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Frequent Deadlines in Relation to Stress at Work: The Role of Self-Efficacy and Social Support at Work

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Abstract

When working against deadlines, individuals deal with the time pressure in different ways. Working against tight deadlines has been found to relate to stress (Herrero, Saldaña, Rodriguez & Ritzel, 2012), however frequency of deadlines has not been prevalent in studies in relation to stress. Participants were 84 employees at two transportation companies in Iceland. Frequency of deadlines was a self-reported measure and participants were divided into two groups, low to intermediate frequency of deadlines and high frequency of deadlines. Analyses of frequency of deadlines in relation to work-related stress, fatigue, energy and sleep quality were conducted. Analyses of the interaction effects of self-efficacy and social support at work, respectively were conducted. All analyses conducted were Univariate analyses of variance.

The results showed no relation of frequency of deadlines to reported work-related stress, occupational fatigue or energy, conversely, high frequency of deadlines related to poorer sleep quality. Self-efficacy and social support at work, respectively, did not moderate the relationship between frequency of deadlines and work-related stress. It seems frequency of deadlines at work does not play a clear role in reported work-related stress, occupational fatigue or energy for transportation employees. However, it needs to be noted that frequency of deadlines has not been prevalent in studies and thus difficult to generalize. For future studies, it is recommended that frequency of deadlines be measured more objectively to avoid biased responses.

Keywords: Deadlines, work-related stress, occupational fatigue, sleep quality, energy, self-efficacy, social support at work, occupational psychology.

The connectedness of the world has changed rapidly the last few decades. With a more globalized economy, the competition is fierce and thus time pressure inevitable for most companies. One example is the transportation business, where globalization has intensified the competition, made country borders obsolete and allowed for business to be sought wherever it can be found. Today, transport companies fight for business by trying to offer the lowest prices and the fastest transportation, which puts pressure on the company and its employees to deliver the cargo on time. In today's fast paced society, the market is constantly changing and it can be vital for the transportation to take the least amount of time possible so the receiving companies can make as much profit as possible. Slow or delayed delivery can therefore be detrimental to both the transportation company and the company in business with the transportation company.

Transporting cargo from one country to another requires considerable planning across all borders and there are deadlines to be met at each point. From the employees who physically deal with the cargo to the employees that do the paperwork, everyone deals with deadlines within their work responsibilities. Some deadlines can be predictable and planned for, while others maybe unexpected and the time pressure therefore even greater. Many occupational sectors deal with deadlines on a regular basis, however deadlines are highly prevalent in transportation companies and employees deal with various kinds of deadlines, from being known months ahead to being known just hours or minutes ahead. When working against frequent deadlines, individuals deal with the time pressure in different ways. Working against tight deadlines has been found to relate to stress (Herrero, Saldaña, Rodriguez & Ritzel, 2012), however research on frequency of deadlines has not been prevalent within the occupational sector in relation to stress and other related variables.

Because of the inherent deadlines in the trade, the transportation sector appears to be an ideal sector to study the nature of the relationship of working with frequent deadlines with work-related stress, work-related fatigue, energy and sleep quality. Self-efficacy and social support at work will also be studied respectively, as potential moderating variables between frequency of deadlines and work-related stress. This will be examined within two transportation companies in Iceland.

Theoretical background

Stress and work-related stress

Stress has been conceptualized and approached in multiple ways in various disciplines and the definition depends on the context, Selye (1974, p. 137) defined stress as *"the nonspecific response of the body to any demands made upon it"*. This rather simple stimuli-

response paradigm has later been superseded and today it is more accepted that stress is a dynamic transactional process that can unfold in different ways with different individuals (Lazarus & Folkman, 1984; Lazarus, 1993).

Numerous models for work-related stress have been put forward, the two models prominent within occupational psychology are the Job Demand-Control model (JDC) and the Effort-Reward Imbalance model (ERI). The JDC model by Karasek and Theorell (1990), postulates that low control and high demand at work lead to the most job strain. The effort-reward imbalance model postulates, as the name would suggest, that imbalance between the perceived effort put forward by the employee and the reward that the employee receives causes stress (Siegrist, 1996; For a review of work-related stress models see Althaus, Kop & Grosjean, 2013). These two models, JDC and ERI have received some criticism, both struggle with the main concepts being too broad, for example the JDC model does not state the specific work demands causing stress. As a result, different types of job demands in different studies are cumulated and utilized as one variable, which has lead to discrepancy in results and the results are not always in line with what Karasek and Theorell posited. Furthermore, neither the ERI model nor the JDC model really take individual differences into account (Kain & Jex, 2010).

Deadlines and work-related stress

The World Health Organization (WHO) (n.d.) defines work related stress as "*the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope".*

There has not been much research done on working with deadlines, especially in relation to work-related stress. However, psychosocial stressors, for example job demands, have been researched somewhat in relation to work-related stress, typically within theoretical models (JDC in the case of job demands). The aforementioned theoretical models do not allow much specification regarding type of stressor by using general terms, such as work demands. There is need for research with more specific psychosocial stressors at work in order to gain more and better knowledge regarding what induces stress at work. The little research that has been done on deadlines show that in a study where deadlines were measured as the self-reported frequency of deadlines difficult to meet, deadlines were found to be associated with poorer sleep quality (Rugulies, Martin, Garde, Persson & Albertsen, 2012) and working with tight deadlines was shown to predict stress levels as assessed by Herrero and colleagues (2012).

It has shown difficult for researchers to pinpoint exactly what causes work-related stress in individuals. One reason for this difficulty, is that previous research and theoretical models (for example JDC and ERI) have mainly focused on stressor-strain direct causation relationships and largely ignored individual variables that could potentially moderate a stressor-strain relationship (Lazarus, 1993), as mentioned above. People are inherently subjective, and as a result, interpret situations differently. It is therefore difficult to put everyone under the same hat and expect a stressor to elicit the same response in everyone. It is therefore of interest in the current study to look at variables that possibly help understand the individual differences in the relationship between frequent deadlines at work and work-related stress.

Lazarus set forth a transactional approach to stress, which looks at stress from the individual's perspective (Folkman & Lazarus, 1984). Similar to the WHO's definition (n.d.), the transactional approach states that stress is the result of the individual's interpretation of a situation as surpassing his or her resources (Folkman & Lazarus, 1984). The individual's appraisal of a situation is thus central to the transactional approach, it is the procedure of assessing a situation, whilst considering the consequences for well-being. Individuals are constantly trying to establish a status of equilibrium/balance, which can be achieved by appraising the situation and deciding on how to deal with it. The results can be positive, negative and a combination of both (Folkman & Lazarus, 1984).

Individual self-efficacy

Self-efficacy is an individual's task-specific belief for his or her ability to complete a certain task successfully. It is a sense of personal competence that is evaluated by the individual in situations and it controls in part how long individuals withstand in challenging situations (Bandura, 1977). Self-efficacy has been said to influence how people feel, think, act and motivate themselves (Bandura, 1995). If a person deems a situation as threatening or challenging, the level of self-efficacy can decide in part if and for how long the person will attempt to complete that challenging task or if the person decides it is too taxing. The level of self-efficacy is key, individuals with strong sense of self-efficacy feel more confident of their ability complete the task and will therefore withstand longer than individuals with low sense of self-efficacy (Bandura, 1977).

Self-efficacy has been researched in relation to many variables. Previous research has linked strong sense of self-efficacy to higher job satisfaction (Siu, Spector, Cooper & Lu, 2005), lower psychological strain (Jex & Bliese, 1999; Panatik, O'Driscoll & Anderson, 2011) and lower occupational stress (Jex & Bliese, 1999; Rajeswari & Anantharaman, 2005;

Rennesund & Saksvik, 2010). Self-efficacy has occasionally been considered a variable that demonstrates individual differences and thus been studied as a moderator of relationships between variables. Self-efficacy has been shown to statistically moderate the relationship between job demands and psychological strain (Panatik, O'Driscoll & Anderson, 2011), stressors (for example quantitative overload, autonomy and home-work interference) and well-being at work (Siu, Spector, Cooper & Lu, 2005), job stress and burnout (Scwarzter & Hallum, 2008) and as will be studied in the current paper, psychosocial stressors and the stress response (Jex & Bliese, 1999; Helms-Lorenz, Slof, Vermue & Canrinus, 2012). The research cited above, that studied the relationship of psychosocial stressors and the stress response and the moderating role of self-efficacy, have primarily linked self-efficacy with task demands, lack of learning opportunities (Helms-Lorenz, Slof, Vermue & Canrinus, 2012), work overload, working hours and task significance (Jex & Bliese, 1999). A thorough literature search yielded no results for studies looking at frequency of deadlines in relation to work-related stress and the moderating role of self-efficacy.

Social support

As well as looking at individual self-efficacy, it is also important to look at the social circumstances at work. Social support is generally defined as friends and family's availability and provision of psychological resources, whether it is for example emotional or informational. The mere perceived readiness of social support has been shown to benefit both health and mood (Cobb, 1976; Cohen and Hoberman, 1983, Cohen and Wills, 1985; Nezlek and Allen, 2006). Within occupational psychology, social support has been researched in many aspects and with different conceptualizations. When it comes to work-related stress, there have been two models most prominent in research, the first regards the direct effect of social support and the second the moderating effect of social support. There has been found some support for both (see Viswesvaran, Sanchez & Fisher, 1999 for a review). The moderating effect of social support has been called the buffering hypothesis and suggests that social support can buffer the impact of work-related stress on the individual, in essence, individuals with lower social support, experience more work-related stress (Cohen & Pressman, 2004). Social support can therefore be considered to help the person cope with the situation (Lazarus & Folkman, 1984). Social support supposedly interacts with the stressor, in the case of current paper, it would potentially moderate the relationship between frequent deadlines and work-related stress.

In previous research, personal social support has mainly been studied, however, in the current study, social support at work is of interest, in essence, the general availability of both

co-workers and superior's assistance and encouragement. Social support at work has not been studied much as in the current context, however, social support at work has been found to correlate with lower anxiety and higher job satisfaction (Mark & Smith,2012). In addition, Frese (1999) studied social support at work and psychological dysfuntioning (depression, psychosomatic complaints, strain and social anxiety) and found that the higher the social support at work was, the lower the psychological dysfunctioning. Frese (1999) also found social support at work to moderate the relationship of stressors and psychological dysfunctioning. A study by García-Herrero and colleagues (2013) looked at social support at work in conjunction with job demands (intellectual demands of the job) and work-related stress, and found social support at work to reduce the impact of job demands on the individual.

Occupational fatigue and sleep quality

Occupational fatigue has been conceptualized in different ways, usually one dimensionally, the most common being physical exhaustion and/or mental exhaustion, which has been negatively related to higher work-related stress (Rajeswari & Anantharaman, 2005).

Occupational fatigue, as conceptualized in the current paper, has various dimensions, *physical exertion, physical discomfort, lack of motivation, sleepiness and lack of energy,* these dimensions are from a relatively new measurement (Åhsberg, 2000). There has not been much research done on this occupational fatigue measure, hence the current research will be a contribution.

As an extension of the occupational fatigue measure, sleep quality will be examined, as working with frequent deadlines that are difficult to meet has been shown to relate to poorer sleep quality (Rugulies et al., 2012). Poor sleep quality can possibly contribute to depression, sickness absence and burnout (Åkerstedt, 2006). In a review of longitudinal and intervention studies, Laethem, Beckers, Kompier and, Geurts (2013) concluded that high job demands and low control at work predict poorer sleep quality.

Occupational fatigue and sleep quality will be studied to examine potential outcomes of working with frequent deadlines.

Aims of the study

The study aims to investigate whether having frequent deadlines at work relates to higher levels of reported work-related stress, energy, fatigue and poor sleep quality compared to when the frequency of deadlines is low to intermediate. Another aim is to investigate if self-efficacy and social support at work, respectively, moderate the relationship between

frequency of deadlines and work-related stress. In essence, if individuals with frequent deadlines and high self-efficacy or high social support at work show lower levels of work-related stress than individuals with frequent deadlines and low self-efficacy or social support at work.

Lazarus's transactional model to stress underlines the process of primary appraisal and secondary appraisal, where the person evaluates whether there is trouble and what possibilities are out there for action (Folkman & Lazarus, 1984). One possible outcome of the primary appraisal is *stressful*, where a situation is appraised as signifying harm/loss, threat or challenge. Threat and challenge are the most applicable for the current research, both call for coping efforts. If, exposure to frequent deadlines were appraised as threatening, negative emotions are anticipated (example given fear, anger, anxiety) to follow. Oppositely, when frequent deadlines are appraised as challenging, it is motivating and more positive emotions are anticipated (example given excitement, exhilaration). These two results of appraisal are however not mutually exclusive, so there is possibility for a situation to be appraised as a mixture of both threat and challenge (Folkman & Lazarus, 1984).

In accordance to the transactional approach to stress, it is postulated that when employees are exposed to frequent deadlines at work, the situation is appraised as threatening and coping efforts are initiated. There are potentially many variables (coping resources) that individuals consider and that have impact on how a situation is appraised, in the current research, a cognitive variable (self-efficacy) and a social variable (social support at work) were chosen because previous research has shown them to relate to stress and represent factors in the transactional approach (Folkman & Lazarus, 1984; García-Herrero, Mariscal, Gutiérrez & Ritzel, 2013).

Additionally, as Lazarus's transactional model of stress suggests, there is possibility that employees will appraise the situation of working with frequent deadlines as challenging and thus more positive (Folkman & Lazarus, 1984). Accordingly, reports of energy will also be measured, energy is a more positive form of stress. The energy that will be measured goes from positively valued high activity state (for example enthusiastic) to negatively valued low activity states (for example dull).

Against the background above, the following hypotheses were stated:

H1: Employees that have high frequency of deadlines will report higher levels of work-related stress compared to those with low to intermediate frequency of deadlines.

H2: Employees that have high frequency of deadlines will report higher levels of occupational fatigue compared to those with low to intermediate frequency of deadlines.

H3: Employees that have high frequency of deadlines will report poorer sleep quality than those with low to intermediate frequency of deadlines.

H4: Employees that have high frequency of deadlines will report different levels of energy compared to those with low to intermediate frequency of deadlines, it is of interest to explore which group has higher energy levels.

H5: Self-efficacy moderates the relationship between frequency of deadlines and work-related stress. In essence, individuals with high frequency of deadlines and high self-efficacy will show lower levels of work-related stress compared to those with high frequency of deadlines and low self-efficacy.

H6: Social support at work moderates the relationship between frequency of deadlines and work-related stress. In essence, individuals with high frequency of deadlines and high social support at work will show lower levels of work-related stress compared to those with high frequency of deadlines and low social support at work.

Method

Participants

Participants were 84 employees of two transportation companies in Iceland, the two companies were linked, as one was the daughter company of the other. There were 56 male participants (67%) and 28 female participants (33%). The age of participants ranged from 20-70 years old (M=45, SD=12.3). A total of 194 employees (every employee with an e-mail address within the companies) received the questionnaire by e-mail, the response rate was 43%. Participation was voluntary and participants did not get a compensation of any kind.

The main variable studied was frequency of deadlines and participants were divided according to how that question was answered. There were four options for participants to answer; daily (n=27), few times a week (n=16), few times a month (n=34) and a few times a year (n=7). The original plan was to have three groups, low frequency (few times a year),

intermediate frequency (few times a month) and high frequency (few times a week and daily), however, since there were so few that answered a few times a year, it was decided to simplify the analysis and divide the participants into two groups. Daily and few times a week became a high frequency group and a few times a month and a few times a year became a low to intermediate frequency group.

Table 1. *Number of participants and percentage for gender, work experience and education divided for the low to intermediate frequency of deadlines group, high frequency of deadlines group and total.*

	Low to intermediate frequency group		High frequency group		Total	
	n	%	n	%	N	%
Gender						
Male	29	70.7	27	62.8	56	66.7
Female	12	29.3	16	37.2	28	33.3
Work experience						
Less than a year	2	4.9	6	14	8	9.5
1-2 years	1	2.4	2	4.7	3	3.6
3-5 years	6	14.6	1	2.3	7	8.3
6-10 years	11	26.8	9	20.9	20	23.8
More than 10 years	21	51.2	25	58.1	46	54.8
Education						
Not finished Primary school	0	0	1	2.3	1	1.2
Primary school	5	12.2	4	9.3	9	10.7
Secondary school	14	34.1	21	48.8	35	41.7
Undergraduate	15	36.6	9	20.9	24	28.6
Graduate	7	17.1	8	18.6	15	17.9

As illustrated in table 1, the majority of participants had more than 10 years of work experience at the company, and most had finished either secondary school or an undergraduate degree. Mean age for the group of participants with low to intermediate frequency of deadlines was M=46.4 (SD=12) and for the high frequency group M=43.2 (SD=12.5). The division between groups for age, gender, work experience and education level were relatively equal.

When asked about amount of hours worked, only six participants reported working less than 40 hours per week, and 42 participants reported working overtime, from one hour up to 20 hours, with five hours being most common.

Measurements

The research had a cross-sectional design. A questionnaire was put together to measure, frequency of deadlines, general self-efficacy, work-related stress, occupational fatigue, social support at work, energy and sleep quality (see appendix). Participants were also asked demographical questions regarding age, gender, education, years working at the company and if employees worked overtime and if so, on average, how many hours a week. All questions were in Icelandic.

Deadlines. Deadlines were assessed with ten single item questions regarding frequency of deadlines, frequency of deadlines difficult to meet, level of consequences for the individual and the company if deadlines are not met, importance of meeting deadlines for the individual and the company, if the employee needs to count on others in order to meet deadlines and predictability of deadlines. One of the question used, *"How often do you have deadlines that are difficult to meet?",* has previously been used in research (Rugulies et al., 2012), the nine questions remaining were created for the purpose of the current study.

The first two questions regarded frequency of deadlines and frequency of deadlines that were difficult to meet. Answers read, *never, few times a year, few times a month, few times a week and daily.* Two questions were on a 5-point Likert scale, with *1=Low to none* and *5=Severe*, example given, "*How would you rate the level of consequences for you if deadlines are not met"*. Two questions were on a 5-point Likert scale, with *1=Not at all important* to *5=Very important,* example given, *"How important is it for you to meet deadlines at work"*. Two questions were on a different kind of 5-point Likert scale, with *1=Never to 5=Always,* example given, *"Do you need to count on your co-workers in order to meet deadlines".* Two questions regarded what kind of consequences the employee or the company would face if deadlines were not met, the questions were open ended, so participants could write what ever came to mind.

General self-efficacy scale (GSE). The scale measures the belief an individual has for his or her successful completion of a novel or challenging tasks, and/or how successfully one copes with difficulty. The scale consists of 10 items where participants rate statements on a 4-point Likert scale, with *1=Not at all true* to *4=Exactly true*, example given, *"Thanks to*

my resourcefulness, I know how to handle unforeseen situations" (Schwarzer & Jerusalem, 1995). The scale has been translated to 33 languages and samples from 23 nations show good Cronbach's alpha, α=.76 to α=.90 (Schwarzer & Jerusalem, 1995). The scale was translated to Icelandic and translated back to English by another person according to Brislin's (1970) guidelines on translation of scales. Cronbach's alpha for the current study was α=.75.

Stress-Energy Inventory (SEI). The scale is designed to measure two dimensions of affective stress responses at work, perceived stress and perceived energy. The scale consists of 12 adjectives, example given *"Ineffective"*, and participants rate to what extent they have felt that way the last month. The scale is on a 6- point Likert scale with *0=Not at all* to *5=Very much*. Six adjectives (items 1, 4, 7, 8, 11 and 12, see appendix), three on each subscale were positive and the scoring therefore reversed before analysis (Kjellberg & Wadman, 2002). The scale was translated to Icelandic and back to English by a different person according to Brislin's (1970) guidelines on translation of scales. Cronbach's alpha for the current study was α=.86 for perceived stress and α=.77 for perceived energy.

Perceived Stress Scale – short version (PSS-4). The scale measures to what extent individuals appraise situations as stressful. It is designed to predict how uncontrollable, unpredictable and overloaded participants perceive their lives (Cohen, Kamarck & Mermelstein, 1983). The original scale is 14 items where participants answer questions on a 5-point Likert scale, where 0=*Never* and 4=*Very often.* The original version has good Cronbach's alpha (α=.85). The short version used in the current research has been measured with α=.72 and has had good results. The four items chosen for the short version were the items that correlated the highest with the 14 items scale (Cohen et al., 1983). Items read for example, *"In the last month, how often have you felt that you were unable to control the important things in your life?"*. Item two and three were positively worded and therefore reversed before analysis. The scale was translated to Icelandic by Daníel Þór Ólason and has been used before in an Icelandic sample. Cronbach's alpha for current study was α=.77.

Swedish Occupational Fatigue Scale-20 (SOFI-20). The SOFI measures five dimensions of occupational fatigue, *physical exertion, physical discomfort, lack of motivation, sleepiness and lack of energy*. The scale consists of 20 expressions which are rated on a 7-point Likert scale, with 0=*Not at all* to 6=*To a very high degree.* Respondents are asked to rate to what extent each expression describes how they feel after a normal day at work, items read for example, *"Lack of concern"* and *"Stiff joints".* The scale is said to have

reasonably good reliability and each dimension satisfactory reliability (Åhsberg, 2000). The scale was translated to Icelandic and translated back to English by a different person according to Brislin's (1970) guidelines on translation of scales. Cronbach's alpha for the current study was α=.94.

Perceived social support at work. The scale measures to what extent employees feel as if they have social support and encouragement at work, from both co-workers and superiors. The scale is from a questionnaire developed by the National Institute of Working Life in Sweden (Berntson at al., 1995). The scale consisted of five questions, however, for the purposes of the current study, one question was excluded as it asked about social support outside of work. Participants answered the four remaining questions on a 4-point Likert scale, with 1=*Never* to 4=*Always*, example given, *"Are you able to get support and encouragement from colleagues when you feel that things are not going well at work"*. The scale was translated to Icelandic and translated back to Swedish by a different person according to Brislin's (1970) guidelines on translation of scales. Unfortunately there is no information on previous Cronbach's alpha for the scale, however in the current study, Cronbach's alpha for the current study was α=.82.

Total sleep quality score (TSQ). Single item that read *"How do you rate your overall sleep quality?"*. Participants answered on a 5-point Likert scale. Responses read, *"Excellent", "Very Good", "Good", "Not so good"* and *"Poor"*. High score signifies poor sleeping quality. The item has been used successfully before by Rugulies et al. (2012).

Procedure

An online questionnaire was conducted from the survey website www.surveygizmo.com and sent to two transportation companies in Iceland. The director of human resources at one company and the managing director of the other were contacted and asked if they were willing to send out an e-mail to all employees to answer the questionnaire. Both agreed and a link to the questionnaire was sent to them. All participants got the same instructions where among other things, participants were told the questionnaire was completely anonymous and there were no way to trace the responses (see appendix). Participants received an e-mail with the link and after one and a half week, another e-mail was sent to remind employees to participate. The questionnaire was open for exactly three weeks. The questionnaire was set up so all questions except three were required, so there

were no missing data and no participant had to be excluded. The SurveyGizmo website gathered the raw date, which was put in SPSS and processed accordingly.

Statistical analysis

The raw data from SurveyGizmo was downloaded and put into SPSS. Questions that needed reversing were reversed and subsequently scales were computed. All scales were examined through the SPSS program in the function *Explore* (under the option analysis) for accuracy of entry, missing values, outliers, minimum values, maximum values and the fit between the scales distribution and the assumptions underlying Univariate Analysis of Variance. No outliers or missing variables were found. Self-efficacy and social support at work were used as interaction/moderation variables. To simplify the interaction analysis, a median split dichotomized the self-efficacy and social support at work score. For self-efficacy the median was 3 and the split was made with low self-efficacy from 0 to 3 and high self-efficacy from above 3 to 4. For social support at work, the median 2.75 was detected and a median split was performed with low social support at work from one to 2.75 and high social support at work from 2.76 to 4. Univariate analysis of variance (under General Linear Model) was performed in accordance to hypotheses. The p-values under .05, were considered significant and the effect size used was partial eta squared. To statistically test for interaction effects, the option interaction was used in the Univariate analysis, under the option *Model*.

Results

Table 2 illustrates means, standard deviations and Pearson's correlation for all scales. The highest correlation was between the Swedish Occupational Fatigue Inventory and the stress subscale of the Stress-Energy Inventory.

Table 2. *Means, standard deviations and Pearson's correlation for all scales*

Scale	M	SD	1	2	3	4	5	6
1. The Perceived Stress scale (0-4)	1.3	.70	-	-	-	-	-	-
2. Stress (The Stress-Energy Inventory) (0-5)	2.3	.88	.53**	-	-	-	-	-
3. Energy (The Stress-Energy Inventory) (0-5)	3.9	.64	-.55**	-.25*	-	-	-	-
4. The Swedish Occupational Fatigue Inventory (0-6)	1.1	.83	.54**	.64**	-.43**	-	-	-
5. Total Sleep Quality (1-4)	3.0	.94	.30**	.41**	-.24*	.57**	-	-
6. General Self-efficacy (1-4)	3.1	.31	-.25*	.07	.58**	-.18	-.32**	-
7. Social support at work (1-4)	2.8	.62	-.35**	-.35**	.38**	-.31**	-.35**	.21

*= $p<.05$; **= $p<.01$

Testing for main effects

To test hypothesis one, a one-way between group analysis of variance was conducted to check if the work-related stress levels gathered from the Perceived Stress scale varied between having high frequency of deadlines (M=1.36, SD=.75) and low to intermediate frequency of deadlines (M=1.26, SD=.66). There was no statistically significant difference between the groups, $F(1, 82)=.459$, $p>.05$. A one-way between group analysis of variance was conducted to check if the work-related stress levels gathered from the stress subscale of the Stress-Energy Inventory varied between having high frequency of deadlines (M=2.5, SD=.80) and low to intermediate frequency of deadlines (M=2.14, SD=.92). There was no statistically significant difference between the groups, $F(1, 82)=3.666$, $p>.05$.

To test hypothesis two, a one-way between group analysis of variance was conducted to check if levels of occupational fatigue gathered from the SOFI scale varied between having high frequency of deadlines (M=1.25, SD=.87) and low to intermediate frequency of deadlines (M=.90, SD=.75). There was no statistically significant difference between the groups, $F(1, 82)=3.713$, $p>.05$.

To test hypothesis three, a one-way between group analysis of variance was conducted to check if levels of sleep quality gathered from the Total Sleep Quality scale

varied between having high frequency of deadlines (M=3.23, SD=1.04) and low to intermediate frequency of deadlines (M=2.83, SD=.77). There was a statistically significant difference found between the groups, $F(1, 82)=4.029$, $p<.05$ (partial eta squared .047).

To test hypothesis four, a one-way between group analysis of variance was conducted to check if levels of energy gathered from the Stress-Energy Inventory varied between having high frequency of deadlines (M=3.94, SD=.62) and low to intermediate frequency of deadlines (M=3.83, SD=.66). There was no statistically significant difference found between the groups, $F(1, 82)=.599$, $p>.05$.

Testing for interaction effects

To test hypothesis five and examine potential interaction effects of frequency of deadlines and self-efficacy on work-related stress, a univariate analysis of variance was conducted. The interaction effect of frequency of deadlines and self-efficacy was not significant for work-related stress levels by the perceived stress scale, $F(1, 80)=1.719$, $p>.05$. There was a statistically significant main effect on work-related stress for self-efficacy, $F(1, 80)=5.610$, $p<.05$ (partial eta squared=.066). For the stress subscale from the Stress Energy Inventory, the interaction effect was likewise not statistically significant, $F(1, 80)=.214$, $p>.05$, no main effect was found.

To test hypothesis six and examine potential interaction effects of social support at work and frequency of deadlines, a univariate analysis of variance was conducted. The interaction effect of frequency of deadlines and social support at work was not significant for stress levels by the perceived stress scale, $F(1, 80)=.121$, $p>.05$. There was a statistically significant main effect for social support at work on work-related stress, $F(1, 80)=4.115$, $p<.05$ (partial eta squared=.049. For the stress subscale from the Stress Energy Inventory, the interaction effect was likewise not statistically significant, $F(1, 80)=1.877$, $p>.05$. Main effects were found for social support at work on work-related stress, $F(1, 80)=8.035$, $p<.05$ (partial eta squared=.091).

Demographic variables

As displayed in table 1, the distribution between the two groups for age, gender, work experience and education level was relatively equal. Therefore, it was decided there was no need to control for these demographic variables in the analyses.

The question *"How often do you have deadlines that are difficult to meet"* showed that employees in the high frequency of deadlines group had more often deadlines that were

difficult to meet than those in the low to intermediate frequency of deadlines group.

Table 3. *Means and standard deviation for questions divided for the low to intermediate frequency of deadlines group and the high frequency of deadlines group.*

	Low to intermediate frequency group	High frequency group
Subjective evaluation of importance of meeting deadlines – personally (1-5)	4.1 (SD=.99)	4.7 (SD=.47)
Subjective evaluation of importance of meeting deadlines - for company (1-5)	M=4.1 (SD=.95)	4.5 (SD=.83)
Subjective evaluation of level of consequences of not meeting deadlines – personally (1-5)	2.3 (SD=.90)	3.2 (SD=1.13)
Subjective evaluation of level of consequences of not meeting deadlines – for company (1-5)	2.5 (SD=.68)	3.2 (SD=1.03)
Count on co-workers in order to meet deadline (1-5)	3.5 (SD=.84)	3.6 (SD=.85)
Predictability of deadlines (1-5)	3.5 (SD=.90)	3.6 (SD=.88)

Table 3 represents questions asked in order to see how employees perceived working with deadlines, divided for the two main groups studied, the low to intermediate frequency of deadlines group and the high frequency of deadlines group. Table 3 shows for example that the mean for employees in the high frequency of deadlines group is higher for the importance of meeting deadlines, for themselves and the company, compared to the employees in the low to intermediate frequency of deadlines group.

Perceived consequences of missing deadlines. There were two open-ended questions where participants could write consequences they themselves or the company would possibly face if deadlines were not met. For themselves, participants reported for example; no consequences, not knowing the consequences, getting a talking to from the boss or getting complaints from the boss, getting rushed by customers or the receiver within the company, being sad about it, not happy with themselves and one reported that simply not allowed. For the company, participants reported for example; dissatisfied customers, loss of

customers, loss of money, extra costing in working hours and delays, losing goodwill with suppliers and financial reports ending up in the wrong settlement month.

Discussion

The study aimed to investigate if having high frequency of deadlines at work related to higher levels of reported work-related stress, energy, fatigue and sleep, compared to when the frequency of deadlines were low to intermediate. The results of the current study failed to show a statistically significant difference between the two groups, for all variables except reported sleep quality. Hypotheses one, two and five were thus not supported, frequency of deadlines at work did not relate to levels of reported work-related stress, occupational fatigue or energy. Reported sleep quality for employees with high frequency of deadlines was significantly poorer than for employees with low to intermediate frequency of deadlines, that means hypothesis three was supported, which is similar to the result Rugulies and colleagues (2012) reported.

Frequency of deadlines and work-related stress

It seems the frequency of deadlines at work does not play a clear role in reported work-related stress within the transportation sector. It is probable, due do 54,8% of the participants reporting having worked longer than 10 years at the company, that employees have mastered their job and do not appraise frequent deadlines as a threat. Frequent deadlines would therefore simply be a part of the job and not constitute anything special to them. Nevertheless it needs to be noted that this has not been researched much before, however, contradictory to current results, working with very strict and tight deadlines has been found to predict stress levels (Herrero et al., 2012).

Deadlines have generally been researched in combination with other psychosocial stressors, for example as task or job demands (Shultz. Wang, Crimmins & Fisher, 2010; Griffiths, Mackey & Adamson, 2011), but not much as a single independent variable, and in a thorough literature search, there was no research found that studied working with frequency of deadlines in relation to work-related stress. Thus, any claims of generalizability of the results will not be made here.

Another aim of the study was to examine if self-efficacy and social support at work interacted with frequency of deadlines, respectively, on the level of reported work-related stress. There were no statistically significant interaction effects found, for either stress scale. Hypotheses five and six were thus not supported, self-efficacy and social support at work did

not moderate the relationship between frequency of deadlines and levels of work-related stress. Even though all hypotheses except number three were rejected, the differences between the groups were in accordance with all proposed hypotheses, however the differences were not substantial.

The fact that no statistically significant interaction effects found for self-efficacy and social support at work with frequency of deadlines, is in contrast of what previous research on psychosocial factors at work has presented, and suggest would apply for the psychosocial factor frequency of deadlines (Jex & Bliese, 1999; Helms-Lorenz, Slof, Vermue & Canrinus, 2012; García-Herrero et al., 2013). However, self-efficacy and social support at work did have a main effect on reported stress at work, in accordance with previous research (Jex & Bliese, 1999; Rajeswari & Anantharaman, 2005; Rennesund & Saksvik, 2010), however the effect sizes were rather small. That means, employees with high self-efficacy reported lower work-related stress levels than those with low self-efficacy, and employees with high social support at work likewise reported lower work-related stress levels than those with low social support at work. That further underlines pervious findings that self-efficacy and social support at work are relevant and important variables to consider at the workplace (Jex & Bliese, 1999; Rajeswari & Anantharaman, 2005; Rennesuns & Saksvik, 2010; Viswesvaran, Sanchez & Fisher, 1999) which is consistent with the aforementioned transactional model of stress by Lazarus (Folkman & Lazarus, 1984; Lazarus, 1993; Lazarus, 2006), that individual differences do play a role in how a stressful situation is appraised.

The psychosocial stressor, frequency of deadlines did not relate to any of the variables studied, except sleep quality. Possible explanations for this lack of statistically significant relation might have to do with how frequency of deadlines was measured. Participants subjectively evaluated their frequency of working with deadlines, which allows for a biased response. Employees with the same frequency of deadlines, one with high self-efficacy and the other with low self-efficacy, could underestimate or overestimate their frequency of working with deadlines. Because when individuals have high self-efficacy, the more confident the employee feels of his or her capabilities of dealing with the quantity of deadlines and thus possibly underestimate the frequency. Adversely, an employee with low self-efficacy would be less confident, thus possibly reporting an overestimate of frequency of deadlines. Similar could apply for social support at work, employees with low social support at work, could have evaluated their frequency of deadlines as more frequent than reality would reveal, because they know everything lies with them due to little support from co-workers. Adversely, employees with high social support at work potentially underestimated their frequency of deadlines as they do not need to fear if it gets too much, as co-workers are

available for help. This biased response would thus nullify any proposed relation of frequency of deadlines to reported work-related stress and pose a threat to internal and construct validity.

Sleep quality, energy and fatigue

The results that levels of sleep quality were different and not levels of reported work-related stress between the groups of frequency of deadlines was contradictory to what previous research suggests, that working with deadlines would induce stress and the stress would influence the sleep quality (Åkerstedt, 2006). The current results could possibly stem from frequency of deadlines having to do with workload and having to work overtime and thus not sleep much (Härmä, 2006).

There were no significant main effects of frequency of deadlines found for reported fatigue at work, contrary to what previous research has reported when studying work exhaustion (physical and/or mental exhaustion) (Rajeswari & Anantharaman, 2005). However, when looking at the means for reported fatigue for the groups studied (Low to intermediate frequency M=.90 and high frequency M=1.25), reported on from 0-6, they are relatively low (Åhsberg, 2000).

It was of interest to explore which group, low to intermediate frequency or high frequency of deadlines had the higher reported energy level, however, there was no statistically significant difference found between the groups. There were no research results found to compare to the current results. However the means of the current study were compared to previous research that uses the Stress-Energy Inventory. When comparing the means to the means in a study that compared men and women in identical jobs that relate to musculoskeletal pain, it is evident that the reported energy levels are relatively similar, but the energy levels of the current study are a little higher (Persson, Hansen, Ohlsson, Balogh, Nordlander & Ørbæk, 2008). Another study looking at energy levels in each month of the year showed similar mean scores for the month of March (when the study was conducted in the current study) reported at 14:00 hours (Persson, Österberg, Hansen, Ørbæk & Karlson, 2010), which suggests that the participants in the study have rated relatively normal levels of energy.

Strengths, limitations and suggestions for further studies

Strength of the study was that it studied the transportation sector, where 51% of participants reported having deadlines either daily or a few times a week, which shows that deadlines are highly prevalent in the transportation sector. The study utilized two stress scales

in order to measure perceived stress and the affective stress response at work, neither related to frequency of deadlines, which underlines the results that reported levels of stress do not relate to frequency of deadlines. Using frequency of deadlines, a more specific measure of psychosocial working environment than used in many previous studies was considered a strength. It allows for more specific preventative measures concerning the results. It was reported in the current research, that frequency of deadlines was related to sleep quality and therefore the company could make arrangements to lighten the load of the employees with high frequency of deadlines and see if the sleep quality improves.

The current study is cross-sectional and it is always difficult to try to infer and generalize from that type of research. However they can be a good start to try to see the lay of the land before embarking on more expensive research. All questions were highly subjective, even the main question, regarding frequency of deadlines, the participants evaluated from feeling and marked on an uneven interval scale. Thus, it is quite possible that participants that had the same amount of deadlines could have marked different frequency, as aforementioned regarding high and low levels of self-efficacy and social support at work. To avoid the biased response of frequency of deadlines, an improvement of the measure of frequency of deadlines is suggested. It would be interesting to use an objective number of frequencies of deadlines acquired from the company being studied and see if that would yield the same results.

The self-efficacy scale and the social support at work scale were dichotomized for the convenience of analyses, which is not an ideal method to use. It is difficult to divide into high and low when dealing with a scale where there is no known split for high and low. The only thing that can be inferred is that the self-efficacy and social support at work were high and low for this particular sample, and were divided as such.

The current research was a contribution to the research of deadlines and showed that high frequency of deadlines related to poorer sleep quality, but not reported work-related stress, occupational fatigue or energy. The research also showed that self-efficacy and social support at work, respectively, related to reported work-related stress, but did not interact with frequency of deadlines and therefore no interaction effects were found.

In conclusion

The study reported, contradictory to postulated hypotheses, that frequency of deadlines at work did not relate to reported levels of work-related stress, fatigue or energy. Frequency of deadlines did relate to poorer sleep quality, possibly due do overtime at work and not the frequency of deadlines.

No interaction effects for self-efficacy or social support at work were found with frequency of deadlines in relation to work-related stress, but main effects for both variables were found on reported work-related stress, which is congruent with previous findings (Jex & Bliese, 1999; Rajeswari & Anantharaman, 2005; Rennesund & Saksvik, 2010).

A possible reason for the lack of statistically significant differences for the two groups of frequency of deadlines in regards to work-related stress, fatigue and energy could be due to work experience of the participants, 54,8% of participants reported having worked at the company for longer than 10 years and therefore possibly mastered the job and do not consider frequent deadlines a threat.

For future studies, it is recommended to use a more objective measure of frequency of deadlines to avoid biased responses. The current research has contributed to the knowledge development regarding specific psychosocial stressors at work.

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Appendix

Dear participant

The following questionnaire is a part of my master thesis in psychology at Lund University. I would appreciate if you could take approximately 10 minutes answering these questions. There are no right or wrong answers to the questions. It is important that you answer all the questions as honestly as you can. You should base your answers on how you are/feel now and not how you want to be/feel in the future. This questionnaire is anonymous and the answers are not traceable to you. All responses are confidential.
If any questions arise, don't hesitate to contact me through e-mail, elvabjorg21@gmail.com

Thank you for participating, your response is greatly appreciated.

Elva Björg Arnarsdóttir

Icelandic:
Kæri þátttakandi

Eftirfarandi spurningalisti er hluti af masters-ritgerð minni í sálfræði við Lund University. Verkefnið snýst um að vinna með skilafresti/tímamörk (e.deadlines) í starfi. Mér þætti vænt um ef þú gætir gefið þér u.þ.b. 10 mínutur til að svara spurningunum. Það eru engin rétt eða röng svör við spurningunum og mikilvægt að þú svarir öllum spurningum eins heiðarlega og þér er unnt. Þú skalt miða svörin við hvernig þú ert almennt núna, en ekki eins og þú myndir vilja vera í framtíðinni. Könnunin er nafnlaus og ekki verður hægt að rekja svörin til þín. Farið er með öll svör sem trúnaðarmál. Ef einhverjar spurningar vakna, ekki hika við að senda mér línu á elvabjorg21@gmail.com

Kærar þakkir fyrir þátttökuna, svör þín eru mikils metin.

Elva Björg Arnarsdóttir

Demographic questions

Age?
Icelandic: Aldur?

Gender?
Icelandic: Kyn?
1. Female (Kvenkyn)
2. Male (Karkyn)

What is your highest level of education?
Icelandic: Hvert er hæðsta menntunarstig þitt?
1. No schooling completed (Hef ekki klárað neitt nám)
2. Elementary school (Grunnskóli)
3. Secondary school (Menntaskóli)
4. Bachelor's degree (Grunnnám í háskóla, bachelorgráða)
5. Master's degree (Framhaldsnám í háskóla, mastersgráða)
6. Doctoral studies (Doktorsnám)

For how long have you worked at this company?
Icelandic: Hversu lengi hefur þú unnið hjá fyrirtækinu?
1. Less than 2 years (Minna en tvö ár)
2. Between 3-5 years (3-5 ár)
3. 5-10 years (5-10 ár)
4. Over 10 years (Lengur en 10 ár)

In a normal workweek, how many hours do you work?
Icelandic: Hvað vinnur þú yfirleitt marga tíma í venjulegri vinnuviku?

How many hours of overtime do you usually work in a week?
Icelandic: Hvað vinnur þú u.þ.b. marga yfirvinnutíma á viku?

Deadlines

Subsequent questions regard working with deadlines, which is when a certain project has to be done before a certain time.
Icelandic: Eftirfarandi spurningar eiga við skilafresti/tímamörk (e.deadlines) í starfi. Það er að segja þegar ákveðið verkefni þarf að klárast fyrir ákveðin tímamörk.

How often do you have deadlines?
Icelandic: Hversu oft vinnur þú með skilafresti/tímamörk?

1. Never (Aldrei)
2. A few times a year (Nokkrum sinnum á ári)
3. A few times a month (Nokkrum sinnum í mánuði)
4. A few times a week (Nokkrum sinnum í viku)
5. Daily (Daglega)

How often do you have deadlines that are difficult to meet?
Icelandic: Hversu oft vinnur þú með skilafresti/tímamörk sem erfitt er að mæta?

1. Never (Aldrei)
2. A few times a year (Nokkrum sinnum á ári)
3. A few times a month (Nokkrum sinnum í mánuði)
4. A few times a week (Nokkrum sinnum í viku)
5. Daily (Daglega)

How would you rate the level of consequences for you if a deadline were not met?
Icelandic: Náir þú ekki að klára verkefni fyrir settan tíma, hvernig myndir þú meta afleiðingar þess fyrir þig?

1. Low to none (Litlar sem engar)
2. Minor (Vægar)
3. Moderate (Miðlungs)
4. High (Miklar)
5. Severe (Alvarlegar)

What type of consequences will you experience if a deadline was not met?
Icelandic: Hverjar eru afleiðingar þess að ná ekki settum skilafresti/tímamörk fyrir þig?
Open-ended question

How would you rate the level of consequences for the company if a deadline were not met?
Icelandic: Náir þú ekki að klára verkefni fyrir settan tíma, hvernig myndir þú meta afleiðingar þess fyrir fyrirtækið?

1. Low to none (Litlar sem engar)
2. Minor (Vægar)
3. Moderate (Miðlungs)
4. High (Miklar)
5. Severe (Alvarlegar)

What type of consequences will the company experience if a deadline were not met?
Icelandic: Hverjar eru afleiðingar þess að ná ekki settum skilafresti/tímamörk fyrir þig?
Open-ended question

How important is it for you to meet deadlines at work?
Icelandic: Hversu mikilvægt finnst þér að ná að klára verkefni fyrir settan tíma?

1. Not at all important (Alls ekki mikilvægt)
2. Somewhat important (Heldur mikilvægt)
3. Neither nor (Hvorki né)
4. Important (Mikilvægt)
5. Very important (Mjög mikilvægt)

How important is it for your company to meet deadlines?
Icelandic: Hversu mikilvægt er það fyrir fyrirtækið að klára verkefni fyrir settan tíma?

1. Not at all important (Alls ekki mikilvægt)
2. Somewhat important (Heldur mikilvægt)
3. Neither nor (Hvorki né)
4. Important (Mikilvægt)
5. Very important (Mjög mikilvægt)

Do you need to count on your coworkers in order to meet deadlines?
Icelandic: Þarft þú að treysta á samstarfsfólk þitt til að standast skilafresti/tímamörk?

1. Never (Aldrei)
2. Almost never (Næstum aldrei)
3. Sometimes (Stundum)
4. Fairly often (Frekar oft)
5. Always (Alltaf)

Are the deadlines you work with predictable?
Icelandic: Eru skilafrestirnir/tímamörkin sem þú vinnur með fyrirsjáanleg?

1. Never (Aldrei)
2. Almost never (Næstum aldrei)
3. Sometimes (Stundum)
4. Fairly often (Frekar oft)
5. Always (Alltaf)

Stress-Energy Inventory
Subsequent questions regard how you have felt at work the last month.
How much have you felt like you were..
Icelandic: Eftirfarandi spurningar snúa að því hvernig þér hefur liðið í vinnunni seinasta mánuðinn. Hversu mikið hefur þér liðið eins og þú værir..

Rated:
Not at all (Alls ekki) (0) - Hardly (Varla) - Somewhat (Aðeins) - Fairly (Tiltölulega) - Much (Mikið) - Very much (Mjög mikið) (5).

Rested (Hvíld/ur)
Active (Athafnasöm/samur)
Tense (Taugaspenn/ur)
Dull (Dauf/ur)
Stressed (Stressuð/aður
Energetic (Dugleg/ur)
Ineffective (Gagnslaus)
Relaxed (Afslöppuð/aður)
Focused (Einbeitt/ur)
Pressured (Undir pressu)
Passive (Aðgerðalaus)
Calm (Róleg/ur)

Perceived Stress Scale-4

Subsequent questions regard your thoughts and feelings in general. Answer each question by marking the answer that best describes your thoughts and feelings the last month.
Icelandic: Eftirfarandi spurningar fjalla almennt um hugsanir og tilfinningar þínar. Svaraðu hverri spurningu með því merkja við það svar sem best lýsir tilfinningum þínum og hugsunum síðastliðin mánuð.

	Never (Aldrei)	Almost never (Næstum aldrei)	Sometimes (Stundum)	Fairly often (Nokkuð oft)	Very often (Mjög oft)
1. In the last month, how often have you felt that you were unable to control the important things in your life? *Icelandic: Hversu oft undanfarinn mánuð fannst þér að þú værir að missa stjórn á mikilvægum hlutum í lífi þínu?*	0	1	2	3	4
2. In the last month, how often have you felt confident about your ability to handle your personal problems? *Icelandic: Hversu oft undanfarinn mánuð varst þú örugg(ur) með þær ákvarðanir sem þú þurftir að taka til að leysa úr persónulegum vandamálum?*	0	1	2	3	4
3. In the last month, how often have you felt that things were going your way? *Icelandic: Hversu oft undanfarinn mánuð fannst þér að hlutirnir gengu þér í hag.*	0	1	2	3	4
4. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? *Icelandic: Hversu oft undanfarinn mánuð hefur þú upplifað að vandamálin hrönnuðust upp án þess að þú réðir við þau.*	0	1	2	3	4

General Self-efficacy Scale
Subsequent questions regard you and your work.
Icelandic: Eftirfarandi spurningar eiga við þig og vinnuna þína

I can always manage to solve difficult problems if I try hard enough
Icelandic: Ég er alltaf fær um að leysa erfið vandamál ef ég legg bara nógu mikið á mig.
1. Not at all true (Mjög ósammála)
2. Hardly true (Ósammála)
3. Moderately true (Sammála)
4. Exactly true (Mjög sammála)

If someone opposes me, I can find the means and ways to get what I want.
Icelandic: Ef einhver andmælir mér, finn ég ráð og leið til þess að fá það sem ég vil
1. Not at all true (Mjög ósammála)
2. Hardly true (Ósammála)
3. Moderately true (Sammála)
4. Exactly true (Mjög sammála)

It is easy for me to stick to my aims and accomplish my goals.
Icelandic: Það er auðvelt fyrir mig að halda mig við mín markmið og ná þeim
1. Not at all true (Mjög ósammála)
2. Hardly true (Ósammála)
3. Moderately true (Sammála)
4. Exactly true (Mjög sammála)

I am confident that I could deal efficiently with unexpected events.
Icelandic: Ég er viss um að ég gæti tekist á við óvænta atburði á skilvirkan hátt
1. Not at all true (Mjög ósammála)
2. Hardly true (Ósammála)
3. Moderately true (Sammála)
4. Exactly true (Mjög sammála)

Thanks to my resourcefulness, I know how to handle unforeseen situations.
Icelandic: Þökk sé útsjónarsemi minni, þá veit ég að ég get tekist á við ófyrirséðar aðstæður
1. Not at all true (Mjög ósammála)
2. Hardly true (Ósammála)
3. Moderately true (Sammála)
4. Exactly true (Mjög sammála)

I can solve most problems if I invest the necessary effort.
Icelandic: Ég get leyst flest vandamál ef ég hef nógu mikið fyrir því?
1. Not at all true (Mjög ósammála)
2. Hardly true (Ósammála)
3. Moderately true (Sammála)
4. Exactly true (Mjög sammála)

I can remain calm when facing difficulties because I can rely on my coping abilities.
Icelandic: Ég get haldið ró minni þegar ég stend frammi fyrir erfiðleikum, af því ég get treyst á sjálfsbjargarhæfni mina?

1. Not at all true (Mjög ósammála)
2. Hardly true (Ósammála)
3. Moderately true (Sammála)
4. Exactly true (Mjög sammála)

When I am confronted with a problem, I can usually find several solutions
Icelandic: Þegar ég þarf að takast á við vandamál, get ég yfirleitt fundið nokkrar lausnir

1. Not at all true (Mjög ósammála)
2. Hardly true (Ósammála)
3. Moderately true (Sammála)
4. Exactly true (Mjög sammála)

If I am in trouble, I can usually think of a solution.
Icelandic: Ef ég er í vandræðum, get ég yfirleitt upphugsað lausn

1. Not at all true (Mjög ósammála)
2. Hardly true (Ósammála)
3. Moderately true (Sammála)
4. Exactly true (Mjög sammála)

I can usually handle whatever comes my way.
Icelandic: Ég get yfirleitt ráðið fram úr hverju sem á vegi mínum verður

1. Not at all true (Mjög ósammála)
2. Hardly true (Ósammála)
3. Moderately true (Sammála)
4. Exactly true (Mjög sammála)

Swedish Occupational Fatigue Inventory-20
Subsequent questions regard how you feel at work. To what extent to the expressions below describe how you feel after a normal day at work.
Icelandic: Eftirfarandi spurningar eiga við líðan í vinnunni. Að hvaða leyti lýsa orðin að neðan hvernig þér líður vanalega eftir vinnudag.

0 Not at all 6 To a very high degree

Palpitations (Hjartsláttartruflanir)
Lack of concern (Kæryleysi)
Worn out (Úrvinda)
Tense muscles (Vöðvaspenna)
Falling asleep (Alveg að sofna)
Numbness (Dofi)
Sweaty (Sveitt/ur)
Spent (Útkeyrð/ur)
Drowsy (Sljó/r)
Passive (Óvirk/ur)
Stiff joints (Stífir/stirðir liðir)
Indifferent (Sinnulaus)
Out of breath (Að missa móðinn)
Yawning (Geispandi)
Drained (Örmagna)
Sleepy (Syfjuð/aður)
Overworked (Ofkeyrð/ur)
Aching (Kvalin)
Breathing heavily (Erfitt með andardrátt)
Uninterested (Áhugalaus)

Perceived Social Support at Work

Can you get help from someone in stressful situations at work?
Icelandic: Getur þú fengið hjálp frá einhverjum í stressandi aðstæðum í vinnunni?

1. Always
2. Usually
3. Seldom
4. Never

Is your work organized so you can help and unburden each other within the work-group?
Icelandic: Er vinnan þannig uppsett að þið getið hjálpað og létt á hjá hvort öðru innan vinnuhópsins?

1. Always
2. Usually
3. Seldom
4. Never

Are you able to get support and encouragement from colleagues when you feel that things aren't going well at work?
Icelandic: Færð þú stuðning og hvatningu frá samstarfsmönnum þegar þú finnur að hlutirnir ganga ekki nógu vel í vinnunni?

1. Always
2. Usually
3. Seldom
4. Never

Are you able to get support and encouragement from your immediate supervisor when you feel that things aren't going well at work?
Icelandic: Færð þú stuðning og hvatningu frá næsta yfirmanni þegar þú finnur að hlutirnir ganga ekki nógu vel í vinnunni?

1. Always
2. Usually
3. Seldom
4. Never

Total Sleep Quality

How do you rate your overall sleep quality?
Icelandic: Hvernig myndir þú almennt meta svefngæði þín?

1. Excellent (Frábær)
2. Very good (Mjög góð)
3. Good (Góð)
4. Not so good (Ekki mjög góð)
5. Poor (Slæm)

Thank you for your participation.
Kærar þakkir fyrir þátttökuna