain from techno-invasion [23]. If organizations support the employees to perceive *organizational support in work-home boundary management*, the users' negative affect – which is induced by technostressors – less strongly leads to psychological technostrain at home [27].

Turning to factors that have an opposite effect and reinforce technostress, we see that users from more *centralized* and *innovative organizations* perceive more technostressors than users from decentralized or less innovative organizations [34].

4.5 Strategies Grounded in the Social Environment

A few results indicate that the social environment, such as colleagues and leaders, also needs to be considered for technostress management strategies. *Peer advice ties*, which refers to informal self-organized support by fellow employees, reduce users' psychological and behavioral technostrain [30]. Interestingly, when traditional organizational support structures, e.g., training or help desk support, are investigated alone, they decrease psychological and behavioral technostrain. However, when there are also peer advice ties, the relationship becomes insignificant [30].

In contrast, *social norms* for responsiveness and *normative response pressure*, referring to the pressure to respond promptly to emails, increase that users perceive psychological technostrain from email stressors [19] and that users perceive technoverload [35]. Turning to leaders, a poor relationship between a leader and a follower (*poor leader-member exchange*) increases that techno-overload leads to psychological technostrain [21].

4.6 Strategies Specific for Certain Technostressors

The majority of IS studies on technostress management strategies has investigated technostressors as a conglomerate of the five common technostressors (technooverload, techno-invasion, techno-complexity, techno-insecurity, and technouncertainty) [11] and did not investigate technostress management strategies separately for specific technostressors [5, 11, 12, 17, 18, 28, 32, 33, 36]. In contrast, each of the included OB and psychology articles has studied technostress management strategies separately for specific technostressors [19, 22, 23, 35], for instance, how boundary control influences the effect of techno-invasion on psychological technostrain [23]. These findings on specific technostressors provide the first indications that technostress management strategies do not affect each technostressor and technostressors' effect on technostrain in the same way. Concretely, while *resource control*, i.e., taking a break, decreases the relationship between techno-overload and physiological technostrain, it increases the relationship between techno-conflict and physiological technostrain [25].

Similarly, while *method control* increases techno-overload's effect on physiological technostrain, it decreases techno-conflict's effect on physiological technostrain [25]. Moreover, some technostress management strategies only work for distinct technostressors. The technostress management strategy of IS support, more specifically personal assistance, reduces that IS hassles lead to psychological technostrain, but not that IS learning expectations lead to psychological technostrain [22].

Table 2. Summary of Research Findings

	Mitigation	Reinforcement	
User Computer experience [15],		Leaving emails in inbox [16],	
	computer self-efficacy [15],	parallel communication [16],	
	cognitive behavior skills training	maladaptive coping strategies	
	[20],	[31],	
	personal innovativeness in IT [5],	moral disengagement [17],	
	IT mindfulness [5],	negative affect [23, 27],	
	promotion focus [18],	work-home role integration	
	deleting emails [16],	[27],	
	adaptive coping strategies [31],	resource control [25],	
	distress venting [28],	method control [25]	
	distancing from IS [28],		
	positive reinterpretation [28],		
	IS control [28],		
	resource control [25],		
	method control [25]		
Technological	Usefulness [10],	Presenteeism [10],	
environment	reliability [10],	pace of change [10]	
	anonymity [10],		
	timing control [25]		
Organizational	Technical support provision [11,	Centralization [34],	
environment	32, 33],	innovation [34]	
	literacy facilitation [11, 32, 33],		
	involvement facilitation [11, 12,		
	[32, 33],		
	IS support [22, 30],		
	boundary control [23]		
	organizational support in work-		
	home boundary management [27]		
Social	Peer advice ties [30]	Social norms [35],	
environment		normative response pressure	
		[19],	
		poor leader-member exchange	
		[21]	

5 Discussion

Based on our systematic literature review, we contribute to technostress literature and identify five avenues for future research that extend the understanding of ways to mitigate technostress.

5.1 Contributions and Implications

We contribute to technostress literature by providing an overview of the variety of technostress management strategies effective for mitigating technostress and derive four different groundings for the strategies: the user, the technological environment, organizational environment, and social environment. This finding highlights the fact that the responsibility for technostress management does not only reside in the users themselves, e.g., that the user should engage in adaptive coping [31], but also, for instance, in the social environment, such as colleagues that provide peer advice [30].

Moreover, we consider that technostress has been studied in different disciplines – although partially using different terminology. Integrating OB and psychology literature besides IS literature into the literature review allows us to depict a more comprehensive picture of technostress management strategies. From this interdisciplinary perspective, we also illustrate that there are differences in how the disciplines study technostress management strategies, especially how they treat technostressors. In contrast to IS literature, OB and psychology literature have predominantly studied the effect of technostress management strategies on *multiple* technostressors *separately*, rather than focusing on one single technostressor or adding up multiple technostressors to study the influence of the strategies.

Existing literature reviews have provided a comprehensive understanding of how technostress comes about – by studying the causes and consequences of technostress [7]. We contribute to technostress literature by taking an action perspective and explicitly focusing on technostress management strategies that are malleable and can be changed or implemented to mitigate technostress. However, this approach also sheds light on the limitations of technostress management strategies as the same strategy can be effective for one technostressor but ineffective or even nonbeneficial for another technostressor [22, 25].

Practitioners may use the findings from this study as a collection where they can select appropriate and evidence-based technostress management strategies. Moreover, our study may draw practitioners' attention to potential pitfalls, e.g., as some strategies only work for specific technostressors or there are strategies with a thin evidence base (e.g., technological or social environment strategies), which leads us to future research avenues.

5.2 Avenues for Future Research

To guide future research on technostress management, we build upon our results and derive five specific avenues for future research.

Research Avenue 1: Intervention Studies. The majority of studies on technostress management have deployed a cross-sectional design and either concentrated on correlational relationships or grounded their derivations about the causal mitigation effect on theoretical considerations. Although longitudinal studies [e.g., 27] are the first step into investigating long-term effects and the direction of effects, we suggest future research to conduct intervention studies to examine causal relationships [20] and show that the strategies can intentionally be introduced to mitigate technostress.

Research Avenue 2: Technostress Management by the Technological Environment. Existing investigations of technostress management strategies have mainly focused on the user and the organizational environment while leaving strategies by the technological environment understudied. Technostress research has revealed how technology characteristics have technostress-inducing effects, i.e., lead users to perceive technostress [10]. However, technologies might also serve as a means to mitigate technostress. Related research in the private context, for instance, reveals that anthropomorphic design features compensate for missing supplies of the technology and thereby reduce or even neutralize adverse effects of IS [36]. Moreover, while there are wide-ranging technological advances in practice, such as the use of chatbots for providing support or applications for reducing screen time and thereby technostress, the empirical investigations of their mitigating effects lacks behind practice and should be the focus of future research.

Research Avenue 3: Technostress Management by the Social Environment. Just like the technological environment, technostress management strategies by the social environment have received scant attention and more as a reinforcing factor [19]. Strategies of the social environment are likely to affect multiple stakeholders. We, therefore, encourage future research to study strategies of the social environment but follow a multi-level approach to account for technostress changes in multiple stakeholders, e.g., leaders and followers. For instance, technostress management strategies implemented on the leadership level might cross over and reduce the followers' technostress. A leader who uses the coping strategy of distancing from IS to deal with techno-complexity [28] might thereby also reduce the followers' technooverload as the followers might receive fewer emails from the leader. Moreover, peeradvice ties [30] might decrease the technostress of an advice-seeking user but might increase the work stress of the advice-providing colleague.

Research Avenue 4: Strategies Specific for Certain Technostressors. Existing findings highlight that technostress management strategies can affect different technostressors in a different way. For instance, a strategy can lead to an opposite effect for another technostressor [25] or some strategies only work for distinct technostressors [22]. We, therefore, encourage researchers to follow the predominant approach in OB and psychology literature and split up the conglomerate of technostressors into its subdimensions to evaluate the effect of a strategy on multiple technostressors separately. This approach would also allow revealing possible adverse side effects of strategies, e.g., decreasing one technostressor while increasing another one.

Research Avenue 5: Combination of Technostress Management Strategies. Most studies have either focused on one technostress management strategy or one area of strategies, e.g., organizational strategies and no user-grounded ones [12, 33]. Future

research should investigate multiple technostress management strategies at the same time, accounting for their separate as well as combined influence on technostress for guiding practitioners in selecting the right strategy or right combination. On the one hand, we see that technostress management strategies have adverse effects, e.g., decreasing one technostressor while decreasing another one [25]. Thus, combinations of strategies might prevent adverse effects that would otherwise arise from implementing a single strategy. On the other hand, studying combinations of mitigation strategies informs us about which strategies are most effective and make other strategies obsolete. For instance, findings on support structures suggest that organizations might spend their resources on strengthening peer advice ties rather than investments in the traditional support structures because peer advice ties make the relationship between traditional support structures, e.g., training and help desk support, and technostrain insignificant [30]. Turning to the user his- or herself, related IS research informs us that users do not engage in a single coping strategy, but there are sequences of coping strategies at play [37]. Therefore, it is relevant to investigate sequential technostress mitigation strategies and to reveal how they jointly lead to technostress mitigation.

5.3 Limitations

Our work is not free of limitations. First, we limit our study to technostress in the work context, but there is also technostress in the private context. Due to the fact that there are distinct technostressors at place, e.g., social overload [38], and studies on technostress management strategies in the private context are still scarce [36], the mitigation of technostress in the private context asks for a separate investigation. Moreover, we integrate technostress management strategies that address different parts of the technostress process, i.e., the technostressor, the relationship between the technostressor and technostrain, or technostrain directly, because a combination of different technostress management strategies is assumed to be most effective for mitigating technostress [39]. However, some of the strategies are effective only for some parts of the technostress process, which we describe in the narrative synthesis, but we do not arrange the findings along this process. Finally, there has been the differentiation between distress and eustress in technostress research, splitting technostressors into hindrance and challenge technostressors [1, 24, 27]. In our research, we focus on the "dark side". Therefore, our results are limited to distress and hindrance technostressors, while the strategies that foster eustress or challenge technostressors might be different.

6 Conclusion

The omnipresence of IS tackles employees and organizations due to the risk of leading to technostress and resulting adverse consequences. Therefore, our study provides an integration and overview of ways for mitigating along with guidance for future research on technostress management by highlighting the relevant research gaps.

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