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"The role of self-compassion in the process between rumination and procrastination in office employees and knowledge workers"

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Abstract

The goal of this master thesis is to examine the role of self-compassion as a buffer between rumination after work and procrastination on the next work day. An additional issue is to examine, if self-compassion after work can reduce rumination after work. The method to test the hypotheses is a two-week diary study design. The sample of the study are 61 knowledge workers and employees in offices with at least 30 work hours per week resulting in a dataset of 371 complete days. To test the hypotheses linear regressions, moderator analyses and mediation analyses are used. The results reveal that procrastination leads to unfinished tasks, that in turn arouse affective rumination after work on a daily level, but do not enhance subsequent procrastination on the next work day. Self-compassion after work reduces affective rumination after work and problem-solving pondering after work on a daily level. Despite this finding, self-compassion after work does not mitigate the expected effect between rumination after work on procrastination on the next work day. The conclusion is that self-compassion after work facilitates the ability to overcome work-related rumination after work on a daily level. Further research should focus on the process of procrastination-related psychological factors in form of a diary study and differentiate between short-term and long-term effects in the process of day-specific procrastination.

Introduction

Procrastination is a prevalent and a malign form of self-regulation failure, that mechanisms are not fully resolved and leave questions about it (Steel, 2007). A historical analysis about procrastination by Milgram (1992; as cited in Steel, 2007, p. 66) postulated, that "... technically advanced societies require numerous commitments and deadlines, which gives rise to procrastination. Consequently, undeveloped agrarian societies are not so afflicted". Referring to this, social acceleration (Rosa, 2003) in our developed society could be a reason for a rising prevalence of procrastination.

The statistics of the prevalence of procrastination are depending on its definition. Chronic procrastination in adult men and women from six nations (Ferrari, Diaz-Morales, O'Callaghan, Diaz, & Argumedo, 2007) is about 13.5% in arousal procrastination type and about 14.6% in avoidant procrastination type. The rate of persons who engage occasionally in procrastination seems to be higher. 80-95% Hereof, about of college students (Steel, 2007) experienced procrastination. Besides the prevalence of procrastination behaviour, procrastination affects various domains of our daily life and society. For example, procrastination can occur in education, in economics, in urgent political decisions, the completion of the tax declaration, in medicine, in health related behaviours or in the work context (Bogg & Roberts, 2004; Steel, 2007). Based on the high prevalence of procrastination its recommended, to not procrastinate further research about procrastination (Steel, 2007).

The focus of this master thesis is to examine the psychological process of work related procrastination. Initially, consequences of procrastination as an irrational delay of tasks are unfinished tasks. Further on, unfinished tasks are associated with psychological consequences of stress like rumination (Syrek & Antoni, 2014). In addition, procrastination can lead to more procrastination because of aversive emotions (Eckert, Ebert, Lehr, Sieland, & Berking, 2016). Especially the meta-analysis of Sirois (2014) showed, that there are associations between stress and procrastination, mediated by self-compassion. Nevertheless, the four analysed studies were mainly based on cross-section designs. Just one of these studies included follow-up measurements. So the causality of the postulated

mechanisms is not clear. One major purpose of this study is to examine, if workrelated procrastination leads to subsequent procrastination on the next work day. Finally, the study intends to detect self-compassion (Neff, 2003) as a relevant strategy to reduce rumination and subsequent procrastination by coping aversive emotions.

The nature of procrastination

In psychology, *procrastination* is an unintended and irrational delay of tasks or operations. It leads to a *task delay* and is a prevalent and harmful form of *selfregulation failure* (Steel, 2007). The focus of procrastination in this master's thesis lies in negative aspects and is distinct from the positive view of procrastination as a way of life. An easy and useful definition of procrastination is "...one procrastinates when one delays beginning or completed an intended course of action" (Steel, 2007, p. 66).

Procrastination has also consequences on mental health and the life span of individuals. To be more precise, procrastination is related with a higher fatigue, anxiety, stress, depression, and with a lower income or an adverse job situation. Beside fatigue, there are also significant associations between procrastination and burnout (Beutel et al., 2016). Ironically, procrastination also reduces mental-health seeking behaviour and delays required treatment, that exacerbates distress and mental illness (Bogg & Roberts, 2004; Rozental & Carlbring, 2014). Besides malign health outcomes, procrastination is typically conceptualized as a stable personality trait and decreases productivity in the workplace (Gupta, Hershey, & Gaur, 2012).

In summary, these findings indicate relevant relationships between consequences of procrastination, mental health, and job outcomes. The level of procrastination is also dependent from the type of profession. At least, it seems that procrastination is higher in *white collar* workers compared to *blue collar* workers (Hammer & Ferrari, 2003). Therefore, the research on procrastination in the work context should consider the group of white collar workers, such as office employees or knowledge workers.

In the workplace, procrastination has different major sources. Therefore, a theoretical framework postulated three different dimensions: The first one is based on (1) *intrapersonal factors*, and the other two on (2) *situational factors* and (3) *task characteristics* (Gupta et al., 2012; Lonergan & Maher, 2002). Referring to this framework, the intention of this study is not to examine the role of external factors of procrastination like specific situations or task characteristics. The research interest of this study lies on an individual level, because the psychological process of procrastination in the work context is not fully understood and needs further research.

From a psychological perspective, procrastination is a very complex process. The meta-analysis from Steel (2007), consisting of 691 correlations from hundreds of different reviewed scientific articles showed the relationships of procrastination with a variety of personality factors. In general, the analysis revealed weak relationships of procrastination with (1) neuroticism, (2) rebelliousness, and (3) sensation-seeking. Stronger relationships were found with (4) task aversiveness, (5) task delay, (6) self-efficacy, and (6) impulsiveness and also (7) conscientiousness and their aspects like (8) self-control, (9) distractibility, (10) organization [in form of the ability to organize oneself], and (11) achievement motivation. According to the factors of achievement motivation, the factors (12) need for achievement and (13) intrinsic motivation reduce procrastination. Other factors that are associated with procrastination are (14) self-handicapping and (15) boredom proneness. Especially boredom proneness is a protection factor of the factor sensation-seeking. A smaller but still significant correlation with procrastination was found between the factors (16) depression or (17) self-esteem. Finally a higher (18) *positive affect* on the scale *extraversion* had a small negative correlation with procrastination. In summary it can be said, that the strongest relations with procrastination were found in the factors conscientiousness and selfcontrol.

Regarding to these findings, there are plenty of psychologically relevant factors, that could serve as an explanation for procrastination in a work-related context. In the following chapter, relevant psychological factors for the cycle of procrastination on subsequent procrastination will be identified and described. The interest of this study is to examine these selected factors and test the effect of changes in these variables on other variables and procrastination.

The vicious cycle of procrastination on subsequent procrastination

This chapter describes possible psychological mechanisms, how procrastination leads to subsequent procrastination on the next day. Because of the complexity between the associations of procrastination-related psychological factors, the selection of these psychological factors is limited according to the presented framework.

Initially, when an individual irrationally delays to begin or complete intended tasks, the central result of this procrastination behaviour are unfinished tasks. As a consequence there can appear the consciousness of *unfinished tasks*, that represents a subjective assessment and not the exact number of unfinished tasks. Because of a lack of this assumption in psychological research, the first hypothesis of this study is:

Hypothesis 1: The higher the level of procrastination is on the present day, the more unfinished tasks will be reported after work.

But what happens in the mind, when tasks are not done at the end of the work day? Unfinished tasks as a knowledge or a feeling about undone work can lead to a set of psychological consequences like *rumination* or *impaired sleep*. Therefore, unfinished tasks can act as a stressor, that delays the process of mental regeneration (Syrek & Antoni, 2014). A possible reason for this is the psychological consequence, that unfinished tasks initiate an active mental process. The *Zeigarnik-effect* is a mechanism of memory, that triggers mental tensions through unfinished tasks and provoke the need of completing unfinished tasks. Because of this mechanism, the task stays in the consciousness and initiates rumination. Rumination can be distinguished into affective rumination and problem-solving pondering. Measured in a period of three months, affective rumination explained the relation between the number of unfinished tasks with impaired sleep. Compared with that, problem-solving pondering slightly reduced

the impact on impaired sleep. The positive effect of problem-solving pondering on sleep quality is based on a reduction of tentativeness through a concrete plan and the confidence to find a solution for the problem. The strongest form of impaired sleep appeared with a pattern of a high affective rumination and a low problem-solving pondering (Syrek, Weigelt, Peifer & Antoni, 2017).

As previously explained, unfinished tasks can provoke rumination. In general, rumination is a "...term primarily used to describe unintentional preservative thoughts in the absence of obvious external cues" (Cropley & Purvis, 2003, p. 197). When the job strain was experienced high, also the level of rumination about work was higher in leisure time. These individuals had more difficulties with switch off their mind after work and this led to an insufficient recovery (Cropley & Purvis, 2003). There are different concepts of mind states based on the nature of rumination, but in reference to the purpose of that study, a specific concept of work-related rumination (Cropley & Purvis, 2003; Cropley, Michalianou, Pravettoni, & Millward, 2012) will be discussed next.

The concept of work-related rumination (Cropley, Michalianou, Pravettoni, & Millward, 2012) includes a distinction between the three types of post-work ruminative thinking (1) *affective rumination*, (2) *problem-solving pondering*, and (3) *detachment*. First of all, the subfactor affective rumination is a cognitive state of negative affective terms in form of intrusive, pervasive and recurrent thoughts about work. It also can be understood as an emotional experience with the inability to switch off from work-related thoughts. The second factor problem-solving pondering represents thoughts in form of pondering and reflecting about work related issues outside of the working time. This type of thinking appears in persons who find the act of thinking about work interesting and like to evaluate completed tasks from work. Furthermore, these persons are driven to find solutions for work-related problems. There is also a third factor and represents how to unwind from job strain. It's called detachment and means the ability how easily the worker is able to switch off and leave issues about work behind (Cropley et al., 2012).

The reason for using the work-related concept of rumination is the theoretical link between unfinished tasks and rumination, based on the Zeigarnik-effect. Another research-relevant reason is the fact, that the concept of work-related rumination was used in further research (Syrek & Antoni, 2014; Syrek et al., 2017) to measure associations with unfinished tasks.

One purpose of this study is to examine, if unfinished tasks lead to rumination after work. For that issue, only the first two subfactors of the concept of rumination will be used. Whereas affective rumination and problem-solving pondering evaluate work-related thoughts, the subfactor detachment measures the ability to unwind or to switch off after work. In addition, detachment was negative associated with rumination (Kinman, Clements, & Hart, 2017) and is not a mental processes that leads to thoughts about work because of unfinished tasks. Therefore the second hypothesis is:

Hypothesis 2: The more unfinished tasks are reported after work, the higher are (a) affective rumination after work or (b) problem-solving pondering after work.

As previously described, ruminative thinking after work is a consequence of unfinished tasks as a result of procrastination. The additional question at this point is, how day-specific procrastination or rumination after work as a consequence of unfinished tasks influences subsequent procrastination on the next work day. For this framework, psychological reasons for procrastination should be considered.

One main reason for procrastination is a low level of self-regulation (Steel, 2007). The factor self-regulation itself is considered to depend on a limited resource. A depletion of this psychological resource is labelled as *ego depletion* (Baumeister, Bratslavsky, Muraven, & Tice, 1998). The Conservation of Resources (Hobfoll, 2001) theory explains, if individuals are not able to restore their resources in the process of stress, this can result in relevant loss spirals of resources.

As previously mentioned, unfinished tasks delay the process of mental recovery (Syrek & Antoni, 2014). Therefore, the *restoration of self-regulatory resources* takes an important role in the process of procrastination, because self-regulation is associated with procrastination. A diary study (Kühnel, Bledow, & Feuerhahn, 2016) about procrastination and sleep showed a lower level of *day-specific procrastination* on the next day, when *sleep quality* was high. In reference

to these findings, a low level of sleep quality can lead to a lack of mental recovery in form of a delayed restoration of self-regulatory resources and can result in subsequent day-specific procrastination on the next work day.

Further on, in an academic context, procrastination was associated with *procrastinatory automatic thoughts* and rumination in form of *ruminative brooding*. Procrastinatory automatic thoughts were measured on a cognitive level and revealed the experienced frequency of procrastination-related automatic thoughts (Flett, Haghbin, & Pychyl, 2016). Another explanation for the cycle of procrastination could be based on emotions. Deficits in specific emotional coping strategies can lead to a rise of subsequent procrastination (Eckert et al., 2016) in a more complex process. The role of emotional regulation on procrastination in form of self-compassion will be discussed in the next chapter. Finally these findings and reflections lead to the hypotheses three and four, that procrastination of the actual day, unfinished tasks and rumination after work lead to subsequent procrastination on the next work day:

Hypothesis 3: The higher (a) affective rumination after work or (b) problem-solving pondering after work, the higher is the level of procrastination on the next work day.

Hypothesis 4: Unfinished tasks and (a) affective rumination after work or (b) problem-solving pondering after work after work are mediating the effect of procrastination of the present day on enhanced procrastination of the next day.

The role of self-compassion in daily procrastination

As outlined in the previous chapter, procrastination at work provokes workrelated rumination in form of affective rumination after work and problem-solving pondering after work, that could lead to subsequent procrastination on the next work day. This raises the question how this vicious cycle of procrastination could be interrupted. One possible psychological factor could be self-compassion. Therefore, in this chapter the mechanisms how an increased level of selfcompassion could reduce subsequent procrastination on the next work day, by influencing psychological relevant factors like rumination, will be discussed. Initially, the concept of *self-compassion* (Neff, 2003) entails that suffering, inadequacies and failure are part of the human being. In contrast, self-compassion is distinct from selfishness and self-pity. Regarding to mental health, a higher level of self-compassion is associated with a lower level of depression and anxiety, whereas it also increases the satisfaction of life (Neff, 2003). In addition, a meta-analysis found evident effects between a lack of self-compassion and psychopathology (MacBeth & Gumley, 2012).

Moreover, self-compassion can be viewed as a useful strategy for emotional regulation by transforming negative emotions into a more positive state of feelings. On a more theoretical level, the concept of self-compassion is based on three basic components. These components are composed by six contrary and paired subfactors. The first component concludes the separated subfactors (1) selfkindness versus (2) self-judgement. Simplified, self-kindness can be understood as the ability to be kind to oneself in instances of pain and failure. On the other side is self-judgment, that means being highly self-critical to oneself. The subfactors of the second component are (3) common humanity versus (4) *isolation*. While isolation entails the experience of being separated and isolated to other humans, individuals with a high level of common humanity are taking their own experiences of isolation rather as a fundamental part of human experience in a holistic way. Finally, the third component represents the contrary subfactors (5) mindfulness versus (6) over-identification. Over-identification means, that an individual strongly identifies with pervasive or painful thoughts, feelings and emotions. Therefore mindfulness is supposed as an antagonist of overidentification and represents the ability to experience the own thoughts and feelings in the mental state of mindfulness (Neff, 2003). More precisely, mindfulness is described as "... nonjudgmental, receptive mind state in that individuals observe their thoughts and feelings as they arise without trying to change them or push them away, but without running away with them either" (Neff, 2003, p. 224).

In general, self-compassion is positively associated with emotional coping and negatively associated with rumination. This finding showed, that selfcompassion is related to emotional patterns (Neff, 2003). In adolescents, rumination could be reduced through an intervention training in self-compassion and was more effective than a training in mindfulness (Galla, 2016). The reasons for this beneficial impact could lie in the potential of mindfulness or selfcompassion as strategy to cope with negative emotions. For instance, when emotional based job demands were high, employees in interactive service jobs had lower levels of job satisfaction and a higher risk of emotional exhaustion. Furthermore, a higher level of mindfulness was positively associated with job satisfaction and negatively associated with emotional exhaustion. Moreover, a self-training in mindfulness led to a lower level of emotional exhaustion and a higher level of job satisfaction (Hülsheger, Alberts, Feinholdt, & Lang, 2013). These findings show the relevance of mindfulness as a subfactor of selfcompassion in emotional exhaustion.

Moreover this is very relevant, because *emotional exhaustion* was negatively associated with recovery experience and positively associated with rumination (Donahue et al., 2012; Luo & Bao, 2013; Kinman et al., 2017). In addition, rumination was associated with poor sleep quality (Zawadzki, 2015). However, the question still remains, how *self-compassion* and mental recovery are connected to each other. Initially, sleep and self-compassion are important factors for recovery and to cope with stress. Hereof, *sleep disturbances* had strong associations with *perceived stress*. The sleep disturbances in health professionals were also higher, if self-compassion or mindfulness were low. This showed, that self-compassion and mindfulness as a subfactor alone were associated with the quality of sleep (Kemper, Mo, & Khayat, 2015). As a conclusion, self-compassion takes an important role in the process of recovery.

Besides a lack of mental recovery, there could be other reasons for ruminative thoughts. One possible mechanism could be based on *self-esteem*, because rumination is also associated with psychological health risk indicators. Specifically, rumination has a negative relation with self-esteem (Zawadzki, 2015), whereas self-compassion has a positive association with self-esteem (Neff, 2003).

Hence, there could be different reasons how self-compassion can reduce rumination after work. One reason could be the beneficial impact of selfcompassion or mindfulness on rumination, based on recovery processes. The second reason could be hidden in a self-esteem mechanism. As previously described, rumination is an automatic process that can result in pervasive, intrusive and recurrent thoughts and is negative related with self-esteem (Zawadzki, 2015). On the other side, self-compassion is a useful strategy to cope with negative emotions and this can lead to a kind process of self-evaluation (Neff, 2003). Therefore, the fifth hypothesis of this study is:

Hypothesis 5: The higher self-compassion after work, the less (a) affective rumination after work and (b) problem-solving pondering after work will occur.

As previously explained, self-compassion has the potential to reduce rumination after work. This assumption could be a key process to reduce subsequent procrastination on the next work day. Actual research about the process of self-compassion, rumination and procrastination is very rare and focuses mainly on the academic context. As an example, students procrastinated more, when they were low on positive actions, expressing feelings and assertiveness (Ferrari & Díaz-Morales, 2014). This shows some relevance for the competence of coping own emotions to overcome procrastination.

The conceptualization of procrastination as a dysfunctional response to undesired affective states opens the assumption that emotional coping strategies can reduce procrastination. First of all, high *emotional regulation skills* are associated with less procrastination. Further, procrastination affected the ability to *tolerate aversive emotions*, whereas the emotional regulation subskill to *modify aversive emotions* can reduce subsequent procrastination. In addition, a systematic training in emotional regulation skills revealed, that the abilities to tolerate aversive emotions and to modify aversive emotions are reducing the level of procrastination (Eckert et al., 2016).

Because self-compassion can be viewed as a strategy to regulate one's own emotions, the role of self-compassion as a strategy to cope with procrastination and rumination should be examined. In fact, there were relevant associations between procrastination with mindfulness, self-compassion, and ruminative brooding (Flett et al., 2016). It relation to that finding, procrastination was represented by procrastinatory automatic thoughts. Furthermore there was a substantial negative association between self-compassion and ruminative brooding (Flett et al., 2016). Therefore, self-compassion has a relevant association with automatic thoughts as a result of procrastination and with the feelings of *feeling down* and *sadness* in form of ruminative brooding. These findings lead to the assumption, that self-compassion could influence procrastination by a direct effect on rumination. Therefore the sixth hypothesis is:

Hypothesis 6: The rumination subfactors (a) affective rumination after work or (b) problem-solving pondering after work are mediating the effect of self-compassion on procrastination on the next work day.

It might be that self-compassion has an influence on procrastination on the next work day for other reasons, than directly affecting rumination. This could be, if rumination has subsequent psychological consequences, that are related with self-compassion and procrastination. Initially, a meta-analysis based on four studies (Sirois, 2014) showed relevant evidence, that a high *trait procrastination* was associated with a higher level of *stress* and a lower level of self-compassion. Furthermore was revealed, that self-compassion mediated the relationship between stress and procrastination. That's an helpful clue, that self-compassion has a constructive role on procrastination and the related experience of stress. This raises the question, whether self-compassion is able to reduce the experience of stress in form of rumination, that in turn reduces subsequent procrastination. Because the four analysed studies from the meta-analysis (Sirois, 2014) were three in cross-sectional and one in a longitudinal design, there is no evidence about the causality of that mechanisms. One purpose of this study is to examine these associations and possible effects on a daily level.

There are different explanations how self-compassion acts as a buffer between rumination and procrastination at work. One reason could be in the role of self-compassion to stabilize emotions in the context of work (Eckert et al., 2016; Hülsheger et al., 2013; Neff, 2003). As previously mentioned, rumination was associated with emotional exhaustion. Because emotional exhaustion was highly associated with ego depletion (Rivkin, Diestel & Schmidt, 2014), a failure of selfregulation and subsequent procrastination can be expected. A possible mechanism between procrastination and self-regulation could be based on self-esteem. First of all, a high level of self-esteem led to a more effective self-regulation than a low level of self-esteem. As a consequence the performance is more effective, because of a more adequately goal setting when self-esteem was high. But a perceived threat of high self-esteem can lead to a self-regulation failure. This effect is defined as *ego-threat* and is low, when selfesteem is also low (Baumeister, Heatherton, & Tice, 1993).

Besides self-esteem and emotional stability, also a higher level of selfefficacy is related to the job performance and the probability for procrastination (Judge & Bono, 2001; Steel, 2007). A helpful explanation to understand the process between self-efficacy, job performance and procrastination provided the theoretical model of efficacy-performance-spirals (Lindsley, Brass, & Thomas, 1995) on an individual and organizational level. The basic statement of that theory was, that a low performance can lead to a decline of self-efficacy, causing negative attributions, self-labelling, and a further reduction of performance. As a consequence, emotional arousals will arise and will intensify anxiety and depression. Subsequently, self-efficacy and task performance will continue to decline. Finally, this mechanism led to an automatization of informational processes and to further negative affects, performance reduction, withdrawal, and an aversion to tasks (Lindsley et al., 1995). This explanation shows how selfcompassion could interact with self-labelling and negative emotional affects to counteract rumination in form of an automatization of informational processes and the downward spiral of self-efficacy, and task performance.

In summary, there could be different psychological causes, how *self-compassion* buffers the effect of rumination on subsequent procrastination. The mechanisms are complex and could be based on the regulation of negative emotions, self-regulation, self-efficacy, self-labelling or self-esteem. Ultimately, this is the seventh hypothesis of this study:

Hypothesis 7: Self-compassion mitigates the effect of (a) affective rumination and (b) problem-solving pondering after work on procrastination on the next day.

Conceptual model of the study

The primary purpose of this study is to examine the role of self-compassion as a moderator between rumination after work during leisure time and subsequent procrastination on the next work day. What follows is a basic description of the mechanisms of the theoretic model (illustrated in Figure 1). First of all, it is assumed that procrastination during the work leads to more procrastination on the next work day. Reasons for that are based on psychological consequences of procrastination itself. Because procrastination goes along with unfinished tasks, automatic ruminative thoughts in form of affective rumination and problem-solving pondering may be provoked. Because of the association between rumination and procrastination, the level of procrastination can rise and close the vicious cycle of procrastination. This psychological mechanism increases the level of procrastination on the next work day, due to insufficient mental recovery. Hence, I postulate that the cycle of procrastination can be mitigated by self-compassion. Initially, self-compassion has a relevant impact on rumination and therefore the capability to reduce subsequent procrastination on the next day. Conceptually, I postulate the hypothesis, that self-compassion moderates the effect of rumination on procrastination and takes an important role in the research of the psychology of procrastination.



Figure 1. Theoretic model of the vicious cycle of procrastination and the role of self-compassion as a moderator between rumination after work and procrastination on the next work day on a daily level. *Note.* The measurements of the shown factors are (T1) in the morning after work starts, (T2) after mid-day, (T3) after work during leisure time and (T4) next mid-day.

Method

Design

The study was conceptualized as diary study design (Ohly, Sonnentag, Niessen, & Zapf, 2010) and included a baseline survey and a subsequent ten-day diary study over a period of two work weeks. The advantage of this method is the possibility to examine psychological processes in an occupational- and organizational context. Occurring dynamics can be identified in time periods between many days and weeks. The design is dependent on the research question and enables the examination of (1) changes in one variable (e.g., procrastination) and (2) relationships between transient state experiences and behaviour (e.g., effect of rumination after work on procrastination on the next work day). Furthermore a diary study design is in natural research context and reduces the retrospective bias (Ohly et al., 2010). Because the actual study examined psychological processes that unfold from day to day, the diary study design was an appropriate survey method. The daily time exposure for the interviews should be about five to seven minutes per day (Ohly et al., 2010) at the maximum. To improve the accuracy of data, Ohly et al. (2010) suggested to choose intrinsic motivated study participants with a sense for the relevance of this research. In the following, the sample of this research will be described.

Sample and procedure

The major criteria to participate in this study was to work at least for 30 hours per week as a knowledge worker or an employee in an office. Besides it was essential, that the participants started to work in the morning and ended the work day in the afternoon or evening. To acquire the sample multiple strategies were used. The members of the research team were asking around in family and other social contacts, writing emails, posting research requests in different facebook groups, asking directly in bank offices in the city and phoned specific companies for recruiting voluntary study participants. The data survey for this diary study was realized by the online-survey tool 'soscisurvey'. After the configuration of the questionnaires, standardized mailings with prepared texts and a link to the appropriate online-questionnaire were created. A special feature to improve the usability of the interviews was the responsive design for office computers and smartphones. There was one standardized text for the baseline mailing and two reminders in case that the respective participant did not complete the baseline. Moreover there were appropriate texts for the variety of mails for every measuring time point in the diary survey.

First of all, the voluntary study participants received a baseline survey, a few days before the diary study started. As a precondition to participate in the ten-day diary study, the participants had to fill out the baseline. Otherwise, they did not receive the subsequent questionnaires of the diary study survey. To encourage the intrinsic motivation of the participants to complete as many questionnaires as valid and possible, an incentive in form of a donation for a NGO was offered. In detail, the selected NGO received 20 cents for all fully completed questionnaires per day, if the participant completed the questionnaires at least on five days per week.

When the diary study survey began, the participants received three mails per day with a link to the online questionnaire from Monday to Friday for a time period of two weeks. The mails were sent out daily in the (T1) morning at 8:00 a.m., at (T2) mid-day at 12:00 a.m. and (T3) at 4:00 p.m. after work. It was not necessary to complete the questionnaires immediately, but it was highly recommended to complete the questionnaire in the first three hours to reduce the retrospective bias. Ultimately, the surveys were realized successfully in the time period between April and Mai 2017.

From the volunteers who have declared to participate, about 103 participants completed the baseline survey. In the ten-day diary study they had to complete at least three full days to be included in the analyses. The final sample of this study were 61 participants consisting of a dataset of 371 complete days after the process of data preparation. Thirty-seven persons of the final sample were women (60.7%) and 24 were men (39.3%). The descriptive statistics revealed an average age of 34.8 years (*SD* = 12.2), a tenure in years in the company with a mean of

9.3 years (*SD* = 11.5), a mean of 40.4 hours of work per week (*SD* = 7.7), and the average of completed days in the diary study about 6.8 days (*SD* = 2.0). According to the frequencies, from the 61 participants 10 persons (16.4%) were in a leadership-position. In relation to the occupational status, 56 persons (91.8%) were not self-employed. One person was self-self-employed (1.6%) and four persons were self-employed while working for a company (6.6%). The highest level of education of the participants was in university/college by 26 persons (42.6%), professional school by 12 persons (19.7%), apprenticeship by 10 persons (16.4%), abitur by nine persons (14.8%) and compulsory school by four persons (6.6%).

Measurement

As previously mentioned, the study was divided in two major parts and all the questionnaires were performed in German language. The first one was the baseline survey and was a precondition for further participation in the ten-day diary study. The used questionnaires are listed and described below.

Baseline Survey

The baseline survey was measuring sociodemographics including eight items to measure characteristics about age, gender, highest level of education, occupational title, job tenure, status of (self-)employment, status of leadership, and the average amount of working hours per week. There were also other measurements in the baseline survey, but they are not relevant for this study and are listed in the appendix.

Daily study survey

As mentioned previously, participants who completed the baseline survey received short questionnaires three times per day over a period of ten working days. In reference to the research question, only the relevant measurements and factors will be described in detail.

In the morning (T1), the scale for work-related *rumination* by Cropley et al. (2012) was used. It was measuring the level of *affective rumination* and *problem-solving pondering* after work from the previous day. The items of both subfactors were answered on a five-point likert scale (1 = very seldom; 2 = seldom; 3 = sometimes; 4 = often; 5 = very often). The first subfactor, labelled as affective rumination included five adapted items like "Yesterday (after work), I became fatigued by thinking about work-related issues during my free time." and has an average Cronbach's α = .86. The other subfactor problem-solving pondering also included five adapted items. One example is "Yesterday (after work), in my free time I find myself re-evaluating something I have done at work." and has an average Cronbach's α = .82. Because it made no sense to survey the level of rumination from the last work day on a Monday, the scale affective rumination and problem-solving pondering was excluded on Mondays.

The second time of measurement was at mid-day (T2) and measured *day-specific procrastination* (6 Items). The scales at mid-day were on the same likert scale level (1 = very seldom; 2 = seldom; 3 = sometimes; 4 = often; 5 = very often). Day-specific procrastination was assessed by six selected items of an adapted and translated version of the procrastination scale of Tuckman (1991) by Kühnel et al. (2016). An example for an item of the actual version is "Today, I needlessly delayed finishing jobs, even when they were important". The used procrastination scale has an average Cronbach's α = .87.

The third time of measurement was after work (T3) and measured the factors *unfinished tasks* (6 Items) and *self-compassion* (6 Items). The items after work were answered on a five-point likert scale (1 = very seldom; 2 = seldom; 3 = sometimes; 4 = often; 5 = very often). The variable unfinished tasks has an average Cronbach's α = .93 and is assessed by six items (Syrek et al., 2017). An example for the adapted version for this diary study is represented by the item "Today, I need to carry many tasks I intended to finish today into the next work day". Finally, the factor self-compassion was measured by a shortened and adapted version of the Self-Compassion Scale (Neff, 2003). The original version included 26 items measuring the six subfactors (1) *self-kindness*, (2) *self-judgement*, (3) *common humanity*, (4) *isolation*, (5) *mindfulness* and (6) *over-identification*. For an acceptable length of this questionnaire, only one item from

each of the six self-compassion subscales was selected. An example for our adaptions is represented the item "During this work day I try to see my failings as part of the human condition". The self-compassion scale in that study had an average Cronbach's α = .75.

Incidentally, the previous listed factors and items of the baseline and diary study survey include for that study required variables. Further items and factors of the diary study data survey of this research project are listed in the appendix.

Data analysis

After the data preparation, descriptive statistics were calculated and the hypotheses were tested. For testing the hypotheses there was a need to calculate specific variables, that represent the daily changes of the respective factors. First of all, the relevant scales (e.g., self-compassion or affective rumination) were calculated by the appropriate items. Then the scales were calculated to person mean-centered variables representing the daily changes. Finally, the hypotheses were tested by these person mean-centered variables using the statistic software SPSS. The hypotheses one, two, three, and five were tested by linear regression analyses. For the other hypotheses the additional statistic software PROCESS was used. Whereas hypotheses four and six were tested by a mediation analysis, hypothesis seven was tested by a moderation analysis. In the following chapter the results of the tested hypotheses are revealed.

Results

Preliminary analysis

First of all, Table 1 reports descriptive statistics and correlations of the relevant variables. The reliabilities of the variables were calculated as average Cronbach α and range between α = .75 and α = .93. Therefore the reliabilities of the factors are at least acceptable. Because of the nested data structure, the factors procrastination, affective rumination, and problem-solving pondering are calculated twofold, whereas they are based on the same raw data. This was required for examining the hypotheses on a reasonable basis. As an example, to examine the effect of self-compassion on affective rumination, the variable affective rumination after work was required, because it was measured on the next morning.

	α ^a	M ^b	SD	1	2	3	4	5	6
1 procrastination	.87	1.47	0.39	-					
2 unfinished tasks	.93	1.84	0.49	.31	-				
3 self-compassion after work	.75	3.97	0.34	02	02	-			
4 affective rumination after work	.86	1.59	0.45	01	.12	39	-		
5 problem-solving pondering after work	.82	1.77	0.45	.03	.01	19	.45	-	
6 next-day procrastination	.87	1.43	0.35	.05	.03	.02	04	02	-

Table 1. Summary of means, standard deviations, variance, reliabilities and correlations of the study variables.

Note. The (sub-)factors of this correlationmatrix (n = 291 to 376) are based on the daily changes of that factors through person mean-centered data. Significant correlations are printed in bold on a significance level of p < .05

- ^a The reported Cronbach α was calculated from raw items before aggregating and person mean-centering the data without considering the nested data structure. The value represents a mean from the reliabilities of each day.
- ^b The mean of the person mean-centered scales is zero. The depicted mean is the mean of the scales before person mean-centering the data.

Hypothesis testing

The first hypothesis is presented in Table 2 and tested, if the level of procrastination positively correlates with the level of unfinished tasks after work. A linear regression analysis showed a positive slope of β = .31 (*t* = 6.26, *F* = 39.14, *p* = .000). This result revealed an effect of R^2 = 0.10 on a significant level.

The second hypothesis is also presented in Table 2 and is tested by two separate linear regression analysis to examine the effect of unfinished tasks on (a) affective rumination after work and (b) problem-solving pondering after work. Initially, the linear regression showed on affective rumination a positive slope of β = .12 with a R^2 = 0.01 on a significant level (t = 2.06, F = 4.24, p = .040). The effect of unfinished task on problem-solving pondering had a R^2 < 0.01 and is not significant with a slope of β = .01 (t = 0.24, F = 0.06, p = .808).

The third hypothesis tested the effect of rumination on procrastination by calculating a multiple linear regression analysis. The predictors were (a) affective rumination after work and (b) problem-solving pondering work using the method stepwise. The analysis showed, that the predictor problem-solving pondering after work has a slope of β = -.01 and is not significant (*t* = -0.27, *p* = .790). The effect of the model is declared by the predictor affective rumination after work by a slope of β = -.04 and is also not significant (*t* = -0.54, *p* = .587). The results revealed that the total model is not significant (*F* = 0.07, *p* = .019) with an adjusted *R*² < .01. Detailed results are depicted in Table 2.

Generally, the fourth hypothesis postulated that unfinished tasks and rumination after work were mediating the effect of procrastination of the present day on next-day procrastination. This assumption was examined by a serial mediation analysis (Model 6 in PROCESS) and was calculated twice. Once for unfinished tasks and affective rumination (H4a) and secondly for unfinished tasks and problem-solving pondering (H4b) as mediators.

	R²	F	р	β	t	р
Predicting unfinished tasks	.10	39.14	< .001			
procrastination				0.31	6.26	< .001
Predicting affective rumination after work	.01	4.24	.040			
unfinished tasks				0.12	2.06	.040
Predicting problem solving pondering after work	< .01	0.06	.808			
unfinished tasks				0.01	0.24	.808
Predicting next-day procrastination	< .01	0.07	.790			
affective rumination after work				-0.04	-0.54	.587
problem-solving pondering after work				-0.01	-0.27	.790

Table 2. Coefficients, effects and significances of the linear regression analyses of the hypotheses H1, H2a, H2b, and H3 in four calculation models.

Note. The samples for these analyses range from n = 276 to n = 376 completed days. Significant effects are on a level of p < .05

First of all, the model procrastination of the present day on next-day procrastination had a total effect of just $R^2 < .01$ and is not significant (F = 2.05, p = .153) for both forms of rumination as second mediator. Detailed results for Hypothesis 4a are shown in Table 3 and reveal, that the only significant effects in this mediator analysis were between procrastination on unfinished tasks (a1) and between unfinished tasks on affective rumination after work (a3). Indirect effects of the mediation analysis of hypothesis 4a were depicted in Table 4. All specific indirect effects of this model are also not significant. Table 5 shows similar results of the serial mediation analysis for hypothesis H4b. The only significant prediction was between procrastination on unfinished tasks (a1). Also the specific indirect effects are all not significant and are depicted in Table 6.

	R²	F	р	b	SE	t	р
Predicting unfinished tasks	.09	28.15	< .001				
Constant				0.00	0.03	0.52	.602
Procrastination (a1)				0.37	0.07	5.31	< .001
Predicting affective rumination after work	.02	2.68	.071				
Constant				0.00	0.03	0.12	.907
Procrastination (a2)				-0.08	0.07	-1.14	.255
Unfinished tasks (a3)				0.14	0.06	2.27	.024
Predicting next-day procrastination	.01	0.90	.443				
Constant				0.00	0.02	0.08	.935
Unfinished tasks (b1)				0.03	0.05	0.57	.568
Affective rumination after work (b2)				-0.03	0.05	-0.64	.523
Procrastination (c')				0.07	0.06	1.64	.245
Total effect (c)	.01	2.05	.153	0.08	0.06	1.43	.153

Table 3. Coefficients, effects and significances of the serial mediation analysis for hypothesis H4a.

Note. The paths of the serial mediation analysis (n = 276 completed days) are described by the indices in reference to Hayes (2009). The effects between X on Y are represented by the indices *c* for the total effect and by the indices *c'* for the direct effect. The effects between the mediator-related variables are represented the indices *a* or *b*. Significant effects are on a level of p < .05

Table 4. Indirect effects of the serial mediation analysis for hypothesis H4a.

	b	SE	95% CI
Total	0.01	0.02	[-0.02, 0.05]
Indirect effect 1: X \rightarrow M1 \rightarrow Y	0.01	0.02	[-0.02, 0.04]
Indirect effect 2: X \rightarrow M1 \rightarrow M2a \rightarrow Y	-0.00	0.00	[-0.01, 0.01]
Indirect effect 3: $X \rightarrow M2a \rightarrow Y$	0.00	0.01	[-0.01, 0.03]

Note. All indirect effects are not significant, because the confidence intervals include zero. CI = confidence interval. Method: Bootstrap.

	R²	F	р	b	SE	t	р
Predicting unfinished tasks	.09	28.15	< .001				
Constant				0.00	0.03	0.52	.602
Procrastination (a1)				0.37	0.07	5.31	< .001
Predicting problem-solving pondering after work	.00	0.08	.920				
Constant				0.00	0.03	0.02	.986
Procrastination (a2)				0.02	0.08	0.29	.768
Unfinished tasks (a3)				0.01	0.06	0.18	.858
Predicting next-day procrastination	.01	0.79	.500				
Constant				0.00	0.02	0.08	.939
Unfinished tasks (b1)				0.02	0.05	0.49	.622
Problem-solving pondering after work (b2)				-0.01	0.05	-0.30	.761
Procrastination (c')				0.07	0.06	1.22	.225
Total effect (c)	.01	2.05	.153	0.08	0.06	1.43	.153

Table 5. Coefficients, effects and significances of the serial mediation analysis for *hypothesis H4b.*

Note. The paths of the serial mediation analysis (n = 276 completed days) are described by the indices in reference to Hayes (2009). The effects between X on Y are represented by the indices *c* for the total effect and by the indices *c'* for the direct effect. The effects between the mediator-related variables are represented the indices *a* or *b*. Significant effects on a level of p < .05

Table 6. Indirect effects of the serial mediation analysis for the hypothesis H4b.

	b	SE	95% CI
Total	0.01	0.02	[-0.03, 0.04]
Indirect effect 1: $X \rightarrow M1 \rightarrow Y$	0.01	0.02	[-0.02, 0.04]
Indirect effect 2: X \rightarrow M1 \rightarrow M2b \rightarrow Y	0.00	0.00	[-0.00, 0.00]
Indirect effect 3: $X \rightarrow M2b \rightarrow Y$	0.00	0.00	[-0.01, 0.00]

Note. All indirect effects are not significant, because the confidence intervals include zero. CI = confidence interval. Method: Bootstrap.

The fifth hypothesis examined the role of self-compassion after work on rumination in form of affective rumination or problem-solving pondering after work during leisure time. This hypothesis was tested by two separate linear regression analyses. The first analysis revealed a significant effect of R^2 = .15 between self-compassion and affective rumination with a negative slope of β = -.39 (*t* = -7.17, *F* = 51.39, *p* < .000). Further on, the linear regression between self-compassion and problem-solving pondering showed a negative slope of β = -.19 with an effect of R^2 = .04 on a significant level (*t* = -3.30, *F* = 10.91, *p* = .001). Detailed results are shown in Table 7.

Table 7. Coefficients and effects of two separate linear regression analysis with self-compassion after work as a predictor on two forms of rumination.

	R²	F	β	t	р
affective rumination after work	.15	51.39	-0.39	-7.17	< .001
problem-solving pondering after work	.04	10.91	-0.19	-3.30	.001

Note. Predictor: self-compassion after work (n = 291 completed days). Dependent variables: (a) affective rumination or (b) problem-solving pondering after work. Significant effects are on a level of p < .05

The sixth hypothesis examined rumination as mediator between selfcompassion after work and next-day procrastination. This assumption is examined by two separate mediator analyses (Model 4 in PROCESS) for the two subfactors of rumination, (H6a) affective rumination and (H6b) problem-solving pondering after work during leisure time. Initially, both mediation analysis showed a total effect of $R^2 < .01$ between self-compassion and next-day procrastination and were therefore not significant (F = 0.01, p = .942). Detailed results of the mediation analysis of hypothesis H6a with affective rumination after work as mediator are shown in Table 8. This revealed that only the path between self-compassion on affective rumination after work (a) is significant.

	R²	F	р	b	SE	t	р
Predicting affective rumination after work	.15	46.94	< .001				
Self-compassion (a)				-0.50	0.07	-6.85	< .001
Predicting next-day procrastination	.00	0.20	.820				
Affective rumination after work (b)				-0.03	0.05	-0.63	.532
Self-compassion (c')				-0.01	0.07	-0.17	.863
Total effect (c)	.00	0.01	.942	0.00	0.06	0.07	.942

Table 8. Coefficients, effects and significances of the mediation analysis for hypothesis H6a.

Note. The paths of the mediation analysis (n = 276 completed days) are described by the indices in reference to Hayes (2009). The effects between X on Y are represented by the indices *c* for the total effect and by the indices *c*' for the direct effect. The effects between the mediator-related variables are represented by the indices *a* or *b*. Significant effects are on a level of p < .05

Similar results are shown in the mediator analysis for hypothesis H6b with problem-solving pondering as mediator. The results are depicted in Table 9 and reveals that only the path between self-compassion on problem-solving pondering (a) is significant. The indirect effect for the mediation analyses of hypotheses H6a and H6b are shown in Table 10 and show no significant results.

Table 9. Coefficients, effects and significances of the mediation analysis for *hypothesis* H6b.

	R²	F	р	b	SE	t	р
Predicting problem-solving pondering after work	.03	9.91	.002				
Self-compassion (a)				22	0.08	-3.15	.002
Predicting next-day procrastination	.00	0.04	.965				
Problem-solving pondering after work (b)				01	0.05	-0.26	.797
Self-compassion (c')				.00	0.06	0.02	.982
Total effect (c)	.00	0.01	.942	.00	0.06	0.07	.942

Note. The paths of the mediation analysis (n = 276 completed days) are described by the indices in reference to Hayes (2009). The effects between X on Y are represented by the indices *c* for the total effect and by the indices *c'* for the direct effect. The effects between the mediator-related variables are represented by the indices *a* or *b*. Significant effects are on a level of p < .05

	b	SE	95% CI
Affective rumination after work	0.02	0.03	[-0.04, 0.09]
Problem-solving pondering after work	0.00	0.00	[-0.02, 0.03]

Table 10. Indirect effects of the serial mediation analyses for hypothesis H6a andH6b.

Note. All indirect effects are not significant, because the confidence intervals include zero. CI = confidence interval. Method: Bootstrap.

The final hypothesis examined the role of self-compassion after work as a buffer between rumination after work on next-day procrastination. Therefore, two separate moderator analyses (Model 1 in PROCESS) were calculated. Whereas self-compassion was set as the moderator variable, in the place of rumination was (a) affective rumination or (b) problem-solving pondering after work during leisure time used as predictor.

Calculating a moderator analysis with affective rumination as predictor revealed that the model of that moderation had just an effect of R^2 = .01 and is not significant (*F* = 0.3, *p* = .826). The predictor, the moderator and the interaction between them are also not significant. The moderator analysis using problem-solving pondering as predictor also revealed a non-significant model with an effect of just R^2 = .01 (*F* = 0.23, *p* = .874). Also in this model the predictor, the moderator and the interactor and the interaction between them are not significant. Detailed results of both moderator analyses are shown in Table 11.

	R²	F	р	b	SE	t	р
Predictor affective rumination after work (H7a)	.01	0.30	.826				
Constant				-0.00	0.02	-0.20	.843
Affective rumination (b1)				-0.04	0.07	-0.63	.531
Self-compassion (b2)				-0.01	0.08	-0.15	.880
Affective rumination X self-compassion (b3) Predictor problem-solving				-0.11	0.14	-0.80	.425
pondering after work (H7b)	.01	0.23	.874				
Constant				-0.00	0.22	-0.96	.923
Problem-solving pondering (b1)				-0.01	0.05	-0.21	.832
Self-compassion (b2)				0.01	0.09	0.15	.883
Problem-solving pondering X self-compassion (b3)				-0.15	0.20	-0.73	.464

Table 11. Coefficients, effects and significances of two single moderation analyses for hypothesis H7a and H7b.

Note. The paths of that moderation analyses (n = 276 completed days) are described by the indices *b1* for the predictor, *b2* for the moderator and *b3* for the interaction between them. All effects of both models are not significant.

Explorative analysis

The previous calculations were executed in reference to the postulated hypotheses on a daily level. Nevertheless, further analyses revealed some insights into the data of the diary study that will relativise the found effects of the postulated hypotheses. Initially, in hypothesis two the effect of unfinished tasks on problem-solving pondering after work was not significant and the effect on affective rumination was only slightly significant. These effects were on a daily level. Calculating the same model with uncentered variables showed different results. In that way, unfinished tasks predicted affective rumination ($R^2 = .16$, F = 54.30, p < .001) and problem-solving pondering ($R^2 = .14$, F = 46.82, p < .001) were significant.

According to hypothesis three, an analysis of the hypothesis using the variables for both forms of rumination from the previous evening as predictor for procrastination of the actual day was calculated. A stepwise linear regression showed slightly different results. The further analysis, using different but theoretically equivalent variables revealed, that the predictor problem-solving pondering from the previous evening had a slope of β = .10 on procrastination of the actual day and was not significant (*t* = 1.57, *p* = .118). The effect of the model was declared by the predictor affective rumination from the previous evening by a slope of β = -.13 on procrastination and was significant (*t* = 2.37, *p* = .019). The results revealed that the total model was significant (*F* = 5.59, *p* = .019) with an adjusted R^2 = .14.

Calculating the model of hypothesis three with the variables before person mean-centering the scales showed different results. A stepwise regression with the raw scales of affective rumination and problem-solving pondering after work as predictors on the raw scale of next-day procrastination revealed a significant effect of $R^2 = .06$ (F = 15.06, p < .001). Whereas the raw scale of problem-solving pondering after work was excluded in the model, the predictor affective rumination after work had a significant slope of $\beta = .24$ (t = 3.88, p < .001).

Different results of hypothesis four were found when calculating with the raw scales of that model. For that the model of the serial mediation analysis revealed, that the total effect of procrastination on next-day procrastination via the mediators unfinished tasks and affective rumination after work was significant (F = 117.21, p

< .001) with an effect of R^2 = .32. An intent look on the specific indirect effect via bootstrap showed a significant effect on the complete path.

A detailed approach to comprehend the effect of self-compassion on both forms of rumination was to calculate with the six subfactors of self-compassion. Initially the six single items self-kindness, self-judgement, common humanity, isolation, over-identification and mindfulness were transformed to person-mean centered variables. With these specific variables the model of hypothesis five was examined. According to that model, a stepwise linear regression revealed a significant model with $R^2 = .07$ (F = 6.21, p = .013), in that only mindfulness ($\beta = .$.10, t = -2.49, p = .013) and self-kindness ($\beta = -.15$, t = -3.36, p = .001) predicted affective rumination after work on a daily level. The subfactor self-judgement was excluded with a p = .076. Compared to that, a second stepwise linear regression analysis with the six subfactors of self-compassion as predictors showed, that only mindfulness ($\beta = -.10$, t = -2.57, p < .001) predicted problem-solving pondering after work on a significant and daily level.

The factor sleep quality was also measured in the diary study survey. Calculating correlations between sleep quality on a daily level with all relevant variables on a daily level showed two significant correlations. One negative correlation was found between sleep quality on a daily level with day-specific procrastination (r = -.11, p = .037) and one positive correlation between sleep quality on a daily level with self-compassion after work (r = .13, p = .013). Therefore no further analysis with the factor sleep quality were executed.
Discussion

The primary purpose of this study is to examine the role of self-compassion between rumination after work and procrastination on the next day in office employees and knowledge workers. The other major interest of this study is to examine the cycle of procrastination on a daily level. Therefore, seven hypotheses are postulated and tested on specific variables on a daily level. The findings of the examination of these hypotheses will be discussed next.

Theoretical Implications

First of all, the findings support the assumption that procrastination causes unfinished tasks. This is psychologically relevant, because procrastination does not automatically imply, that individuals think or feel about the fact that they did not finish intended tasks. Despite a lack of research to that association, this result is expected and hypothesis one can be confirmed. The consequence of unfinished tasks is the Zeigarnik-effect and can provoke rumination (Syrek & Antoni, 2014; Syrek et al., 2017). Whereas Syrek et al. (2017) found significant correlations between unfinished tasks with both forms of rumination, this study confirms this assumption partly. Whereas the effect of unfinished tasks on problem-solving pondering after work (H2b) can not be confirmed, the effect of unfinished tasks on affective rumination after work (H2a) is significant. An intent look shows, that the effects of unfinished tasks on both forms of rumination are bigger in the study of Syrek et al. (2017). The reason for the different results could be because of methodical issues in reference to the study design. Whereas this study measured the associations between unfinished tasks and both forms of rumination on a dailylevel, Syrek et al. (2017) measured these associations on a weekly-level. Nevertheless, it should be noted that the effect of unfinished tasks on affective rumination after work is very weak and examined on a daily level. Therefore I assume, that daily effects of unfinished tasks on rumination are smaller and harder to detect then effects over a longer period of time.

The result of hypothesis three reveals that neither affective rumination after work nor problem-solving pondering after work effect procrastination on the next work day on a daily level. Because of these results, hypotheses H3a and H3b cannot be confirmed. This is unexpected for different reasons. One of the reasons refers to the finding of an association between procrastination and rumination in form of ruminative brooding in previous research (Flett et al., 2016). Perhaps procrastination provokes rumination and not reciprocal. Another reason is because rumination is positively associated with emotional exhaustion and negative associated with recovery experience (Donahue et al., 2012; Kinman et al., 2017; Luo & Bao, 2013). In addition, recovery is important for the restoration of self-regulatory resources. This is essential, because self-regulation is a central source of procrastination (Kühnel et al., 2016; Steel, 2007). Therefore I assume, that rumination after work can impair the restoration of self-regulatory resources through a delay of mental recovery, but do not provoke subsequent procrastination on the next work day based on daily changes. Perhaps it needs a longer period of rumination to deplete self-regulatory resources sufficient to affect subsequent procrastination.

This assumption can be supported by an alternative analysis of hypothesis three, using the raw scale of both forms of rumination after work instead of the person mean-centered variables. With this method of calculation a positive effect between the variables affective rumination after work and next-day procrastination was identified. This alternative examination reveals, that affective rumination after work and procrastination on the next work day are positively associated in general and that the daily effects are too small or unaccurate to be significant.

Further on, hypothesis four postulates that unfinished tasks and affective rumination after work (H4a) or problem-solving pondering after work (H4b) are mediating the process between procrastination of the actual work day on subsequent procrastination on the next work day. Two separate serial mediation analyses revealed, that both models are not significant. A detailed analysis shows that only the paths procrastination of the actual work day on unfinished tasks for both subhypotheses and unfinished tasks on affective rumination after work for hypothesis H4a are significant. Therefore these hypotheses cannot be confirmed and disprove the assumption of the cycle of procrastination on a daily level. This means that procrastination does not automatically lead to a rise of subsequent procrastination on the next work day. However, the arguments for this assumption

have a weak foundation. As already explained for hypothesis three, procrastination leads to rumination (Flett et al., 2016), but not coercively reciprocal. In addition, an explorative analysis of hypothesis four reveals different effects when the serial mediation is calculated with the raw scales as variables, instead of the personmean centered variables. It that case the cycle of procrastination, mediated by unfinished tasks and affective rumination after work, is significant. This is a clue that the cycle of procrastination exists and could be confirmed over time, but not on a daily level.

The analysis referring to hypothesis five show that self-compassion after work reduces affective rumination after work as well as problem-solving pondering after work on a daily level. This supports the assumption that rumination can be reduced by self-compassion as a specific form of emotional regulation (Neff, 2003; Flett et al., 2016) on a daily level. While previous research examined these associations in a cross-sectional design, this study reveals that the effect between rumination and self-compassion interact on a daily basis. Explorative analysis with the six subfactors of self-compassion show, that only the subfactor mindfulness negatively predicts problem-solving pondering after work on a daily basis. Further on, affective rumination after work can be negatively predicted by mindfulness and self-kindness on a daily basis. Incidentally, the subfactor self-judgement miss significance in predicting affective rumination after work. These results show the special role of mindfulness as a subfactor of self-compassion in reducing daily rumination after work. This is not unexpected, because also an intervention training in mindfulness can reduce rumination in the context of work (Galla, 2016).

The further question of hypothesis six was, if self-compassion after work can reduce procrastination on the next work day mediated by rumination after work. The analyses show that neither affective rumination after work nor problem-solving pondering after work mediate the effect between self-compassion after work on procrastination on the next work day. Besides affective rumination after work and problem-solving pondering after work, also self-compassion after work do not directly influence procrastination on the next work day. According to these results, hypothesis six cannot be confirmed. The assumption behind that was, that self-compassion as a strategy to regulate own emotions (Neff, 2003) has the power to reduce subsequent procrastination (Eckert et al., 2016; Flett et al., 2016) on the

next work day through reducing rumination. The results show indeed, that selfcompassion can reduce rumination after work in a short period of time. An explanation for the lack of an effect between rumination and procrastination on the next work day is previously mentioned. In addition, the assumption of a direct effect of self-compassion after work on procrastination on the next work day is based on previous findings. It was mentioned that a low level of self-compassion is associated with a higher level of procrastination (Flett et al., 2016; Sirois, 2014). But these studies do not provide evidence, that self-compassion reduces subsequent procrastination over time. And this was one purpose of this study, to examine if self-compassion can reduce subsequent procrastination on a daily level.

Finally, the seventh hypothesis assumes, that self-compassion mitigates the effect between rumination after work in form of affective rumination after work (a) or problem-solving pondering after work (b) on procrastination on the next work day. The basis of this expectation are the results from the meta-analysis of Sirois (2014). Three cross-sectional design and one longitudinal study show that selfcompassion mediate the effect between stress and procrastination. In reference to that, there are three main differences in this study. The first difference is that this study used the factor rumination as a specific form of psychological stress. The second difference is that self-compassion acts as moderator instead a mediator. Finally, the third reason is based on a main interest of this diary study to examine effects on a daily level. The examination of hypothesis seven reveal, that selfcompassion after work does not mitigate the effect of rumination after work on procrastination on the next work day. The theoretical explanation for the postulated effect was the assumption that self-compassion buffers specific psychological consequences of rumination, that in turn influence procrastination on the next work day. Possible common psychological factors of rumination, selfcompassion and procrastination are self-regulation, emotional exhaustion, selfesteem, or self-efficacy (Baumeister et al., 1993; Judge & Bono, 2001; Lindsley et al., 1995; Rivkin et al., 2014). An explanation for the absence of the moderationeffect of self-compassion between rumination after work and procrastination on the next work day is that subsequent procrastination on the next work day cannot be influenced by rumination after work on a daily level.

Summarizing hypothesis one, two and five are confirmed, whereas hypotheses three, four, six and seven cannot be confirmed. An intent look shows, that the absence of the single effect between both forms of rumination after work on procrastination on the next work day is responsible for the not significant hypotheses. As previously mentioned, the postulated effects between both forms of rumination after work on procrastination are based on a daily level. Furthermore the significance of this effect changes rapidly, if the effect is not examined on a daily level. Perhaps there are other psychological factors that are responsible for daily changes in procrastination on the next work day, than rumination after work. In the following, limitations of this diary study and the learnings for future research will be discussed.

Strengths, limitations and implications for future research

This study has a series of strengths that should be mentioned. The major strength of this study is its design as a diary survey. This allows insights into changes in one variable and relationships between transient state experiences and behaviour (Ohly et al., 2010). Previous research (Sirois, 2014) already shows general associations between the relevant psychological factors examined in this study. But this type of survey provides data to examine effects between these variables based on daily changes with a reduction of the retrospective bias. To examine these sensible changes we had to recruit a sufficient sample of volunteers. The final sample of 61 valid participants provided a dataset of 371 completed days in the survey. Another strength of this study was the design of the online-questionnaires. To facilitate the usability of the questionnaires, they are adjusted as responsive design for PC and smartphone. A further strength is the high level of reliability of all measurements with an average Cronbach α ranging between $\alpha = .75$ and $\alpha = .93$.

Nevertheless, this study has also limitations. Initially, in respect of the valid reliability of self-compassion there are two weak points in this measurement. One is the fact, that based on a daily level, the Cronbach α of self-compassion after work for day one to day three ranges between $\alpha = .47$ and $\alpha = .69$. In contrast to that bias, the average Cronbach α for self-compassion after work is with $\alpha = .75$ still on an acceptable level. The second weak point of the measurement of self-

compassion after work is the circumstance that in this survey are just six items of self-compassion used. Each one for each subfactor of self-compassion.

This leads to another weakness of this study. The data survey of this diary study is part of a larger research project on the University of Vienna. In detail, the data survey of this diary study was created for two different diary study projects. Therefore the number of items had to be reduced and the elicitation of other interesting procrastination-related psychological factors had to be relinquished for pragmatic reasons. In comparison with self-compassion after work, the original Self-Compassion Scale (SCS; Neff, 2003) had 26 items. The advantage of the reduction down to six items is the timesaving consequence when the participants complete the daily questionnaires. On the other hand, with only one item per subfactor of self-compassion there is no way to calculate the reliability of the single subfactors. But there is also the presumption of a reduced validity of the subfactors of self-compassion after work. As an example, the subfactor mindfulness was only surveyed by one single item: "Today after work, I tried to balance my feelings". This statement is indeed part of mindfulness, but mindfulness as a psychological concept is much more than just actively balancing feelings.

Another limitation of this study is the distribution of the single items of the subfactors procrastination, rumination, and self-compassion. There is the tendency of a right-skewed distribution of the raw data. This leads to the question if the participants tended to answer in a social desired way. This is quite possible, because the data are based on self-reports of their behaviour, feelings and thinking. In relation to the dataset there are also some comments about the method of the diary study. Because of the circumstance that the data survey for hypotheses three to seven are across days, the relevant variables had to be shifted to the previous or the next day in the dataset. This was essential to ensure that the variables match in accordance to the hypotheses. As a consequence of this procedure, the nested data structure resulted in a small loss of data. As an example, further analysis of hypothesis three showed a marginal, but relevant difference in the prediction of affective rumination and problem-solving pondering on procrastination on a daily level, when the variables of rumination from the previous evening and procrastination of the current work day were used. Despite

these factors are based on the same raw data, the lagged variables in the process of data preparation have a consequence. In detail, the size of the sample to test the hypothesis is different, because some data had to be displaced for day one and day 10. Nevertheless, this way of data preparation is not wrong, but lead to a small loss of data from the first day and the last day of the diary study. The last limitation refers to the methodical way of analyzing the data. Another option to examine the hypotheses is to calculate them as a multilevel model. Multilevel analyses are also used in other diary studies (Ohly et al., 2010). But ultimately, the option to analyse the data of this study with a multilevel analysis was not used for pragmatic reasons.

According to the results and my learnings of this research project I suggest following proposals for future research. One proposal is to design a diary study project where all measurements are part of the research question. This is helpful to reduce the daily time for filling out the questionnaires and to create a specific theoretic model to examine complex processes in the psychological process of procrastination. Some of the explanations for the psychological mechanisms in the hypotheses are quite on a theoretical level. As an example, it would be very interesting to examine the role of different types of self-esteem in the process of procrastination on a daily level, because self-esteem is also linked to rumination and self-compassion. Other interesting factors in the process of procrastination would be the associations with the variables self-efficacy, intrinsic motivation, selfregulation, self-regulation resources, ego depletion, emotional exhaustion and recovery experience. Especially for the variables based on the energy level it would be interesting to differentiate between short- and long term effects in the process of procrastination. This could help to improve the understanding of common psychological variables in the psychological mechanisms between rumination, self-compassion, and procrastination on a daily level or over a longer period of time.

Another implication for future research is the idea to combine the self-reports of the diary study with technological equipment to measure psycho-physiological reactions of stress for a survey of objective data. As an example, rumination in form of perservative cognitions is associated with a lower heart rate variability (HRV; Ottaviani et al., 2016). This form of monitoring could reveal new insights about the role of mind-based stress reactions in the process of procrastination.

Practical implications and conclusion

Alltogether, the results of this study allow limited conclusions for the practice. Initially, procrastination leads to unfinished tasks. This is relevant, because unfinished tasks can provoke affective rumination after work on a daily level. One major question of this study was, if affective rumination can be reduced by selfcompassion as a strategy to regulate one's emotions. The finding that selfcompassion after work is able to reduce problem-solving pondering after work and affective rumination after work on a daily level is quite valuable for employees in offices and knowledge workers. The point is, that self-compassion can be trained in already five days and also stays stable after three months (Neff, 2003; Galla, 2016). Therefore knowledge workers and employees in offices could benefit from a training in self-compassion. This would be very beneficial to cope with daily rumination after work. Despite rumination do not raise the level of procrastination on the next day, rumination delay the process of mental recovery and have a malign impact on the level of emotional exhaustion (Cropley & Purvis, 2003; Donahue et al., 2012; Kinman et al., 2017; Luo & Bao, 2013). Ultimately, this study shows that the facilitation of self-compassion takes an important role for employees in offices and knowledge workers in the future of the daily work life.

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Appendix

Baseline Questionnaire

Seite 01

TeilnehmerInneninformation und Einwilligungserklärung zur Teilnahme an der Studie:

Selbstmitgefühl im Umgang mit Stress im Arbeitsalltag

Sehr geehrte Teilnehmerin, sehr geehrter Teilnehmer,

herzlichen Dank für Ihre Bereitschaft an dieser arbeitspsychologischen Tagebuchstudie teilzunehmen. Im Folgenden geben wir Ihnen einen kurzen Überblick über unser Anliegen und die Studie.

1. Zweck der Studie

Der Tagebuchcharakter der Studie gewährt Einblicke in die täglichen Arbeitsabläufe. Dies ermöglicht genauere Aussagen zu den Effekten von Selbstmitgefühl im Umgang mit Stress im Arbeitsalltag, sowie zu Veränderungen die innerhalb eines Tages oder innerhalb mehrerer Tage stattfinden. Der dadurch entstehende Erkenntnisgewinn trägt zu einem besseren Verständnis des Arbeitserlebens bei und kann zur künftigen Verbesserung von Arbeitsbedingungen beitragen.

2. Verlauf der Studie

Nach Beendigung des Allgemeinen Fragebogens zur Erfassung demografischer Daten und genereller Merkmale Ihrer Arbeit, bitten wir Sie für zwei Arbeitswochen (Mo-Fr) jeweils drei Mal pro Tag kurze Fragebögen ("Tagebucheinträge") auszufüllen, die wir Ihnen jeweils morgens, mittags und abends per E-Mail zusenden. Die Tagebucheinträge können sowohl am PC oder auch bequem über das Handy ausgefüllt werden und sollten pro Tagebucheintrag etwa drei Minuten in Anspruch nehmen.

3. Nutzen der Studie

Mit Ihrer Teilnahme unterstützen Sie nicht nur den wissenschaftlichen Erkenntnisgewinn, sondern helfen auch Studierenden im Rahmen ihrer wissenschaftlicher Abschlussarbeiten.

4. Spenden

Wenn Sie an der Studie teilnehmen, haben Sie die Möglichkeit eine Spende für einen guten Zweck zu ermöglichen. Wenn an mindestens fünf Arbeitstagen alle drei Tagebucheinträge erledigt werden, spenden wir pro Arbeitstag an dem alle drei Tagebucheinträge erledigt wurden 20 Cent. Insgesamt können so bis zu 2 Euro erreicht werden. Eine Auswahl der zur Verfügung stehenden Einrichtungen, finden Sie im weiteren Verlauf des Fragebogens.

5. Anonymität und Datenschutz

Jegliche Informationen, die wir von Ihnen erhalten, werden vertraulich behandelt und ausschließlich für wissenschaftliche Zwecke verwendet. Dritte haben keinen Zugriff auf Ihre Angaben und Ihre Angaben können nicht mit Ihrer Person in Verbindung gebracht werden. Die gesammelten Daten werden im Rahmen wissenschaftlicher Abschlussarbeiten sowie weiterer wissenschaftlicher Publikationen verwendet.

6. Weitere Fragen?

Bei weiteren Fragen oder eventuellen Problemen, stehen wir Ihnen gerne zur Verfügung.

```
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Ihre Teilnahme an dieser Studie erfolgt freiwillig. Sie können jederzeit, ohne Angabe von Gründen, Ihre Bereitschaft zur Teilnahme ablehnen oder diese auch im Verlauf der Studie zurückziehen. Die Ablehnung der Teilnahme oder ein vorzeitiges Ausscheiden aus dieser Studie hat keine nachteiligen Folgen für Sie.

o Ich habe die TeilnehmerInneninformation gelesen und verstanden und willige ein, an dieser Studie teilzunehmen.

Allgemeiner Fragebogen zu demografischen Daten und Arbeitsmerkmalen

Sehr geehrte Teilnehmerin, sehr geehrter Teilnehmer,

wir heißen Sie zum ersten Teil der Studie herzlich willkommen!

Die Folgenden Fragen dienen zur Erfassung demografischer Daten und der generellen Merkmalen Ihrer Arbeit. Bitte antworten Sie auf alle Fragen spontan, ohne groß nachzudenken, und so vollständig wie möglich.

Vielen Dank vorab für Ihre Unterstützung!

Seite 03

1. Alter:

Jahre

2. Geschlecht:

- Weiblich
- Männlich

3. Höchste abgeschlossene Ausbildung

- o Pflichtschule
- Lehrabschluss
- Fachschule
- Matura / Abitur
- O Universität / Fachhochschule

4. Welche Tätigkeit üben Sie aus?

Bitte tragen Sie Ihre Berufsbezeichnung ein.

5. Wie lange üben Sie Ihre jetztige Tätigkeit schon aus?

Jahre

6. Sind Sie selbstständig tätig?

- Nein.
- Ja, aber ich bin gleichzeitig auch in einem Unternehmen angestellt (unselbstständig tätig).
- Ja, ich bin ausschlielich selbstständig tätig.

7. Üben Sie eine leitende Funktion aus (Führungskraft)?

Bei Selbstständigen: Beschäftigen Sie Mitarbeiter/-innen?

- Nein.
- Ja.

9. Für welches Unternehmen arbeiten Sie?

Bitte beantworten Sie diese Frage, wenn Ihre Organisation eine standardisierte Rückmeldung über die Ergebnisse der Tagebuchstudie erhalten soll.

Ich arbeite für:

10. Welche Organisation möchten Sie durch Ihre Teilnahme unterstützen?

Wenn an mindestens fünf Arbeitstagen alle drei Tagebucheinträge erledigt werden, spenden wir pro Arbeitstag an dem alle drei Tagebucheinträge erledigt wurden 20 Cent an eine Organisation aus der Wahl. Es können somit bis zu 2 Euro pro Person erreicht werden.

- ZARA Verein f
 ür Zivilcourage- und Anti-Rassismus-Arbeit
- AFS Flüchtlingshilfe-Stiftung
- Wiener Tierschutz

Seite 04

11. Inwieweit treffen die folgenden Aussagen auf Ihre Arbeit im Generellen zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Ich bin frei in der zeitlichen Einteilung meiner Arbeit.	0	0	0	0	0
Ich kann selbst entscheiden, in welcher Reihenfolge ich meine Arbeit mache.	0	0	0		0
Ich kann meine Arbeit so planen, wie ich es möchte.	0	0	0		0
Meine Arbeit ermöglicht es mir Initiative zu übernehmen und nach eigenem Ermessen zu handeln.	0	0	0	0	0
Ich kann bei meiner Arbeit viele Entscheidungen selbstständig treffen.	0	0	0		0
Meine Arbeit gewährt mir einen großen Entscheidungsspielraum.	0	0	0	0	0
Bei meiner Arbeit kann ich oft zwischen verschiedenen Herangehensweisen wählen.	8	8	0	0	0
Ich kann selbst entscheiden, mit welchen Mitteln ich zum Ziel komme.	0	0	0	0	0
Ich habe viele Freiheiten in der Art und Weise, wie ich meine Arbeit verrichte.	0	0	0	0	0
In meiner Tätigkeit mache ich sehr viele verschiedene Dinge.	0	0	0	0	0

12. Inwieweit treffen die folgenden Aussagen auf Ihre Arbeit im Generellen zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Bei meiner Arbeit mache ich immer mal wieder etwas Neues.	0	0	0	0	0
Bei der Arbeit muss ich eine Vielfalt von Aufgaben bearbeiten.	0	0	0	0	0
Meine Arbeit ist sehr abwechslungsreich.	0	0	0	0	0
Meine Arbeit wirkt sich bedeutsam auf das Leben anderer Menschen aus.	0	0		0	0
Meine Arbeit ist bedeutsam und wichtig in einem größeren Zusammenhang.	0	0	0	0	0
Meine Arbeit wirkt sich stark auf Menschen außerhalb der Organisation aus.	0	0	0	0	0
Das Ergebnis meiner Arbeit hat einen großen Einfluss auf andere Menschen.	0	0	0	0	0
Die Ergebnisse meiner Arbeit sind vollständige, abgeschlossene Produkte/Dienstleistungen.	0	0	0	0	0
Meine Arbeit ist so aufgebaut, dass ich einen vollständigen Arbeitsvorgang von Anfang bis Ende durchführe.	0	0	0	0	0
Bei meiner Arbeit habe ich die Möglichkeit, Produkte/Dienstleistungen, die ich beginne, fertigzustellen.	0	0	0	0	0

Seite 06

13. Inwieweit treffen die folgenden Aussagen auf Ihre Arbeit im Generellen zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Bei meiner Arbeit kann ich zu Ende bringen, was ich begonnen habe.	0	0	0	0	0
Ich erhalte unmittelbare und deutliche Informationen darüber, wie gut ich meine Arbeit mache.	0	0	0	0	0
Durch die Tätigkeit selbst erhalte ich automatisch Rückmeldung über meine Leistung.	0	0	0	0	0
Bei der Ausführung meiner Tätigkeit kann ich leicht feststellen, wie gut ich arbeite.	0	0	0	0	0
Meine Vorgesetzten geben mir häufig Rückmeldung über meine Arbeitsleistung.	0	0	0	0	0
Ich erhalte von KollegInnen Rückmeldung über meine Arbeitsleistung.	0	0	0	0	0
Andere Personen aus der Organisation geben mir Rückmeldung über die Effektivität meiner Arbeitsleistungen.	0	0	0	0	0
Ich muss bei meiner Arbeit Probleme lösen, für die es keine eindeutige Lösung gibt.	0	0	0	0	0
Kreativität ist sehr wichtig für meine Arbeit.	0		0	•	0
Meine Arbeit beinhaltet oft den Umgang mit neuen Problemen.	0	0	0	0	0
Meine Arbeit verlangt ungewöhnliche Ideen oder Problemlösungen.	0	0	0	0	0

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Wie häufig stehen Sie unter Zeitdruck?

sehr selten/ nie	selten (etwa 1× pro Woche)	gelegentlich (etwa 1× pro Tag)	oft (mehrmals pro Tag)	sehr oft (fast ununterbrochen)
0			0	

Wie häufig passiert es, dass Sie schneller arbeiten, als sie es normalerweise tun, um die Arbeit zu schaffen?

sehr selten/ nie	selten (etwa 1x pro Woche)	gelegentlich (etwa 1x pro Tag)	oft (mehrmals pro Tag)	sehr oft (fast ununterbrochen)
0	0	0	0	0

Wie oft kommt es vor, dass Sie wegen zuviel Arbeit nicht oder verspätet in die Pause gehen können?

sehr selten/ nie	selten (etwa 1x pro Monat)	gelegentlich (etwa 1× pro Woche)	oft (mehrmals pro Woche)	sehr oft (täglich)
0	0	0	0	0

Wie oft kommt es vor, dass Sie wegen zuviel Arbeit verspätet in den Feierabend gehen können?

sehr selten/ nie	selten (etwa 1x pro Monat)	gelegentlich (mehrmals pro Monat)	oft (mehrmals pro Woche)	sehr oft (fast täglich)
0		0	0	0

Wie oft wird bei Ihrer Arbeit ein hohes Arbeitstempo verlangt?

sehr selten/ nie	selten (etwa 1x pro Woche)	gelegentlich (etwa 1× pro Tag)	oft (mehrmals pro Tag)	sehr oft (mehrmals pro Stunde)
0	0	0	0	0

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14. Inwieweit treffen die folgenden Aussagen auf Sie zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Ich setze mir höhere Ziele als die meisten Menschen.	8	8	8	8	8
Ich habe extrem hochgesteckte Ziele.	8	8	8	8	8
Ich erwarte bei meinen täglichen Aufgaben höhere Leistungen als die meisten anderen Menschen.	0	0	8	8	8
Wenn ich bei der Arbeit versage, bin ich als Mensch ein Versager.	8	8	8	8	8
Wenn ich nur zum Teil versage ist das genauso schlecht, als wenn ich im Ganzen versagt hätte.	0	0	0	8	0
Wenn ich nicht genauso gut bin wie andere Menschen, bedeutet das, dass ich minderwertig bin.	8	8	8	8	8
Auch wenn ich etwas sehr sorgfältig mache, habe ich oft das Gefühl, dass es nicht ganz richtig ist.	8	0	8	8	8
Ich zweifle normalerweise an den einfachen, alltäglichen Dingen.	8	8	8	8	8
Ich neige dazu, mit meiner Arbeit hinterher zu hinken, weil ich alles nochmal und nochmal mache.	8	0	8	8	8
Es dauert sehr lange bis ich etwas richtig gemacht habe.	8	8	8	8	8

Seite 09

15. Inwieweit treffen die folgenden Aussagen auf Sie zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Ich bin gut darin, Versuchungen zu widerstehen.	8	8	8	8	8
Es fällt mir schwer, schlechte Gewohnheiten abzulegen.	8	8	8	8	8
Ich bin faul.	8	8	8	8	8
Ich sage unangemessene Dinge.	8	8	8	8	8
Ich tue manchmal Dinge, die schlecht für mich sind, wenn sie mir Spaß machen.	8	0	0	0	8
Ich wünschte, ich hätte mehr Selbstdisziplin.	8	8			8
Angenehme Aktivitäten und Vergnügen hindern mich manchmal daran, meine Arbeit zu machen.	8	8	8	8	8
Es fällt mir schwer, mich zu konzentrieren.	8	8			8
Ich kann effektiv auf langfristige Ziele hinarbeiten.	8	8	8	8	8
Manchmal kann ich mich selbst nicht daran hindern, etwas zu tun, obwohl ich weiß, dass es falsch ist.	0	0	8	8	8
Ich handle oft ohne alle Alternativen durchdacht zu haben.	8	8	8	8	8
Ich lehne Dinge ab, die schlecht für mich sind.	8	8	8	8	8
Andere würden sagen, dass ich eine eiserne Selbstdisziplin habe.	8	8	8	8	8

16. Inwieweit treffen die folgenden Aussagen auf Sie zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Wenn ich bei etwas versage, was mir wichtig ist, werde ich von Gefühlen der Unzulänglichkeit aufgezehrt.	8	8	8	8	8
Wenn es mir schlecht geht, neige ich dazu zu glauben, dass die meisten anderen Menschen wahrscheinlich glücklicher sind als ich.	8	8	8	8	8
Wenn ich eine sehr schwere Zeit durchmache, schenke ich mir selbst die Zuwendung und Einfühlsamkeit, die ich brauche.	8	8	8	8	8
Wenn mir etwas für mich Wichtiges misslingt, glaube ich oft, dass nur ich allein versage.	8	8	8	8	8
Wenn ich mich niedergeschlagen fühle, neige ich dazu nur noch auf das zu achten, was nicht in Ordnung ist.	8	0	8	8	8
Ich missbillige und verurteile meine eigenen Fehler und Schwächen.	8	8	8	8	8
Ich bin intolerant und unduldsam gegenüber denjenigen Seiten meiner Persönlichkeit, die ich nicht mag.	8	8	8	8	8
Wenn etwas Unangenehmes passiert, versuche ich einen ausgewogenen Überblick über die Situation zu erlangen.	8	8	8	8	8
Ich versuche, meine Fehler als Teil der menschlichen Natur zu sehen.	8	8			8
Wenn mich etwas aufregt, versuche ich meine Gefühle im Gleichgewicht zu halten.	8	8	8	8	8
Wenn ich mich auf irgendeine Art unzulänglich fühle, versuche ich mich daran zu erinnern, dass die meisten Leute solche Gefühle der Unzulänglichkeit haben.	8	8	8	8	8
Ich versuche verständnisvoll und geduldig gegenüber jenen Zügen meiner Persönlichkeit zu sein, die ich nicht mag.	8	8	8	8	8

Letzte Seite

Vielen Dank für Ihre Teilnahme!

Wir möchten uns ganz herzlich für Ihre Mithilfe bedanken.

Am nächsten Montag starten wir mit den täglichen Fragebögen. Dazu bekommen Sie am Morgen (ca. 8:00 Uhr), am Mittag (ca. 12:00) und am Abend (ca. 16:00) jeweils einen kurzen Fragebogen an Ihre E-Mailadresse geschickt.

Bis dahin wünschen wir Ihnen noch eine schöne Woche!

Camilla Iber, Mario Schuster, Roman Prem

Ihre Antworten wurden gespeichert, Sie können das Browser-Fenster nun schließen.

Kontakt: Camilla Iber, Mario Schuster, Roman Prem, Fakultät für Psychologie, Universität Wien

Diary study questionnaire

Fragebogen am Vormittag

Sehr geehrte Teilnehmerin, sehr geehrter Teilnehmer,

wir heißen Sie zum ersten Fragebogen des heutigen Tages herzlich willkommen!

Dieser Fragebogen sollte kurz nach Arbeitsbeginn im Laufe des Vormittags ausgefüllt werden. Bitte antworten Sie auf alle Fragen spontan, ohne groß nachzudenken, und so vollständig wie möglich.

Vielen Dank vorab für Ihre Unterstützung!

1. Wann haben Sie heute mit der Arbeit begonnen?

Bitte geben Sie die Uhrzeit im folgenden Format ein [hh:mm] Zum Beispiel: 07:30 Uhr oder 09:42 Uhr



2. Inwieweit treffen die folgenden Aussagen auf Ihr momentanes Wohlbefinden zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Momentan fühle ich mich lebendig und vital.	0	0	0	•	0
Momentan habe ich Energie und Schwung.	0	0	0	0	۲
Momentan fühle ich mich aufmerksam und wach.	0	0	0	•	0

3. Wie würden Sie die Qualität Ihres Schlafes in der vergangenen Nacht beurteilen?

	sehr	eher	mittel-	eher	sehr
	schlecht	schlecht	mäßig	gut	gut
Beurteilen Sie nun die Schlafqualität der vergangenen Nacht:	0	0	0	0	0

4. Wie lange haben Sie in der vergangenen Nacht insgesamt geschlafen?

Bitte geben Sie die Schlafdauer (exkl. der Dauer bis zum Einschlafen und eventueller Schlafunterbrechungen) im folgenden Format ein [hh:mm].

Zum Beispiel: 07:30 für 7 1/2 Stunden oder 8:15 für 8 1/4 Stunden.



Seite 01

5. Inwieweit treffen die folgenden Aussagen auf Ihre gestrige Freizeit (nach der Arbeit) zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Gestern war ich (nach der Arbeit) angespannt, wenn ich über berufliche Dinge nachgedacht habe.	0	0	0	0	0
Gestern war ich (nach der Arbeit) aufgrund von beruflichen Dingen gereizt.	0	0	0	0	0
Gestern hat es mich (nach der Arbeit) ermüdet, wenn ich über berufliche Dinge nachgedacht habe.	0	0	0	۲	0
Gestern war ich (nach der Arbeit) aufgrund von beruflichen Dingen beunruhigt.	0	0	0	•	0
Gestern war ich (nach der Arbeit) verärgert, wenn ich über berufliche Dinge nachgedacht habe.	0	0	0	•	0
Gestern habe ich (nach der Arbeit) darüber nachgedacht, wie ich meine Arbeitsleistung verbessern kann.	0	0	0	•	0
Gestern habe ich (nach der Arbeit) über Aufgaben nachgedacht, die ich heute bei der Arbeit erledigen muss.	0	0	0	•	0
Gestern habe ich (nach der Arbeit) Lösungen für arbeitsbezogene Probleme gefunden.	0	0	0	0	0
Gestern habe ich mich (nach der Arbeit) ertappt, Dinge zu überdenken, die ich bei meiner Arbeit getan habe.	0	0	0	0	0
Gestern hat mir (nach der Arbeit) das Nachdenken über meine Arbeit dabei geholfen, kreativ zu sein.	0	0	0	•	0

6. Inwieweit treffen die folgenden Aussagen auf Ihren heutigen Arbeitstag zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Heute stehe ich unter Zeitdruck.	0	0	0	0	0
Heute muss ich schneller arbeiten, als ich es normalerweise tue, um die Arbeit zu schaffen.	0	0	۲	۲	0
Heute wird bei meiner Arbeit ein schnelles Arbeitstempo verlangt.	0	0	۲	۲	0
Heute ist es aufgrund meiner Tätigkeit erforderlich, die Reihenfolge der Aufgaben selbst festzulegen.	0	۲	۲	۲	۲
Heute ist es aufgrund meiner Tätigkeit erforderlich, selbst festzulegen, auf welche Art und Weise ich meine Arbeit erledige.	0	0	0	۲	۲
Heute ist es aufgrund meiner Tätigkeit erforderlich, selbstständig Entscheidungen bezüglich der Priorität von Aufgaben zu treffen.	0	0	0	۲	۲
Heute muss ich mich bei einigen meiner Arbeitsaufgaben richtig darum bemühen, dass ich sie nicht zugunsten attraktiverer Aufgaben unerledigt lasse.	0	0	0	۲	۲
Heute kostet es mich einiges an Überwindung, bestimmte Aufgaben in Angriff zu nehmen.	0	0	۲	۲	0
Heute sind einige meiner Aufgaben so, dass ich mich richtig zwingen muss, sie zu erledigen.	0	0	0	0	0

Seite 05

7. Inwieweit treffen die folgenden Aussagen auf Sie während des heutigen Arbeitstages zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Wenn sich heute bei der Arbeit Widerstände auftun, finde ich Mittel und Wege, mich durchzusetzen.	۲	۲	۲	0	0
Wenn heute bei der Arbeit eine neue Sache auf mich zukommt, weiß ich, wie ich damit umgehen kann.	0	0	0	0	۲
Wenn heute bei der Arbeit ein Problem auftaucht, kann ich es aus eigener Kraft meistern.	0	0	۲	0	۲

Letzte Seite

Vielen Dank für Ihre Teilnahme!

Wir möchten uns ganz herzlich für Ihre Mithilfe bedanken. Den nächsten Fragebogen erhalten Sie am Mittag um ca. 12:00 Uhr.

Wir wünschen Ihnen noch einen schönen Arbeitstag!

Ihre Antworten wurden gespeichert, Sie können das Browser-Fenster nun schließen.

Kontakt: Camilla Iber, Mario Schuster, Roman Prem, Fakultät für Psychologie, Universität Wien

Seite 01

Fragebogen nach der Mittagspause

Sehr geehrte Teilnehmerin, sehr geehrter Teilnehmer,

wir heißen Sie zum zweiten Fragebogen des heutigen Tages herzlich willkommen!

Dieser Fragebogen sollte kurz nach der Mittagspause im Laufe des Nachmittags ausgefüllt werden. Bitte antworten Sie auf alle Fragen spontan, ohne groß nachzudenken, und so vollständig wie möglich.

Vielen Dank vorab für Ihre Unterstützung!

Seite 02

1. Inwieweit treffen die folgenden Aussagen auf Ihr momentanes Wohlbefinden zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Momentan fühle ich mich lebendig und vital.	0	0	0	•	۲
Momentan habe ich Energie und Schwung.	0	0	0	0	۲
Momentan fühle ich mich aufmerksam und wach.	۲	0	۲	0	۲

2. Inwieweit treffen die folgenden Aussagen auf Sie heute während der Arbeit zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Heute bin ich bei meiner Arbeit voll Energie.	0	0	0	0	0
Heute bin ich von meiner Arbeit begeistert.	0	•	0	0	0
Heute gehe ich völlig in meiner Arbeit auf.	0	•	0	•	0

3. Inwieweit treffen die folgenden Aussagen auf die Situationen und Ereignisse Ihres heutigen Arbeitstages zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Die Situationen und Ereignisse des heutigen Tages führen zu lehrreichen Erfahrungen.	0	0	۲	0	0
Die Situationen und Ereignisse des heutigen Tages helfen mir, eine Menge zu Lernen.	0	0	0	0	0
Die Situationen und Ereignisse des heutigen Tages zeigen mir, dass ich dazu fähig bin, etwas Neues zu tun.	0	0	0	0	0
Die Situationen und Ereignisse des heutigen Tages tragen dazu bei, dass ich mich darauf konzentrieren kann, gute Arbeit zu machen.	۲	۲	0	0	0
Die Situationen und Ereignisse des heutigen Tages schränken meine Fähigkeiten ein.	0	0	۲	0	0
Die Situationen und Ereignisse des heutigen Tages hindern mich daran, schwierige Aspekte der Arbeit zu meistern.	0	0	0	0	0
Die Situationen und Ereignisse des heutigen Tages schränken mich ein, gut zu arbeiten.	0	0	0	0	0
Die Situationen und Ereignisse des heutigen Tages behindern jede Leistung, die ich erzielen könnte.	۲	0	۲	0	0

Seite 04

4. Inwieweit treffen die folgenden Aussagen auf Sie während des heutigen Arbeitstages zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Heute schiebe ich die Erledigung von Aufgaben unnötigerweise auf, auch wenn sie wichtig sind.	0	0	0	0	0
Heute schiebe ich schwierige Entscheidungen vor mir her.	0	0	0	0	۲
Heute bin ich ein unverbesserlicher Zeitverschwender ("Bummelant").	0	0	0	0	0
Heute bin ich zwar ein Zeitverschwender, kann aber nichts dagegen machen.	0	0	0	•	0
Heute habe ich mir fest vorgenommen, etwas Bestimmtes zu erledigen, lasse es jetzt aber doch schleifen.	0	0	0	۲	0
Heute komme ich nicht in die Gänge, obwohl ich genau weiß, wie wichtig es ist, anzufangen.	0	0	0	0	0

5. Inwieweit treffen die folgenden Aussagen auf Sie während des heutigen Arbeitstages zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Während des heutigen Arbeitstages gehe ich zu hart mit mir selbst um.	0	0	۲	0	۲
Während des heutigen Arbeitstages neige ich dazu, zu glauben, dass die meisten anderen Menschen wahrscheinlich glücklicher sind als ich.	۲	۲	۲	0	0
Während des heutigen Arbeitstages achte ich tendenziell nur noch auf das, was nicht in Ordnung ist.	0	0	0	0	0
Während des heutigen Arbeitstages versuche ich, meine Gefühle im Gleichgewicht zu halten.	0	0	0	0	0
Während des heutigen Arbeitstages versuche ich, meine Fehler als Teil der menschlichen Natur zu sehen.	0	0	0	0	0
Während des heutigen Arbeitstages versuche ich, verständnisvoll mit mir selbst umzugehen.	0	0	۲	0	۲

Letzte Seite

Vielen Dank für Ihre Teilnahme!

Wir möchten uns ganz herzlich für Ihre Mithilfe bedanken. Den nächsten Fragebogen erhalten Sie am Abend um ca. 16:00 Uhr.

Wir wünschen Ihnen weiterhin einen schönen Arbeitstag!

Ihre Antworten wurden gespeichert, Sie können das Browser-Fenster nun schließen.

Kontakt: Camilla Iber, Mario Schuster, Roman Prem, Fakultät für Psychologie, Universität Wien

Fragebogen bei Arbeitsende

Sehr geehrte Teilnehmerin, sehr geehrter Teilnehmer,

wir heißen Sie zum letzten Fragebogen des heutigen Tages herzlich willkommen!

Dieser Fragebogen sollte beim Arbeitsende (oder kurz danach) ausgefüllt werden. Bitte antworten Sie auf alle Fragen spontan, ohne groß nachzudenken, und so vollständig wie möglich.

Vielen Dank vorab für Ihre Unterstützung!

Seite 02

1. Wann haben Sie heute aufgehört zu arbeiten?

Bitte geben Sie die Uhrzeit im folgenden Format ein [hh:mm] Zum Beispiel: 16:30 Uhr oder 20:42 Uhr



2. Inwieweit treffen die folgenden Aussagen auf Ihr momentanes Wohlbefinden zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Momentan fühle ich mich lebendig und vital.	0	0	0	0	0
Momentan habe ich Energie und Schwung.	0	•	0	0	0
Momentan fühle ich mich aufmerksam und wach.	0		0		0

3. Inwieweit treffen die folgenden Aussagen auf Ihren heutigen Arbeitstag zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Heute habe ich etwas dazugelernt.	0	0	0	0	0
Heute habe ich mich verbessert.	0	0	0	0	0
Heute habe ich mich persönlich weiterentwickelt.	0	0	0	•	0

4. Inwieweit treffen die folgenden Aussagen auf Ihren heutigen Arbeitstag zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Heute habe ich dringende Aufgaben nicht erledigen können.	0	0	0	0	0
Heute habe ich dringende Aufgaben nicht anfangen können.	۲	۲	0	•	0
Heute habe ich wichtige Aufgaben, die ich mir vorgenommen hatte, noch nicht erledigt.	0	0	0	0	0
Heute habe ich wichtige Aufgaben, die ich mir vorgenommen hatte, noch nicht anfangen können.	0	0	0	•	0
Heute habe ich einen ganzen Berg fälliger Aufgaben noch nicht erledigen können.	0	0	0	0	0
Heute muss ich viele Aufgaben, die ich erledigen wollte, für den nächsten Arbeitstag mitnehmen.	0	0	0	•	0

Seite 04

5. Inwieweit treffen die folgenden Aussagen auf Ihr Wohlbefinden jetzt am Ende des heutigen Arbeitstag zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Jetzt, am Ende des heutigen Arbeitstages, fühle ich mich angespannt.	0	0	0	0	۲
Jetzt, am Ende des heutigen Arbeitstages, bin ich aufgeregt.	0	0	0	0	۲
Jetzt, am Ende des heutigen Arbeitstages, bin ich besorgt.	0	0	0	0	۲
Jetzt, am Ende des heutigen Arbeitstages, bin ich ruhig.	0	0	0	0	۲
Jetzt, am Ende des heutigen Arbeitstages, bin ich entspannt.	0	0	0	0	۲
Jetzt, am Ende des heutigen Arbeitstages, bin ich zufrieden.	0	0	0	0	۲

6. Inwieweit treffen die folgenden Aussagen auf Sie jetzt am Ende des heutigen Arbeitstag zu?

	gar nicht	ein wenig	teilweise	überwiegend	völlig
Jetzt, am Ende des heutigen Arbeitstages, gehe ich zu hart mit mir selbst um.	0	۲	0	0	0
Jetzt, am Ende des heutigen Arbeitstages, neige ich dazu, zu glauben, dass die meisten anderen Menschen wahrscheinlich glücklicher sind als ich.	۲	۲	۲	0	0
Jetzt, am Ende des heutigen Arbeitstages, achte ich tendenziell nur noch auf das, was nicht in Ordnung ist.	0	0	0	0	0
Jetzt, am Ende des heutigen Arbeitstages, versuche ich, meine Gefühle im Gleichgewicht zu halten.	0	0	0	0	0
Jetzt, am Ende des heutigen Arbeitstages, versuche ich, meine Fehler als Teil der menschlichen Natur zu sehen.	0	0	0	0	0
Jetzt, am Ende des heutigen Arbeitstages, versuche ich, verständnisvoll mit mir selbst umzugehen.	0	0	0	0	0

Letzte Seite

Vielen Dank für Ihre Teilnahme!

Wir möchten uns ganz herzlich für Ihre Mithilfe bedanken. Den nächsten Fragebogen erhalten Sie Morgen um ca. 08:00 Uhr.

Wir wünschen Ihnen einen schönen Feierabend!

Ihre Antworten wurden gespeichert, Sie können das Browser-Fenster nun schließen.

Kontakt: Camilla Iber, Mario Schuster, Roman Prem, Fakultät für Psychologie, Universität Wien

Abstract in German

Das Ziel dieser Masterarbeit ist es, die Rolle von Selbstmitgefühl als Schutzfaktor zwischen Grübelei nach der Arbeit und Prokrastination am nächsten Arbeitstag zu untersuchen. Ein zusätzliches Untersuchungsziel ist, ob Selbstmitgefühl nach der Arbeit zu einer Reduktion von Grübelei nach der Arbeit führen kann. Als Methode zur Testung der Hypothesen wurde ein zweiwöchiges Tagebuchstudiendesign verwendet. Die Stichprobe besteht aus 61 Wissensarbeitern und Büroangestellten mit einem Arbeitsumfang von mindestens 30 Arbeitsstunden pro Woche und resultiert in einem Datensatz von 371 komplett ausgefüllten Tagen. Um die Hypothesen zu testen wurden lineare Regressionen, Moderatoranalysen und Mediationsanalysen verwendet. Die Ergebnisse zeigen, dass Prokrastination zu unerledigten Aufgaben führt, das wiederum affektives Grübeln nach der Arbeit auf einem täglichen Niveau erregt, aber das Level weiterführender Prokrastination am nächsten Arbeitstag nicht erhöht. Selbstmitgefühl nach der Arbeit reduziert affektives Grübeln nach der Arbeit und problemlösendes Grübeln nach der Arbeit. Trotz dieses Befunds, schwächt Selbstmitgefühl nach der Arbeit den erwarteten Effekt von Grübeln nach der Arbeit auf Prokrastination am nächsten Arbeitstag nicht ab. Die Schlussfolgerung ist, dass Selbstmitgefühl nach der Arbeit die Fähigkeit fördert, arbeitsbezogenes Grübeln nach der Arbeit auf einem täglichen Niveau zu bewältigen. Zukünftige Studien sollten den Fokus auf den Prozess von prokrastinationsbezogenen psychologischen Faktoren im Rahmen einer Tagebuchstudie legen und zwischen kurz- und langfristigen Effekten im Prozess tagesabhängiger Prokrastination unterscheiden.

Declaration

"I declare, that this master thesis is my own work and that I wrote it autonomously. Therefore I used only the published resources. Moreover this master thesis is not submitted to any other authority or to any other person."

Vienna, 11th of August, 2017

Mario Schuster

Curriculum Vitae

Name:

Mario Schuster

Date of birth: 18th of August, 1983

Nationality: Austria



<u>School</u>

1989 - 1993	Volksschule Mistelbach
1993 - 1997	Hauptschule Mistelbach
1997 - 2002	TGM Wien, Industrial engineering, Matura with good success

University of Vienna

2004 - 2009	Bakkalaureat in Sport Science - graduated
2009 - 2011	Magister in Sport Science - graduated with honours
2006 - 2013	Bachelor in Psychology - graduated
since 2015	Master in Psychology (specialisation in psychology of work
	education and economics)

Further education

2015	Certified member in the Austrian Network for Psychology of Sports (ÖBS)
2014	Sportpsychological Training in high performance sports (Center of Mental Excellence)
2009	Swimming instructor (B- license) on the BSPA Innsbruck
2007	Life Guard (swimming)
2002	REFA basic, ÖVQ-certificates for QM, QII and ST

Gaulhofer-Streicher Preis 2012

Awarded by the "Zentrum für Sportwissenschaften" in Vienna for outstanding performance on university

Work experience	
since 01/2017	Mental Synergy
	Founder
since 04/2016	ASVÖ Wien
	Trainer for motor skills in autists
since 09/2014	Vienna DC Timberwolves
	Mentaltrainer in the timberwolves basketball academy
11/2012 – 01/2016	Europ Assistance (Generali-Group)
	Sport Scientist in the Department for Rehabilitation- and Healthmanagement
09/2011 – 08/2012	Campus Monte Laa
	Fulltime Sports Teacher
10/2010 - 09/2011	Universität Wien - Zentrum für Sportwissenschaften
	Assistant for study program managment
07/2006 - 07/2011	FSD - "Fit Statt Dick"
	Sportdirector of a medical diet camp called FSD in the Sacre Coeur in Pressbaum (3 weeks to 6 weeks in summer holidays)
04/2010 - 07/2010	IMSB – Institut für medizinische und sportwissenschaftliche Beratung
	Internship in the department of sports anthropometry and sport science
10/2008 - 03/2009 StarkBewegt!

Project for occupational health care for obese children in cooperation with 'FSD'

04/2008 - 06/2008 SoWhat! - Institut für Menschen mit Essstörung

Sports with obese children and adolescents

04/2006 – 12/2008 Intersport Eybl - Mariahilfergürtel

Sports consultant in the department for running, fitness & soccer

03/2005 - 10/2011 Diverse jobs as a sports coach

Manager of a sports camp, fitnesscoach, swim coach, triathloncoach, basketballcoach and basketballcoach