Breaking Out of the Social Media Prison: Identifying Strategies to Disrupt the IT- Mediated State-Tracking Habit

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Completed Research

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Abstract

In recent times, the negative consequences of social network sites (SNS) including social overload, loss of self-control and technology addiction caused problematic usage behavior. Combined with the new phenomenon of IT-mediated state-tracking, the habit of constantly checking for new updates has a rising impact in terms of information technology (IT) usage on the society. Since there is a lack of theoretical insights on how to break checking habits, strategies have been developed to disrupt the user's habit of compulsive and excessive usage. To provide insights on this topic, a literature review has been conceived which invests Information System (IS) journals and IS conferences. The results show six disruption strategies. The paper's findings contribute conceptually to the existing IT literature including an illustration from which users can derive important and useful guides to disrupt their IT-mediated state-tracking habits.

Keywords

Habit disruption, IS habit, IT-mediated state-tracking habit, social network sites, constant checking.

Introduction

During the last decade, the usage of social network sites (SNS) has reached its peak (Turel and Qahri-Saremi 2016). The positive aspects of the increasing SNS usage also share a dark side of IT. The dark side is reflected by compulsive and excessive usage, which affects personal, academic, and social performance (Turel and Qahri-Saremi 2016). The platform Statista published statistics of 2022, showing that the average daily social media use of individuals using the internet amounts to 147 minutes a day. The platform further points out that social media has a crucial and wide-reaching impact on online activities, offline behaviour and general live activities (Statista 2022). Therefore, individuals check continuously for updates and news on a short but constant basis (Turel and Qahri-Saremi 2016). These outcomes imply the virtual prison society lives in, built by social media, leading to negative consequences. However, recent research states that problematic and excessive usage can be understood as a checking habit that is performed on a constant basis to receive up-to-date news. The habit is further defined as IT-mediated state-tracking, which serves as a new theoretical construct to represent constant checking habits better. Thereby, individuals seek information to receive up-to-date state updates (Gerlach and Cenfetelli 2020). Based on this new understanding of IT-mediated state-tracking, the countermeasures of such behaviors should be investigated to reduce the negative consequences that affect organizations, individuals, and society. Hence, strategies must be identified which disrupt the IT-mediated state-tracking habit to break out of the social media prison. Therefore, we aim to close the gap by reviewing the existing literature in the field and providing strategies for disrupting the IT-mediated state-tracking habit. Thus, the following research question arises:

What strategies exist to disrupt the IT-mediated state-tracking habit?

The structure of this paper is designed as follows. The background of habits and the IT-related field regarding SNS will be examined. Afterwards, a literature review will be presented regarding the strategies

to disrupt habits. Finally, the results will be discussed and reviewed, along with the theoretical and practical implications of the limitations and future research.

Theoretical Background

Habits, Checking Habit, and IT-Mediated State-Tracking Habit

"Habits are learned dispositions to repeat past responses. They are triggered by features of the context that have covaried frequently with past performance [...]" (Wood and Neal 2007, p. 843). Additionally, a habit is associated with a process in which a situational context leads to an automatic response (Verplanken et al. 1997). In the IS context, an IS habit can be defined as *"[...] the extent to which people tend to perform behaviors (use IS) automatically because of learning"* (Limayem et al. 2007, p. 709). For instance, many users find themselves mindlessly clicking on an application or icons on their smartphone screens, computers, or tablets without the conscious intention of doing so (Polites and Karahanna 2013). Habits can be further categorized into subcategories. Checking habits are defined as *"[...] automated behaviors where the device is quickly opened to check the standby screen or information content in a specific application"* (Oulasvirta et al. 2012, p. 107). More precisely, checking habits are mostly performed constantly. A common characteristic of checking habits is the usage of smartphones, which is of a short time frame and unfolds during the whole day (Oulasvirta et al. 2012). Gerlach and Cenfetelli (2020) created a new term to describe the constant checking habit in more detail. They define IT-mediated state-tracking habit (hereafter IT-STH) as *"an individual's habitual use of IT to seek information that closes the gap between their knowledge about a real-world domain's state and its actual state"* (p. 1713). IT-STH is understood as a process encompassing the following parts.

Need to stay up-to-date: Users try to learn about the latest changes in the world by constantly checking digital devices for updates. This describes the need to stay up-to-date and the desire to know about news immediately. It is simple to satisfy through easy access everywhere and constant connectivity. These days, SNS achieve increasing popularity by providing their users with various ways to connect with other individuals. The applications are installable on smartphones, and now the access has gotten even easier (Gerlach and Cenfetelli 2020).

Continuous state-tracking: Individuals use IT as a mediator to track the state of the real-world domain. By constantly checking, they track state changes of real-world domains, especially those in which they are interested (Gerlach and Cenfetelli 2020). Thus, users potentially develop new habits regarding internet usage (Oulasvirta et al. 2012).

Habituation: Continuous state-tracking results in a faster habituation process (Gerlach and Cenfetelli 2020). For a habit to develop, several steps are taken to form a habitual pattern that results in habituation. Pattern describes the factor that individuals experience when they match their SNS usage to the usage of their friends (Tarafdar et al. 2020). This action can be derived from the desire to inform others through postings and to keep up with postings of friends. In this context, the habit of checking has already developed into a response through automatic behavior (Tarafdar et al. 2020). Besides, habits are constructed on mental associations that consist of goals and automated concepts. These associations are strengthened through repeated reward learning and trigger a specific response. This response thus gets triggered by context cues (Wood 2017). In this case, the device itself represents the contextual cue. By seeing the phone, the individual gets reminded of the reward, and a habitual usage performance is triggered. Since the behavior is automated, the user gets access to screens that provide the informational value reward. Therefore, the user becomes more aware of social networks, and the lack of stimuli is saturated (Oulasvirta et al. 2012). The habit mechanism with the ready response brings the reliable benefit of fulfilling daily tasks without thinking and using cognitive resources (Neal et al. 2013).

IT-mediated state-tracking habit (IT-STH): To represent constant checking habits from a theoretical view, Gerlach and Cenfetelli (2020) defined IT-mediated state-tracking. It further defines the construct of a user's behavior toward a single IT. It represents an individual's habitual use of IT to seek information that closes the gap between their knowledge about a real-world state and its actual state.

Habit execution: After the habit is formed and triggered in the presence of context cues, habit execution is performed. Since users report less self-control, it results in an automated habit execution process (Gerlach and Cenfetelli 2020).
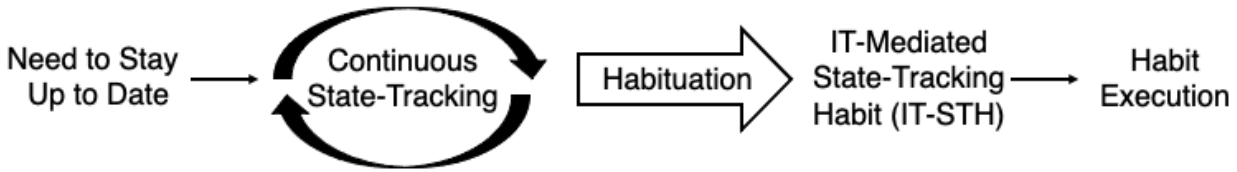
Figure 1. Overview of IT-mediated state-tracking (based on Gerlach and Cenfetelli 2020)

Habit Disruption Strategies

Habit disruption strategies aim to break IS habits. They serve to disrupt incumbent system habits or discourage habit performance. Each strategy draws on the embeddedness of IT use (Polites and Karahanna 2013). Considering the problematic and excessive usage of individuals, it is necessary to disrupt IT-STH. Past literature develops a framework that contains four disruption strategies to disrupt state-tracking habits (Polites and Karahanna (2013). First, interference, which splits into physical access changes and modified routines. Second, disruption, which is achieved by distraction through monitoring and feedback. Additionally, both mentioned strategies manipulate important work routines in situations when habitual behavior occurs. Third, reprogramming responses, which is accomplished through training-in-context, which raises awareness of triggers leading to habit execution. Fourth, counteracting antecedent states, which are attained by a suspension in the performance goal to reduce reversions to habitual patterns of IS usage.

Research Methodology: Literature Review

To identify further disrupting strategies, a literature review has been carried out, which focuses on strategies to disrupt IT-STH. The literature review structure follows the process that is recommended by vom Brocke et al. (2009): (1) definition of review scope, (2) conceptualization of topic, (3) literature search, (4) literature analysis and synthesis.

The first step (1) draws on an established taxonomy to clearly define the scope of review since it conducts implications for the later research process. Therefore, the taxonomy by Cooper (1988) is used. The important focus of the review is on research outcomes. The common goal is to integrate findings and results of preceding research on disrupting strategies to gain a broader range of insights. Furthermore, the paper is organized in a conceptual manner because related work appears together. The review covers a neutral representation in showing the results. The addressed audience consists of specialized researchers and scholars with interest in disrupting IT-STH. The distinguished coverage is classified as representative, since it only includes a sample of representative literature articles and not the entirety of the literature (Cooper 1988).

The second step (2) describes the aspect of conceptualization of the topic. It is suggested to contain an overview of the key issues relevant to IT-STH (Baker 2000). This has been done in the theoretical background by connecting the psychological aspect of habits and IS habits (Wood and Neal 2007; Verplanken et al. 1997; Limayem et al. 2007) with the IT-related part of IT-mediated state-tracking (Gerlach and Cenfetelli 2020).

The third step (3) considers the literature search, which is based on the 'Senior Scholars' Basket of Journals', IS conferences, and is presented in Table 1 (Association for Information Systems 2011). According to vom Brocke et al. (2009), the search process also involves databases, keyword search, backward and forward search, and an ongoing evaluation of sources, which will be conducted in the following. The search includes only peer-reviewed articles. All hits resulting from the query used the keywords habit disruption, IS habit, social network sites or constant checking. Finally, 1.694 articles have been found. The decision regarding whether to analyze an identified article in detail was based on the title and abstract and if the focus was on habits or disruption. The significant difference between hits and relevant papers results from the fact that there is a large amount of SNS papers. Since this paper is limited to IS habit disruption, the number of relevant papers has been greatly reduced. The phenomenon of IT-STH is relatively new, thus the time frame has been set between 2010 and 2021. This initial search yielded

10 articles. In accordance with Webster and Watson (2002), a backward and forward search was executed, thus 11 articles have been classified.

Senior Scholars' Basket of Eight	Search field	Coverage	Hits	Analyzed
Management Information System Quarterly	All fields: Abstract, Subject, Title	2010 - 2021	376	3
European Journal of Information Systems			43	2
Information Systems Journal			12	2
Journal of Information Technology			23	0
Information Systems Research			7	0
Journal of Management Information Systems			18	2
Journal of Strategic Information Systems			29	0
Journal of the Association for Information Systems			192	0
Conferences				
International Conferences on Information Systems			349	1
European Conference on Information Systems			32	0
Americas Conference on Information Systems			440	0
Pacific Asia Conference on Information Systems			173	0
Backward and forward search				1
Total sum			1.694	11

Table 1. Hits and analyzed journals and conference papers

Results and Proposition Development

After finishing step (3), the paper follows step (4), which analyzes and synthesizes the literature (vom Brooke et al. 2009). To structure the analysis, we assigned the identified habit disruption strategies to the categories of the framework by Polites and Karahanna (2013). Several revealed strategies could not be assigned to the existing categories, so we extend the existing framework with new categories.

Habit Disruption Strategies			
Strategy		**Approach**	**Reference**
Interference	Physical Access Changes	Modification of **physical access changes**.	(Polites and Karahanna, 2013)
		Temporarily **self-exclusion** from betting.	(Hou et al., 2019)
	Modified Work Routines	Online feedback on **control of usage** and **restriction** of payment or gaming options.	(Hou et al., 2019)
		Modification of interface for **performing certain automated tasks**.	(Polites and Karahanna, 2013)
Distraction		Implementation **of pop-up messages/delays and countdowns** as reminders.	(Polites and Karahanna, 2013)
		Time restriction on websites and **bans** of online games in school networks.	(Turel and Serenko, 2012)
		Feedback by showing **statistics or alert warnings**.	(Turel, 2015)
		Awareness campaigns illustrating consequences.	(Soror et al., 2015)
		Monitoring environments to better regulate behaviors.	(Chen et al., 2020)
		More **responsibility**, **control of impulses**, **avoid stimuli** by institutions.	(Turel, Qahri-Saremi, 2016)
Reprogramming Responses		Training within context of **task sequence**.	(Polites and Karahanna, 2013)
		Embedded reminders such as pop-up messages.	(Hou et al., 2019)
Counteracting Antecedent States		**Lowering employee stress** by setting **performance goals**.	(Polites and Karahanna, 2013)
		Decrease inertia by **modifying features** that prevent **habitual usage.**	(Polites and Karahanna, 2012)
		Managers **vary goal value** that is linked to behavior.	(Gerlach et al., 2014)
Digital Detox and Discontinuance		**Temporary SNS abstinence**.	(Vaghefi et al., 2018)
		Discontinuance and **stop usage** of SNS.	(Turel, 2015)
Hybrid Solutions		**Modifying technology** of legacy and new IS systems.	(Rezazade et al., 2021)
Deterring Role		**Abandoning dysfunctional habits** while maintaining creative work.	(Rezazade et al., 2021)

Table 2. Overview of the results

Interference

Interference describes the strategy of prevention in the pursuit of an individual's goal. Either the user's access to an incumbent system is completely eliminated, so that the IT-STH is disrupted or, the IT-STH is still present. Two types of interference strategies exist.

Physical Access Changes (Gerlach and Cenfetelli 2020) describe the process when system designers modify physical access changes so that users tend to make less action slips. These action slips include situations where the individual is not consciously thinking, not aware of the actions and thus, 'slips up' (Polites and Karahanna 2013). Habitual usage is disrupted by the combination of several disrupting features and alteration of the IT environment. The research differentiates between online sport and online casino gambling in the field of regularity in gambling behavior. A mixture of modified routines is suggested, as well as changes in physical access and training-in-context. In the research study, the European Internet gambling establishment 'bwin.party' has implemented features in the gambling interface. For instance, the intention behind temporary self-exclusion from betting was to slow down habitual scripts and force the user to think about the actions consciously (Hou et al. 2019).

Modified Routines describe the second possibility of interfering with and triggering the habitual choice. This has been achieved by blocking the gambling user from betting and accessing the game and restricting payment options. We extend the framework of disruptive strategies (Polites and Karahanna 2013) by some aspects. The additional strategies include digital detox, discontinuance, hybrid solutions and the deterring role. In a physical context, the interface can be modified for performing certain automated tasks in a larger, integrated system such as a web interface or a portal. Through modifying or eliminating the work routines, automatic cues are disrupted so that the user must stop and consciously think about the next step. By preventing script completion, it leads to a higher awareness level and the ability to control the behavior resulting in IT-STH disruption. Hence, we posit that:

Proposition 1a: *Interference disrupts IT-STH by modifying physical access and therefore, slowing down habitual scripts and forcing the user to rethink the actions.*

Proposition 1b: *Modified routines disrupt IT-STH through interfering habit execution after the habit has been triggered.*

Distraction

Distraction serves as another strategy to disrupt habitual scripts. It is provided through monitoring and feedback by social circumstances. These distractions cause users to follow or pursue another goal. Polites and Karahanna (2013) suggest changing the social context and promoting new IS usage goals by implementing pop-up messages that alert users in situations when their habit leads them to the unwanted behaviour of checking devices. Furthermore, an approach is proposed that works like a countdown or a delay that requires the individual to be patient and wait before the incumbent system powers up. In this case, awareness through the monitoring and feedback mechanism is raised and the users must give an active response (Polites and Karahanna 2013). Research in the field of IS enjoyment leads to the assumption that enjoyment might facilitate the development of bad habits with strong patterns (Turel and Serenko 2012). This statement demonstrates that bad habits evolve into a dependency on IT usage and, ultimately, technology addiction. In the case of IT addiction, many users will not voluntarily decrease the time and intensity of IT usage. Thus, it is suggested to manipulate the elements that are linked to technology addiction. To raise awareness, time restrictions on websites, bans of online games in schools, and more disclaimers should be implemented (Turel and Serenko 2012). Especially in the context of SNS, IT users are mostly guilt-ridden. Clinical psychologists should develop more advanced treatment practices for IS users in order to develop more self-awareness of these guilt-producing behaviors. Feedback is given by showing usage statistics or providing alert warnings in situations where excessive usage is identified (Turel 2015). Research by Soror et al. (2015) used dual-system theories to examine the negative consequences associated with mobile phone usage (MPU). The authors theorize that the influence of self-regulation and habits on negative consequences is mediated by MPU. Results showed that users who actively monitor and evaluate their MPU tend to experience fewer negative consequences. Another study investigated factors that lower critical smartphone game usage based on protection motivation theory. The results demonstrated that subjective norms in IS usage, parents, friends, and the individual's social surroundings help users regulate and manage their behavior (Chen et al. 2020). Research on dual-system

theory concentrated on the problematic usage and potential adverse consequences of SNS (Turel and Qahri-Saremi 2016). They investigated that many users use SNS while driving, in class, or when talking to others face-to-face. Their results showed that users should gain more control over their excessive usage behavior, more assistance should be provided by educational institutions and IT designers should provide easier monitoring features such as observable usage statistics (Turel and Qahri-Saremi 2016). To sum up, the observed findings and prior knowledge, this paper posits:

Proposition 2: *Distraction disrupts IT-STH through changing the social context, monitoring IS usage and thus, promotes awareness by returning the associated feedback.*

Reprogramming Responses

Reprogramming responses through training-in-context represents another disruption strategy by Polites and Karahanna (2013). Training serves the purpose of increasing self-efficacy and removing knowledge barriers. To eliminate embedded IS habits, it requires awareness of all situational cues that trigger usage of the unwanted behaviour of IT-STH. Awareness provides a higher ability to gain more conscious control over the chosen IS habit and leads to fewer action slips. This can be achieved by reprogramming the response to the contextual cues. Cues that are associated with certain task sequences can guide action slips, and they demonstrate that training with a new IS system should be practiced within the context of the task sequence. Training to use a new IS system should be performed when situational triggers are present. Additionally, to use the new system more often, the user's response to situational cues should be reconditioned. Reconditioning can be achieved by either disrupting the habit along IS usage or by strengthening the habitual construct of the habit (Polites and Karahanna 2013). A recent investigation applied training-in-context in the form of initiatives to address unwanted gambling. In the study, the leading online gambling company 'bwin.party' implemented habit disruptive IT features to assist help-seeking gamblers in order to slow down automatically performed habit execution. The feature prompted the user to rethink the next actions and explained the reason of the interruption (Hou et al. 2019). Thus, this paper proposes:

Proposition 3: *Reprogramming responses disrupt IT-STH through training-in-context which increase self-efficacy and reprograms the response to contextual cues.*

Counteracting Antecedent States

Counteracting antecedent states in performance goal suspension describes the state when an employee is feeling stressed or overwhelmed (Polites and Karahanna 2013). In this situation, users may automatically return to the usage of a system that reduces stress or provides a faster completion of tasks. Employee stress and habitual patterns will decrease by setting reasonable and attainable performance goals. Individuals adapt to the changes that arise with the introduction of the new system. Thus, users will be more aware of situational cues that could trigger the habitual usage of an incumbent IS system and gain more control over the habits (Polites and Karahanna 2013). An early study investigated inertia, which emerges in situations of habitual usage or just by the existence of usage patterns of the old IS usage behaviour (Polites and Karahanna 2012). The aim is to encourage and strengthen the individual's intention to adopt to the new IS usage behaviour. Furthermore, decreasing inertia by modifying features of the context might prevent habitual usage of the incumbent IS habit (Polites and Karahanna 2012). Further research investigated the moderating effect of goal values linked to habit and satisfaction. It demonstrates that managers can influence the satisfaction of users by varying the goal value that is linked to the behavior. If the intention behind introducing a new usage behaviour is explained to the habitual users, the change in their beliefs of the value of goals might develop (Gerlach et al. 2014). Thus, users develop a conscious awareness of situational triggers and are able to control their checking habits. Summing up these observations, this literature review proposes:

Proposition 4: *Counteracting antecedents states disrupts IT-STH through stress reduction and modifying performance goals.*

Digital Detox and Discontinuance

An investigative study examined digital detox and abstinence, which refer to habitual behavior that occurs with harmful effects and is observable in situations when individuals want to stop a repeated behavior or

take a break (Vaghefi et al. 2018). The strategy describes the users' efforts to stop using SNS either permanently or on a temporary basis. The focus is on obtaining a better understanding of SNS abstinence and further examined consequences and antecedents. The benefits and effects of the digital detox strategy result in SNS abstinence and higher activity when meeting with friends, and thus, less intention for compulsive checks of the phone occur. On the long term, individuals reported using the phone in less situations after the break, which enabled them to complete a bigger workload. They also experienced higher self-control and explore new opportunities to spend their free time (Vaghefi et al. 2018). Since the inference strategy forces the user to consciously think about actions, digital detox differs here in the user's already existing awareness of stopping the usage of SNS. Based on the preceding discussion, this paper proposes:

Proposition 5: *Digital detox disrupts IT-STH through a temporary SNS abstinence, which has been triggered by the user's efforts to stop using SNS.*

Another approach to disrupt IT-STH can be achieved by discontinuance. To limit the amount of literature in the context of discontinuing SNS, this paper concentrates on discontinuing habits. It is worth noting that discontinuance might not always be the right choice, and therefore disruption strategies might be more effective and realistic for the problematic usage of technology (Osatuyi and Turel 2020). The key discontinuance drivers lead to feelings of guilt and less self-efficacy, thus, inhibitors are represented by habit and satisfaction (Turel 2015). Discontinuance occurs when users develop an awareness of their problematic use. Usage results in less time to maintain relationships and lower work productivity, and inequity is produced in social exchange. More precisely, to return to emotional stability and reduce the feelings of guilt, the user has to minimize the negative consequences and exit the situation, which results in discontinuance (Turel 2015). This leads us to the following proposition:

Proposition 6: *Discontinuance disrupts IT-STH by exiting the situation completely, which has been triggered by the user's developed awareness of problematic IS usage.*

Hybrid Solutions

Further investigations focus on legacy habits, which are defined as unconscious and default thinking when working with unwanted behaviour (Rezazade 2021). The approach examines the way users handle their dependency on their user-personalized habits and the role of habits during the discontinuance process. First, users resist the discontinuance process, since an inhibiting role created resistance among the individuals to discontinue IS systems and triggered them to participate in the modification of the technology. Second, the users took part in the creation of a hybrid solution, which consisted of parts of the legacy and a new IS system. Individuals adapted from the old IS usage in a healthy manner to the incumbent usage behaviour (Rezazade 2021). Thus, this paper posits:

Proposition 7: *Hybrid solutions disrupt IT-STH through modifying technology of legacy and new IS systems, which has been triggered by the user's developed awareness of problematic IS usage.*

Deterring Role

The deterring role describes the users' dissatisfaction with legacy habits (Rezazade 2021). The deterring role strategy also consists of dysfunctional habits, which encourage users to discontinue and abandon their habits. In contrast, users also realize that replacing legacy habits makes their work less creative. Hence, this conflict leads them to find ways to abandon their dysfunctional habits but also maintain creative work. The deterring role is further strengthened when the user is oriented towards change. If the user is not willing to break dysfunctional habits, it leads to abandoning the specific qualities and creativity they enjoy about their work (Rezazade 2021). Summarizing the observed studies, the review proposes:

Proposition 8: *The deterring role disrupts IT-STH by abandoning dysfunctional habits while maintaining creative work, which has been triggered by the user's developed awareness of problematic IS usage.*

Discussion and Implications

This paper responses to the research question in regards to which strategies exist to disrupt the IT-STH. The usage of SNS is tremendously increasing, which is caused by IT-STH and results in negative consequences (Turel and Qahri-Saremi 2016). To counteract the problematic und habitual SNS use, different strategies have been identified. The strategies have been sorted into the framework of disruptive habit strategies (Polites and Karahanna 2013). Therefore, a broad understanding and explanation of habit disruption strategies have been obtained. Our results contain several theoretical and practical implications, which are discussed next.

Theoretical Implications

First, this research contributes to the existing IT literature by identifying disruption strategies for IT-STH based on the framework of Polites and Karahanna (2013). Furthermore, the literature research makes a conceptual contribution by identifying further habit disruption literature and sorting it into the framework. Thus, it expands the existing framework and reveals that further studied habit disruption strategies in the context of IT-STH exist. The different approaches grant IS researchers a holistic overview and summarize habit disruption strategies that can be applied to IT-STH and meet the peer-reviewed literature requirements. This paper successfully connects IT-embedded disruption strategies (Polites and Karahanna 2013) with the more detailed constant checking phenomenon of IT-mediated state-tracking (Gerlach and Cenfetelli 2020), including a psychological perspective. While the research of Polites and Karahanna (2013) is based on existing IS habits that are embedded in task sequences, this investigation expands the literature by identifying the habit as an IT-mediated state-tracking habit. More precisely, after being set in the context of organizational and individual work routines by Polites and Karahanna (2013), we added the variable of IT by Gerlach and Cenfetelli (2020). The generated value consists of various habit disruption strategies that aim to disrupt IT-STH, discontinue the usage completely or support a temporary distance (Vaghefi et al. 2018). Since the phenomenon of IT-STH is still rising, this paper calls for more research in this field.

Second, this paper has effectively emphasized the importance of disrupting IT-STH and highlights why strategies must be developed, applied, and should be further investigated. It is crucial to explain the interconnectivity of this IT-related topic, since most research only includes excessive and problematic IS system use in terms of technology addiction (Turel and Serenko 2012; Salehan and Negahban 2013; Vaghefi et al. 2017). The predominant perception of problematic IT use and constant checking is that users are addicted to technology (Gerlach and Cenfetelli 2020). This paper expands the perspective of constant checking being simply an addiction. It adds IT-STH as a user's habitual need for information. Thus, the need and compelling necessity for a greater attention should be paid to IT-STH, since not much knowledge exists regarding existing disruption strategies (Hou et al. 2019). The role of IT system usage will play an even bigger role since more and more individuals suffer from excessive usage and its behavioral consequences (Chen et al. 2020). Therefore, this paper expands the dominant perspective of SNS usage simply being a technology addiction and exchanges it by introducing IT-mediated state-tracking habits.

Third, this paper calls for more awareness and caution by parents and educational institutions. Furthermore, it extends the view of SNS usage being a simple need for information and interconnectivity. Since most young adults use SNS in inappropriate situations (Turel and Qahri-Saremi 2016), it is necessary to break IT-STH by applying disruption strategies. Additionally, the government should focus on awareness campaigns regarding phone usage (Soror et al. 2015). The effectiveness of adapting disruption strategies depends on the user's regular usage and plays an influential role in habit development. The habitual choice of a certain system gets encouraged by the appearance and layout of the interface (Ortiz de Guinea and Markus 2009). The excessive usage and the outcome of prioritizing IS use over personal wellbeing are harmful in the short- and long term (Salehan and Negahban 2013).

Practical Implications

This paper serves as a guide for users with excessive and problematic SNS usage in everyday life. Users may want to distance themselves from smartphone usage or aim to disrupt the IT-STH of devices. We provide users with disruption strategies to break their IT-STH. For example, we give users a proper

instruction on how to handle excessive phone usage and provide information for IT developers to modify IT interfaces more carefully and cautiously. Since SNS providers want to encourage user continuance, they need to implement and adapt features such as screen time and warning messages to support state-tracking habit reduction. To prevent employees from overusing technology, disruptive features must be implemented by managers in organizations. This paper also calls on the management board to raise professional awareness and to provide a healthy and controlled work environment. A ban on receiving messages or muting ring tones on the weekend or after working hours could prevent employees from carrying out the IT-STH and result in a better work-life balance. This could lead to less burn outs, more motivated workers, and a more satisfied teams.

Limitations and Future Research

Following the literature search to identify relevant literature by Webster and Watson (2002) and vom Brocke et al. (2009), the results are limited due to the chosen keywords. By focusing only on the 'Senior Scholars' Basket of Eight' and the main IS conferences, the research might miss some findings. Also, the time frame has been set from 2010 until June 2021, which results in another limitation regarding IS literatures and outcomes. In addition, there is limited knowledge about the effectiveness or empirical evidence of disruption strategies. Further research might investigate and validate whether disruptive strategies can break the habit of everyday use among different age groups or characters. In addition, the identified propositions have to be addressed in future research and tested in a qualitative manner. In this case, variation by age groups will be of crucial significance, since children and young adults will be affected by the negative consequences resulting from excessive SNS usage.

Conclusion

The present paper investigates strategies for disrupting IT-STH (Gerlach and Cenfetelli 2020). Based on a literature review within the IS literature, habit disruption strategies have been analyzed, identified, and sorted into the framework by Polites and Karahanna (2013). The results show six disruption strategies and discontinuance of SNS. The review reveals strategies that do fit not into the existing categories so that we extend the framework of Polites and Karahanna (2013) by digital detox, discontinuance, hybrid solutions and the deterring role. Each of these strategies contribute to the approach of disrupting IT-STH. This paper also sheds light on possible solutions and preventions for individuals within IS usage. This topic will also be of crucial significance in future research, as children and young adults will be affected by the negative consequences resulting from excessive SNS usage.

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