Working Smarter to get Things Done. How Procrastination Moderates the Relationship

Between Workload and Unfinished Tasks.

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Abstract

Research has identified unfinished tasks as a significant job stressor linked to work-related rumination and sleep disturbances. However, the antecedents of unfinished tasks are underexplored. This study aims to investigate workload as one of these potential antecedents. Additionally, this study investigates how procrastination might act as a moderator between workload and unfinished tasks, and as potential leverage point of intervention. We hypothesize that workload and procrastination are both independently linked to unfinished tasks. Furthermore, we hypothesize that procrastination moderates between workload and unfinished tasks, strengthening the relationship. Data was collected from 113 participants through a self-report survey drawn from a convenience sample. Results indicate that workload and procrastination are both positively correlated with unfinished tasks. However, procrastination does not moderate the relationship between workload and unfinished tasks, neither weakening nor strengthening the relationship. The results suggest that job design, training and work engagement present promising points for intervention. These interventions include improved project management, training employees on time management and promoting work engagement.

Keywords: productivity, workload, procrastination, unfinished tasks, tasks completion.

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Looking at the fast-paced working environment of today it is important to understand the factors that influence productivity and the completion of tasks. Research on task completion and unfinished tasks has been extensive over the years (Syrek & Antoni, 2014; Syrek et al., 2017; Weigelt & Syrek, 2017; Weigelt et al., 2019; Uhlig et al., 2023). Research found that unfinished tasks during the work week are linked to increased sleep impairment in weekends (Syrek et al., 2017). While most studies have looked at the consequences of unfinished tasks (Smit, 2016; Syrek et al., 2017), few have examined their antecedents. Understanding these antecedents behind unfinished tasks could help in resolving these problems such as sleep impairment in the weekends (Syrek et al., 2017). Workload may appear as one of these antecedents, as it is easy to imagine why. People who have more tasks often have more unfinished tasks. Although employees may vary in their interpretations and approaches to managing high workload, it may appear that workload is an almost trivial antecedent of unfinished tasks.

Self-management plays a role in task or goal completion (Castaneda et al., 1999), there are many aspects of self-management considered adaptive such as setting goals and self-rewards. However, there are also behaviours that are maladaptive and may make things worse. One of these maladaptive forms of behaviour is procrastination (Renn et al., 2011). Research on procrastination was already being conducted three decades ago and has gained more attention since (Ferrari et al., 1995). It is a widespread issue that affects employees across different fields of work (Nguyen et al., 2013). Steel (2007, p. 66) defines procrastination as the "voluntary delay of an intended course of action despite expecting to be worse off for the delay." This behaviour negatively impacts mental health and productivity, making it a significant concern in the workplace (Sirois et al., 2023; Steel, 2007).

Despite research that already has been conducted on workload, procrastination and unfinished tasks, we want to understand how procrastination interacts with workload to influence the amount of unfinished tasks. Previous studies have explored various aspects of procrastination and workload independently. However, the interaction between procrastination and workload and their combined association with unfinished tasks is not yet investigated.

Workload and Unfinished tasks

Workload is defined as "An all-encompassing term that includes any variable reflecting the amount or difficulty of one's work" (Bowling & Kirkendall, 2012, p. 222). Workload is a concept that encompasses both the tangible, measurable aspects of work, such as the number of tasks and time constraints. As well as the more subjective experiences like stress and satisfaction. It includes both the mental demands of tasks such as cognitive effort and the physical effort required. An individual's subjective perception of workload can differ significantly from the observable amount of work they have objectively, influenced by personal skills, stress tolerance and time management (Bowling & Kirkendall, 2012). Recognizing these differences allows for a more complete understanding of how workload and unfinished tasks are related. Unfinished tasks are defined as "tasks that the employee aimed to finish (or make certain progress), but which were left undone (or left in an unsatisfactory state) when the employee stopped working" (Syrek et al., 2017, p. 229). This includes tasks that were not started, tasks that were partially completed and tasks that were left by unsatisfied standards. Unfinished tasks can lead to cognitive and emotional unrest and rumination, a process of repetitive thinking about the tasks left uncompleted at work (Syrek et al., 2017). Over time unfinished tasks can contribute to reduced productivity and increased workload (Syrek & Antoni, 2014). This can occur as unfinished tasks accumulate, adding time pressure and more unfinished tasks. Understanding the impacts of unfinished tasks such as sleep disturbances,

stress and anxiety could be useful to improve tasks management at work and the wellbeing of employees.

Procrastination

"Procrastination comprises over a quarter of most people's working days, costing employers about $10,000 per employee per year" (Nguyen et al., 2013 p. 388). Steel (2007) reviewed and meta-analysed the nature of procrastination, characterizing it as a common and harmful self-regulation failure. According to estimates, procrastination affects 80% to 95% of college students, with 75% considering themselves procrastinators and about 50% frequently procrastinating in a way that is troublesome. Additionally, procrastination seems to be becoming more common outside of higher education. Procrastination affects the general public as well, 15% to 20% of adults consistently put off task (Xie et al., 2018). Furthermore, Renn et al. (2011) suggest that procrastination is a form of self-defeating behaviour that negatively impacts self-management behaviour. Drawing from these studies we argue that procrastination is a behaviour that takes form across different situations. These situations could be starting or finishing tasks at work. Which is why we argue procrastination could be seen as an antecedent to unfinished tasks.

Traditional Procrastination is the type of procrastination in which people put off beginning or finishing work because they are unmotivated, afraid of failing or experiencing other emotional problems (Steel, 2007). Workplace Procrastination (Metin et al., 2016) is a type of procrastination unique to the workplace and includes actions like taking longer than necessary breaks, daydreaming or putting off more important or difficult tasks in order to avoid them. It involves online activities (cyberslacking) as well as offline behaviours (traditional forms of delaying tasks). These offline behaviours can be described as soldiering. Soldiering is seen as avoidance from work tasks for more than a hour a day without aiming to harm others

or shifting work onto colleagues (Paulsen, 2015). Cyberslacking is the practice of using mobile devices and the internet for non-job-related activities while at work (Vitak et al., 2011). This includes using the internet for non-work-related purposes, such as social media surfing, online shopping, video watching and other online activities. Cyberslacking is a type of procrastination that is easily accessible in the workplace, especially in the modern digital age, where it is simple to take one's mind off work-related activities thanks to the availability of digital devices. While the distinction between soldiering and cyberslacking highlights different manifestations procrastination in the workplace, the impact is similar. Procrastination is negatively linked to performance (Renn et al., 2011). In addition, high levels of procrastination are linked to lower salaries and a shorter duration of employment (Nguyen et al., 2013).

We aim to explore the interaction between workload and procrastination and their association to unfinished tasks. The moderating role of procrastination between workload and unfinished tasks is the main focus of our research. In order to understand how workload would operate in the interaction between workload and procrastination and their association on unfinished tasks, we want to investigate the link between workload and unfinished tasks. Workload directly impacts an individual's ability to complete tasks (Bowling et al., 2015). When the workload becomes too high for someone to control it increases the chances of tasks remaining unfinished. Even though this seems almost trivial, it is therefore an important foundation on which the moderating role of procrastination could be studied. Therefore, we argue that people who score high on workload have more unfinished tasks at the end of the week. To investigate the direct role of workload we derived the following hypothesis:

Hypothesis 1: Workload is positively linked to unfinished tasks.

While it is not our main focus of our study, we want to investigate the link between procrastination and unfinished tasks. Procrastination is a maladaptive behaviour (Renn et al.,

2011) that interferes with the ability of individuals to complete their tasks. People who procrastinate tend to delay beginning or finishing a task (Steel, 2007). In a workplace environment this is seen as non-productive work activities (Metin et al., 2018). Therefore, we argue that when people score high on procrastination, they have more unfinished tasks at the end of the week. To investigate the direct role of procrastination we derived the following hypothesis:

Hypothesis 2: Procrastination is positively linked to unfinished tasks.

While in low workload conditions procrastination may not be associated to more unfinished tasks, an individual might get the few tasks done either way. In high workload conditions procrastination might make a difference in completing the tasks or not. We argue that if high workload can already overwhelm someone, showing higher levels of procrastination would only make it harder to finish the tasks as the time available for tasks completion would shorter. Therefore, our main hypothesis we want to study is:

Hypothesis 3: Procrastination moderates the relationship between workload and unfinished tasks, strengthening the link between workload and unfinished tasks.

Method

Participants

We recruited a total of 113 participants (69 females, 44 males, *Mage* = 44.21, *SD* =13.52) in this study. Participants were recruited through a convenience sampling strategy. The students conducting the survey reached out to their personal and professional networks to ask for participation with the help of cover letters via email. Participation was anonymous and no person-identifying information was captured. The participants represented a diverse array of backgrounds, including various professions, from which 73 were Slovenian, 23 were Dutch,

and 17 had other nationalities from different fields of occupation. The sample consisted mainly of working adults. On average, participants worked 36.3 hours per week ($SD = 12.32$).

Research Design and Procedure

We conducted a cross-sectional self-report survey study. We compiled validated measures to a survey consisting of 42 items. The scale aimed at identifying self-management behaviours that can help in coping with high levels of workload.

The questionnaire was administered online through a data-collection platform (Qualtrics). Participants were not compensated for their involvement but are offered insight into the results of the present study. All materials and communications were provided in English, Dutch and Slovenian. Since the items we used were all in English we used translation-back translation to make sure the meaning that was conveyed was the same across the different languages. Ethical approval was obtained from the university's research ethics board, ensuring that all procedures complied with psychological research ethical standards.

Measures

Workload

For the assessment of workload we used a five-item scale by Spector & Jex, 1998, a self-report measure on job stressors and strain. Participants were asked to provide information on the strain that the tasks have on the employees and whether they are in situations where the job requires them to work fast or have a great amount of tasks to be finished. Questions could be answered on a 5-point Likert scale (1= less than once per month or never, 5= several times per day). An example item is: "How often does your job require you to work very fast?" (see Appendix A). The workload subscale we used was found to be highly reliable ($\alpha = 0.879$).

Unfinished tasks

For the assessment of unfinished tasks, we used the scale by Syrek et al. (2017). We asked participants to assess their performance at the workplace at the end of the week. The scale consisted of six items. An example of an item is "At the end of a working week, I have not completed important tasks that I wanted to do." (see Appendix A) Participants responded to statements on a 5-point Likert scale (1= strongly disagree, 5= strongly agree). Cronbach's alpha for the six items was 0.903.

Procrastination

We measured procrastination at work by For the Procrastination segment we used questions based on Metin's questionnaire measuring procrastination at work (2016) with a 5-point answer scale with the items 1: Strongly disagree 2: Somewhat disagree 3: Neither agree nor disagree 4: Somewhat agree 5: Strongly agree. The Participants were asked to relate to statements like "When I work, even after I make a decision, I delay acting upon it." and "When I have an excessive amount of work to do, I avoid planning my tasks, and find myself doing something totally irrelevant" (see Appendix A). Indicating that a higher degree of procrastination correlates to a higher score in the answering scale. To establish the reliability of the subscale we used Cronbach's alpha (0.840).

Results

To be sure the data was usable and optimized for analysis we performed assumption checks and the test results indicate that there were no violations of the assumptions for linearity and normality of residuals (see Appendix B). This suggests that the relationships between the variables are linear and the residuals are normally distributed. The VIF scores in table 5 show no significant multicollinearity among the predictors from the multiple regression analysis, ensuring the reliability of the regression coefficients. Although the check for homoscedasticity revealed slight signs of heteroscedasticity, this effect is minimal and can be ignored because of

the sample size (Grissom, 2000). After looking at the tests we concluded that the regression models meet the key assumptions and the results of the analysis can be considered robust and reliable. To make sure the heteroscedasticity does not become more noticeable it could be helpful to keep an eye on it in upcoming analyses.

To ensure the usefulness of the questions in the procrastination scale for the analysis, we performed a factor analysis using the Maximum Likelihood extraction method. The initial factor matrix and the rotated factor matrix was obtained using the Varimax rotation method with Kaiser normalization. The factor analysis indicated that the question "I take long coffee breaks" did not load well on either of the matrices, as shown in table 1 and 2. Therefore this item was excluded from further analysis. The exclusion was based on its poor loading. This means that the item does not significantly contribute to any of the identified factors.

Table 1: *Factor analysis*

Factor Matrix

	Factor 1	2
When I work, even after I make a decision, I delay acting upon it.	0.072	0.59
I delay before starting on work I have to do.	0.214	0.717
At work, I crave a pleasurable diversion so sharply that I find it increasingly hard to stay on track.	0.269	0.679
When a work task is tedious, again and again I find myself pleasantly daydreaming rather than focusing.	0.231	0.694
I give priority to the lesser tasks, even if there is something important I should do at work.	0.28	0.42
When I have an excessive amount of work to do, I avoid planning my tasks, and find myself doing something totally irrelevant.	0.223	0.654
I take long coffee breaks.	0.999	-0.002
I delay some of my tasks just because I do not enjoy doing them.	0.055	0.574
I spend more time than I want on social network sites on work per day.	0.439	0.404

Extraction Method: Maximum Likelihood.
a 2 factors extracted. 5 iterations required.

Table 2: *Rotated Factor Matrix*

Rotated Factor Matrix

	Factor	
	1	2
When I work, even after I make a decision, I delay acting upon it.	0.593	0.04
I delay before starting on work I have to do.	0.727	0.176
At work, I crave a pleasurable diversion so sharply that I find it increasingly hard to stay on track.	0.692	0.233
When a work task is tedious, again and again I find myself pleasantly daydreaming rather than focusing.	0.706	0.194
I give priority to the lesser tasks, even if there is something important I should do at work.	0.435	0.258
When I have an excessive amount of work to do, I avoid planning my tasks, and find myself doing something totally irrelevant.	0.664	0.188
I take long coffee breaks.	0.051	0.998
I delay some of my tasks just because I do not enjoy doing them.	0.576	0.025
I spend more time than I want on social network sites on work per day.	0.427	0.417

Extraction Method: Maximum Likelihood.
 Rotation Method: Varimax with Kaiser Normalization.
 a Rotation converged in 3 iterations.

The reliability statistics for the scales we used in the analysis are shown in Table 4. The statistics show a high reliability following the rule that reliability is high when the Cronbach's alpha is above 0.8. The Cronbach's alpha for the workload scale with five items is 0.879, the alpha for the unfinished tasks scale with six items is 0.902 and the alpha for the procrastination scale with eight items is 0.840. These high alpha's mean that the scales are predictable and consistent. This means that the items in each scale correlate well with each other and are measuring the same underlying construct, providing trustworthy and repeatable results.

Table 3: *Reliability statistics*

Reliability Statistics

Variable	N of Items	Cronbach's Alpha
Workload	5	0.879
Unfinished tasks	6	0.902
Procrastination	8	0.840

We want to understand the relationships between workload, procrastination and unfinished tasks. To achieve this, we did a Pearson correlation analyses to look at the strength and the direction of the relationships between these variables. We did a simple and a multiple regression analysis to see how workload and procrastination would predict unfinished tasks independently and then to see how procrastination would moderate the relationship between workload and unfinished tasks. Through these analyses we were able to test our hypothesis about the moderating role of procrastination on the relationship between workload and unfinished tasks as well as the direct links between workload and procrastination on unfinished tasks.

Workload

Workload alone has a moderate positive link to unfinished tasks (r=0.330) as seen in table 4. Workload also predicts unfinished tasks moderately to high because of the significant t and p values, as seen in table 5 (B=0.251, se=0.068, expB=0.330, t=3.684, p<.001). In a model of multiple regressions workload also predicts unfinished tasks moderate to high, as seen in table 5 (B=0.274, se=0.067, expB=0.361, t=4.096, p<.001). Indicating that workload, when used in a regression model with more predictors such as procrastination and the interaction between workload and procrastination, positively predicts unfinished tasks. Based on the results, hypothesis 1 can therefore be supported so a higher level of workload is linked to more unfinished tasks.

Procrastination

Procrastination alone has a weak positive link to unfinished tasks (r=0.185) as seen in table 4. Procrastination also predicts unfinished tasks moderate, as seen in table 5 (*B*=0.212, SE=0.079, expB=0.236, t=2.680, p=0.008). This relationship is a significant positive link to

unfinished tasks. Therefore, based on these results, hypothesis 2 can be supported so a higher level of procrastination is linked to more unfinished tasks.

Procrastination as a moderator between workload and unfinished tasks

Procrastination as a moderator does not strengthen the relationship between workload and unfinished tasks. In the multiple regression including the interaction term, the interaction between workload and procrastination was not significant, as seen in table 5 (B=−0.082, SE=0.076, expB=−0.094, t=−1.084, p=0.281). Indicating that procrastination does not significantly moderate the relationship between workload and unfinished tasks. Therefore, based on the results, hypothesis 3 is not supported. This means that procrastination does not strengthen the relationship between workload and unfinished tasks.

Table 4: *Correlations*

Descriptive Statistics and Correlations

Variable	N	Mean	SD	1	2	3	Sig
1. Unfinished tasks	113	2.1106	0.76038	-	-	-	2=<0.001
2. Workload	113	3.1133	1.00031	0.330^2	-	-	3=0.136
3. Procrastination	113	2.2367	0.84604	-0.141^3	0.185^1	-	1=0.050

Note: Sig=significance with the variable number named

Table 5: *Regression analyses*

Coefficients

Model 1		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
		B	Std. Error	Beta			
1	(Constant)	0.771	0.299		2.579	0.011	
	composite score of workload	0.274	0.067	0.361	4.096	<0.001	1.021
	composite scores of procrastination	0.212	0.079	0.236	2.680	0.008	1.020
	Workload x procrastination	-0.082	0.076	-0.094	-1.084	0.281	1.001

model 2							
		B	Std. Error	Beta			
1	(Constant)	1.330	0.223		5.972	<0.001	
	composite score of workload	0.251	0.068	0.330	3.684	<0.001	

a Dependent Variable: composite score of unfinished tasks

Discussion

In a cross-sectional self-report survey study, we investigated the link between workload and unfinished tasks, the link between procrastination and unfinished tasks, and how procrastination could moderate the link between workload and unfinished tasks. Our main focus was to investigate how procrastination would moderate the relationship between workload and unfinished tasks. We hypothesized that workload would have a positive relationship to unfinished tasks. In addition, we hypothesized that procrastination would have a positive relationship with unfinished tasks. We hypothesized that procrastination would strengthen the link between workload and unfinished tasks. This implies that if someone reports high levels of workload, it would be more likely that their tasks would be unfinished at the end of the workweek. Additionally, if people tend to procrastinate more than others, the relationship between workload and unfinished tasks would become stronger.

There was evidence found that supports a moderate positive relationship between workload and unfinished tasks. In addition, there was evidence found that supports a weak positive relationship between procrastination and unfinished tasks. However, there was no supporting evidence found that procrastination weakens nor strengthens the relationship between workload and unfinished tasks.

Theoretical and practical implications

One major takeaway from this study is that there is a significant relationship between workload and unfinished tasks. However, this relationship was not as strong as we initially predicted. We mentioned in the introduction it is an almost trivial relationship between workload and unfinished tasks, therefore we expected a stronger relationship. This suggests that using a different variable to illustrate the amount of work a person does might give better insight. While the correlation between workload and unfinished tasks suggests that a higher workload leads to more unfinished tasks. The relationship is moderate, indicating that other factors may play a role. A weak correlation between procrastination and unfinished tasks indicates the same. The lack of an interaction effect between procrastination and workload suggests that employees do not perceive procrastination as a hindrance when facing a higher workload. Interpretation of these findings suggests that employees are not passive receivers of workload but are active in managing their tasks and are adaptive in the face of high workload. Employees can utilize compensatory behaviours such as working harder and faster, skipping breaks and working in overtime (Trépanier et al., 2020). These compensatory behaviours could explain the respective moderate and weak correlations between workload and unfinished tasks and procrastination and unfinished tasks.

Our study provides insight into the dynamics of workload, procrastination and unfinished tasks. We found that workload and procrastination are both independently linked to unfinished tasks. This indicates that procrastination itself is significantly linked to unfinished

tasks regardless of the level of workload, where we previously believed procrastination would not be a problem in the face of low workload. The finding that workload did not have the same negative impact on the unfinished tasks as previously believed suggests workload may not be as a trivial cause to unfinished tasks as previously believed. In addition, procrastination does not strengthen nor weaken the relationship between workload and unfinished tasks. This suggests that the detrimental effects of workload and procrastination operate independently rather than interactively. Researchers should address workload and procrastination as separate factors in research of the antecedents of unfinished tasks to avoid assuming interactions without empirical support.

Based on the findings in this study it is clear that procrastination is linked to unfinished tasks, even when workload is low. Therefore, addressing procrastination is a relevant point for intervention. HR departments could implement targeted training to help reduce procrastinatory behaviours in the workplace. Time management training could help employees to prioritize their tasks more efficiently (Häfner & Stock, 2010). In this study the researchers found that time management training led to an increase in perceived control in time and a decrease in perceived stress. In addition, Metin et al. (2018) mentioned the importance of promoting work engagement in organizations to decrease procrastination behaviour, as they found a positive link between work engagement and performance. While hiring more staff to reduce workload might be an ideal solution, this is not always a realistic way to deal with high workload due to personnel shortage. Organisations could focus on better task distribution through improved project management (Gilbert, 2024).

Strength and limitations

One limitation was that we drew from a convenience sample. The sample we drew could be biased because, for example, we could have an overrepresentation of certain subgroups (Zickar & Keith, 2023). We had no regulations to the number of participants from a

certain subgroup such as nurses. Our sample, consisting of mainly working adults in an office environment, aligned well with our target group. However, to use our findings outside our target group could give less meaningful results and for that a different sample or sampling strategy is needed. In a convenience sample the generalizability could be murky at best (Zickar & Keith, 2023). Generalizability means how well our sample could be applied to larger populations beyond our sample. We think the study's findings would be more meaningful to apply for practical implications if the survey were conducted in the same field of work like the healthcare industry or one organisation. People with different types of jobs have different motivations to fulfilling tasks. For example, a blue-collar worker could have different priorities in tasks and have different distractions while working than a white-collar worker. A blue-collar worker could not leave a patient unattended and procrastinate while the patient needs help. So when conducting research in a working environment such as a hospital a new sample or sampling strategy may be needed. Zickar & Keith (2023) found probability-based sampling and stratified random sampling to be generalizable to the population, therefore they could be used as a potential new sampling strategies.

A strength of our research was that we used items from other studies that were already used and tested (Metin et al., 2016; Spector & Jex, 1998; Syrek et al., 2017). After our survey was conducted, we found high alpha's for the subscales of workload, procrastination and unfinished tasks. These high alphas suggest that the items we chose from the other studies captured the intended aspects of each construct, thus enhancing the validity and trustworthiness of our study findings.

A section of questions measuring procrastination (Metin et al., 2016) included only question about procrastination in an office type of workplace. These questions can be difficult for employees in other type of workplaces to answer comprehensively. Questions like "I spend more time than I want on social network sites on work per day" and "I delay before starting on

work I have to do" may not be relevant or valid to worker in a blue-collar environment. Paulson (2015) discussed procrastination in blue collar working environments where workers would intentionally take longer breaks. An item like "I take long coffee breaks" which is now excluded from the questionnaire could have more meaning in a blue-collar working environment. Future studies could benefit from including a wider range of questions that include the various aspects of procrastination in different types of workplaces. These questions could be more specific and fitting to the type of workplace the survey is conducted. Looking at other procrastination scales (Lay, 1986; Simpson & Pychyl, 2009), procrastination is measured more as a personality trait. Therefore, when conducting a questionnaire in a different workplace it could be beneficial to make use of multiple procrastination measuring scales to better understand how procrastination manifests in different contexts such as different workspaces.

The sample of participants now contains people from different countries form both western and eastern Europe. Having a sample of people from different cultures could give more inclusive data. However, it could also mean we got data in which cultural differences affected our results and in turn our conclusions. However, due to our limited sample size, we acknowledge constrictions in investigating the role of culture in our study. Differences in culture (Hofstede, 1984) like habits and attitudes toward work could be a variable that can impact perceptions towards workload, procrastination and unfinished tasks that we did not systematically investigate. These differences in culture could affect the way people perceive workload and deal with procrastination and, in turn, influence the conclusions of the study which we are now unaware of.

Future research

For future research, this study could be replicated on a larger scale, aiming to gather a much larger sample. Larger sample sizes provide more reliable data and increases the chance to get significant interactions (Murphy, 2021). This also addresses the limitation about the

current study employing a relatively small convenience sample. Via this method perhaps we lowered the possibility to get a significant interaction. An idea for future research that sparked our interest while gathering our participants and conducting our research came from the idea to investigate the differences between people from western and eastern Europe. A future study could investigate the differences between a country with an individualistic culture and a country with a collectivistic culture (Hofstede, 1984), like the study from Scott (2016), where the differences in culture were used to study wellbeing. We predict that the links between workload, procrastination and unfinished tasks will be different across cultures. For example, in individualistic cultures people could see high workload as something one has to manage alone. This could potentially lead a higher number of unfinished tasks when someone procrastinates. In collective cultures being part of a group and interdependence is more important (Hofstede, 1984). When someone faces high workload in a collective culture, they may get more social support from colleagues in the form of sharing workload. As a result, the collaborative efforts help to complete tasks despite the individuals tendency to procrastinate. Which, in turn, could decrease the impact of procrastination on unfinished tasks in the face of high workload.

Another idea is to use this study in a single organisation. Using a limited sample with clearer limits, the tasks that fall under workload and unfinished tasks can be described much clearer. The generalizability would be challenged, however this would not be the aim for this study. It's aim would be to be fully adapted to the organisations needs and working environment. The study can be altered completely to the organisations specifications giving the results and implications more meaning and usefulness. This way the results are better fitted for an effective strategy to improve the productivity of employees and reduce the amount of unfinished tasks. From an academic perspective this approach would be like a case study, as the environment and the variables could be closely monitored and manipulated. Conducting a case study can provide insights into a real world scenario, which in turn could help research in

unfinished tasks like the study of Levett et al (2019) did for using mindfulness in the workplace. From our findings we had some conceptual questions like whether proactive coping behaviours would impact unfinished tasks and if an organisational environment or culture could influence the impact of workload on unfinished tasks. By conducting this study in a controlled environment such as a single organisation more meaningful variables could be provided, potentially helping in answering these questions.

Conclusion

This study's aim was to understand the relationship of workload and unfinished tasks and the relationship of procrastination and unfinished tasks. Additionally, this study aimed to understand the interaction of workload and procrastination by investigating the moderating role of procrastination on the relationship between workload and unfinished tasks. Higher perceived levels of workload and higher perceived levels of procrastination are both independently linked to more unfinished tasks. However, procrastination does not moderate between workload and unfinished tasks, neither weakening nor strengthening the relationship.

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Appendix A

Workload

How often does your job require you to work very fast?

How often does your job require you to work very hard?

How often does your job leave you with little time to get things done?

How often is there a great deal to be done?

How often do you have to do more work than you can do well?

Unfinished tasks

At the end of the working week, I have not completed important tasks.

At the end of the working week, I have not completed the important tasks that I wanted to.

At the end of a work week, I haven't started on tasks that were due.

At the end of the working week, I did not complete a large number of tasks that were due.

At the end of the working week, I have not even started the important tasks that I set out to do.

At the end of the working week, I have to take the past-due tasks into to the next week.

Procrastination

When I work, even after I make a decision, I delay acting upon it.

I delay before starting on work I have to do.

At work, I crave a pleasurable diversion so sharply that I find it increasingly hard to stay on track.

When a work task is tedious, again and again I find myself pleasantly daydreaming rather than focusing.

I give priority to the lesser tasks, even if there is something important I should do at work.
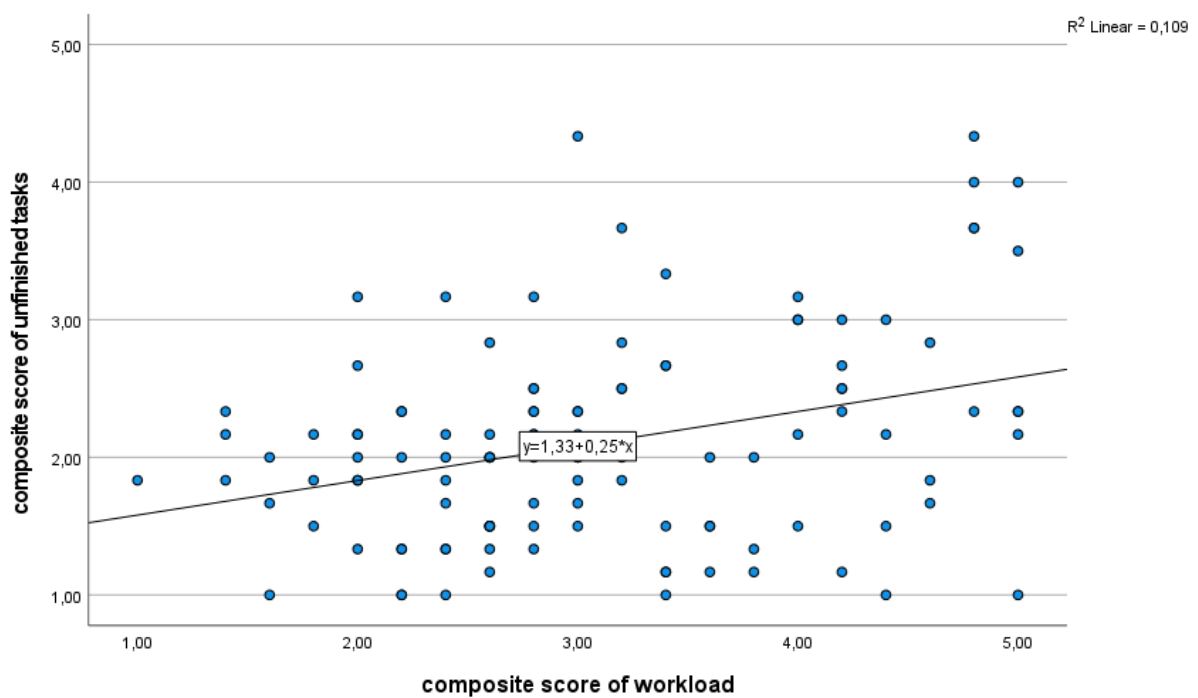
When I have an excessive amount of work to do, I avoid planning my tasks, and find myself doing something totally irrelevant.
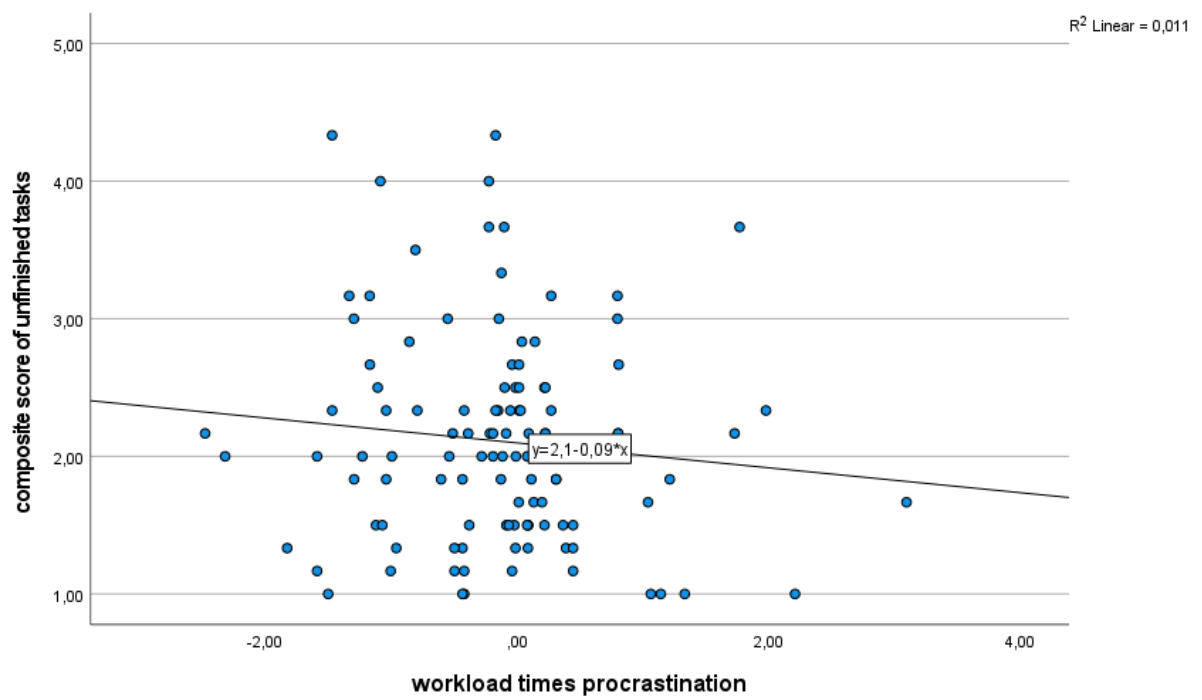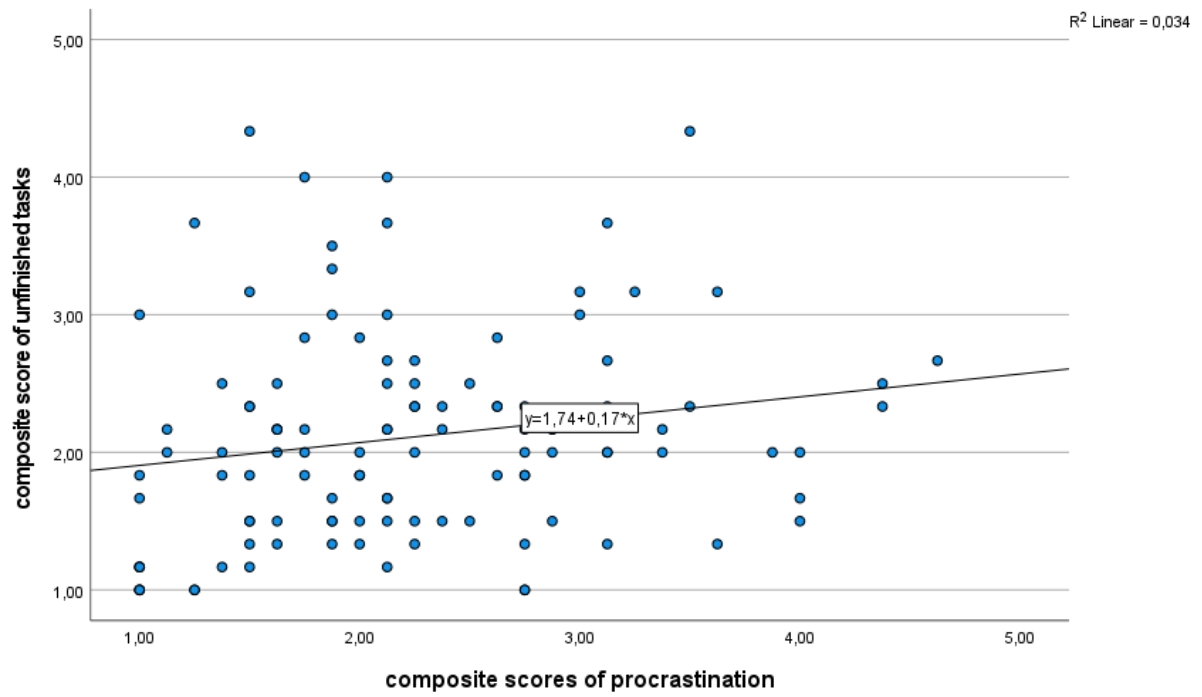
I delay some of my tasks just because I do not enjoy doing them.

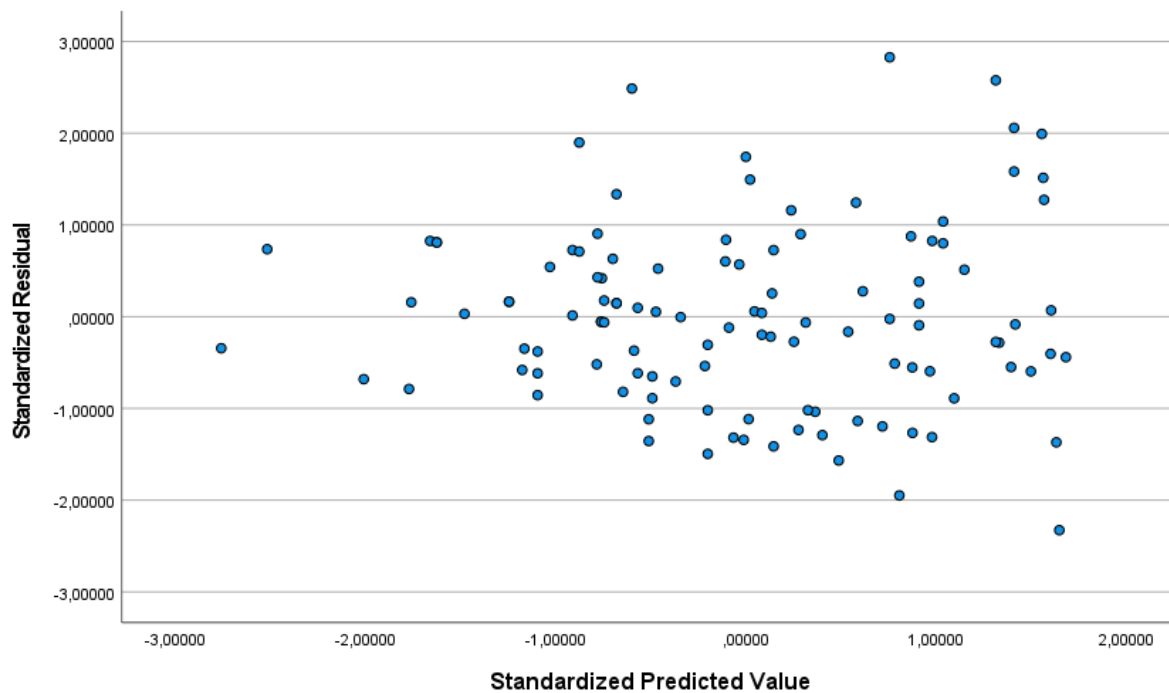I spend more time than I want on social network sites on work per day.

Appendix B

Linearity

R^2 Linear = 0,034

$y=1,74+0,17*x$

composite score of unfinished tasks

composite scores of procrastination

R^2 Linear = 0,011

$y=2,1-0,09*x$

composite score of unfinished tasks

workload times procrastination

Homoscedasticity

Normality of residuals

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: composite score of unfinished tasks