TRIAL-PERIOD TECHNOSTRESS: A CONCEPTUAL DEFINITION AND MIXED-METHODS INVESTIGATION

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Note: This paper has not been copy-edited so far
(*author accepted manuscript*)

Please cite:

Maier et al., forthcoming. "Trial-period technostress: a conceptual definition and mixed-methods investigation", *Information Systems Research*, forthcoming

ABSTRACT

This study employs a mixed-methods approach to examine how trial use of an IT can induce stress that leads individuals to reject the IT. In our qualitative study (Study 1), we identify eight technostress creators encountered during trial use of a specific IT. Then, in our quantitative study (Study 2), we show that these trial-period technostress creators reduce user satisfaction and increase intention to reject. Also, we demonstrate that motivation to learn and personal innovativeness in IT, two individual differences, moderate the influence of trial-period technostress creators on the intention to reject. Our mixed-methods study contributes to technostress research by identifying the specific technostress creators that influence the user during trial periods and by articulating the nature of this influence. By doing so, we illustrate how the interplay of the context- and domain-specific individual differences influence the relationship between technostress creators and the intention to reject. We extend adoption research by connecting technostress creators to rejection of IT in the trial period of IT use.

Keywords: Technostress, IT adoption, Trial-period, Rejection, Individual differences, Motivation to learn, Personal innovativeness with IT, User satisfaction, Mixed-methods

TRIAL-PERIOD TECHNOSTRESS: A CONCEPTUAL DEFINITION AND MIXED-METHODS INVESTIGATION

MOTIVATION

In the first weeks of trial use, many individuals reject information technologies (IT) such as electronic devices (Charlton 2020) or mobile apps (Valdellon 2020). In the case of electronic devices, rejection means physically returning consumer devices to a retailer for a refund, typically within the trial period (e.g., within 30 days of purchase). Trial-period rejection of devices is common; for example, the telecommunications company U.S. Cellular reported that about 550,000 electronic devices and accessories were returned (Blaker 2018). Such returns have caused growing losses for the consumer electronics industry as return rates have risen to almost every sixth device (Djordjevic 2021a). Given online purchases are more often returned (Djordjevic 2021b) and individuals are ordering an increasing number of consumer electronics online these direct losses are expected to increase and cause secondary losses in firms' ecosystems (e.g., app revenue).

Despite the high costs of rejection, we lack a systematic understanding of why individuals return new IT after a trial period. Such understanding is important because trial periods constitute a unique use context (Agarwal and Prasad 1997; Karahanna et al. 1999). Trial periods are relatively short, meaning that users lack opportunities to develop habits or routines, suggesting that explanations for trial-period rejection may differ from explanations of rejection after extended periods of use. Trial periods compress learning and acceptance decisions into a defined period of several weeks, so that they create immediate demands on time, requiring users to layer experimentation with the new IT on top of regular daily activities. Also, trial periods pose a clear financial risk for users because they require quickly deciding to keep the IT that they might never use. Given these unique aspects of trial-period use, there is a need for research that explicitly considers the IT trial period and the decisions it demands from users.

Given that the trial period demands immediate use, places immediate time demands on users, and compresses financial risks into a short period, we suspect that trial period pressures changes which technostress creators are more or less salient to the decision to reject or use IT, especially when compared to less-time constrained use contexts (Califf et al. 2020; Ragu-Nathan et al. 2008). For

example, trial-period pressures could change the implications of difficulty and personalization. Although difficulty might be expected with normal use, the financial pressure to make a quick adoption decision during the trial period could lead users to reject a difficult to master device. Whereas personalization may be a benefit in a regular-use context, during trial-period use personalization may cause users to reject a device due to the pressure created by defined time span and immediate demands for use. Absent an understanding of how trial-period pressures shape the salience of technostress creators, it is difficult to model how technostress creators shape trial-period IT use or rejection decisions.

In addition to the unique characteristics of the trial period, we suspect that users' individual differences shape their responses to trial-period IT use. Technostress research shows that broad individual differences influence the relationship between technostress and behavior (Srivastava et al. 2015) and recommends focusing on understanding how individual differences, such as context-specific (i.e., trial use of a tablet) and domain-specific (i.e., general IT use) differences, shape the relationship between technostress creators and responses (Maier et al. 2019). Individual differences might help to explain variance in how users respond to technostress creators (Pflügner et al. 2021). Theory and previous research in related fields suggest that the motivation to learn and personal innovativeness in IT (PIIT) may help to explain differences in how individuals react to stress creators (Maier et al. 2019) and use consumer IT (Stein et al. 2015; Venkatesh et al. 2012).

Hence, to advance the understanding of IT trial-period rejection, this paper investigates trial-period technostress creators and explores how they relate to user satisfaction during or rejection at the end of a trial period of IT use. We base our investigation on the transactional model of stress (Lazarus and Folkman 1984), as it sheds light on the deliberative process through which trial use may create technostress and its implications for users' beliefs and behavior (Ahuja and Thatcher 2005). Therefore, we systematically (1) identify trial period-specific technostress creators, (2) consider their influence on trial period-specific behavior (e.g., user satisfaction or rejection), and (3) evaluate how context- (i.e. motivation to learn) and domain-specific (i.e. PIIT) individual differences magnify or diminish the influence of technostress creators on trial-use responses. Hence, we investigate the following questions:

1. *What are trial-period technostress creators and do they lead to trial-period rejection of IT?*

2. *How do individual differences that are specifically relevant to the context and the domain of IT use in the trial period influence how users respond to trial-period technostress creators?*

To answer these questions, we conducted a mixed-method study of trial period technology use. We recruited participants who had never used a tablet and gave them a tablet for a one-month trial period; then, we either conducted interviews (Study 1) or collected survey data (Study 2). In Study 1, we interviewed 66 participants to intuit trial-period technostress creators. Guided by the critical incident technique, we used descriptive and interpretative coding to identify eight trial-period technostress creators (perceived difficulty of use, unreliability, monitoring, incompatibility, privacy concerns, transition costs, personalization complexity, and habit disruption). In Study 2, we gathered data in three waves from 112 participants in order to evaluate the relationship between trial-period technostress and trial-period rejection. We found that participants' trial-period technostress creators reduced their satisfaction and increased their intention to reject. We also observed that participants' motivation to learn and PIIT moderated the influence of trial-period technostress creators on the intention to reject but did not moderate the influence of trial-period technostress creators on user satisfaction.

Our research contributes to the IS literature on technostress and IT use. In terms of theory, we offer a foundation and rich conceptualization for studying trial-period technostress. We also offer insight into trial-period technostress creators and evaluate how they differ or align with previous technostress and IT use research. In terms of theory testing, we offer empirical evidence that trial-period technostress creators lead to low levels of user satisfaction and trial-period rejection. Also, we demonstrate that the relationship between trial-period technostress creators and trial-period rejection varies with context- and domain-specific individual differences—specifically, motivation to learn and PIIT. Collectively, we contribute by offering a theory and supporting evidence that clarify how trial-period technostress creators shape users' satisfaction with or rejection of an IT.

The remainder of the paper proceeds as follows: We begin by anchoring our paper in the trial period of IT within the IT use lifecycle and IT rejection literatures. We then summarize the relevant technostress literature and offer a theoretical explanation of trial-period technostress. Next, we describe our mixed-methods study, report the results of Study 1 and Study 2, and draw meta-inferences. Finally, we present post-survey interviews and a discussion of findings, contributions, and practical implications.

THE IT USE LIFECYCLE AND TRIAL-PERIOD REJECTION

IS research has long studied acceptance of consumer IT (Venkatesh et al. 2012) as part of the broader literature on the IT use lifecycle, which incorporates adoption, usage, and termination, as well as IT rejection (Figure 1). This research contextualizes general consumer behavior research to focus on consumers' adoption of IT innovation, examining new product innovations' characteristics such as such as relative advantage, among others, which influence consumer decisions, at the time of adoption or later in the lifecycle (Rogers 2003). As a result, this literature is well-suited to our study of trial-period rejection.

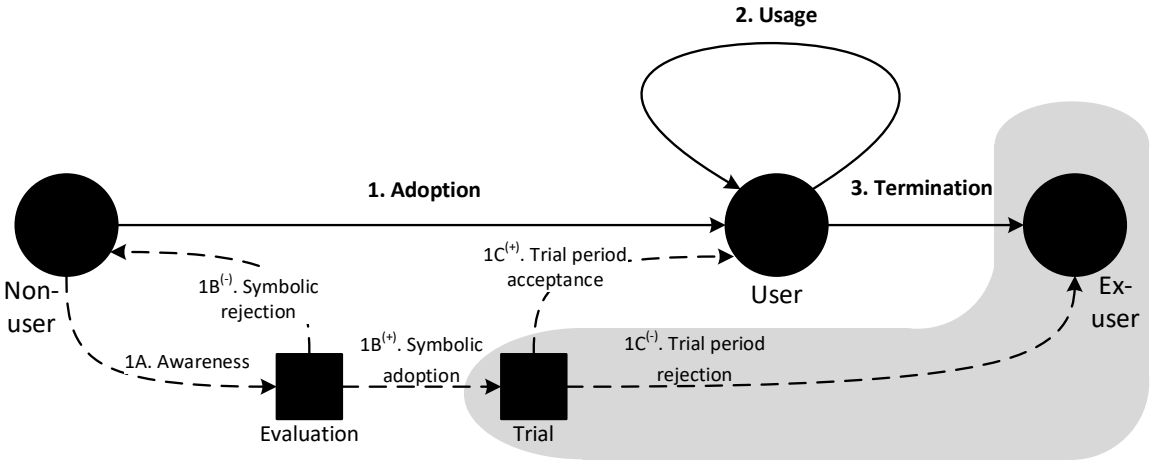

Figure 1: The adoption process model (dotted line; Klonglan and Coward 1970) in the lifecycle of IT use (solid line; Maier et al. 2015). The gray shaded area reflects trial-period rejection

IT use lifecycle. During the first stage, the adoption of an IT (*1. Adoption* in Figure 1), the individual becomes aware of an IT (*1A. Awareness* in Figure 1). Next, the individual evaluates the IT and symbolically adopts it or rejects it. Symbolic rejection (*1B(-). Symbolic rejection* in Figure 1) is the conscious decision not to adopt an IT after evaluating a use option based on a priori expectations about the IT but before actually using it (Gould et al. 1997). Reasons for symbolic rejection include a IT that is too expensive or perceived as useless (Mani and Chouk 2017). Symbolic adoption (*1B(+). Symbolic adoption* in Figure 1) implies mental acceptance of the potential value of adopting an IT (Wolverton and Cenfetelli 2019). Following symbolic acceptance, individuals then take anticipatory steps toward trying out the IT, such as purchasing a device, creating a user account on an online platform, or installing an app or software (indicated by the black box in the gray shaded part in Figure 1). During the second major

stage, the usage of an IT (*2. Usage* in Figure 1), users might integrate the IT into their daily routine, identify new ways of working with it, and develop habitual use of the IT, which let them use the IT continuously (Evanschitzky et al. 2015). Finally, in the third stage, the termination of an IT (*3. Termination* in Figure 1), the user consciously decides to stop using an IT that they have used for some period of time (Maier et al. 2015). Overall, each stage's temporal orientation implies period-specific beliefs that guide individual behavior.

Relevant to our work, the trial period occurs after symbolic acceptance and prior to the user fully accepting an IT and the user either accepts the IT (*1C(+). Trial period acceptance* in Figure 1) (Son et al. 2006) or rejects it (1C(-). Trial-period rejection in Figure 1). As such, the individual immediately becomes an ex-user following the conscious decision to stop using an IT after symbolically adopting it and trying it out. While a wide range of beliefs motivate adoption behavior (Table A-3), trialability (Agarwal and Prasad 1997) is one particularly relevant concept to voluntary trial-period adopters as it may different them from habitual IT users (Karahanna et al. 1999) as well as users in mandatory contexts (Moore and Benbasat 1991).

Table 1. Definitions of previously studied types of rejection and differences from trial-period rejection.

Types of rejection (exemplary study)	Definition	Difference from trial-period rejection
Rejection (Cenfetelli 2004)	A user's conscious decision to avoid a system.	Rejection is not focused on a specific stage of the IS lifecycle, has no temporal focus, and functions as an umbrella term.
Symbolic rejection (Gould et al. 1997)	The conscious decision not to adopt an IT after evaluating a use option based on expectations about using the IT without having any use experience.	Symbolic rejection is grounded in expectations and individuals had never used or tried the IT.
Termination (Maier et al. 2015)	The conscious decision to stop using an IT after having used it for a while.	Termination can only occur when an individual had a habit that integrated the IT routinely in their daily life.
Trial-period rejection (Focus of that research)	The conscious decision to stop using an IT after having symbolically adopted it and after trying it out.	**----**

Trial-period rejection and its unique characteristics. Trial-period rejection differs research on (1) general rejection, (2) symbolic rejection, and (3) termination (Table 1 and Table A-2).

While IT rejection research generally focuses on a "*user's conscious decision to avoid a system*" (Cenfetelli 2004, p. 479), such research varies in its temporal focus. Studies of symbolic rejection focus on users before use and studies examining termination on users during their use. Trial-period rejection differs in temporal focus, in that it directs attention to that period between when users symbolically adopt the IT and when they develop routine or habitual use of the IT. Therefore, while symbolic rejection is based on expectations and termination is based on well-formed opinions resulting from extended use of IT, trial-period rejection occurs quickly and results from quick judgments based on limited use of the IT. Although IT use research has studied symbolic rejection and termination, we direct attention here to furthering understanding of trial-period rejection—that is, to examining how technostress shapes rejection decisions made before users habitually and/or routinely engage in IT use.

TECHNOSTRESS AND TRIAL-PERIOD TECHNOSTRESS

TECHNOSTRESS RESEARCH

Technostress broadly describes stress resulting from working with IT (Ayyagari et al. 2011; Ragu-Nathan et al. 2008) (Table A-1), and IS research typically investigates two forms of technostress (Galluch et al. 2015; Maier et al. 2019). Most research focuses on technostress resulting from ongoing IT use over days, months, and years, e.g., such as using an ERP system at work (e.g., Ayyagari et al. 2011). Less research has studied technostress experienced in very specific, short episodes—typically lasting only several seconds or, at most, minutes, e.g., when a user is confronted with a system breakdown or when she or he has to perform a specific task (e.g., Galluch et al. 2015; Tams et al. 2014). Both forms of technostress research conclude that technostress creators, defined as IT-specific events or properties of stimuli encountered by users, cause strain, defined as psychological, physiological, or behavioral responses to the stress creators (Ayyagari et al. 2011). Typically, strain results when a user evaluates technostress creators as a threat (Maier et al. forthcoming). Many forms of strain have been linked to technostress, including high emotional exhaustion (Ayyagari et al. 2011), low job satisfaction

(Ragu-Nathan et al. 2008), low end-user satisfaction (Tarafdar et al. 2010), high job burnout (Pflügner et al. 2020) and discontinuous use (Maier et al. 2015).

The role of individual differences in technostress research. Users' capacities, qualities, and skills determine their response to technostress creators. Lazarus and Folkman (1984) suggest that individual differences in psychological vulnerability, commitment, and values, as well as differences in personal resources and capacities influence responses to stress creators. Individual differences refer to "*factors such as personality, situational, and demographic variables that influence users' beliefs about and use of information technology*" (Thatcher and Perrewé 2002, p. 383). Research suggests two ways that individual differences shape technostress creators and influence strain. Individual differences influence whether a user perceives technostress creators. For example, low levels of IT mindfulness, low levels of PIIT, or high levels of neuroticism increase perceptions of technostress creators (Maier et al. 2019). Also, individual differences influence how technostress creators translate into strain. For example, when users are predisposed to be open or less neurotic, the perception of technostress creators is less likely to reduce job engagement (Srivastava et al. 2015). IS research provides ample empirical evidence of individual differences influence on beliefs and behaviors (Maier et al. 2019; Thatcher et al. 2018).

Innovation adoption. In addition to technostress research, consumer research (Rogers 2003) acknowledges that product innovations may lead to stress, anxiety, and coping responses among consumers (Cui et al. 2009; Mick and Fournier 1998). Evidence suggests that product innovations can provoke ambiguity that trigger anxiety and stress (Cui et al. 2009; Duhachek and Iacobucci 2005; Luce et al. 2000; Yi and Baumgartner 2004). Further, evidence suggests that consumers' coping behavior in response to anxiety and stress is manifest in both the pre- or in the post-adoption stage (Mick and Fournier 1998). Also, consumer research emphasizes individual differences help to explain consumers selection of coping behaviors (Duhachek and Iacobucci 2005; Hamilton and Hassan 2010; Mathur et al. 1999). While consumer research helps to explain why consumers enact coping strategies, it leaves reletiavely unexamined stress creators experienced by consumers when trying out a new product innovation (Cui et al. 2009; Pavia and Mason 2004). To understand why some innovations, be they technology or otherwise, cause stress, anxiety, and coping responses, it is necessary to direct attention to the trial-period examine which, and how, technostress creators impact consumer decisions.

TRIAL-PERIOD TECHNOSTRESS

We maintain that *trial-period technostress* results from a transactional process (Lazarus and Folkman 1984) in which an individual is confronted with technostress creators that generate strain while trying out an IT. We define *trial-period technostress creators* as stressful stimuli and demands that are encountered by a user when trying out an IT. When a user evaluates trial-period technostress creators as threats that lead to personal loss, constraint, or harm, the user responds to the technostress creators with *psychological strain*, e.g., reduced user satisfaction, or *behavioral strain*, e.g., high intention to reject. We propose that trial-period technostress creators are perceived as threats, imply psychological and/or behavioral responses, and occur when trying out an IT, and thus have the potential to inhibit IT use.

Delineation of trial-period technostress (Table 2). While previous technostress research focuses primarily on ongoing or extremely short-lived stressors, trial-period technostress is associated with a specific temporal orientation. Specifically, trial-period technostress takes a mesostate position, meaning that there is a fixed start and end point; this suggests that the focus on context for use, the voluntariness of use, and range of technologies involved differ from extant technostress research. Whereas much technostress research directs attention to stressors and outcomes related to employment, such as job performance, turnover, or job burnout, the trial period directs attention to individuals' trial-period IT use and the decision to keep or reject an IT (Figure 1).

Further, while most technostress research examines technostress as a result of mandatory, work-related IT use, e.g., enterprise resource planning (ERP) use at work or using a personal smartphone for work purposes (Ayyagari et al. 2011), trial-period use is most often voluntary. In mandatory settings, technostress research tends to focus on coping behaviors, such as taking a break or pushback (Maier et al. 2021); in contrast, during the trial period, users can cope with technostress by simply rejecting the targeted IT (e.g., returning it to a retailer). In voluntary settings, such as those typically corresponding to trial-period use (e.g., consumer electronics or apps), users lack habits that help them respond to trial-period technostress creators (Tarafdar et al. 2020). Also, while technostress research has mostly focused on combinations of IT applications, trial-period technostress generally applies to one specific IT application, such as the use of a tablet.

Importantly, we do not contend that prior technostress research is not relevant—indeed, established technostress creators, e.g., perceived difficulty to use or unreliability (Ayyagari et al. 2011) and personality characteristics, may be relevant to trial use—rather, we argue that additional stressful stimuli, such as demands for time required to learn to use a new IT (Laumer et al. 2016; Polites and Karahanna 2012), are likely important for understanding the trial period. Also, whereas extant IS research directs attention to precursors of stress, such as negative affect, trait anxiety, neuroticism, and IT mindfulness (Maier et al. 2019; Thatcher and Perrewé 2002), our research directs attention to individual differences relevant to the trial period, such as specific IT (e.g., motivation to learn) and the domain of using IT in general (e.g., PIIT).

Table 2. Delineation of trial-period technostress and previous research in related technostress

Characteristics	Trial-period technostress	Technostress
Relevant stage in the IT use lifecycle	IT adoption	IT usage and IT termination
Temporal orientation	Fixed start and end point (e.g., first 30 days) (mesostate)	Chronic (ongoing) or episodic (short-lived)
Use purpose	Knowing whether to keep or reject the IT	Many different outcomes
Financial risks for the user	Yes, if the user wants their money back (e.g., by returning the IT to the vender)	No, the organization has bought the IT
Time demands	High due to compressed time to learn using the IT	Low to medium
Use experience	No experience, no habit, no routine	High experience, strong habit, strong routine
IT use context	Voluntary, in private	Mandated at work
Technological orientation	Focus on trial use of one specific IT	Focus on using a combination of IT
Stress creators	IT characteristics Change characteristics Intrusive characteristics	IT-characteristics (e.g., overload, complexity)
Strain, responses to technostress creators	User relevant (e.g., trial rejection) IT relevant (e.g., decreased user satisfaction)	User relevant (e.g., burnout, termination) IT relevant (e.g., decreased user satisfaction) Business relevant (e.g., decreased performance and innovativeness, increased turnover)
Further context variables	Context- (here: tablet) and domain- (here: IT) specific individual differences (e.g., Motivation to learn, PIIT)	General individual differences (e.g., Big Five, IT mindfulness)

Theoretical framing. Theories of stress suggest that technostress creators are the direct product of an interaction between the user and his or her environment (Lazarus and Folkman 1984, 1987). When technostress creators threaten the user, and taxes user resources, they result in strain (Maier et al. forthcoming). Individual differences shape how users evaluate their ability to handle *internal shortcomings* and *external environmental contingencies* that may arise during the trial period, which then influences user rejection decisions (Ahuja and Thatcher 2005; Maier et al. 2019).

THE MIXED-METHODS STUDY

We employ a mixed-method, two-study design (Tashakkori and Teddlie 2003) (Table 3). Our epistemological perspective follows a multiple paradigm stance, and we take a pragmatic approach, placing the greatest importance on our research questions and on selecting the most suitable research method to develop deep and detailed insights into trial-period technostress (Califf et al. 2020; Sarker et al. 2018; Venkatesh et al. 2013), and combine different methods and paradigms (e.g., induction, in line with Study 1; deduction, in line with Study 2) in order to investigate trial-period technostress. We follow a developmental purpose: Study 1 identifies trial-period technostress creators and Study 2 examines how trial-period technostress creators influence intention to reject. Our design strategy—which is sequential, fully mixed-method, multistrand, and less-dominated qualitative, followed by dominant quantitative investigation—allows us to elaborate on and extend theory by developing a rich understanding of trial-period technostress creators and user responses to them.

Table 3. Mixed-methods study (adapted from Sarker et al. 2018 and Venkatesh et al. 2013)

Overall study		
Purpose:	Developmental	The qualitative study aimed to identify trial-period technostress creators to develop hypotheses, the quantiative study aimed to test the hypotheses.
Nature:	Sequential less-dominant qualitative followed by dominant quantitative study	The objective of the qualitative study is mainly the base for the quantitative study, which then provides the main responses to the research questions.
Phase I: Qualitative study *Objective*: Identification of trial-period technostress creators to develop a research model and hypotheses		
Design quality:	Design adequacy	*Selection of suitable interviewees*: Only individuals with a realistic willingness-to-pay and who had never used a tablet before participated. *Ensuring credibility:* We gave individuals a tablet, so that they can use it e.g. at home on her own. *Interview conduction:* Interviews were conducted by two or three of the researchers. We had an overall interview guideline but followed the principles of flexibility, nondirection, specificity and range.
	Analytic adequacy	All interview data was transcribed. Relevant factors were identified by at least two of the authors through coding the transcripts. One of the authors transcribes the data in two different points in time. Due to that we can offer inter- and intra-coder reliability We used descriptive and interpretative coding. We illustrated the trial-period technostress creators by offering quotations to show plausibility.
Phase II: Quantitative study Objective: Testing the research model to understand the reactions to trial-period technostress creators		
Design quality:	Design adequacy	Theory-driven research model developed for empirical testing We use well-established measures or used q-sorting to develop measures for new constructs We follow the same sampling strategy as we did for the qualitative study We collected a sample large enough to test the research model
	Analytic adequacy	We use PLS as analysis technique and SmartPLS as tool. We validated that the sample size is powerful by using different calculations (e.g. rule of ten and further calculations) We used reverse measures and show items randomized to users so that we minimize biases.
Meta-inferences		
Explanation quality:	Qualitative inferences	The identified trial-period technostress creators are plausible and relevant for the specific trial phase.
	Quantitative inferences	Internal validity is given as we use control variables, follow a reliable data collection process, use reliable measures, appropriate statistical tests and re-do some of our analysis with a second source of data (e.g. trial-period technostress creators). We also use common statistcial tests to demonstrate the validity of our measures and constructs and to show that CMB does not distort the results. External validity is given as we also studied the role of individual differences and followed an explicit sampling strategy to minimize potential biases.
	Meta-inferences	In our exploratory qualitative study, we identify eight relevant trial-period technostress creators to then derive hypotheses in terms of the influence on user satisfaction and intention to reject, by respecting the influence of individual differences. We see that all eight identified trial-period technostress creators are significant related to the second-order construct. The relationships between trial-period technostress creators on satisfaction and intention to reject are significant and the influence of trial-period technostress creators on intention to reject is significantly moderated by personal innovativeness on IT and motivation to learn. We explain more than 59% of the variance in our dependent variable, so that we ensure integrative efficacy by having a good balance between comprehensiveness (all relevant trial-period technostress creators) and parsimony (high focus on trial-period technostress) in our research model. We discuss the inference transferability in the context of consumer electronic, collected different samples so that their consistency underscores the strength of our research design and supports the richness and robustness of our findings and ensure integrative correspondence by being able to respond to the research question as a consequence of the mixed-methods design and by developing a holistic view on trial-period technostress.

RESEARCH DESIGN

Study 1 and Study 2 focused on consumer devices, specifically tablets, because industry reports indicate that many are rejected during the trial period (Dalrymple 2011). We solicited participation from individuals who had never used a tablet but were interested in trying one out. In both studies, participants were given a Samsung Galaxy NotePro tablet that had been provided by the Samsung Electronics Co. LTD to use without restriction for 30 days—i.e., they were free to use any functionality of the tablet and could install or remove applications. We chose a month as our "trial period" because, in Germany where our participants reside, retailers typically provide 30 days to return products for a full refund. We collected qualitative and quantitative data at different points during the trial period (Figure B-2). For Study 1, we interviewed participants during the first few days of the trial period; for Study 2, we collected survey data at three points in time. Our first survey collected control variables (age, gender, income). Our second survey collected data on trial-period technostress creators and other beliefs about IT use at the end of the trial period. Our third survey collected data on participants' intentions to reject the IT.

SAMPLING STRATEGY

We wanted to sample from a population that could immediately enter the trial period, had never used a tablet, and were interested in doing so, i.e., they had already symbolically adopted using a tablet (Figure 1). To attract participants, we issued an open call for applications to participate in a research project involving the use of a state-of-the-art tablet for a month on three forums: a research institute's website, on social media platforms, and to more than 1,000 individuals enrolled in a research database. Potential participants filled out an online application form that gathered demographic data such as age, gender, income, their willingness to pay for the tablet, and IT-specific data, such as experience with IT in general and with tablets in particular. We also asked whether applicants were experienced in using the operating system of the tablet—e.g., through smartphone use.

We screened 393 applicants using the following criteria. We removed 78 participants who indicated that they had used a tablet previously (i.e., they had already experienced a trial period of tablet use) and also removed five participants who did not know what a tablet is (i.e., they did not know enough to

symbolically adopt the tablet). Also, we removed participants who reported low purchase intentions or unrealistic beliefs about costs (i.e., they had not symbolically adopted the tablet). In addition, we screened out participants who scored less than 3 on intentions (on a 1-7 Likert-type scale) and those who were only willing to pay the equivalent of 1 euro to purchase a tablet. This procedure resulted in 178 qualified participants. Five participants, who withdrew their applications for personal reasons, were replaced with five new, randomly selected, qualified participants from our list. Finally, we randomly assigned applicants to either Study 1 (66 applicants) or Study 2 (112 applicants).

STUDY 1

PROCEDURE AND SAMPLE CHARACTERISTICS

Study 1 employed the critical incident technique (CIT) to identify trial-period technostress creators and interview each participant using a structured interview guideline (Appendix C). We interviewed all 66 participants on Days 2 and 3 (Figure B-2). The Study 1 sample comprised 53% women and 47% men, with an average age of 27 (SD = 5), with 77.9% of the sample ranging in age from 25 to 54. We realized a 100% response rate, meaning that we interviewed all participants because the agreement to participate in the project required participating in interviews.

We questioned participants about beliefs, thoughts, feelings, and behaviors related to critical occurrences experienced while trying out the tablet (Flanagan 1954; Gremler 2004). Occurrences refer to major positive or negative incidents related to trial-period tablet use. In order for the occurrence to be critical, the interviewee had to express confidence that the occurrence had a causal relationship with the outcome of the study, in our case the trial rejection of the tablet. Examining critical occurrences helped elicit a list of trial-period technostress creators.

The interviews were conducted by two of the authors, lasted between 20 and 60 minutes, and were conducted during the first few days of the trial period. We recorded and transcribed each interview, and used these data as the basis for our qualitative analysis (Fielding and Schreier 2001; Yin 2009) as well as to seed our coding of trial-period technostress creators (Miles et al. 2013; Myers 2009), employing the software program MaxQDA to support qualitative coding.

CODING PROCESS

We coded the data for internal shortcomings and external contingencies that were perceived as trial-period threats. We used the transactional model of stress (Lazarus and Folkman 1984) and knowledge that internal shortcomings and external environmental contingencies that arise during the trial period (Ahuja and Thatcher 2005; Bagozzi and Warshaw 1990) cause feelings of threat or psychological and behavioral responses. Next, we categorized the trial-period technostress creators using descriptive coding (Myers 2009) that we used to compare and contrast similar and different technostress creators, which we then named as descriptive codes. We then applied interpretive coding (Gasson 2004; Hay 2010), which we used to group the descriptive codes. With that approach, we saw differences from previously published related research (Cenfetelli 2004; Cenfetelli and Schwarz 2011). While that research has identified factors that hinder IT use, we focused only on identifying stimuli that are considered as threat and cause responses, so that they could be classified as stress creators. The coding and abstraction process is illustrated in Table C-1.

Established validation criteria guided our coding process (Venkatesh et al. 2013). We accounted for design validity by describing our research setting in detail in order to ensure a highly transferable (e.g., to the use of wearables) and credible setting. We also accounted for analytical validity, which is reflected by our descriptive coding approach, thus ensuring high theoretical validity as well as transparent and plausible coding (Table C-1). To account for inferential validity, the coding process was completed and repeated by three researchers, which served to confirm the results. The intercoder reliability was 94%. In addition, one of the authors coded the statements twice—once when the data were collected, then again twelve months later—yielding an intracoder reliability of 97%. This validation process ensured that the data were coded in a valid and reliable manner.

STUDY 1 RESULTS

While trying out a tablet, 51 out of 66 interviewees reported that they felt stressed by using the device in the trial period. The stress was tied to the trial period, meaning that the fixed temporal orientation of about 30 days, was attributed as a source of stress. To use the tablet, the interviewees report that they had acquire experience with the IT, within this short time period, and then use this experience as base

for further decisions. Interviewees found this threatening as they cannot rely on previous IT experiences, habits, or routines. Based on these general insights, we moved to eliciting insight from our interviews about specific characteristics of the short trial period of an unknown IT that caused technostress.

Analyzing 51 interviewees's responses allowed us to identify eight trial-period technostress creators (summarized in Table 4). We present these technostress creators in three categories defined by IT characteristics (perceived difficulty of use, unreliability, personalization complexity), change characteristics (transition costs, habit disruption, incompatibility), and intrusive characteristics (monitoring, privacy concerns).

IT characteristics: Perceived difficulty of use, unreliability, personalization complexity

A large number of interviewees report that they were stressed due to issues around the tablet itself. While one of the specific characteristics of the trial period is that no experience exists in how to use the tablet, interviewees have to try out the new tablet, learn to use it, interpret the response of the tablet, and understand its design and features within a short period. Consequently, these characteristics drive what users perceive as internal shortcomings or external environmental contingencies concerning the interaction with the device as a threat leading to either behavioral or psychological responses. We present the three identified trial-period technostress creators that in the following paragraphs.

We identified *perceived difficulty of use*, which describes the degree to which individuals perceive an IT to be complex and difficult to use. Individuals reported that they felt threatened by difficulties encountered while using the tablet, e.g., the settings were too complex, it was too difficult to try out the tablet's features, and/or they found it necessary to turn off features. Individuals highlighted they felt especially threatened as they were aware of the short period in which they need to learn using the tablet. The design of a tablet was completely new to them, which made it complicated for them to find out how to use it effectively and efficiently. In our coding process, we identified internal shortcomings (e.g., difficulty using the tablet) or external environmental contingencies (e.g., no instruction manual) that triggered threats in terms of difficulty of use leading to either behavioral (e.g., asking for help) or psychological (e.g., feeling annoying) responses.

We identified *unreliability* or the degree to which individuals believe that an IT does not behave in a consistent way. In other words, individuals felt threatened when certain apps or the device itself did not respond or when they encountered malfunctions or issues of instability while trying to use the tablet. Especially, the more apps or the tablet itself remain instable over time, the more individuals reported that they felt threatened as they might not be able to evaluate the tablet within the trial period. The interview results indicate that unreliability is based either on the inability of the individual to use the tablet appropriately or on the unreliability of the tablet itself because of bugs or tablet malfunctions. Hence, unreliability can either be grounded in perceived individual shortcomings or in external environmental contingencies related to the tablet characteristics themselves, which, as our interviewees indicated, led to either behavioral (e.g., trying to fix it) or psychological (e.g., frustration) responses.

We identified *personalization complexity* or the degree to which an IT can be adjusted and modified by users to suit their personal needs and preferences—for example, by adjusting the way applications are arranged on the main screen or choosing a wallpaper. Individuals reported that the complexity of customization, adjustability, and individualization created strain, indicating that the personalization complexity threat is primarily based on the tablet as an external environmental contingency that, by design, constrains the possibilities for personalizing the tablet for individual use and leads to psychological responses (e.g., frustration).

Change characteristics: Transition costs, habit disruption, incompatibility

In addition, interviewees shared that they were stressed due to the behavioral changes that come with using the tablet. They reported that before starting to use the device in the trial-period, they had a well-established habit in which they do not rely on the use of a tablet. The tablet required them to change their habits and to integrate the new device into their daily routines. This is needed as otherwise the tablet cannot provide value. Hence, interviewees report that they have to invest time and effort to adapt their behavior, leave well-established habits behind, and find use cases that allow them to integrate the tablet and also shows a fit with their lifestyle. Interviewees indicate that this is threatening as it has to happen in a short period and because there is a high uncertainty. Consequently, these characteristics specific to the trial period imply that the behavioral change can create technostress when the user perceives internal shortcomings or external environmental contingencies concerning the change from

the status quo required because of the new IT as a threat leading to either behavioral or psychological responses. We present the three identified trial-period technostress creators in the following.

We identified *transition costs* or the degree to which individuals perceive that they must invest time and effort into becoming familiar with the IT to adapt their behaviors accordingly. For example, a new user must learn how to adjust the settings and synchronize the tablet with other IT. In our interviews, these transition costs were described as threatening because time and effort were required to set up the device. Individuals were threatened as the IT itself was unknown. There were no experiences on integrating such an IT into one's routine such that the efforts required within the short time of the trial period were perceived as threatening. As such, the threat of transition costs related to individual shortcomings can lead to negative psychological responses (e.g., annoyance).

We identified *habit disruption* or the degree to which one perceives leaving established habits behind as difficult. Individuals reported that using the new tablet made them feel threatened. It required them to break old habits quickly without knowing how new habits might look like when using the tablet for the first time. For instance, one participant reported regularly using various apps on her smartphone while watching TV in the evening. Although she could have used the same apps on the tablet, she was shackled to her habit and continued to use the smartphone. These habits are specific to the individual, and disruptions can be evaluated as threats related to perceived individual shortcomings that induce negative psychological responses (e.g., annoyance).

We identified *incompatibility* or the degree to which individuals perceive that an IT fits to their lifestyle, is consistent with their past experiences, existent values, and needs, and so opens several use cases. For example, our participants felt threatened when the tablet does not fit in their existent technological ecosystem such that they had to acquire additional products to use the tablet or when they had to change their lifestyle of way of living to use the tablet and its features. Incompatibility is particularly relevant in the trial period when individuals have to find use cases for it, integrate it in their life, and fit it to their lifestyle. The reasons for this type of threat seem to relate only to external environmental contingencies (e.g., previous use of Apple products only) and led to psychological responses (e.g., frustration).

Intrusive characteristics: Monitoring, privacy concerns

Finally, interviewees indicate that they were stressed as the tablet has intrusive characteristics. The interviewees report that they have no experience with how to handle such situations and encounters when using the tablet in the trial period. Among others, they are unsure how to avoid that others can monitor their activities and protect disclosed data. So, our results show that these characteristics are responsible for the user to perceive internal shortcomings or external environmental contingencies leading to either behavioral or psychological responses. We will present the two identified trial-period technostress creators that are related to the IT in the following.

We identified *monitoring* or the degree to which individuals think that an IT allows others who may also be using the IT to monitor their activities. The interviews supported the contention that individuals feel threatened by the traceability opportunities provided by a tablet that might allow others (e.g., family members) who also use the tablet to monitor their use behavior. Individuals were threatened when they encountered these experiences for the first time when trying out the tablet. We identified only external environmental contingencies (e.g., other people's access to or use of the tablet) that triggered threat perceptions in terms of monitoring that led to psychological responses (e.g., feeling uncomfortable).

We identified *privacy concerns* or individual concerns about opportunistic behavior related to data disclosed while using an IT. Individuals reported that they felt threatened by the fact that information stored on the tablet could be misused. We received reports of fears about information misuse or perceived illegitimate data access that may either relate to perceived individual shortcomings or external environmental contingencies. Related to perceived individual shortcomings, individuals reported strong concerns about the IT itself, in that privacy concerns are seen as a threat leading to psychological responses (e.g., embarrassment). Concerning external environmental contingencies, the tablet requests personal data and does not provide sufficient privacy protection interventions. In this way, privacy concerns may cause individuals to feel threatened when using a tablet, leading to negative psychological responses (e.g., anxiety).

Table 4: Characteristics of trial-period technostress creators

Trial-period technostress			Related to internal shortcomings and external environmental contingencies	
Instantiation of trial-period technostress creators	**Definition of variable in the context of trial-period technostress**	**Trial-period uniqueness**	**Internal shortcomings**	**External environmental contingencies**
Perceived difficulty of use	Degree to which the use of an IT is complex and difficult	The trial-period places demands on the individual to develop skills and capabilities required to use the complex and difficult IT, as they have no knowledge with the IT and need to gain this knowledge in a short period.	The user does not have the skills and capabilities required to use an IT.	The IT is complexly designed such that the IT induces the constraints perceived by the individual.
Unreliability	Degree to which an IT does not behave in a consistent way	The trial-period places demands on the individual to deal with malfunctions or issues of instability without having experience in using the IT to use the IT consistently within a short period.	The user does not have the skills and capabilities required to use an IT.	The IT contains bugs or other characteristics that make the IT unreliable.
Personalization complexity	Degree to which an IT can be adjusted and modified by a user to suit one's needs and preferences	The trial-period places demands on the individual as they cannot adjust settings to their preferences and has to find ways to do so in a short period and without having experienced knowledge about using the IT.	-	The IT provides constraints in its design so that the user cannot easily adjust settings.
Transition costs	Degree to which one must invest time and effort to become familiar with the IT	The trial-period places demands on the individual, as they need to invest time and effort in using the IT and adapt their behaviors accordingly in a short period and without having experienced knowledge about using the IT.	The time and effort an individual is not willing to invest to get started with the new IT.	-
Habit disruption	Degree to which one perceives leaving established habits behind as difficult due to the new IT.	The trial-period places demands on the individual as they have to leave well-established habits behind quickly and without knowing how new habits might look like as there are no experiences in using the IT so far.	The individual habits that need to be disrupted.	-

Incompatibility	Degree to which an IT fits and is consistent with past experiences, existent values, and needs of the user	The trial-period places demands on the individual to find ways that IT features fit with their needs in a short period and to find one or more use cases without having experienced knowledge about using the IT.	-	The IT does not provide the features required for the use cases as expected by the user.
Monitoring	Degree to which an IT enables others to monitor one's activities	The trial-period places demands on the individual as they have threats that other individuals observe their behavior. They experience this for the first time in the trial period as they have no experience with using the IT so far.	-	The IT and the IT use contexts enable other individuals to observe and monitor the use of IT by an individual.
Privacy concerns	Concerns about opportunistic behavior by others related to the data disclosed while using an IT	The trial-period places demands on the individual as they are unsure whether the data is safe. They experience this for the first time in the trial period as they have no experience with using the IT so far.	The individual does not trust the IT or the providers, although they ensure data protection and security.	The IT provides fewer opportunities to protect data, asks for information in a way that invokes privacy concerns by design.

RESEARCH MODEL AND HYPOTHESES DEVELOPMENT

Trial-period technostress creators may cause intentions to reject an IT. When users perceive stress creators triggered by the new use of the IT, they are more likely to reject new software and devices (Dalrymple 2011). Also, trial-period technostress creators may cause psychological and behavioral strain, which may potentially manifest as low user satisfaction, which is an important factor because it begins to emerge during the trial period, and high intention to reject. Consistent with our focus on individual differences relevant to the context of the trial period and the domain of IT use (Maier et al. 2019) we suggest that motivation to learn (Johnson et al. 2015) and PIIT (Ahuja and Thatcher 2005) influence the trial-period technostress creator-strain relationship (Figure 2).

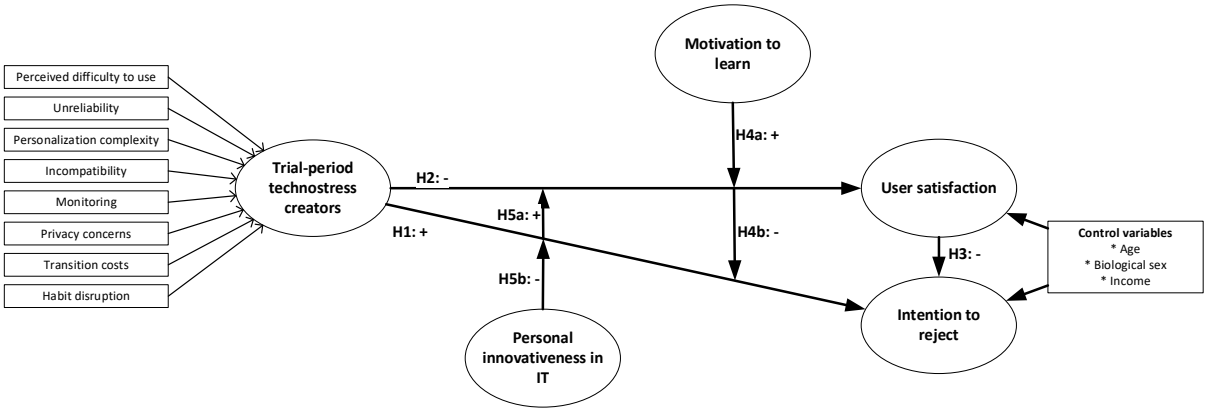

Figure 2: Research model

TRIAL-PERIOD TECHNOSTRESS CREATORS AND INTENTION TO REJECT

Technostress creators evoke behavioral responses (Tarafdar et al. 2010). We contextualize this insight to the trial period in order to explain how trial-period technostress creators evoke the intention to reject. For example, a trial-period user may believe that she or he does not have the ability to competently address a certain situation and thus evaluates this as threatening (Lazarus and Folkman 1984). We contend that users in such situations will then seek to avoid or minimize perceived trial-period technostress creators (Beaudry and Pinsonneault 2005) by employing strategies such as distancing from the IT or avoiding it altogether (Lazarus and Folkman 1984) by rejecting it.

Consider, the high rate of table trial rejections (Dalrymple 2011; Merritt 2011). Trial-period users may, for example, encounter technostress creators caused by not knowing how to adjust settings, learning how to individualize voice controls, or investing time to learn the complexities of customizing

applications. Other users may perceive stress creators by having a device that makes them accessible to both work and nonwork contacts at all times. Collectively, these trial-period technostress creators make users more likely to reject using the tablet in order to minimize stress. Thus, we hypothesize:

H1: The greater the perceptions of technostress creators during the trial period of use, the greater the intention to reject the IT.

TRIAL-PERIOD TECHNOSTRESS CREATORS AND USER SATISFACTION

User satisfaction refers to the degree to which a user positively or negatively evaluates using an IT (de Guinea and Webster 2013). Users' overall satisfaction with an IT likely shapes IT use during the trial period and beyond. The perception of trial-period technostress creators likely results in lower user satisfaction, because people tend to pay more attention to negative experiences than to positive ones (e.g., Baumeister et al. 2001). Trial-period technostress creators may also negatively impact user satisfaction among users who feel that they lack the resources and abilities necessary to use the IT during the trial period, causing them to ignore rational conclusions concerning the benefits of the IT use (Cenfetelli and Schwarz 2011).

Returning to our running example of tablet use. A user might feel that it is complex to customize the tablet to meet his or her needs. While evaluating this as a threat, e.g., because complexity hinders the user's full exploitation of the benefits of tablet use, the user might feel unable to set up the device and may thus develop low levels of user satisfaction. Even when users recognize the personal and professional benefits afforded by tablet use, such as improved access to email or social media, technostress creators may lead users to report low levels of user satisfaction. Thus, we hypothesize:

H2: The greater the perceptions of technostress creators during the trial period of use, the lower the user's satisfaction with the IT.

USER SATISFACTION AND INTENTION TO REJECT

We expect that user satisfaction is strongly related to the intention to reject. A dissatisfied trial user may regret buying an IT, may invest less effort in learning new functionality, may invest less time exploring

opportunities for use, and will be more likely to reject the IT at the conclusion of the trial period (Beaudry and Pinsonneault 2010). Thus, we hypothesize:

H3: The lower a user's satisfaction with a new IT during the trial period of use, the higher the intention to reject the IT.

INDIVIDUAL DIFFERENCES AND TRIAL-PERIOD TECHNOSTRESS

Individual differences may moderate how technostress creators affect user satisfaction and the intention to reject an IT. Lazarus and Folkman (1984) suggest that individual differences such as psychological vulnerability or values, as well as differences in personal resources and capacities, shape how people respond to stress creators. Technostress research suggests that individual differences relate to technostress and strain in two ways: individual differences directly influence technostress creators (Maier et al. 2019) and technostress creators translate into individual responses (Srivastava et al. 2015).

Consistent with prescriptions to study how individual differences relate to beliefs and behaviors (Paunonen and Ashton 2001), we focus on individual differences salient to learning or trying to do something new during the trial period. Studying trial-period use of a specific IT (here: tablets) requires examining two types of individual differences. The first type of individual difference is *specific* to the context of the trial use of a tablet. The second type of individual difference has *general* relevance to IT. This offers valuable insights regarding the extent to which one individual differs from another in terms of how he or she perceives or uses IT. Based on this rationale, as well as a screening of literature on individual differences and consumer electronics devices (Stein et al. 2015; Venkatesh et al. 2012) (Table A-4) such as tablets, we integrate motivation to learn, as a context-specific individual difference relevant to trial period tablet use, and PIIT, as a domain-specific individual-difference variable with general relevance to the domain of IT use, into our research model.

MOTIVATION TO LEARN AND PERSONAL INNOVATIVENESS IN IT AS MODERATING FACTORS

During the trial period, users who are either motivated to learn to use a specific IT, predisposed to be innovative with IT in general, or both, are more likely to feel user satisfaction and less likely to reject IT (Agarwal and Prasad 1998; Bagozzi et al. 1992).

Motivation to learn. Studies investigating the motivation to learn (Bagozzi et al. 1992)—an individual difference relevant to a specific context in which learning something new is required (e.g., trial-period tablet use)—have found that it relates to diverse outcomes, such as attention levels and absorption while trying new activities, the ability to reproduce activities, perceptions of usefulness associated with new activities, and recall of key aspects related to performing new activities (Yi and Davis 2003). Generally speaking, a high motivation to learn can be useful in the trial period for overcoming technostress creators; highly motivated learners will likely tolerate higher levels of technostress creators when trying out new things, due to their predisposed interest in learning.

In the trial period, motivation to learn may moderate how trial-period technostress creators relate to user satisfaction. The conscientiousness of highly motivated learners (Colquitt and Simmering 1998) may result in them focusing on the whole potential of a tablet, as opposed to adverse use outcomes, resulting in higher levels of user satisfaction. For example, a user with a high motivation to learn may mostly ignore trial-period technostress creators, primarily focusing instead on learning to use the tablet's functionality. In contrast, less motivated learners may allow technostress creators to cloud their view of a tablet's potential and may express greater user dissatisfaction with it. For example, less motivated users may give up learning a tablet's functionality and may be more likely to express user dissatisfaction. Thus, we hypothesize:

H4a: Motivation to learn positively moderates the impact of trial-period technostress creators on user satisfaction.

We also posit that the motivation to learn moderates the influence of trial-period technostress creators on the intention to reject. Studies indicate that highly motivated learners are goal oriented (Colquitt and Simmering 1998), making them better equipped to respond to trial-period technostress creators because

they continuously try to learn to use the IT if they consider this to be their objective. In contrast, users who are less motivated to learn may lose interest in the novelty of the IT when challenged and may be more willing to reject it. Highly motivated learners are more likely to try many features of an IT even when confronted with trial-period technostress creators; thus, they will be less likely to immediately reject the IT without having tested all the features. In contrast, less motivated learners will tend to avoid trying a lot of features and, if they perceive stress creators during the trial period, will likely develop an intention to reject the IT. Thus, we hypothesize:

H4b: Motivation to learn negatively moderates the impact of trial-period technostress creators on the intention to reject.

Personal innovativeness in IT. PIIT refers to user willingness to try out an IT (Agarwal and Prasad 1998). PIIT is an individual difference relevant to the general domain of IT use. Users with higher PIIT perceive IT as more useful and easier to use (Lewis et al. 2003), experience more engagement in using IT (Agarwal and Karahanna 2000), express higher intentions to adopt new IT (Lu et al. 2005), and report lower computer anxiety and higher computer self-efficacy (Thatcher and Perrewé 2002). PIIT is also relevant to understanding behavioral changes (Polites and Karahanna 2012), as more highly innovative IT users transfer beliefs into intentions and behaviors differently than less innovative IT users (Agarwal and Prasad 1998). Thus, individuals predisposed toward PIIT may be less likely to experience technostress creators during the trial period because it may be less difficult for such individuals to solve problems encountered during the trial period.

We anticipate that PIIT moderates the relationship between trial-period technostress creators and users' satisfaction. Innovative IT users are more likely to enjoy the novelty of trial-period use, which will contribute to positive views about a new IT (Agarwal and Prasad 1998). Since highly innovative IT users are often characterized as risk takers (Rogers 2003) who are not deterred by uncertainty, they will likely report less user dissatisfaction due to trial-period technostress. Thus, we hypothesize:

H5a: Personal innovativeness in IT (PIIT) positively moderates the impact of trial-period technostress creators on user satisfaction.

We also align with the understanding that PIIT moderates the influence of perceptions on behavioral intentions (Bhattacherjee et al. 2012). Highly innovative IT users tend to focus on long-term potential benefits, while less innovative IT users tend to be more short-term oriented (Oreg 2003). Therefore, innovative IT users are more likely to persist in their efforts to figure out the new IT and less likely to reject the IT due to frustration (Agarwal and Prasad 1998; Oreg 2003). Thus, we hypothesize:

H5b: Personal innovativeness in IT (PIIT) negatively moderates the impact of trial-period technostress creators on the intention to reject.

STUDY 2

We gathered three waves of data on technostress creators, user satisfaction, intention to reject, and individual differences (Figure B-2), and 112 participants completed all three waves (Table 5). Gender was almost equally distributed (48.9% were women) and participants' mean age was 36 years. To estimate sample size and power, we followed Kim's (2005) suggestion that power depends on (1) number of variables/degrees of freedom, (2) the relation among the variables, (3) choice of fit index, and (4) the value of the fit index, involving a range of different fit indexes. Using Steiger's gamma (with $\gamma = 0.95$; $\alpha = 0.05$; Power = 0.90), the proposed sample size is 111 and RMSEA ($\alpha = 0.05$; Power = 0.90) reveals a minimum recommended sample size of 38.2, which our sample size slightly exceeds.

Table 5. Demographics of 112 participants (values in percentage)

Gender	Women	48.9
	Men	51.1
Age (Mean = 36; SD = 13)	< 25	14.3
	25-34	46.4
	35-44	23.3
	45-54	8.9
	> 54	7.1
Monthly available income (after fixed costs)	< 500	52.0
	500-1,000	32.0
	1,000-1,500	14.0
	> 1,500	2.0

MEASURES

We operationalized constructs using multi-item measures. We first reviewed the literature to identify measures that could be adapted to the trial-period tablet use. Then, where possible, we tailored existing items, and when not possible, created items to measures trial-period technostress constructs. Next, all resulting items were reviewed by two individuals who lacked experience with tablets to ensure that items were clear and easy to understand. Finally, we pretested the survey. We provide details about our operationalization of first-order constructs in Table E-1.

Trial-period technostress was modeled as a higher-order multidimensional construct. To do this, we followed Polites et al.'s (2012) guidelines and patterned our analysis after Thatcher et al. (2018). Study 1 helped to identify a relevant content domain as well as trial-period technostress creators (Step 1 in Polites et al. 2012) that are not directly measurable using a single construct (Step 2 in Polites et al. 2012). We then performed a CFA, identifying trial-period technostress creators as a second-order construct with eight first-order factors (CFI = 0.96; RMSEA = 0.07) (Thatcher et al. 2018). We also collected a further larger data sample of 280 individuals who bought a tablet during the last few months, verified by presentation of the sales receipt. For data collection purposes, we used MTurk and followed typical mechanisms such as using attention-check questions. We also used the data to redo a CFA in which we observed similar values (CFI = 0.96; RMSEA = 0.068). In addition, we used the larger data set to verify the new construct as a second-order construct. While the fit indices exceeded recommended thresholds (e.g., NFI > 0.91, CFI > 0.95, IFI > 0.94, RMSEA < 0.08), in line with previous research (Ragu-Nathan et al. 2008), we compared a first-order correlated model with eight factors with a second-order model. The ratio of the chi-square value for the first-order model to the chi-square value for the second-order model should exceed the recommended value of 80% (Marsh and Hocevar 1985). Our data produced a value of 90.8%, thus indicating that trial-period technostress creators operate as a second-order construct. Given that first-order technostress creators can be combined in different ways to estimate trial-period technostress (Step 3 in Polites et al. 2012), we assessed the form of the higher-order concept and determined that it was an algebraic function of the first-order dimensions (Step 4 in Polites et al. 2012). Since the relationship is linear—meaning that each technostress creator might be weighted

differently and separately to contribute to the meaning of trial-period technostress creators (Step 5 in Polites et al. 2012)—we determined that trial-period technostress creators comprise an aggregate construct with reflective first-order constructs.

STUDY 2 RESULTS

We used SmartPLS 3 with 500 and 5,000 bootstrapped samples to test the model (Ringle et al. 2014).

Measurement model

Given that we conceptualized trial-period technostress creators as a second-order construct (reflective-formative, Type II), as per Becker et al. (2012), we used the hybrid approach to assess indicator validity, construct reliability, convergent validity, and discriminant validity of the first-order dimensions and constructs in a single model (Bagozzi 1979; Wright et al. 2012) (Table E-1). Indicator reliability reflects which rate of an indicator variance comes from the latent variable. To explain at least 50% of the variance of a latent variable by the indicators, each value must be 0.707 or greater (Carmines and Zeller 2008). This condition was fulfilled (Table E-1). In addition, all loadings have a significance level of at least 0.001. For construct reliability and convergent validity we used composite reliability (CR) and average variance extracted (AVE) to determine quality at the construct level (Fornell and Larcker 1981). Each met the heuristics, i.e., CR should be higher than 0.7 and AVE should be higher than 0.5 (Table 6). For discriminant validity we tested the extent to which measurement items differ from one another (Campbell and Fiske 1959). To determine this, the square root of AVE is contained on the diagonal of the latent variable correlation (Table 6). As the square roots of the AVEs are greater than the corresponding construct correlations (Fornell and Larcker 1981; Hulland 1999), we confirmed that this requirement was met. We also looked at the heterotrait-monotrait (HTMT) ratio of correlations criterion to detect whether discriminant validity was a problem (Henseler et al. 2014). Using the absolute $HTMT_{0.85}$ criterion indicates that discriminant validity was not an issue.

Table 6. Bivariate correlations, mean, SD, AVE, CR

Construct	Mean	SD	AVE	CR	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) Perceived difficulty to use	2.68	1.39	0.902	0.973	0.95														
(2) Unreliability	2.67	1.73	0.966	0.988	0.55	0.98													
(3) Personalization complexity	2.78	1.43	0.931	0.976	0.49	0.46	0.97												
(4) Incompatibility	3.10	1.78	0.959	0.986	0.49	0.50	0.47	0.98											
(5) Monitoring	4.69	1.77	0.883	0.958	0.10	0.28	0.29	0.30	0.94										
(6) Privacy concerns	4.82	1.70	0.887	0.940	0.10	0.32	0.32	0.36	0.65	0.94									
(7) Transition costs	3.12	1.77	0.863	0.962	0.55	0.38	0.49	0.46	0.40	0.47	0.93								
(8) Habit breaking	3.51	1.66	0.882	0.968	0.33	0.41	0.49	0.50	0.27	0.32	0.67	0.94							
(9) User satisfaction	5.28	1.55	0.874	0.965	-0.45	-0.56	-0.59	-0.56	-0.45	-0.48	-0.44	-0.42	0.94						
(10) Intention to reject	3.08	1.60	0.856	0.947	0.35	0.46	0.35	0.47	0.21	0.22	0.35	0.09	-0.49	0.93					
(11) Motivation to learn	5.08	1.59	0.893	0.962	-0.39	-0.31	-0.43	-0.52	-0.38	-0.43	-0.48	-0.44	0.63	-0.49	0.95				
(12) Personal innovativeness in IT	4.77	1.21	0.713	0.908	-0.17	-0.15	-0.25	-0.21	0.06	-0.03	-0.15	-0.01	0.15	-0.13	0.28	0.84			
(13) Age	see Table: Demographics		1.000	1.000	-0.26	-0.28	-0.20	-0.05	0.40	0.31	-0.02	0.04	0.03	0.03	-0.05	0.02	-[1]		
(14) Gender			1.000	1.000	-0.07	-0.19	0.06	0.00	-0.06	-0.04	0.06	-0.06	0.15	-0.16	0.04	-0.22	0.15	-[1]	
(15) Income			1.000	1.000	0.21	0.24	0.16	0.25	0.11	0.14	0.28	0.31	-0.28	0.15	-0.30	-0.04	-0.36	-0.02	-[1]

Note: Square root of AVE on the diagonale; AVE means average variance extracted, CR means composite reliability, -[1] means single-item construct

Structural model

We estimated the coefficient of determination (R^2) and paths' significance levels to evaluate the model.

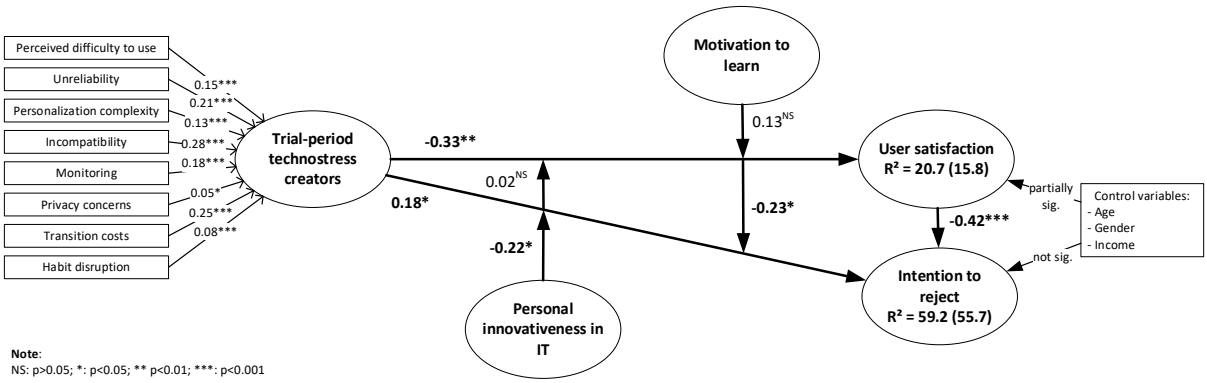

Figure 3: Research results (values in parenthesis represent R^2 without interaction effect)

Figure 3 reports that we explained 20.7% of the variance of user satisfaction and 59.2% of the variance of the intention to reject. Concerning the path coefficients of the main research model, we conclude that while two of the hypothesized relationships are not supported, all others yielded significant results. More precisely, our results indicate that motivation to learn (H4a not supported; $\beta = 0.02$; $p > 0.05$) and PIIT (H5a not supported; $\beta = 0.13$; $p > 0.05$) do not moderate the relationship between trial-period technostress creators and user satisfaction. However, trial-period technostress creators influence user satisfaction negatively (H2 supported; $\beta = -0.33$; $p < 0.01$), which, in turn, negatively influences the intention to reject (H3 supported; $\beta = 0.42$; $p < 0.001$). We also found that trial-period technostress creators evoke the intention to reject (H1 supported; $\beta = 0.18$; $p < 0.05$), and that this relationship is moderated by two individual differences — motivation to learn (H4b supported; $\beta = -0.23$; $p < 0.05$) and PIIT (H5b supported; $\beta = -0.22$; $p < 0.05$) (Figures F-1, F-2). Our results reveal that our control variables have no impact on the intention to reject (age: $\beta = 0.03$; gender: $\beta = -0.05$; income: $\beta = 0.05$;

each with $p > 0.05$) and a partial impact with one significant effect, on dissatisfaction (age: $\beta = -0.12$, $p > 0.05$; gender: $\beta = -0.02$, $p > 0.05$; income[1]: $\beta = 0.20$, $p < 0.05$). It is notable that all relationships in terms of levels of significance and direction of effects remain stable independent of whether we include or exclude controls. We also did *t*-tests to evaluate whether participants who used the Android OS on a Samsung phone differed from the remaining participants (*N*=31 used Android OS, *N*=81 never used Android OS). Unsurprisingly, we found that participants with Android experience reported lower transition costs ($p < 0.01$); however, they surprisingly did not differ on other constructs.

Common Method Bias

Because common method bias can be problematic when dependent and independent variables are collected in a single survey, we used a longitudinal three-wave data collection strategy. We also presented the items used to measure constructs in a randomized order (Podsakoff et al. 2003). We used different techniques to determine the influence of CMB in our research model (Appendix D), and found no evidence that CMB distorted results

META-INFERENCES

In this section, we draw meta-inferences between the qualitative findings of Study 1 and the quantitative findings of Study 2. Details about the assessment of the quality of meta-inferences are included in Table 3. We adhered to established guidelines for quality and rigor for both Study 1 and Study 2 (Myers 2009; Ringle et al. 2012; Sarker et al. 2013) and aimed to minimize threats such as biases during the data collection, inadequate data transformation, and failure to address validity issues by using established analysis (Chin et al. 2012) and validity criteria (Henseler et al. 2014; Ringle et al. 2012), thus ensuring the high quality of our meta-inferences.

We triangulate across methods to build meta-inferences and assess the validity of the inferences derived from our studies (Venkatesh et al. 2013). In Study 1, we inductively identified eight trial-period technostress creators. We leveraged these technostress creators in Study 2, where we used deductive

[1] We want to note that there is also an influence of income on trial-period technostress creators ($\beta = 0.23$, $p < 0.01$) so that we see an indirect mediating effect of income on dissatisfaction via trial-period technostress creators when using bootstrapping procedure (Hayes 2012).

reasoning to derive the form of the trial-period technostress creator construct and make logical connections between our data, which was collected in Study 2, and theory, which informed the development of our research model. In short, Study 2 confirms that trial-period technostress creators are distinct dimensions that form the higher-order trial-period technostress creator construct. Therefore, we achieved convergence between Study 1 and Study 2, validating the high quality of our inferences and the strength of our results (Venkatesh et al. 2013). Furthermore, we found complementary results. For example, Study 2 shows that trial-period technostress creators influence user satisfaction and the intention to reject. Additionally, we show that individual differences in terms of motivation to learn and PIIT influence how trial-period technostress creators are translated into rejection intentions. We believe that our studies, taken together, add value beyond that of the individual studies, thus confirming the validity of the inferences drawn from our mixed-method approach (Venkatesh et al. 2013).

POST-SURVEY INTERVIEWS

While our mixed-method study helps to explain why people reject IT during the trial period, Study 1 also provides evidence that positive effects also result from trial-period tablet use. To probe this unexpected finding, we performed twelve post-survey interviews with participants who had bought a tablet and returned it to the retailer within the 30 days' trial period (Figure B-1). We recruited these participants using Amazon Mechanical Turk (mTurk). We were comfortable using mTurk because it has been used in technostress research and has been shown to provide similar results to data collected in organizations (Maier et al. 2019). To verify that participants met our screening criterion of having recently bought and returned a tablet to a retailer, we asked individuals to, in a first step, upload their purchase and return receipts and, in a second step, confirm that they were willing to participate in a virtual interview. Based on that, we received 19 responses, 12 of which confirmed buying and returning a table in the last 12 months. Then, one of the authors conducted a video call (i.e., using Skype) with each of the 12 individuals. The interviews lasted between 45 and 90 minutes and followed predefined interview guidelines (Appendix G). Participants confirmed that the tablet, which was returned, was the first that they had ever bought. The demographics of the interviewees ranged from 22 to 59 years, nine of the participants were men and three were women.

Interview coding employed the same procedure and coding guidelines as Study 1 to identify positive beliefs, trial-period technostress creators, and their interaction with and influence on user satisfaction or rejection behavior. Coding revealed that (1) all twelve interviewees were challenged by the trial-period technostress creators, indicating the relevance of the identified technostress creators (Study 1), (2) the relationship between technostress creators and rejecting an IT begins during the first days of usage in the trial period (Study 2), and (3) two different patterns clarified how trial-period technostress creators overcome positive perceptions to cause rejection.

Rejection pattern one: Technostress creators overwhelm positive perceptions. Some individuals (*N*=8) were initially exclusively positive and enthusiastic about using their new tablet. These individuals reported that using certain features such as apps was fun and that some of the features of the tablet seemed useful. In using the tablet over time, these individuals noticed that they experienced more and more technostress creators over time such that their original positive enthusiasm, emotions, perceptions, and thoughts about the tablet waned over time. Our participants reported a tipping point of sorts, when they realized that the technostress creators overcame positive emotions and perceptions, which led them to reject the tablet and return it. Thus, this group of individuals confirmed that positive perceptions and trial-period technostress creators existed along with negative feelings but, at some point, they perceived a tipping point at which the negative aspects of using the tablet outweighed the positive aspects. Over time, these individuals followed an X-shaped course: Positive perceptions of use were high at the beginning of use and decreased over time, and trial-period technostress creators were perceived as low at the beginning of use and gradually increased until they overwhelmed positive use perceptions.

Rejection pattern two: Immediate technostress. Another group of individuals (*N*=4) bought a tablet for one specific use case and generally expressed less enthusiasm and fewer positive emotions, perceptions, and thoughts about the tablet than did the individuals in the first group. This group of individuals immediately reacted with strain when they first used the tablet because, for example, transitioning to the tablet and integrating it into their own daily routines was too complex. Such trial-period technostress creators caused these individuals to return the tablet. This indicates that positive

perceptions are not necessarily present and, thus, that weighing pros and cons is not always involved in the decision-making process.

Finally, we asked participants what would have prevented them from returning the tablet. This question yielded insights: some participants prefer guided adoption or stated that picture-based Q&A instructions would have been useful, e.g., to reduce personalization complexity or difficulty of use. These participants complained about text-based instructions, which may be more useful for experienced users beyond the trial period. Some participants also stated that a telephone contact for technical help would have been useful. We used these insights to derive practical implications, which will be detailed at the end of this paper.

Our post-survey interviews offered evidence that trial-period technostress creators, identified in Study 1, not only generate individual intentions to reject, as found in Study 2, but also lead to actual rejection behavior. Participants confirmed that perceptions of trial-period technostress creators arise, even in the presence of positive use perceptions, and that they can eventually overwhelm positive use perceptions. Also, absent robust positive use perceptions, trial-period technostress creators can emerge immediately, at the beginning of trial use. Finally, consistent with our contention that costs constitute a type of risk, participants reported that deciding whether to keep a high-cost tablet was a source of stress, particularly because it was not necessarily used for essential daily activities.

DISCUSSION AND IMPLICATIONS

Our mixed-method study offers insight into how trial-period technostress creators shape user satisfaction and rejection intentions and demonstrates how individual differences affect the relationship between trial-period technostress creators, user satisfaction, and rejection intentions. We found that the IT trial period has unique characteristics that create pressures for users. First, the trial period creates time pressure in that it offers only a limited time to develop a habit (see our research setting and the stress creator transition cost). Second, the trial period creates time demands, because users are forced to set up and learn to use a device quickly (see discussion above regarding the stress creators, e.g., personalization complexity, difficulty to use). Third, the trial period creates financial pressure—individuals must decide

in the first 30 days whether to keep a device (see our research setting and the dependent variable intention to reject, as well as our post-survey interviews in which individuals confirmed that spending money for something nonessential is a concern). Because of such pressures, our resulting model shows that lower user satisfaction and higher rejection intentions are triggered by internal shortcomings and external environmental contingencies, which constitute trial-period technostress creators. Furthermore, we illustrate that individual differences—one context specific (motivation to learn) and one domain specific (PIIT)—influence the relationship between trial-period technostress creators and IT-related beliefs and behaviors. Given our context of consumer electronics, our work contributes to consumer behavior research in general (Rogers 2003) and to IS research in particular by elaborating on how that trial-period rejection of a consumer electronic device results from technostress in the trial period. In the following section, we go into more detail on insights derived from our findings (Figure 4).

TRIAL-PERIOD TECHNOSTRESS: FOUNDATION AND CONTEXTUALIZATION

Our research offers a new stream in technostress research, because trial-period technostress can be classified as neither chronic nor episodic. By utilizing a mesostate perspective on technostress, we generate three new perspectives for IS research. First, we extend the literature by examining technostress in a fixed and relatively short time period. This is an important time period because in the trial period individuals have not yet developed habits, which typically guide how users respond to technostress creators (Tarafdar et al. 2020). Studying technostress in the trial period is particularly relevant for theory, as it shows how individuals with no experience, routines, or habits regarding the use of an IT experience technostress. More specifically, our results indicate that technostress occurs in the context of the fixed, defined period of IT trial use.

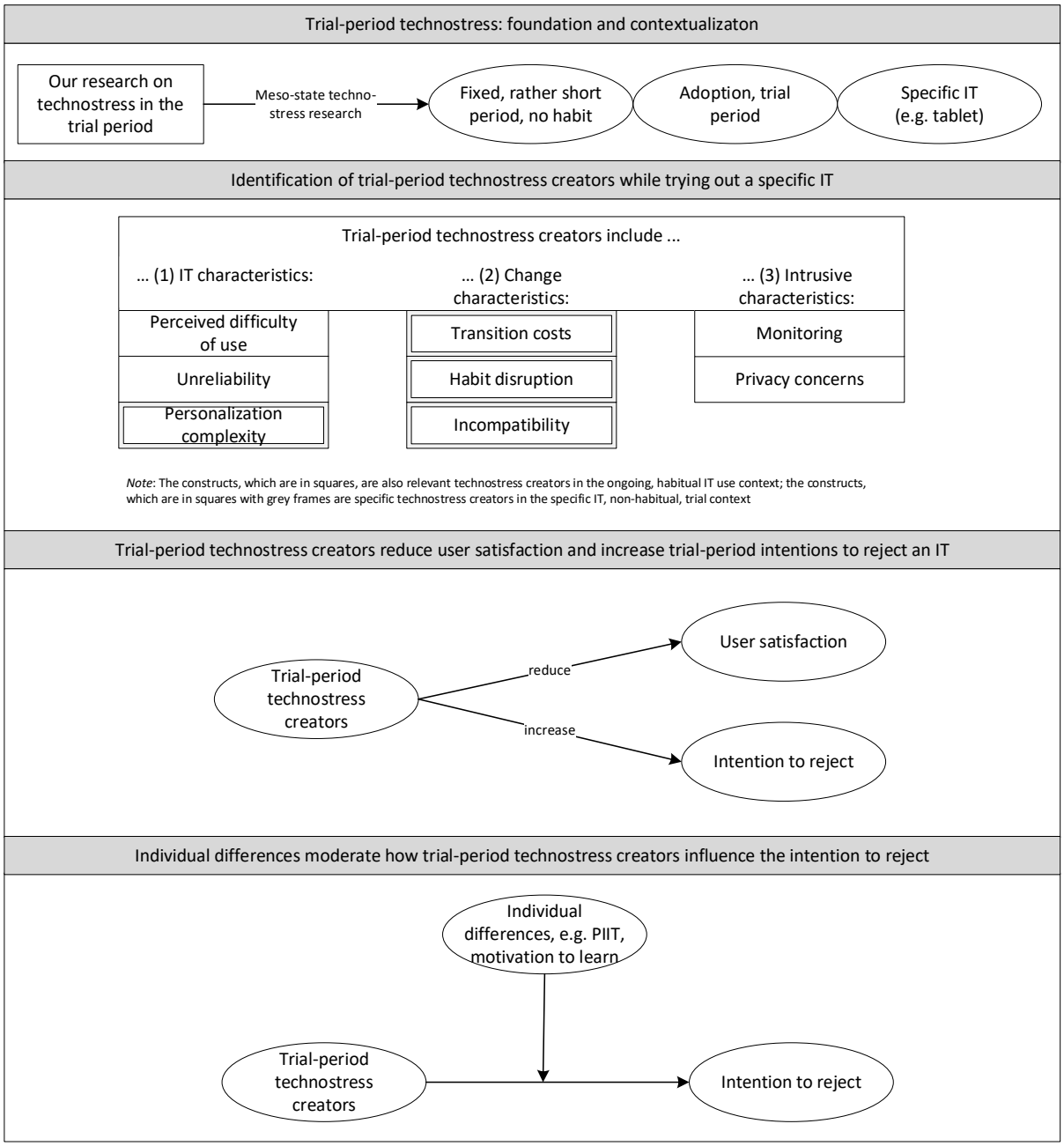

Figure 4. Overview of theoretical contributions

Second, our research sheds new light on the impact of technostress creators in an earlier period of adoption by focusing on trial use of IT (Klonglan and Coward 1970). We provide evidence that trial-period technostress creators exert an influence on user satisfaction and the intention to reject and thereby underscore that technostress is relevant to IT use in the whole IT use lifecycle. By doing this, our research increases the understanding of users' responses to IT in the trial period. From an organizational point of view, this understanding could facilitate better understanding of how to engage users throughout the whole IT use lifecycle.

Third, we focus on a single device—a tablet. We identified specific, discrete technostress creators for new tablet users. By focusing on a single IT, we offer specific insights for device manufacturers interested in improving the user experience tied to tablets and were able to take initial steps toward understanding trial-period technostress. This is also important for research around consumer IT and technostress as it is the first approach showing that and why a consumer IT causes stress to its users.

In sum, these three perspectives complement previous research that a) focuses on ongoing, habitual IT use (Califf et al. 2020) or examines how abrupt, momentary events such as computer breakdowns (Riedl et al. 2012) influence the user, b) focuses on individuals who have successfully gone beyond the trial period and stress creators associated with ongoing IT use (Ayyagari et al. 2011), and c) focuses on stress resulting from a combination of IT applications (Ragu-Nathan et al. 2008).

IDENTIFICATION OF TRIAL-PERIOD TECHNOSTRESS CREATORS WHILE TRYING OUT A SPECIFIC IT

Our research identifies trial-period technostress creators and explains how they relate to the overarching stress concept. Specifically, we identify eight trial-period technostress creators, including perceived difficulty of use, unreliability, monitoring, incompatibility, privacy concerns, transition costs, personalization complexity, and habit disruption. In identifying trial-period technostress creators, we found that these are grounded in (1) IT, (2) change, and (3) intrusive characteristics. First, we illustrate that the IT, which is new to the user in the trial period, itself creates stress for users in the initial adoption. In detail, we provide evidence that perceived difficulty to use, unreliability, and personalization complexity are stress creators. These three technostress creators pose a threat to individuals as either they assess that they do not have the abilities and knowledge to use the IT or the IT places too high demands, such that the evaluation is grounded in internal shortcomings and external contingencies. Second, the new IT requires that the user adapts their behavior to benefit from the IT. In that respect, there exist change characteristics in terms of transition costs, habit breaking, and incompatibility that are stress creators. Among others, we found that for some individuals, introducing a new device changes their daily routines and habits, sometimes to an intolerable extent. So this change, again, poses a threat as the individual has to invest time and effort to use the IT, leave well-established habits behind and

identify use cases for which the IT can be used. Third, the intrusiveness that comes along with the new IT in terms of being monitored and having privacy concerns depicts stress creators in the trial period, because the individual had no touchpoint with those issues before trying out the IT. This occurs as the individuals have no expertise in how to set up the IT or as the IT requires too high demands to limit the intrusiveness. In sum, our results contribute that there are many different reasons in the trial period that let the individual perceive stress. We therefore motivate further work that focuses on these stress creators and studies its short- as well as long-term consequences as well as to probe strategies that can diminish the impact of these technostress creators on user satisfaction and rejection intentions.

The identification of these technostress creators has three implications for research. First, while existing technostress studies have shown that perceived difficulty of use, unreliability, and monitoring are technostress creators (Ayyagari et al. 2011; Ragu-Nathan et al. 2008), we extend knowledge that these create stress in users in the initial adoption *as well as in the* later use stages of the IT use lifecycle. So our findings suggest a need for further work that probes the boundary conditions of when technostress creators shape user beliefs and behavior. Second, IT use and adoption research indicates that transition costs (Mattke et al. 2018; Polites and Karahanna 2012), privacy concerns (Smith et al. 2011) and incompatibility (Parthasarathy and Bhattacherjee 1998; Venkatesh et al. 2003) influences the use of a IT. We complement that these are also stress creators in the early trial period. Our results suggest that future research should investigate stages of the IT use lifecycle beyond the trial period to examine the extent to which technostress creators relate to established constructs and perceptions. Third, we extend prior research by identifying technostress creators that have not been studied in previous research. We identified four technostress creators specific to the trial period of IT use: transition costs, incompatibility, personalization complexity, and habit disruption. These are specific to the trial period since, after adopting an IT, users will have likely reconciled themselves to or developed a coping strategy for changes in routines. Therefore, we suspect that evaluating whether a new IT is too complex or (in)compatible with existing IT infrastructure happens during the trial period. In addition, the time and effort necessary to adapt to using a new IT and to stop previous habits are relevant for the trial period but not for habitual IT use. We therefore complement contemporary technostress research by showing

that specific stress creators are relevant to specific phases of the IT use lifecycle. We also contribute to research on the IT use lifecycle by demonstrating that different phases are guided by specific causes and thus require different theoretical perspectives.

While we focus on identifying trial-period technostress creators, we see some similarities to related concepts found in IT rejection research. Most prominently, Cenfetelli's (2004) work on inhibitors has already shown that perceptions exist that hinder IT use. This study and extensions of that work (Cenfetelli and Schwarz 2011) have expanded understanding of how a range of different perceptions lead individuals to develop low intentions to use an IT. While our research has similar objectives in that we seek to explain why individuals reject IT, our work differs from Cenfetelli's more general focus on rejection because we focus on elaborating on the influence of a specific set of threatening perceptions that evoke psychological and/or behavioral responses during the trial period. In particular, we reveal conditions under which perceptions studied by Cenfetelli help to explain technostress and identify when it is necessary to go beyond established stress creators to explain behavioral and psychological responses to trial-period IT use. In sum, our research adds value by integrating trial-period technostress into what is known about IT rejection and showing how this understanding differs understanding of chronic and episodic technostress.

TRIAL-PERIOD TECHNOSTRESS CREATORS REDUCE USER SATISFACTION AND INCREASE TRIAL-PERIOD INTENTIONS TO REJECT AN IT

Our results show that users respond to trial-period technostress creators in two ways. First, trial-period technostress creators impact users overall evaluation of the IT. As was seen in Study 2, and the post-survey interviews, we found that trial-period technostress creators overcome initial positive perceptions and cause individuals to evaluate the IT more negatively. One explanation for this finding is the human tendency to emphasize negative experiences (Bower 1981; Watkins et al. 1996) and to pay more attention to negative experiences than to positive ones (e.g., Baumeister et al. 2001).

Second, trial-period technostress creators also trigger the development of intentions to reject an IT. Study 2 empirically validates this relationship, and the post-survey interviews also show that trial-period technostress creators not only elicit rejection intentions but also rejection behavior. Theoretically,

previous research has suggested that users often respond to negative stimuli with avoidance responses (Bala and Venkatesh 2015), which, in the context of our study, resulted in trial users expressing an intention to reject an IT. This finding complements technostress research that shows that technostress creators lead users to terminate use (Maier et al. 2015). This finding also directs attention to research and practice interested in identifying strategies to mitigate the influence of trial-period technostress creators as a means of encouraging use beyond the trial period.

INDIVIDUAL DIFFERENCES MODERATE HOW TRIAL-PERIOD TECHNOSTRESS CREATORS INFLUENCE THE INTENTION TO REJECT

Our research clarifies how individual differences moderate the relationship between trial-period technostress creators and user satisfaction and rejection intentions in two ways. Our findings affirm that the motivation to learn, a context-specific individual-difference variable focusing on the trial period of tablet use, moderates the relationship between trial-period technostress creators and the intention to reject. Thus, users who are highly motivated to learn how to use a *specific* IT such as a tablet are less likely to develop rejection intentions. We also show that PIIT, a domain-specific individual-difference variable, is an important factor to consider during the trial period because it moderates the influence of technostress creators on the intention to reject. Research has shown that PIIT correlates (positively) with Big Five personality traits like conscientiousness (Venkatesh et al. 2014) and with other individual differences like IT mindfulness (Thatcher et al. 2018). We provide evidence that PIIT moderates the influence of trial-period technostress creators on the intention to reject. This means that users predisposed to being innovative in terms of IT use are less likely to develop the intention to reject on the basis of trial-period technostress creators. We therefore demonstrate how PIIT, as an individual-difference variable with *general* relevance to IT, helps explain user behavior during the trial period.

We found that neither motivation to learn nor PIIT influences the relationship between trial-period technostress creators and user satisfaction. This finding contributes to technostress research by underscoring that, while users' behavioral responses depend, in part, on individual differences, these differences do not exert a pervasive influence on psychological responses. Thus, different theoretical lenses and action modes might help explain how trial-period technostress creators translate into either

behavioral or psychological strain. While our results contribute by responding to previous research calling for a stronger focus on moderating factors (Sun and Zhang 2006), this opens many possibilities for future research in the field of technostress. For example, future research could examine factors beyond individual differences that influence the relationship between trial-period technostress creators and psychological responses. Our results also demonstrate that individual differences relevant for general IT and for a specific IT influence how trial-period technostress creators translate into rejection intentions. While previous research has examined domain-specific individual differences (Maier et al. 2019; Thatcher et al. 2018), we show that individual differences that are not domain specific but context specific, such as the motivation to learn, merit future investigation in IT use and technostress research.

TRIAL-PERIOD TECHNOSTRESS AND INNOVATION ADOPTION

Our work on trial period technostress has broader implications for consumer behavior research that examines the innovation diffusion. It is well established that product innovations are not always beneficial (Cui et al. 2009; Mick and Fournier 1998). An innovation might be too complicated and make one feel unskilled or it might disrupt existing routines and show a need to pull out of one's habit. By doing so, an innovation might stimulate anxiety and stress, which results in psychological and behavioral responses that shape coping strategies (Duhachek and Iacobucci 2005). While consumer behavior research offer insights into why consumers select coping strategies, it does not elaborate on the sources of stress, especially in the trial-period, tied to a product innovation. Therefore, while our work focuses on one IT, it hints at a need for future research that examines whether there are consistencies and between IT and other product innovations. It would be useful to assess the degree to which our definition of trial-period technostress, IT-specific trial-period technostress creators and emergent model of trial-period technostress creators map to consumers satisfaction and intentions to reject product innovations in other categories. Such research could shed light on the degree to which our findings generalize from the study with an IT innovation to general product innovations as well as which the trial period stress creators shape decisions about different types of innovations.

PRACTICAL IMPLICATIONS

From a practical perspective, our results offer implications relevant for consumers and their trial use of IT devices. Our results reveal that even after symbolically adopting an IT, users who are generally willing to adopt an IT, such as a tablet, and have positively preevaluated its use, may nevertheless reject it after purchase because of the stressful stimuli encountered during the trial period of use. Thus, our results highlight the importance of the initial experience with an IT over the first days of usage.

With technostress as a major obstacle in the trial period, different strategies are useful for consumers. We found that if trial-period users encounter problems in personalizing the device, which prevents them from fully exploiting the benefits of the IT, they are more likely to abandon its use. For example, participants reported user dissatisfaction that some features of their tablet could not be changed or removed. Thus, one path to avoid trial-period technostress would be to have a simpler navigation for personalizing the tablet. We see evidence that such strategies are already in place, e.g., step-by-step tutorials on how to set up the device. However, guidance may be necessary beyond the initial set-up of the device because the trial period typically lasts for several weeks. Our longitudinal study underscores the need for more expansive and long-lasting strategy, suggesting, for example, that offering "guided adoption support" for personalization throughout the trial period that help users to gradually integrate new devices into daily routines to help mitigate trial-period technostress.

Specifically, two suggestions that surfaced in our post-survey interviews might be helpful for users to avoid trial-period technostress. Interviewees indicated that stressed users would have benefited from a picture-based tutorial explanation that could help users overcome specific stressful stimuli, such as individualization settings. Interview participants specifically requested a picture-based tutorial instead of a textual description, explaining that since they were unfamiliar with the tablet, they did not understand how to navigate through the settings. Our interviews revealed that textual explanations are most useful for users who have successfully adopted a tablet and have used it for a longer period of time. In addition, our interview participants reported that they tried to contact the support hotline but they either encountered a long wait to talk to an actual support representative or they were not well supported

in the chat function. Based on the experience of our study participants, we highlight the need to ramp up product-specific telephone hotlines for users who have recently purchased a tablet.

LIMITATIONS

Like all research, this study has limitations. For example, it is plausible that trial-period technostress creators interact with known drivers of user satisfaction. Because of our interest in trial-period technostress, we did not collect data on antecedents of user satisfaction. Given the moderate to large amount of unexplained variance in our study, we believe there is room for future research examining the interplay between trial-period technostress creators and known drivers of user satisfaction, such as trust and technical support. Also, we focused on the influence of second-order construct trial-period technostress creators on psychological strain, in terms of low satisfaction, and on behavioral strain, in terms of high intentions to reject; thus, we do not offer insight into how specific trial-period technostress creators account for decreased user satisfaction or intentions to reject. An additional limitation is that participants in Study 1 and Study 2 did not pay for the tablet device. Even though it might be reasonable to argue that individuals may have an even higher likelihood of returning a tablet they paid a lot of money for, we cannot control for this fact. However, our post-survey interviews, which queried individuals that paid for a tablet, confirm our results.

With that in mind, it is worth discussing the generalizability of our results. Since our results are grounded in the context of individuals using a tablet, a specific class of consumer electronics, we are not able to generalize our results to other contexts, such as trial IT use in organizations (e.g. trial use of a new ERP system or a new email client). However, we anticipate that our results would translate well to other consumer electronics, such as smart home devices (e.g., Amazon Alexa), video game consoles, or smartwatches. We suggest that there are similar stress creators when using consumer electronics but concede that there may be further contextualized stress creators or that specific stress creators may contribute differently to trial-period technostress creators overall. Further, we suspect that responses to technostress creators would similarly lead to low satisfaction or high intentions to reject in other trial-use contexts but that the influence of individual differences may vary, e.g., if an IT is rather easy to use, the influence of motivation to learn might be less important.

FUTURE RESEARCH

Our results offer several other paths for future research. First, our research examines the trial-period technostress associated with a specific IT. We chose the voluntary use of tablets as the target IT because volition is necessary to reject an IT, and tablets are a commonly rejected IT (Dalrymple 2011; Douthit et al. 2011; Merritt 2011). Also, our trial-period technostress creators may not be relevant for devices with different feature sets. For example, even though personalization is highly important for customers (Xu et al. 2014), personalization complexity may only be relevant if the IT provides customization opportunities. Future research could examine whether trial-period technostress creators differ with more or less complex feature sets, or could evaluate the importance of incompatibility with a mandatory IT (Brown et al. 2002) or when using cloud-based software from one provider (e.g., GoogleDocs). In sum, future research on trial-period technostress could study other contexts as well as different classes of IT—e.g., IT used on the job versus off the job.

Second, we examined trial-period technostress during a defined time period. While we examined technostress over a 30-day trial period, future research might use more granular methods, such as daily journaling, to examine the evolution of technostress creators. For example, by using belief-update theory (Hogarth and Einhorn 1992), future research could provide insights into how trial-period technostress creators evolve over time and how and why technostress creators early in the trial period influence perceptions in later stages. For example, habit disruption may be particularly relevant when initially trying to use an IT but may decrease with continued use, while privacy concerns might be an issue during the whole trial period. Such research could clarify design mechanisms that could mitigate the effects of technostress creators on user satisfaction and rejection intentions. In a similar vein, future research might use biological measures of stress, such as saliva measurements (Riedl et al. 2012), skin conductance (Weinert et al. 2020), or eye-movements (Eckhardt et al. 2013) to evaluate potential physical responses among users.

Third, our post-survey interviews offer interesting, unanticipated avenues for further research. For example, there is an important difference between users who adopt a device because of a general interest in the IT versus those who purchase a device for a specific utilitarian reason. Thus, future research might

focus on understanding the differences in expectations associated with general versus specific use and evaluate how these expectations are confirmed or disconfirmed during the trial period (Lankton and McKnight 2012). It could be useful to apply an expectation-confirmation perspective on technostress research or to carve out the role of goals associated with IT use, as individuals might perceive a specific interdependence and fit with an IT (Venkatesh et al. 2017; Windeler et al. 2017). We also found an interaction between positive versus negative beliefs about use and the presence of technostress creators. Future research could examine the interplay between positive and negative use beliefs and trial-period technostress creators and evaluate its impact on use decisions, e.g., through the lens of enablers and inhibitors (Cenfetelli 2004). Furthermore, interview participants hinted at a tipping point at which negative trial-period technostress creators overcame the potency of positive use experiences and belief; it would be useful to probe whether there is a predictable tipping point at which negative use experiences outweigh positive use experiences, perhaps from the perspective of trait activation theory (Tett et al. 2014).

Finally, by studying trial-period technostress in the consumer IT context, we investigate consumer behavior, which is the focus of a broader research stream focusing on general consumer acceptance of product innovations (Rogers 2003). While we set a focus on particular on IT innovations and trial-period technostress creators based on IT, change, and intrusiveness characteristics, future research can extend our results to focus on other types of product innovations to reveal their stress creators in the trial period and the different characteristics constituting these trial-period stress creators. Going beyond the IT focus of our study in future research would enable to generalize the concept of trial-period technostress to general consumer behavior research and other types of innovations.

CONCLUSION

Motivated by a desire to understand why users reject IT after trial-period use, we conducted a mixed-method study to develop a theoretical explanation and obtain empirical evidence that supports the evaluation of trial-period IT rejection. In Study 1, we identified eight trial-period technostress creators based on interviews with actual trial users. In Study 2, we probed how to measure trial-period technostress and its implications for rejection intentions and behavior. We found evidence that trial-

period technostress creators should be modeled as an aggregate second-order construct. Based on the analysis of our emergent research model, we found that trial-period technostress creators triggered psychological and behavioral strain, as evidenced by lower user satisfaction and higher rejection intentions. The influence on rejection intentions is also moderated by salient individual differences—one context specific (motivation to learn) and one domain specific (PIIT)—which help explain why some but not all users reject an IT after encountering trial-period technostress creators during the trial period of the adoption process. Our investigation into trial-period technostress creators and their implications builds a foundation for future research that might explore the boundaries of trial-period technostress for IT use in more use contexts in organizations and society. Such research could further explore how trial-period technostress creators can swamp positive sentiment, leading individuals to reject the IT and increasing the number of devices returned to retailers.

ACKNOWLEDGMENT

Christian Maier was named as Schöller Fellow by the Dr. Theo and Friedl Schöller Research Center for Business and Society that supported and funded this project. We also express our gratitude for the guidance of the Senior Editor, Dr. Suprateek Sarker, the Associate Editor, Dr. Choon-Ling Sia, and three anonymous reviewers.

REFERENCES

Agarwal, R., and Karahanna, E. 2000. "Time flies when you're having fun: Cognitive Absorption and beliefs about information technology usage," *MIS Quarterly* (24:4), pp. 665-694.

Agarwal, R., and Prasad, J. 1997. "The Role of Innovation Characteristics and Perceived Voluntariness in the Acceptance of Information Technologies," *Decision Sciences* (28:3), pp. 557-582.

Agarwal, R., and Prasad, J. 1998. "A Conceptual and Operational Definition of Personal Innovativeness in the Domain of Information Technology," *Information Systems Research* (9:2), pp. 204-215.

Ahuja, M., and Thatcher, J. B. 2005. "Moving Beyond Intentions and Toward Theory of Trying: Effects of Work Environment and Gender on Post-adoption Information Technology Use," *MIS Quarterly* (29:3), pp. 427-459.

Ayyagari, R., Grover, V., and Purvis, R. 2011. "Technostress: Technological Antecedents and Implications," *MIS Quarterly* (35:4), pp. 831-858.

Bagozzi, R. P. 1979. "The Role of Measurement in Theory Construction and Hypothesis Testing: Toward a Holistic Model," in *Conceptual and theoretical developments in marketing*, O. C. Ferrell, S. W. Brown and C. W. Lamb (eds.), Chicago, Ill.: American Marketing Assoc., pp. 15-32.

Bagozzi, R. P., Davis, F. D., and Warshaw, P. R. 1992. "Development and Test of a Theory of Technological Learning and Usage," *Human Relations* (45:7), pp. 659-686 (doi: 10.1177/001872679204500702).

Bagozzi, R. P., and Warshaw, P. R. 1990. "Trying to Consume," *Journal of Consumer Research* (17:2), p. 127 (doi: 10.1086/208543).

Bala, H., and Venkatesh, V. 2015. "Adaptation to Information Technology: A Holistic Nomological Network from Implementation to Job Outcomes," *Management Science* (62:1), pp. 156-179 (doi: 10.1287/mnsc.2014.2111).
Baumeister, R. F., Bratslavsky, E., Finkenauer, C., and Vohs, K. D. 2001. "Bad is Stronger than Good," *Review of General Psychology* (5:4), pp. 323-370.
Beaudry, A., and Pinsonneault, A. 2005. "Understanding user responses to information technology: a coping model of user adaptation," *MIS Quarterly* (29:3), pp. 493-524.
Beaudry, A., and Pinsonneault, A. 2010. "The Other Side of Acceptance: Studying the Direct and Indirect Effects of Emotions on Information Technology Use," *MIS Quarterly* (34:4), pp. 689-710.
Becker, J.-M., Klein, K., and Wetzels, M. 2012. "Hierarchical Latent Variable Models in PLS-SEM: Guidelines for using Reflective-Formative Type Models," *Long Range Planning* (45:5-6), pp. 359-394.
Bhattacherjee, A., Limayem, M., and Cheung, C. M. 2012. "User switching of information technology: A theoretical synthesis and empirical test," *Information & Management* (49:7-8), pp. 327-333 (doi: 10.1016/j.im.2012.06.002).
Blaker, A. 2018. *How Retailers Can Minimize Return Impact With Remarketing*. https://www.twice.com/blog/how-retailers-can-make-more-money-on-retur.
Bower, G. H. 1981. "Mood and memory," *American Psychologist* (36:2), pp. 129-148 (doi: 10.1037/0003-066X.36.2.129).
Brown, S. A., Massey, A. P., Montoya-Weiss, M. M., and Burkman, J. R. 2002. "Do I really have to? User acceptance of mandated technology," *European Journal of Information Systems* (11), pp. 283-295.
Califf, C. B., Sarker, S., and Sarker, S. 2020. "The Bright and Dark Sides of Technostress: A Mixed-Methods Study Involving Healthcare IT," *MIS Quarterly*.
Campbell, D. T., and Fiske, D. W. 1959. "Convergent and discriminant validation by the multitrait-multimethod matrix," *Psychological Bulletin* (56:2), pp. 81-105.
Carmines, E. G., and Zeller, R. A. 2008. *Reliability and validity assessment*, Newbury Park, Calif.: Sage Publ.
Cenfetelli, R. T. 2004. "Inhibitors and Enablers as Dual Factor Concepts in Technology Usage," *Journal of the Association for Information Systems* (5:11-12), pp. 472-492.
Cenfetelli, R. T., and Schwarz, A. 2011. "Identifying and Testing the Inhibitors of Technology Usage Intentions," *Information Systems Research* (22:4), pp. 808-823.
Charlton, G. 2020. *Ecommerce Returns: 2020 Stats and Trends*. https://www.salecycle.com/blog/featured/ecommerce-returns-2018-stats-trends/.
Chin, W., Thatcher, J. B., and Wright, R. T. 2012. "Assessing Common Method Bias: Problems with the ULMC Technique," *MIS Quarterly* (36:3), pp. 1003-1019.
Colquitt, J. A., and Simmering, M. J. 1998. "Conscientiousness, goal orientation, and motivation to learn during the learning process: A longitudinal study," *Journal of Applied Psychology* (83:4), pp. 654-665 (doi: 10.1037/0021-9010.83.4.654).
Cui, G., Bao, W., and Chan, T.-S. 2009. "Consumers' adoption of new technology products: the role of coping strategies," *Journal of Consumer Marketing* (26:2), pp. 110-120 (doi: 10.1108/07363760910940474).
Dalrymple, J. 2011. *Galaxy Tab return rate at 13%; iPad 2%*. http://www.cnet.com/news/galaxy-tab-return-rate-at-13-ipad-2/.
de Guinea, A. O., and Webster, J. 2013. "An investigation of information systems use patterns: technological events as triggers, the effect of time, and consequences for performance," *MIS Quarterly* (37:4), pp. 1165-1188.
Djordjevic, M. 2021a. *18 Ecommerce Return Rate Statistics for an Enhanced Shopping Experience in 2021*. https://savemycent.com/ecommerce-return-rate-statistics/.
Djordjevic, M. 2021b. *50+ Essential Ecommerce Statistics To Help You Keep Up With the Latest Trends*. https://savemycent.com/ecommerce-statistics/.
Douthit, D., Flach, M., and Agarwal, V. 2011. "A "Returning Problem": Reducing the Quantity and Cost of Product Returns in Consumer Electronics,"
Duhachek, A., and Iacobucci, D. 2005. "Consumer Personality and Coping: Testing Rival Theories of Process," *Journal of Consumer Psychology* (15:1), pp. 52-63 (doi: 10.1207/s15327663jcp1501_8).
Eckhardt, A., Maier, C., Hsieh, J. J., Chuk, T., Chan, A., Hsiao, J., and Buettner, R. 2013. "Objective measures of IS usage behavior under conditions of experience and pressure using eye fixation data," *Proceedings of the 34th International Conference on Information Systems* (DOI 10.1007/s12599-013-0291-3).
Evanschitzky, H., Iyer, G. R., Pillai, K. G., Kenning, P., and Schütte, R. 2015. "Consumer Trial, Continuous Use, and Economic Benefits of a Retail Service Innovation: The Case of the Personal Shopping Assistant," *Journal of Product Innovation Management* (32:3), pp. 459-475 (doi: 10.1111/jpim.12241).
Fielding, N., and Schreier, M. 2001. *Introduction: On the Compatibility between Qualitative and Quantitative Research Methods*. Forum: Qualitative Social Research. http://www.qualitative-research.net/index.php/fqs/article/view/965/2107. Accessed 3 May 2011.

Flanagan, J. C. 1954. "The Critical Incident Technique," *Psychological Bulletin* (51:4), pp. 327-359.
Fornell, C., and Larcker, D. F. 1981. "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research* (18:1), pp. 39-50.
Galluch, P. S., Grover, V., and Thatcher, J. B. 2015. "Interrupting the workplace: examining stressors in an information technology context," *Journal of the Association for Information Systems* (16:1), pp. 1-47.
Gasson, S. 2004. "Rigor in Grounded Theory Research," in *The Handbook of Information Systems Research*, M. Whitman and A. Woszczynski (eds.), IGI Global, pp. 79-102.
Gould, S. J., Houston, F. S., and Mundt, J. 1997. "Failing to Try to Consume: A Reversal of the Usual Consumer Research Perspective.," *Advances in Consumer Research* (24:1), pp. 211-216.
Gremler, D. D. 2004. "The Critical Incident Technique in Service Research," *Journal of Service Research* (7:1), pp. 65-89 (doi: 10.1177/1094670504266138).
Hamilton, K., and Hassan, L. 2010. "Self-concept, emotions and consumer coping," *European Journal of Marketing* (44:7/8), pp. 1101-1120 (doi: 10.1108/03090561011047544).
Hay, I. 2010. *Qualitative research methods in human geography*, Oxford, New York: Oxford University Press.
Hayes, A. F. 2012. "PROCESS: A versatile computational tool for observed variable moderation, mediation, and conditional process modeling.," *[White Paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf*.
Henseler, J., Ringle, C. M., and Sarstedt, M. 2014. "A new criterion for assessing discriminant validity in variance-based structural equation modeling," *Journal of the Academy of Marketing Science* (doi: 10.1007/s11747-014-0403-8).
Hogarth, R., and Einhorn, H. J. 1992. "Order effects in belief updating: The belief adjustment model," *Cognitive Psychology* (24:1), pp. 1-55.
Hulland, J. S. 1999. "Use of partial least squares (PLS) in strategic management research: A review of four recent studies," *Strategic Management Journal* (20:2), pp. 195-204.
Johnson, R. D., Veltri, N., and Thatcher, J. B. 2015. "Beliefs and Attributions toward Computing Technology," *Journal of Organizational and End User Computing* (27:3), pp. 27-54 (doi: 10.4018/joeuc.2015070102).
Karahanna, E., Straub, D. W., and Chervany, N. L. 1999. "Information Technology Adoption Across Time: A Cross-sectional Comparison of Pre-adoption and Post-adoption Beliefs," *MIS Quarterly* (23:2), pp. 183-213.
Kim, K. H. 2005. "The Relation Among Fit Indexes, Power, and Sample Size in Structural Equation Modeling," *Structural Equation Modeling: A Multidisciplinary Journal* (12:3), pp. 368-390 (doi: 10.1207/s15328007sem1203_2).
Klonglan, G., and Coward, E. 1970. "The concept of symbolic adoption: A suggested interpretation," *Rural Sociology* (35), pp. 77-83.
Lankton, N. K., and McKnight, H. D. 2012. "Examining Two Expectation Disconfirmation Theory Models: Assimilation and Asymmetry Effects," *Journal of the Association for Information Systems* (13:2), pp. 88-115.
Laumer, S., Maier, C., and Weitzel, T. 2016. "The influence of change-related stress on user resistance when an enterprise system is implemented: a longitudinal field study," *Proceedings of the 37th International Conference on Information Systems (ICIS), Fort Worth (TX)*.
Lazarus, R. S., and Folkman, S. 1984. *Stress, appraisal, and coping*, New York: Springer Pub. Co.
Lewis, W., Agarwal, R., and Sambamurthy, V. 2003. "Sources of influence of beliefs about information technology use: An empirical study of knowledge workers," *MIS Quarterly* (27:4), pp. 657-678.
Lu, J., Yao, J. E., and Yu, C. S. 2005. "Personal innovativeness, social influences and adoption of wireless Internet services via mobile technology," *The Journal of Strategic Information Systems* (14:3), pp. 245-268.
Luce, Payne, and Bettman 2000. "Coping with Unfavorable Attribute Values in Choice," *Organizational Behavior and Human Decision Processes* (81:2), pp. 274-299 (doi: 10.1006/obhd.1999.2872).
Maier, C., Laumer, S., Tarafdar, M., Mattke, J., Reis, L., and Weitzel, T. forthcoming. "Challenge and Hindrance IS Use Stressors and Appraisals: Explaining Contrarian Associations in Post-acceptance IS Use Behavior," *Journal of the Association for Information Systems*.
Maier, C., Laumer, S., Thatcher, J. B., Sun, H., Weinert, C., and Weitzel, T. 2021. "Social Networking Site Use Resumption: A Model of Return Migration," *Journal of the Association for Information Systems* (22:4), Article 5.
Maier, C., Laumer, S., Weinert, C., and Weitzel, T. 2015. "The effects of technostress and switching stress on discontinued use of social networking services: a study of Facebook use," *Information Systems Journal* (25:3), pp. 275-308 (doi: 10.1111/isj.12068).
Maier, C., Laumer, S., Wirth, J., and Weitzel, T. 2019. "Technostress and the hierarchical levels of personality: a two-wave study with multiple data samples," *European Journal of Information Systems* (28:5), pp. 496-522 (doi: 10.1080/0960085X.2019.1614739).
Mani, Z., and Chouk, I. 2017. "Drivers of consumers' resistance to smart products," *Journal of Marketing Management* (33:1-2), pp. 76-97 (doi: 10.1080/0267257X.2016.1245212).

Marsh, H. W., and Hocevar, D. 1985. "Application of confirmatory factor analysis to the study of self-concept: First- and higher order factor models and their invariance across groups.," *Psychological Bulletin* (97:3), pp. 562-582.
Mathur, A., Moschis, G. P., and Lee, E. 1999. "Stress and consumer behavior," *Journal of Marketing Practice: Applied Marketing Science* (5:6/7/8), pp. 233-247 (doi: 10.1108/EUM0000000004572).
Mattke, J., Maier, C., Müller, L., and Weitzel, T. 2018. "Typology of User Resistance Behavior: A Study Explaining Why Individuals Resist Using Bitcoin," *ICIS 2018 Proceedings*.
Merritt, J. 2011. *Galaxy Tab Sales "Smooth" not "Small" but High Return Rate is Bumpy Ride*. http://www.androidheadlines.com/2011/02/galaxy-tab-sales-"smooth"-not-"small"-but-high-return-rate-is-bumpy-ride.html.
Mick, D. G., and Fournier, S. 1998. "Paradoxes of Technology: Consumer Cognizance, Emotions, and Coping Strategies," *Journal of Consumer Research* (25:2), pp. 123-143 (doi: 10.1086/209531).
Miles, M. B., Huberman, A. M., and Saldaña, J. 2013. *Qualitative data analysis*: *A methods sourcebook*.
Moore, G. C., and Benbasat, I. 1991. "Development of an instrument to measure the perceptions of adopting an information technology innovation," *Information Systems Research* (2:3), pp. 192-222.
Myers, M. D. 2009. *Qualitative research in business and management*, Los Angeles: Sage.
Oreg, S. 2003. "Resistance to Change: Developing an Individual Differences Measure," *Journal of Applied Psychology* (88:4), pp. 680-693.
Parthasarathy, M., and Bhattacherjee, A. 1998. "Understanding post-adoption behavior in the context of online services," *Information Systems Research* (9:4), pp. 362-379.
Paunonen, S. V., and Ashton, M. C. 2001. "Big Five Factors and Facets and the Prediction of Behavior," *Journal of Personality and Social Psychology* (81:3), pp. 524-539.
Pavia, T. M., and Mason, M. J. 2004. "The Reflexive Relationship between Consumer Behavior and Adaptive Coping," *Journal of Consumer Research* (31:2), pp. 441-454 (doi: 10.1086/422121).
Pflügner, K., Maier, C., Mattke, J., and Weitzel, T. 2020. "Personality Profiles that put Users at Risk of Perceiving Technostress: A Qualitative Comparative Analysis with the Big Five Personality Traits," *Business & Information Systems Engineering*.
Pflügner, K., Maier, C., and Weitzel, T. 2021. "The direct and indirect influence of mindfulness on techno-stressors and job burnout: A quantitative study of white-collar workers," *Computers in Human Behavior* (115), p. 106566 (doi: 10.1016/j.chb.2020.106566).
Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., and Podsakoff, N. P. 2003. "Common Method Biases in Behavioral Research: A Critical Review and Recommended Remedies," *Journal of Applied Psychology* (83:5), pp. 879-903.
Polites, G. L., and Karahanna, E. 2012. "Shackled to the status quo: The inhibiting effects of incumbent system habit, switching costs, and inertia on new system acceptance," *MIS Quarterly* (36:1).
Polites, G. L., Roberts, N., and Thatcher, J. 2012. "Conceptualizing models using multidimensional constructs: a review and guidelines for their use," *European Journal of Information Systems* (21:1), pp. 22-48.
Ragu-Nathan, T. S., Tarafdar, M., Ragu-Nathan, B. S., and Qiang, T. 2008. "The Consequences of Technostress for End Users in Organizations: Conceptual Development and Empirical Validation," *Information Systems Research* (1:4), pp. 417-433.
Riedl, R., Kindermann, H., Auinger, A., and Javor, A. 2012. "Technostress from a Neurobiological Perspective - System Breakdown Increases the Stress Hormone Cortisol in Computer Users," *Business & Information Systems Engineering* (4:2), pp. 61-69.
Ringle, C. M., Sarstedt, M., and Straub, D. W. 2012. "Editor's comments: a critical look at the use of PLS-SEM in MIS quarterly," *MIS Quarterly* (36:1), pp. iii-xiv.
Ringle, C. M., Wende, S., and Becker, J.-M. 2014. *SmartPLS3*, Hamburg.
Rogers, E. M. 2003. *Diffusion of innovations*, New York, NY: Free Press.
Sarker, S., Ahuja, M., and Sarker, S. 2018. "Work–Life Conflict of Globally Distributed Software Development Personnel: An Empirical Investigation Using Border Theory," *Information Systems Research* (29:1), pp. 103-126 (doi: 10.1287/isre.2017.0734).
Sarker, S., Xiao, X., and Beaulieu, T. 2013. "Qualitative Studies in Information Systems: A Critical Review and Some Guiding Principles," *MIS Quarterly* (37:4), pp. iii-xvii.
Smith, H. J., Dinev, T., and Xu, H. 2011. "Information privacy research: an interdisciplinary review," *MIS Quarterly* (35:4), pp. 989-1016.
Son, J.-Y., Kim, S., and Riggins, F. 2006. "Consumer Adoption of Net-Enabled Infomediaries: Theoretical Explanations and an Empirical Test," *Journal of the Association for Information Systems* (7:7), pp. 473-508 (doi: 10.17705/1jais.00094).
Srivastava, S. C., Chandra, S., and Shirish, A. 2015. "Technostress creators and job outcomes: theorising the moderating influence of personality traits," *Information Systems Journal* (25:4), pp. 355-401 (doi: 10.1111/isj.12067).

Stein, M.-K., Newell, S., Wagner, E. L., and Galliers, R. D. 2015. "Coping with information technology: Mixed emotions, vacillation and non-conforming use patterns," *MIS Quarterly* (39:2), pp. 367-392.
Sun, H., and Zhang, P. 2006. "The role of moderating factors in user technology acceptance," *International Journal of Human-Computer Studies* (64:2), pp. 53-78 (doi: 10.1016/j.ijhcs.2005.04.013).
Tams, S., Hill, K., Ortiz de Guinea, A., Thatcher, J., and Grover, V. 2014. "NeuroIS—Alternative or Complement to Existing Methods? Illustrating the Holistic Effects of Neuroscience and Self-Reported Data in the Context of Technostress Research," *Journal of the Association for Information Systems* (15:10).
Tarafdar, M., Maier, C., Laumer, S., and Weitzel, T. 2020. "Explaining the link between technostress and technology addiction for social networking sites: A study of distraction as a coping behavior," *Information Systems Journal* (30:1), pp. 96-124 (doi: 10.1111/isj.12253).
Tarafdar, M., Tu, Q., and Ragu-Nathan, T. S. 2010. "Impact of Technostress on End-User Satisfaction and Performance," *Journal of Management Information Systems* (27:3), pp. 303-334.
Tashakkori, A., and Teddlie, C. (eds.) 2003. *Sage handbook of mixed methods in social & behavioral research*, Los Angeles: Sage Publications.
Tett, R. P., Simonet, D. V., Walser, B., and Brown, C. 2014. "Trait activation theory: Applications, developments, and implications for person-workplace fit," in *Handbook of personality at work*, N. Christiansen and R. Tett (eds.), New York, NY: Brunner-Routledge, pp. 71-100.
Thatcher, J. B., and Perrewé, P. L. 2002. "An empirical examination of individual traits as antecedents to computer anxiety and computer self-efficacy," *MIS Quarterly* (26:4), pp. 381-396.
Thatcher, J. B., Wright, R. T., Zagenczyk, T. J., and Klein, R. 2018. "Mindfulness in Information Technology Use: Definitions, Distinctions, and a New Measure," *MIS Quarterly* (42:3), pp. 831-847 (doi: 10.25300/MISQ/2018/11881).
Valdellon, L. 2020. *Why App Uninstalls Aren't Forever*. https://clevertap.com/blog/app-uninstalls-arent-forever/#:~:text=Remember%20that%20most%20apps%20lose,in%20the%20first%2090%20days.&text=A%20good%2050%25%20of%20all,period%20for%20a%20new%20user.
Venkatesh, V., Brown, S. A., and Bala, H. 2013. "Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems," *MIS Quarterly* (37:1), pp. 21-54.
Venkatesh, V., Morris, M. G., Davis, G. B., and Davis, F. D. 2003. "User Acceptance of Information Technology: Toward a unified view," *MIS Quarterly* (27:3), pp. 425-478.
Venkatesh, V., Sykes, T. A., and Venkatraman, S. 2014. "Understanding e-Government portal use in rural India: Role of demographic and personality characteristics," *Information Systems Journal* (24:3), pp. 249-269 (doi: 10.1111/isj.12008).
Venkatesh, V., Thong, J. Y. L., and Xu, X. 2012. "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology," *MIS Quarterly* (36:1), pp. 157-178.
Venkatesh, V., Windeler, J. B., Bartol, K. M., and Williamson, Ian, O 2017. "Person-Organization and Person-Job Fit Perceptions of New IT Employees: Work Outcomes and Gender Differences," *MIS Quarterly* (41:2), pp. 525-555.
Watkins, P. C., Vache, K., Verney, S. P., and Mathews, A. 1996. "Unconscious mood-congruent memory bias in depression," *Journal of Abnormal Psychology* (105:1), pp. 34-41.
Weinert, C., Maier, C., Laumer, S., and Weitzel, T. 2020. "Technostress mitigation: an experimental study of social support during a computer freeze," *Journal of Business Economics* (doi: 10.1007/s11573-020-00986-y).
Windeler, J. B., Chudoba, K. M., and Sundrup, R. Z. 2017. "Getting away from them all: Managing exhaustion from social interaction with telework," *Journal of Organizational Behavior* (38:7), pp. 977-995 (doi: 10.1002/job.2176).
Wolverton, C. C., and Cenfetelli, R. 2019. "An Exploration of the Drivers of Non-Adoption Behavior," *ACM SIGMIS Database* (50:3), pp. 38-65 (doi: 10.1145/3353401.3353405).
Wright, R. T., Campbell, D. E., Thatcher, J. B., and Roberts, N. 2012. "Operationalizing Multidimensional Constructs in Structural Equation Modeling: Recommendations for IS Research," *Communications for the Association for Information Systems* (30:23), pp. 367-412.
Xu, J., Benbasat, I., and Cenfetelli, R. T. 2014. "Research Note —The Influences of Online Service Technologies and Task Complexity on Efficiency and Personalization," *Information Systems Research* (25:2), pp. 420-436 (doi: 10.1287/isre.2013.0503).
Yi, M. Y., and Davis, F. D. 2003. "Developing and Validating an Observational Learning Model of Computer Softw^are Training and Skill Acquisition," *Information Systems Research* (14:2), pp. 146-169.
Yi, S., and Baumgartner, H. 2004. "Coping With Negative Emotions in Purchase-Related Situations," *Journal of Consumer Psychology* (14:3), pp. 303-317 (doi: 10.1207/s15327663jcp1403_11).
Yin, R. K. 2009. *Case study research*: *Design and methods*, Los Angeles, Calif: Sage.