Abstract

With the rising number of mobile devices and the chance for employees to work from anywhere at any time, the risk for employees to find it challenging to detach themselves from work is high. Recent literature on work-life balance shows how important it is to design information technology to prevent employees from work-life conflict resulting in strain, diseases or burn out. To help employees to detach themselves from work, we aim to discover how work avoidance training can affect perceived strain and psychological detachment. We hope to assist workers in learning how to detach themselves in their leisure time, when work demands are high. We will conduct a laboratory experiment with two groups in a between-subject experiment. We propose that employees should be able to find relaxation in times of intense work demand, in finding proven ways of ‘switching off’ from work mode, maintaining a better work-life balance.

Keywords
Approach avoidance task, psychological detachment from work, laboratory experiment

Introduction

In the past years, the challenge to cope with the rising volume of technology in the work place has intensified. With the increasing presence of mobile technologies (e.g. laptop, tablet and smartphone), employees are able to work from anywhere and everywhere at any time (Klesel et al. 2018, 2016; Köffer et al. 2015). This is also heightened by the constant evolution of information technologies (IT) in the work place (Sørensen and Landa, 2015; Vodanovich et al. 2010). This ubiquitous use of IT can lead to disruption in an employees work-life balance. In line with Greenhaus et al. (2003), we define work-life balance as “the extent to which an individual is equally engaged in—and equally satisfied with—his or her work role and family role” (Greenhaus et al. 2003, p. 513). This definition includes positive and negative effects of a work-life balance. Recent literature has introduced the construct of work-life conflict by demonstrating the negative aspect when work and home life are not complementary. Work-life conflict describes the negative effect an individual experiences when his or her own preferences regarding the boundaries between work and private life are not satisfied any longer (Clarke et al. 2016; Kossek et al. 2011, 2006; Kreiner 2006; Kreiner et al. 2009; Michel and Clark 2012; Nippert-Eng 1996).

Recent literature in psychology and information systems had also a look at consequences and antecedents of work-life conflict with IT (Cousins and Robey 2015; Duxbury and Smart 2011; Sarker et al. 2012). Previous studies also indicate the importance of preventing syndromes such as burn out, before they occur (Kelly et al. 2011; Kossek et al. 2014; Kossek and Lee 2017). Research on dual process models suggest that there might be impulsive approach tendencies that lead to such conditions (Strack and Deutsch 2004).
However, it is unclear whether these approach biases exist in a work context and how psychological detachment from work in leisure time can be enhanced with the help of work avoidance training. In order to address our objective, this paper is guided by the following research questions:

RQ1: Is there an impact between work approach bias and psychological strain?
RQ2: What effect does work avoidance training have on employee’s psychological detachment from work and perceived strain?

This paper is structured as follows: Firstly, we give a short overview of the theoretical background and the development of our model. In the second section, we introduce the method that we use in our study. Section three will conclude with a discussion of our expected findings, proposing implications for theory and practice, demonstrating opportunity for future research.

**Theoretical Background and Model Development**

*Psychological Detachment from work.* “Psychological detachment from work refers to the off-job experience of “switching off” mentally” (Sonnentag and Bayer 2005, pp. 393). It is hypothesized that a high workload encountered during the workday has a negative impact on the way employees detach from work (Sonnentag et al. 2014, Sonnentag and Bayer 2005, Sonnentag and Kruehl 2006). With this in mind, a psychological detachment from work is positively related to well-being and satisfaction.

*Dual process models.* According to dual process models (Deutsch and Strack 2006, Soror et al. 2015, Strack and Deutsch 2014), human behavior is formed by the interaction of two different cognitive systems. These systems are called the impulsive system and the reflective system. For automatic responses to a stimulus, which are built by associations to successful behavior in the past, the impulsive system is responsible. On the other hand, the reflective system can flexibly adapt to change. The impulsive system is associated with heightened attention and approach toward certain stimuli, which are reflected by approach or attentional biases. Approach bias refers to the tendency to physically reaching for or approaching these stimuli (Cousijn et al. 2011). The approach avoidance task (AAT) can be used to assess this effect. A reduction of approach bias or unhealthy behavior could be detected after using the AAT as training method on the computer. This affect can be seen throughout different studies within the context of addiction (e.g. for substances such as nicotine (Machulska et al. 2016), alcohol (Wiers et al. 2010, Wiers et al. 2013) or chocolate (Schumacher et al. 2016)). However, it is still unclear if approach bias can be detected in the context of work. By following our objectives, we aim to expand on recent research related to work avoidance training and psychological detachment from work. Figure 1 introduces our research model for this study with our hypothesis.

![Figure 1. Proposed research model](image)

We hypothesize, that work avoidance training leads to lower perceived strain (H1), higher psychological detachment (H2), and lower work approach bias (H3) than private life avoidance training.

**Method**

*Data Collection*

*Method selection.* In order to answer our research questions, we will recruit participants online and with a physical flyer for a laboratory experiment. We will also ask project partners from the public sector to take part in our experiment. We will conduct a laboratory between-subject experiment with two groups to test our hypothesis.
Participants. We will recruit 128 participants by promoting the laboratory experiment online (via Facebook), with physical flyers and with project partners in the public sector.

Materials

Hardware and Software. We will use a room with four computers, where 2 to 4 people can take part in our experiment, simultaneously.

Manikin Task. A modified version of the manikin task will be implemented with PsychoPy² (Peirce et al. 2019). In recent literature, the manikin task is used as a measurement for automatic approach tendencies (De Houwer et al. 2001) to address the impulsive system. The modified tasks will consist of a set of trials. In each trial, participants will be shown a picture of a stimulus together with a manikin on the screen to address the impulsive system. The manikin can be displayed above or below the picture, so that participants have to make the manikin approach or avoid the picture. To do this, participants can press the “up” or “down” key. Whether the manikin needs to approach or to avoid the picture depends on the color that the picture is framed in. If the picture is framed in red, participants need to move their manikin away from the picture, whereas they need to approach picture when it is framed in a blue color. When participants will make a mistake, “ERROR” will be shown on the screen as a feedback for their task. Again, the task will be conducted on the computer. Participants are not able to go backwards to their writing task. Instead they have to follow the AAT. The manikin task will consist of three blocks. In the first block (pre bias measurement), both office items and pictures of private life are framed red and blue. In the second block (training), either office items are always framed red and private life pictures are always framed blue (work avoidance), or the reversed pattern is used (private life avoidance). The final block (post bias measure) is similar to the first block.

Stimuli: For the ten-trial practice, we will use neutral images of fruit. As stimuli for the bias measurement and training parts, we will use five work pictures (smartphone, laptop, office, outlook, and calendar) and five private life pictures (beach, sea, park, family event and drinks with friends) in order to address the impulsive system.

Measures

All questionnaire items will be measured on a scale from 1 (strongly disagree) to 7 (strongly agree) and adapted from relevant literature.

Perceived Strain. Aligned to Fuller et al. (2003) we will use adapted items for perceived strain. An example for an item is: “Indicate how much each word/phrase describes your task situation: Relaxed?”

Psychological Detachment from work. Aligning to Sonnentag et al. (2003), we will use the following item to measure psychological detachment from work (“During after-work hours, I forget about work.”).

Work Approach Bias: We will measure work approach bias for pre and post bias measure by calculating the reaction time difference between pushing and pulling pictures (RT_push – RT_pull). Thus, if bias measure has a value greater zero, individuals have an approach bias for work, else an avoidance bias.

Procedure

Participants will be invited to join our laboratory experiment in the University. When participants arrive, they are grouped in four and will be invited to choose a working area with a computer. They will be informed that the study is about the ability to concentrate on a work task. After informed consent is obtained, participants will be asked to provide information on their gender, age and current job. Next, participants will read about the work task they will be given. Participants will be asked to write up to 500 words within 30 minutes about a work experience in which they had to spend much time and energy in order to complete and to explain what obstacles to completion occurred, if any were present. After 10 minutes of writing, participants will be invited to take a 10 minute break. Following the break, the procedure of the AAT will be explained to them and the three block manikin task will begin. After this section, participants will be able to work on their given writing task for another 10 minutes. Once the writing task is finished, participants will be asked to complete the survey with the statements shown under “measures”. Finally, participants will be thanked and debriefed.
Data Analysis

We will analyze the data regarding the effects on perceived strain and psychological detachment using two one-way ANOVAs. To assess if any differences for approach bias in the manikin task occurred, we will use a 2 (time: pre vs. post) x 2 (work training repeated measure) ANOVA.

Discussion

With our study, we aim to assist employees to disconnect from work more easily, especially in times of high working demands. Our expected results (confirmation of H1 – H3) will provide a starting point for design science research to investigate how the effects of the AAT can be enhanced in health related studies combined with IT.

Regarding implications for theory, we aim to contribute to the existing body of knowledge regarding psychological detachment from work and perceived strain using the AAT in the health and burn out literature. We want to expand upon existing literature on the dual process model by showing that the AAT can enhance psychological detachment from work and can help to decrease perceived strain. Practical implications include prevention of work-life conflict and conditions like burnout. We aim to help organizations to take better care of their employees by providing a scientifically backed framework to support them to detach from work, thereby reducing perceived strain. Our study is one of the first studies using the AAT in the context of prevention for burn out.

To generalize and address the results of our experiment is a limitation we face. Our study is also limited by the question of how we can adapt the method to the work context of an individual for their individual, daily work experiences instead of in laboratory contexts. Regrettably, this limitation could not yet be met in the initial stage of this research.

Based on our results, we expect that future research can extend our study to developing and designing a tool, which can be played like a game between finishing work and entering the private life domain, in order to facilitate an employee’s detachment from work.

REFERENCES


