Perceptions of Work Stress among Employees: A Qualitative Study

[Master Thesis – University of Twente]

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Preface

After starting my study of Psychology in September 2013, I was often confronted with both distress and eustress. There were many assignments and exams that I had to learn for. Often, I did not have the ability to accomplish learning on time. Sometimes I got lost in all the demands placed on me. But at other times, I saw the beginning of a new module as a challenge and experienced a feeling of "Yes, I can do it!" Being concerned with distress and how to deal with it was always a topic of interest for me. In the last few years, I got more and more occupied with mindfulness, which was also due to my study. That's why I was very interested for picking the notion of stress as a subject for my Master's thesis.

I would like to thank the participants in this study first, because without their help, this study would not have been realizable. Further, I would like to thank Dr. Mirjam Radstaak and Dr. Anneke Sools for their good supervision of my thesis. I had always the opportunity to ask for help if I needed to.

I devote this thesis to my parents and my boyfriend. They kept me strong through my whole student life with their friendly ears, which actually ended up in receiving my Master's degree. They tried to support me not only in my student life, but in all other dimensions I could think of. Further, I would like to thank my friends for always listening to my problems concerning study life, even whether they were actual problems or not. Without you, finally achieving my Master's degree would not have been possible. You deserve my deepest appreciation and gratefulness. This is to you.

Laura Thomas

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Abstract

In times of a fast- paced society, especially employees are confronted with difficult conditions like overwork, job insecurity or low levels of job satisfaction. Because of that, employees experience more and more work stress. Stress in which there is an imbalance between perceived demands and the available resources to cope with them is called *distress*. There is many existing literature providing models and explanations for the potential sources of distress at work, but there is only little research focussing on the potential positive effects of work stress, the so- called *eustress*. Eustress can be described as a positive and constructive stress response leading to growth, development and mastery. In order to get a better grasp of what eustress and distress actually mean to employees, the research questions **1)** Under which circumstances do employee perceive eustress? **2)** How do employees perceive eustress? **3)** Under which circumstances do employees perceive distress? **4)** How do employees perceive distress? have been formulated.

Semi- structured interviews were conducted on ten participants with a mean age of 36.3 years (*SD*=12.08) working in middle to higher education paid- jobs. Based on these interviews, a coding scheme was generated while making continuous adjustments in both an inductive and deductive approach containing the main topics experiences with eustress, experiences with distress, work experience and demographics. The coding scheme was applied to all semi- structured interviews.

The results on distress showed that workload, work pressure and time were the most important perceptions contributing to distress. Further, some participants reported a chain reaction, where one colleague perceives distress and transfers this distress to others. Regarding eustress, the most important circumstances were accomplishment of tasks and appreciation from customers or patients. When it comes to the experience of eustress and distress, participants reported the same physical arousal, yet more negative reactions to distress such as a lack of concentration or inner restlessness. Reactions to eustress were described from a more positive perspective, like being more in focus or feeling more vital, vigorous and productive. In conclusion, a circumstance leading to eustress or distress cannot be seen as a single cause, but must rather be viewed in relation to other circumstances. Although the same physical arousal to both kinds of stress as well as a lack of self- care were reported, the behavioural and cognitive responses to eustress were described in more positive terms than those of distress. Further research could focus on intensive longitudinal methods combined with physical measurements to gain data over a longer period in order to get a deeper understanding of eustress and distress.

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1. Introduction

Nowadays, occupational stress forms an enormous problem in various work fields. More and more, employees have to face difficult conditions like "overwork, job insecurity, low levels of job satisfaction and a lack of autonomy" (Bickford, 2005, p.6). The Fourth European Working Conditions Survey (2005) stated, that 22 % of the European workers reported suffering from stress. When employees perceive their work environment to be straining because it does not fulfil their personal wishes, desires or abilities, the discrepancies may not only affect health and wellbeing, but may result at the same time in a loss of productivity or absence from work (Houtman et al., 1999). Alarming long-term effects on physical health must be paid attention to, such as cardiovascular disease (Kivimäki et al., 2002), back ache, muscular pain and fatigue (Nelson & Simmons, 2011). As it is often stated, physical and mental health are distinct constructs, yet they go hand in hand and affect each other (Keyes, 2005). Because of that, physical symptoms due to stress are caused by, or lead to, mental health problems, such as severe anxiety, depression or a so-called "burnout" (Melchior, Caspi, Milne, Danese, Poulton & Moffitt, 2008).

Employees show various symptoms and signs when continuously confronted with a stressful environment (Bickford, 2005). However, not all symptoms occur at once, but appear in different phases as reported by Annscheutz (1999). The first phase is more like a warning, which has an emotional rather than physical nature. In this phase, feelings of emotional fatigue, boredom or apathy may occur, followed from mild physical and emotional symptoms. In the second phase, the consumption of drugs occurs more frequently and mental symptoms worsen. The third phase is a severe stress reaction, which is often considered to be self-destructive, occurring after five to ten years of ignoring the symptoms. These can be described in various physical and mental health problems, such as asthma, heart conditions, muscle tremors, agitation, severe depression, lowered self- esteem extreme chronic fatigue and paranoia.

Focussing on the potential sources of occupational stress, Murphy (1995) composes a typology of stressors especially in the workplace. These are, among others, the factors unique to the job, role in the organization, career development, individual characteristics and relationships at work. The American Psychological Association (APA, n.d.) found other circumstances contributing to stress at work, such as low salaries, excessive workloads or few opportunities for growth or advancement. The person- environment (P-E) fit (Lazarus & Launier, 1978), which states that stress is a result of an imbalance between the person's

values, goals or desires and his environment (Harrison, 1978) supports the notion of stress at work.

Another model trying to explain the causes of occupational stress is the demand-control- support model (Karasek, 1979). This model holds, that the tasks the employee has to perform [job demands] and the perceived degree of control he holds over the job demands [job control] account for the degree of stress at work. The highest amount of stress at work is expected in situations with high demands and low control (Karasek, 1979). Although this model appeared to be inconsistent in that it measured different kinds of demands and did not address the individual characteristics of employees (Van der Deof & Maes, 1999), it was broadened by more factors such as integrating resources, active coping, self- efficacy or social support (Johnson & Hall, 1988).

As described in the upcoming section, there are two kinds of responses to stress; either a negative one, or so- called *distress*, or a positive one, so- called *eustress*. Although Tomaka (1993) found out, that eustress, the positive stress response, leads to many positive outcomes on both subjective and objective performance as well as on adaptive domains (Le Fevre et al., 2003), only few investigations have been carried out on what eustress actually is (Kurpiyanov & Zhdanov, 2014). Furthermore, eustress can prevent from psychological illness (Rosch, 1979) as from perceiving distress at work (Nelson & Simmons, 2011). Nelson and Cooper (2007) state that eustress at work leads to more wellbeing in general, gratefulness for the little things, growth and positive emotions. Therefore, examining how and under which circumstances eustress and distress are experienced seems to be of big interest for this study in order to get a better grasp of the whole construct of stress. Before addressing the concepts of eustress and distress, the different components of stress in general need to be described in more detail.

Stress

Hans Selye (1950) defined stress as "the non-specific response of the body to any demand for change". From the view of this interpretation, stress is by itself a neutral construct. In order to get a better grasp of the notion of stress, the key factors of it have to be examined sufficiently. These are *stressors, appraisal, coping and stress response* as adapted from the Transactional Model of Stress by Lazarus and Folkman (1987). It is important to notice, that stress can lead to both positive and negative stress responses as illustrated in *Figure 1*.

There are many situations for employees, which are perceived as straining. These situations can be defined as *stressors*. Depending on the appraisal and coping with the

stressor, they either have a negative effect on the individual's mood and wellbeing or lead to growth and energy (Selye, 1974). Lazarus (1990) stated that stressors are a dynamic construct composed out of individual and environmental factors that are constantly exposed to changes.

It is due to the individual's cognitive *appraisal*, which events are perceived as stressful. The appraisal is dependent on the source, duration, controllability and the desirableness of the situation (Le Fevre, Matheny & Kolt, 2003). Lazarus (1990) distinguishes between primary and secondary appraisal. Primary appraisal refers to the examination of the importance of the stressor, whereas secondary appraisal stresses the evaluation of what can be done about the situation. This means, that the stressor is recognized, and thereafter interpreted and evaluated. The appraisal determines how to react to a certain stressor.

Coping is referred to as a way to react to the stressor, both in a behavioural and emotional as well as cognitive manner. The main aim of coping is to reduce or even eliminate distress (Lazarus & Folkman, 1984). Carver, Weintraub and Scheier (1989) distinguish between two types of coping strategies. These are problem- focused coping and emotional-focused coping. The former tries to solve a problem lying within the situation or managing the stressor, whereas the latter aims at altering the emotional distress linked to the situation. Problem- focused coping occurs more often when the individual perceives the efficacy to change something about the stressor, whilst emotion-focused coping predominates when the stressor is perceived to be enduring (Folkman & Lazarus, 1980).

The stress response is the actual reaction to the perceived stressor, which can be perceived either as distress or eustress. Since it is very subjective, which situations are perceived as stressors and because of the many different ways how to appraise and to cope with these, there are many differences among individuals. These subjective cognitive factors and situational factors determine differences in the stress response (Le Fevre et al., 2003). An example of a stress response is the *fight-or-flight reaction,* first described by Cannon in 1929, which is a survival mechanism helping to react quickly to threatening situations. The individual fights the threat or flees into safety. However, regarding physical arousal, the body reacts to all stressors in the same way. Little amounts of everyday stressors keep this mechanism activated and do not leave a chance for the mechanism to "turn off", resulting in both physical and mental illness (Milosevic, Randi & McCabe, 2015).
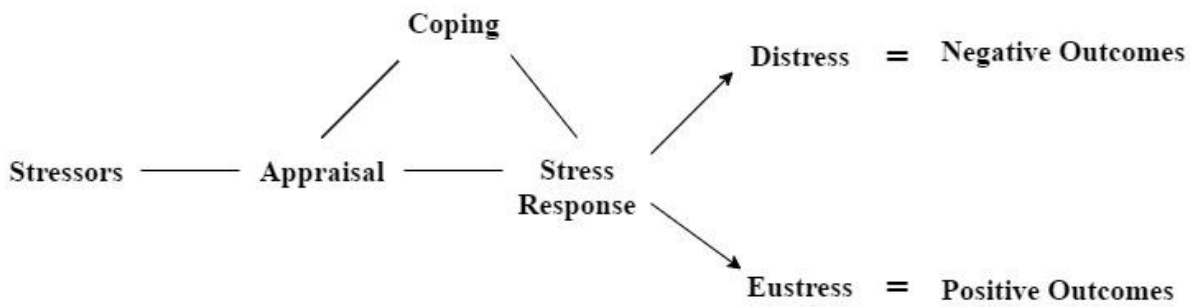
Figure 1. *The Transactional Model of Stress adapted from Lazarus & Folkman (1987)*

Distress and Eustress- Two different stress responses

If stress occurs in large amounts the individual is not able to cope with, distress may occur, which goes along with negative physical or mental health effects (Canadian Centre for Occupational Health and Safety, 2000). In other words, distress is a negative stress response emerging because of negative appraisal of the situation and insufficient coping strategies of the individual. Although there is no clear definition of distress, a consent exists in that it enacts an imbalance between perceived demands and the available resources to cope with (Selye, 1974). Stressors at work that lead to distress are, among others, work overload, health problems, balancing work and family, peer pressure or unemployment (Michie, 2002). Most of the time, stress is linked with a negative image (Schafer, 1996), but in contrast to distress, another type of stress leads to adaptive effects: eustress (Selye, 1976). Eustress occurs when the stressor is appraised as positive and the individual is able to employ coping strategies in order to prevent the emergence of distress. Quick et al. (1997) defined eustress as the positive and constructive stress response essential to growth, development and mastery. Eustressed employees are said to be more engaged at work, which means that they experience a great amount of meaningfulness, manageability, hope and positive affect towards their job demands (Simmons and Nelson, 2011). Because there are several familiar factors mentioned like self-efficacy or satisfaction, further research is required to examine the indicators contributing to eustress. Furthermore, experiencing eustress at work relates to better job performance, increased psychological wellbeing and physical health (Simmons & Nelson, 2011). Because of that, stressors do not always have to be associated to have a negative impact on health, but can also be stimulating especially at the workplace.

Occupational Eustress Models

The Human Resource Development Eustress Model developed by Hargrove, Becker and Hargrove (2015) offers a method for promoting the development of eustress in organizations by focussing on preventing distress. Further, it tries to give a framework in how organizational distress can be "converted from a threat into a source of energy with concomitant positive outcomes for employees and organizations" (Hargrove et al., 2015, p.280). It entails practices "that can aid individuals in coping with challenges and promoting eustress", such as flexible scheduling, employee assistance programs or career management. (Hargrove et al., 2015; p. 295). The authors of this model defined eustress as the positive conceptualization of stress by referring to definitions of Selye (1987) and Quick et al. (1997), which related eustress to positive emotions, such as hope and goodwill. The occupational eustress model relies among others on the transactional model of stress focussing on appraisal and coping as responsible for the stress response and the challenge hindrance framework.

An individual appraising a stressor as a challenge instead as a threat to both physical and mental health is more likely to perceive the situation as eustress rather than distress. Cavanaugh, Boswell, Roehling and Boudreau (2002) support this argument with their *Challenge Hindrance Framework* (CHF), in that challenge- related stressors lead to positive outcomes, whereas hindrance- related stressors lead to negative outcomes. *Challenge stressors* can be defined as workplace demands, which are appraised as a challenge. These are, among others work pace, workload, job complexity and job responsibility (Podsakoff, 2007). With a positive appraisal, these kinds of stressors promote the accomplishment of tasks and personal development.

Research Questions

Because there is only little research about what distress and eustress actually is, and due to the striking positive effects eustress can offer, it is important to employ this construct in the improvement of working conditions by generating an impression of what the constructs of distress and eustress mean to employees as well as how they experience these. The ultimate aim of this study is to investigate what differentiates the experience of distress from eustress regarding when and how employees in different working fields perceive it. Therefore, individual experiences will be analysed both inductively and deductively regarding differences and commonalities regarding under which circumstances and how these types of stress are perceived. Because it is assumed that the phenomenology of eustress and distress is

not necessarily dichotomous, it will be asked for both types of stress. The results of the study may reduce the gap in the literature about perceptions of eustress and distress in a work-related context. More insight into the aspects that differentiate eustress from distress may also add value not only to employees, but also to employers, policy makers and intervention designers trying to adapt working conditions and promote or generate eustress in order to stimulate growth, development and mastery among employees. The research questions for this study are:

1) Under which circumstances do employees perceive eustress?
2) How do employees perceive eustress?
3) Under which circumstances do employees perceive distress?
4) How do employees perceive distress?

2. Methods

Participants

Following an interview survey design, qualitative semi-structured interviews were conducted with 10 German volunteers in June 2017. It was chosen to recruit the participants via convenience sampling, which is the most economical and easiest sampling method for this study (Ferber, 1977). All participants were people belonging to the social environment of the researchers. The inclusion criteria were checked in personal conversations beforehand containing an oral invitation before sending an invitation mail asking for participation and contact details. Inclusion criteria of participation were that participants had to be employees in paid jobs at least in a part- time job including not less than 30 working hours per week at the day of data gathering. Furthermore, they had to be above 18 years of age. Employees who do not perceive stress in their daily working lives were excluded from this study. These criteria where chosen in order to guarantee that both working experience and experiences with occupational stress are existent within the population. A wide range of working professionals containing participants of different sex, age and profession have been recruited:

Five of the participants were female, whereas five were male. The participants had an average age of 36.3 years (*SD*= 12.08), working in middle- to higher education jobs. One of them worked 30 hours per week in a part- time job, whilst nine participants were full- time employees. Two of the participants worked as medical nurses in a psychiatric hospital, one worked as a psychotherapist in a psychiatric hospital, another one as a childcare worker, the other as a mechanical engineer. One participant worked as an online marketing manager, one

as a chief executive officer, whilst two of the participants worked as recruiters. One participant was employed as a technician for machine tools. Their work experience ranged from 0.5 to 40 years, with an average of 15.65 working years (*SD*=14.12) and an average of 40.9 working hours (*SD*=6.86) per week. The vacation days per year ranged from 14 to 42. None of the volunteers dropped out.

Materials

It was chosen to conduct semi- structured interviews in order to give the participants freedom for creativity in their responses (Longhurst, 2016). The interview contained open questions to different topics covering experiences with eustress and distress, work experience and demographics. The researchers generated these questions based on existing theoretical insights about the topic rather broadly to avoid suggestive manipulation of the responses. In the first section of the interview, an explanation of both distress and eustress based on earlier literature research and the aim of this study were communicated to the participant and checked for understanding. If the participant had no clear idea of these constructs, another example of either distress or eustress was given. Distress was described as "When we talk about "stress" in our daily lives, mostly we mean a negative, unpleasant perceived state of tension, the so-called distress. Distress is defined by Hans Selye (1976) as a state of overload, for example overextension at work, thus negative stress". At the same time, eustress was defined in the interview as "in how far straining situations become negative stress does depend on the length of tension, as well as on the individual coping strategies and experiences from earlier situations, but also on your perceived coping abilities, thus the perceived self-efficacy. If the ability and skills are existent to manage the demands and if you have the opportunity to release the physical and mental energies, then we talk about positive stress, thus eustress." In the second section, individual experiences with eustress and distress at work were requested as well as the participants' coping strategies, for example "How does distress influence your daily life?" or "What do you personally do to reduce the effects distress has on you?" In this way, it was possible to examine how the participants differentiate individually between eustress and distress. The third section asked for reactions to both types of stress by asking straight "How do you react to eustress/distress?" Suggestions asking for different dimensions like "What happens to your body? Your thoughts? Your feelings? Your behaviour?" served to clarify the question. The fourth section covered questions about the participant's profession and demographics in order to find differences in response patterns by a different age, education and occupational position.

Procedure

Before starting with the semi- structured interviews, the study was approved by the Ethical committee of the University of Twente. Because the native language of both interviewers and interviewees was German, the interviews were conducted in German as well. Each of the two researchers conducted five interviews respectively, with an average duration of 29 minutes (*SD*= 7.30) per interview. The participants had the right to get the results of this study, but no further rewards or the like were given after completion of the interview. In order to test the interview scheme, the researchers performed a pilot test with two individuals from their social environments to check whether it contained ambiguities or mistakes in order to diminish possible pitfalls. In fact, some minor adjustments have been made on the interview scheme, like the formulation of some questions and an example of both distress and eustress has been added to simplify the participants' understanding of those constructs.

After recruiting the participants, individual appointments have been made for conducting the semi- structured interviews, which were held at the participants' workplace or their homes in a quiet room with no possible disturbances. All interviews were recorded with help of a smart phone. Before starting the interview, the participants were again given information about the study and asked whether they wanted to participate by means of an informed consent. The participants attended the interview on a voluntary basis and were free to stop at any moment of the interview. Furthermore, the researcher and participant had a brief small talk beforehand about the ethics and anonymity of this study in order to make the participant more comfortable at actual data collection. After that, the actual interview was conducted. After the end of the interview, the participant was given the opportunity to evaluate the interview, ask questions and give some possible additions. At last, the participant was asked whether he or she would like to get insight in the results of this study and could, if desired, leave his e-mail address to be able to communicate the results.

Data analysis

In order to answer the research questions how and under which circumstances eustress and distress are perceived, the responses obtained from the transcribed semi- structured interviews were analysed and synthesized by labelling them with different codes with the help of the coding program Atlas.Ti. Because the coding categories were created directly from the responses, a conventional content analysis was performed employing a deductive and inductive approach following iterative steps (Kondracki Wellman & Amundson, 2002). By doing so, responses were grouped under different codes representing a certain response to get

an overview of how many times an answer containing certain information was given as well as how many circumstances were mentioned as a whole. Circumstances were for example examined by asking for specific situations, for instance "Could you tell me about some situations, in which you experienced distress?" How eustress and distress are perceived was mainly examined by asking for reactions to both types of stress, for example "How do you perceive eustress?" For both circumstances and how participants experience eustress and distress, the coding groups "Circumstances" and "Reactions" were created beforehand for eustress and distress respectively.

Regarding the further generation of the coding scheme, the researchers read one of their transcripts first. Thereafter, each researcher created initial codes based on the interviews by means of a constant comparison to look for differences and commonalities in the interviews. Then, the created coding schemes were merged in a deductive approach into one coding scheme, resulting in the four main topics experience of eustress, experience of distress, profession and work experience and demographic characteristics. After that, the researchers coded one transcript each, thereby renaming, revising or creating new (sub-) codes, focussing on open coding. Quotes containing single catchwords, for example the codes "Accomplishment" or "Disturbances" were coded in vivo. Because of that, both an inductive and a deductive approach were used to generate the final coding scheme.

Regarding the unit of analysis, or so- called "chunks", the quotes where kept to a minimal length to avoid redundant information not necessary to answer the research questions, yet long enough to be able to grasp the essence as well as the context of the quote. An example of a response not quoted was among others "Of course this was a stupid situation, but it could be clarified afterwards and yes." The amount of quotes was not predetermined. Ultimately, the final code structure was applied to all interviews. The results were derived from an inductive approach, trying to generate general statements and theories from the single interviews. In order to promote the inter- coder agreement of the performed analysis, the interviews were coded twice, by each researcher once respectively and are thus double coded to ensure accordance among the researchers.

3. Results

This section is trying to provide an answer to the research questions "Under which circumstances do employees perceive eustress/distress?" and "How do employees perceive eustress/distress?" The semi- structured interviews were analysed by reference to the developed coding scheme, resulting in a wide variety of quotes regarding both content and

form. The quotes were translated into English in order to provide a better illustration of the results. The impression was gained, that all participants felt free to answer the questions and were not reluctant. Regarding the interview scheme, the participants understood the questions well and answered in a way which was open and trying to offer help. Remarkable was that the participants had different response patterns. Some of the participants were answering rather emotional than factually, while others were not. However, two participants had no idea how to answer the question "What do you personally do to enhance maintain the amount of eustress?"

In order to get a general overview of the results, Table 1 can be consulted which presents the coding scheme in terms of coding category, code, description, example quote, the total amount of codes within the respective category and the corresponding percentage. Most of the quotes were applicable to the code- groups *Eustress* and *Distress.* Because coding was a never-ending process, some codes where adjusted while coding. One example of this is the code "*Work Pressure*", which was often double coded with the code "*Customers/Patients*", "*Colleagues*" and "*Disturbances*", resulting in the code group "**Work Pressure**". Ultimately, the findings derived from the quotes were used to answer the research questions.

Coding Scheme

Table 1.

Overview of codes regarding eustress and distress with definition, example quote, frequency in total and percentage

Coding Category	Codes	Description	Example Quote	Total
EUSTRESS				
Circumstances	Accomplishment	master (difficult) tasks/before the end of the work day	"It is simply a good feeling to have managed to do the tasks for the day."	25 (13.02%)
	Appreciation Customer/ Patient	receiving appreciation from customers/patients	"When the kids [with whom I work] say something or hug you, they simply put a smile on your face."	24 (12.5%)
	Other	other circumstances contributing to perception/emergence of eustress	"[…] my attitude towards […], that you don't block off if there are more things to do."	17 (8.85%)

[14]

Influence Responsibility Others	giving someone a helping hand, affect someone	"[…] it is like positive stress. There were many phone calls shortly after each other in the last half hour before closing time, but I was able to help all customers calling. That was a good feeling to help those people."	16 (8.33%)
New Challenges	perceiving task as challenge rather than threat	"I try to see the daily things that lie ahead as not so negative, instead I think "There is something new lying ahead, and we will manage these things, together.""	11 (5.73%)
Appreciation Chief	receiving appreciation from chief/colleagues	"My chief complimented me several times […] for my work."	10 (5.21%)
Workload & Planning	proper workload or planning of tasks, workweek or working days	"[…] that you consciously choose on which tasks you do when."	10 (5.21%)
Rewards	receiving material incentives	"To receive appreciation for my work in the form of a compliment or a wage increase […]. It happens rarely, that one gets appreciated for his work, as well as financial […]."	7 (3.65%)
Long Term	perceiving gratefulness for the little things in life/mindfulness	"You have to find for yourself a smaller view for the little things in daily life. Because of that I think the whole day is experienced in another way."	7 (3.65%)
Leisure Time	eustress through or in leisure time	"I also experience eustress in my leisure time, when I work as a football trainer."	5 (2.6%)

[15]

Reactions	Positive emotions	experiencing positive emotions, mood changes	"I feel being in a better mood."	23 (11.98%)
	Enhanced concentration	being able to concentrate better, being in focus	"I am more interested in all kinds of things and I can grasp clear thoughts. I am faster in processing information."	18 (9.38%)
	Physical reactions	physical reactions to eustress	"[…] adrenaline level rises, blood pressure rises, goose bumps everywhere."	13 (6.77%)
	Enhanced physical energy	reporting to have more energy, feeling more balanced	"After a successful working day, I have the energy to do something else after work […]."	3 (1.56%)
	Lack of self- care	eating/drinking less, not taking time- outs	"I would say I even drink less when experiencing eustress."	3 (1.56%)
Total				**192 (100%)**

DISTRESS

Circumstances

	Workload	lack of staff/too many tasks	"[…] simple too much, an overload"	34 (15.18%)
	Time	too little time to accomplish tasks	"When there are sudden changes in workflows, for example if a resident does not cooperate or how you want him to cooperate, you get in time pressure."	28 (12.5%)
Work Pressure	Work Pressure	pressure from chief/colleagues	"After work, the phone rings at 6:30 a.m.: "Did you this, did you that, can you do that?"	23 (10.27%)
	Colleagues	arguments/trouble with colleagues	"There were 5 patients staying over. In the afternoon, my chief came in and asked, "What is happening here?" and I was	14 (6.25%)

[16]

			trying to explain to her, but I had no chance […] Then she was like "Why didn't you accomplish this, others did it well."	
	Customers/ Patients	arguments/demands of customers/patients	"Everything is fast- paced; everything has to be fast… I want to order today and tomorrow I want to have delivered the product."	13 (5.8%)
	Disturbances	disturbances, which hinder employee from working	"The continue interruption at work. I would rather finish one task and then start with the next one, but then someone asks again, and there is a phone call and suddenly you have to do 5 tasks at the same time."	10 (4.46%)
	Uncertainty	uncertainty, if performance is sufficient enough/ about tasks	"Am I doing it properly?"	13 (5.8%)
	Responsibilities	too many responsibilities	"[…] when you want to make some agreements or talk about the distributions of tasks. One colleague of mine has isolated herself once in a conversation with our chief and referred to the for her suitable amount of tasks and said, "I can't take more than 2 [patients]."	12 (5.36%)
Reactions	Physical reactions	physical reactions to distress	"Stomach trouble or feelings of inner heat, insomnia"	23 (10.27%)
	Loss of productivity	not being able to concentrate any longer	"When more tasks than time are around and that is going to be tight and then you can't concentrate any longer, even if you want to want to work longer […] you are knocked out anyway."	13 (5.8%)

[17]

Helplessness	having no control over the situation	"When you get the impression you can't do anything about the situation."	12 (5.36%)
Irritability	feelings of irritability, mood changes	"When I had a stressful workday, I want to go home be all alone at first to calm down, just for a few minutes, and then it gets better".	11 (4.91%)
Dissatisfaction	not being satisfied with workload, achievements	"If the pressure gets too high, you will make mistakes like forgetting to measure the blood pressure of the patients."	10 (4.46%)
Lack of self- care	eating/drinking less, not taking time- outs	"Of course I drink less when being confronted with distress."	8 (3.57%)
Total			**224 (100%)**
Irrelevant codes: 20*			

* Note. Codes were irrelevant for this study

Research Questions

1) *Under which circumstances* do employees perceive eustress?

Participants reported that they experienced eustress at work from two times per week to every workday. Coding categories relevant to answer the question as to under which circumstances do employees perceive eustress were "**Eustress Circumstances**" containing the 11 sub-codes "*Accomplishment*", "*Appreciation Chief*", "*Appreciation Customer/Patient*", "*Contact To Customers/Patients*", "*Influence Responsibility Others*", "*Leisure Time*", "*Proper Workload/Planning*", "*Rewards*", "*New Challenges*", "*Long Term*" and "*Others*". This category covered circumstances promoting the emergence of eustress. Since not all quotes were applicable to a sub-code, they were summarized in the sub-code "*Other*" (17 times).

The most frequently used code was "*Accomplishment*"(25 times) followed by "*Appreciation Customer/Patient*" (24 times). One of the participants gave a definition of accomplishment in conformity with all other participants: "[…] when I finish the from me

intended workflows and tasks in a rhythm which is good for me". Accomplishing tasks was often related to high demands or a lack of time: "Sometimes, there are many things that I have to do […], but I succeeded." or "Despite the time pressure, I succeeded in writing the letters I ought to. I actually did a good job." A strategy for the employees to accomplish tasks was to plan things. The quotes belonging to this topic were coded under the sub-code "*Proper Workload/Planning*" (10 times): "This means, I have a long list and when I am finished with one task, I can return to my schedule. By and by, the list gets shorter by applying a To-Do-List." By that, the employees have a greater feeling of control of the situation:

> "When a new task is coming in which may leads to distress, one has to find ways in order to keep the situation under control."

Further, new tasks were perceived rather as a challenge than as a threat (*New Challenges*; 11 times) by a few of the participants. Besides, applying this view to new tasks, the self- efficacy of the participants seems to have increased: "I have less fear of failure. I would say that I have more confidence to accomplish things; that it is worth the effort." The second most frequently coded topic contributing to the emergence of eustress was "*Appreciation Customer/Patients*", which uttered itself in compliments and confirmation of the customer or patient. Receiving appreciation by the chief or colleagues ("*Appreciation Chief/Colleagues*"; 10 times) played a minor role to the participants in contrast to the appreciation by a customer or patient: "To put it in a nutshell, the reason for experiencing eustress is the appreciation and compliments. It does not necessarily have to be the chief or something. Being complimented by the patients and to notice, that the work is worth it is already sufficient."

Another way to receive rewards except from compliments are financial incentives. These were coded as "*Rewards*" 7 times, thus a lot less important for the participants. Nonetheless, some participants mentioned them as an option for enhancing eustress.

Helping or affecting someone, "to experience and to witness, maybe to change someone's life, to improve it" was coded 16 times ("*Influence Responsibility Others*") and therefore an important aspect in experiencing eustress for the participants as well. A participant made a description of a situation, where she helped a patient:

> "I experienced once, that one resident [of the residential home where she worked] had something swallowed up, and as we found the reason what he actually swallowed up, it was namely a currant bun, we ensured, that the bun came out again and thereafter, his breath was recovered. This was a nice experience."

In the long-term ("*Long Term*", 7 times), participants reported to have a deeper sense for trivialities. Another participant stresses the importance to share success with others: "[…] to share such positive moments with others and not to keep them by yourself. One works every day in a team, so this positive stress can be transferred to others." Further, another aspect reported by a participant was to reflect oneself and remember situations that went well:

> "The reason why I experience this eustress is that I actively create these moments in which I experience eustress, thus I bethink a situation in which I succeeded."

Although it was not explicitly asked for leisure time as promoting eustress, 5 times the code "*Leisure Time*" was given, as some of the participants stressed the importance of it. They reported either to enjoy doing some sports or spending time with family and friends.

Some circumstances that encourage the emergence of eustress were not applicable to the sub- codes. Therefore, the sub- code "*Other*" was generated and coded 17 times. The most frequently mentioned topic here covered contact and support from colleagues as well as a good working climate: "I really like having contact with my colleagues and I want to get to know more about their experiences or to learn something from my colleagues." In addition, some participants talked about the importance of having a say in workflows: "I have worked pretty much until closing time, but it's done the way I wanted to do it. That's positive stress for me."

To sum up, circumstances contributing to the emergence of eustress mentioned by the participants can be described either in terms of an environmental circumstance or as an attitude towards distress. The participants differentiated eustress from distress in that circumstances perceived as distress could be altered by feelings of accomplishment and appreciation from customers or patients or social support as an environmental circumstance or having the attitude to see new tasks rather as a challenge than as a threat. Less important for the participants were leisure time and financial incentives.

2) ***How do employees perceive eustress?***

When it comes to the reactions upon eustress, the code group "**Reactions**" was created containing the sub- codes "*Positive emotions*" (23 times), "*Enhanced concentration*" (18 times) "*Physical reactions*" (13 times), "*Enhanced energy*" (3 times) and "*Lack of self- care*" (3 times). Experiencing positive emotions was an overarching topic present during the whole section of the interview about eustress. Participants described their emotions when experiencing eustress as "cheery", "satisfied", "joyful" or "proud" (coded as "*Positive*

emotions" 23 times). Concerning cognitive performance, which was coded as "*Enhanced concentration*" 18 times, one participant reported that he was not able to keep his mind off something, thereby describing a state of being in total focus. Others described being interested in much more: "I can focus more on things and work more concentrated". The participants described the physical effects (coded as "*Physical reactions*" 13 times) of eustress in positive terms, such as for example "I feel more vital, vigorous and productive" although "the stress symptoms are the same as to distress at first sight, you are tensed and an acceleration of the vegetative system." Furthermore, participants reported to be more energetic in that they more often go out in their leisure time (coded as "Enhanced energy" 3 times). Behavioural reactions to eustress were only coded three times as "*Lack of self- care*", saying that reactions to both eustress and distress are similar, since these are both straining situations: "I would say that I probably drink less and eat less when I have both kinds of stress. Participants are more energetic in that they more often go out in their leisure time, but on the other hand, one participant notes that he treats himself after a long workday with some sweets or alcohol.

Overall, participants described reactions to eustress in positive terms. Participants related especially positive emotions to the emergence of eustress and reported them during the whole interview section about eustress. Almost even important for participants was an enhanced productivity, which uttered itself in an increased concentration and increased task-focus. Remarkable was, that a lack of self- care behaviour is described when experiencing circumstances leading to eustress or distress respectively.

3) *Under which circumstances do employees perceive distress?*

In order to answer the research question under which circumstances employees perceive distress, the code group "**Distress Circumstances**" containing the sub- codes "*Time*", "*Colleagues*", "*Customers/Patients*", "*Workload*", "*Responsibilities*", "*Disturbances*", "*Work Pressure*" and "*Uncertainty*" were employed. Further, circumstances perceived as distress were accelerating each other resulting in even more perceived distress. The participants stated that they experienced distress pending on a daily basis.

The most frequently used codes regarding circumstances contributing to the emergence of distress were "*Workload*" (34 times) and "*Time*" (28 times). One participant described workload as "the demands overexert my temporal abilities and my abilities as a whole." Two participants described the experienced workload in relation with time factors: "And when you don't get things done on a usual workday, then you do it voluntarily on

Saturdays, just to have a clean work desk, not to fall in stressful situation on Monday again."
Alternatively, "When the first faxes arrive in the early morning and you didn't have a chance to organize yourself for the day and then, the next tasks come in as well."

"*Time*" played a crucial role for the participants as well, since "[...] you have a specific workflow you have to stick to, so you have to stick to the schedule as well." Five times, the failure to accomplish something, may it be due to the time limit or the type of task demanded was explored:

> "When all of a sudden 6 or 7 intakes are coming, and we have to be absolutely finished, because the doctor wants to see the patients for a talk, the responsible therapist wants them for a talk, and we cannot accomplish this in the given time frame."

It is not only the workload and time, which provoke distress, but also the pressure at work (coded as "*Work Pressure*" 23 times). Participants describe work pressure mainly in terms of demands of others:

> "I can't say to a client that he shouldn't build his house or that he shouldn't open his business. I have to do it at times in which the client wants it; I don't have any influence on that."

Because of work pressure, workload and conflicts with others, four participants put their abilities into question. In response to the uncertainty and self- doubt the participants reported, the code "*Uncertainty*" was created containing 13 quotes. One participants described uncertainty as a sort of vicious circle:

> "[…] that the work that I'm doing is not sufficient, self-doubts emerge, and when I get feedback then, that the tasks were not settled as intended, or I get further requests, or have to explain myself time and time again, then this is pressure from the exterior, which led to further self- doubts and even more distress."

Two others pointed out reasons in their personal development as evoking distress: "I have difficulty in saying what I want to and what I don't." „And "What I am not able to yet is the courage to decide things on my own."

Much distress in relation with workload is reported to be due a lack of staff: "When there is staff absent, the same amount of work has to be done by less staff." On the other hand, "When I have many appointments that week or it is a short week because of holidays or colleagues are absent, then you compensate in a smaller time frame." The same holds for

situations with representatives: "[…]the more or the narrower the time schedule is or representative situations join in, time pressure, appointments, then there is more distress."

The participants also perceived incidents, which hindered them from working as stressors contributing to distress. These incidents were coded as "*Disturbances*" 10 times in total. One participant gave a description of disturbance in his daily working live in accordance with the other participants even among working sector:

> "[…] because you get disturbed at any time. Then there is a phone call, then you have to interrupt your work, when you start again you have to think, "Where did I leave off?" Then you have just started continuing with your work, then someone enters the room and asks something stupid and you have to answer it."

One other participant contributes disturbances to a lack of staff: "A reason for disturbances and having to do many tasks at the same time is mainly due to the lack of personnel. If we would have more personnel, then you can delegate much easier and the stress- level would shrink." Conflicts with colleagues were more often coded (14 times) than conflicts with customers or patients (13 times). One participant noticed that most of the conflicts arise due to other sources of stress, such as the distribution of responsibilities, the comparison with others, or the workload the employees have to take themselves:

> "I noticed that in our company the colleagues put stress on each other, they make one another responsible for the things that did not go well."

Colleagues, which were already stressed out themselves, were prudent in accomplishing their tasks, even though not concerning the workload of colleagues: "And then, the doctor calls and asks where the patient is and I get pressure from all sides and all of my colleagues keep saying "finish up, finish up, finish up!".

Another reason why conflicts arise is the distribution of responsibilities: "[…] because I am often made responsible for things for which I am actually not responsible for. And when I do not process these tasks, I will experience stress again." Therefore, the code "*Responsibilities*" was coded 12 times. The participants handled responsibilities mainly in two ways: The first group of participants was able to isolate themselves from workload and responsibilities in order to not to get the distress out of control (7 codes), for example "[…] and when things are left behind, then this is simply the case." On the other hand, there were participants taking their profession and the demands they have to fulfil very seriously (five codes): "It is straining for me, because I take my profession serious and I want to fulfil everything which is demanded from me with all of my energy."

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Conflicts with customers or patients played a minor role in evoking distress. Yet, the code "*Customers/Patients*" was coded 13 times, covering topics from the fast-paced society to demands. There is a difference between employees offering material products and employees offering help. On the one hand, "you also receive the feelings of a patient, or feel empathy for them. That is burdensome as well." Further, one participant claims the fast- paced society and the demands of the customers as a circumstance contributing to distress: "the pressure on behalf of the customers rises as well… I would say the time a machine takes to finish a task, thus from order to delivery, they get shorter and shorter. The customer wants less time and that is a load for the company as well as for the employees."

To conclude, participants made a mixture of especially workload, time and work pressure responsible for the emergence of distress. Though willing to work conscientiously, all participants reported having too much tasks to accomplish in too little time with too little personnel. Furthermore, they pointed out that there is a negative spiral among employees. Often, work demands for one employee are said to be transferred to other employees in order to relieve oneself, resulting in even more distress among the whole team. Others explained the experienced distress by the fast- paced society, in which companies and customers demand for steadily more performance in ever little time without hiring more staff.

4) *How do employees perceive distress?*

The code group "**Reactions**" was responsible for the ways *how* distress is perceived. This code group contained the sub- codes "*Physical reactions*" (23 times), "*Loss of productivity*" (13 times), "*Helplessness*" (12 times), "*Irritability*" (11 times), "*Dissatisfaction*" (10 times) and "*Lack of self- care*" (8 times). All of the participants described unpleasant physical reactions (coded as "*Physical reactions*" 23 times), such as "inner restlessness, nervousness" or being "more rushed, transpiring, restless sleep" resulting in "a tiredness, a loss of energy, not being motivated, here and there physical pain, thus muscles hurt, sinews hurt, the head hurts, thus headaches, or ear noises". Further, two of them noticed a change in their vegetative systems: "Pulse rises, blood pressure increases". Regarding cognitive performance, three participants reported a loss of concentration, coded as "*Loss of productivity*"13 times, though trying to compensate: "And when my concentration is already impaired, I have to raise energies to shove it aside." Further, a feeling of helplessness was coded 12 times, like "The feeling of no control, "I don't have an influence", that is the worst or has the worst impact." Another cognition is a feeling of dissatisfaction, which was coded 10 times: "Getting into an

inner conflict like "I cannot work more than I am able to"." Participants pointed out, that they are feeling more irritable (coded 11 times), having a bad mood and withdrawn when experiencing distress, like one participant experienced a "guilty conscience and disappointment because I'm getting more touchy and aggressive." This goes often along with difficulties in calming down after work, such as one participant stated in accordance with four others: "I have difficulty to calm down after work because I often think about "What did I do today, did you check everything, and did you register everything." Because of that, my work accompanies me to a certain extent to my home." When it comes to behaviour, three participants stress the lack of self- care behaviour when experiencing distress, coded as "Lack of self-care" 8 times: "Sometimes my self- care suffers; I drink less and eat less or eat more sweets, which makes me unsatisfied on another dimension." Alternatively, "Alcohol is an opportunity to calm down, to relax with a glass of wine, to get tired."

In conclusion, participants described the experience of distress mainly in negative terms, which do not only have an effect on the participants during working hours. To put it concisely from the view of the participants, distress affected concentration and productivity the most, while having various negative physical effects like pain or insomnia. Another important reaction to distress was a negative mood change. Noticeable was as well, that participants described similar physical reactions and a lack of self- care behaviour to both types of stress.

4. Discussion

The aim of this study was to examine under which circumstances eustress and distress occur and how individuals react to them. Many circumstances evoking the emergence of eustress and distress have already been examined in earlier research (e.g. Michie, 2002; Nelson & Simmons, 2007). Participants stated to be confronted with distress a lot and described to alter this experience by feelings of accomplishment or appreciation or having a more positive attitude towards new tasks. Regarding the reactions to eustress, participants mainly stressed the role of positive emotions when experiencing eustress as well as enhanced productivity, having control over the situation, being more in focus or enjoying new challenges. When it comes to the circumstances promoting the experience of distress, participants deemed a mixture of workload, time and work pressure to be responsible in the emergence of distress and reported to experience a negative spiral among colleagues, in which job demands are transferred to other colleagues, leading to even more perceived distress due to the fast- paced society. Participants described their reactions to distress in negative terms, such as a loss of

productivity and concentration, negative mood changes or physical symptoms like pain or insomnia. When comparing the reactions to eustress and distress, the same physical sensations have been reported as well as a lack of self- care behaviour.

Overall, non- material rewards, confirmation and a good working climate contributed according to the participants to the emergence of eustress. Participants described that circumstances perceived as distress could be altered by feelings of accomplishment, appreciation from customers or patients, social support, or by having a more positive attitude towards new tasks. Regarding circumstances contributing to the emergence of eustress, the most reported one was accomplishment, thus finishing tasks. Achieving work goals is reported to have an important influence on the emergence of eustress (Bakker and Demerouti, 2007). Together with circumstances stimulating growth, learning and development, accomplishments are referred to as job resources promoting eustress as described in the job demands- resources [JD-R] model (Bakker, Demerouti, de Boer & Schaufeli, 2003). Job resources can compensate for the negative effects job demands can entail (Bakker and Demerouti, 2007). The second most important circumstance for participants in experiencing eustress was receiving appreciation from customers or patients, which is not described explicitly in previous literature. The participants strived for confirmation of the customers or patients in order to get to know if they are working in the right place. Another circumstance deemed important for the emergence of eustress was social support from colleagues. Participants liked sharing their accomplishments with others or spend time with colleagues in their leisure time, which goes in line with earlier literature stressing social support as the most important buffer against distress (Haines, Hurlbert & Zimmer, 1991)   .

When it comes to the reactions to eustress, participants reported to be more in focus at work when experiencing eustress. Research by Salanova et al. (2006) also stresses this focus, described as *flow*, as an important part in the perception of eustress as well as *savouring*, which is described by all participants as to enjoy the little things at work. The former is described as the ultimate eustress experience, a time zone in which individuals lose themselves in activity and perceptions of time (Csikszentmihalyi, 1996), whilst savouring is defined as actually "enjoy with appreciation this positive response to demands they [employees] have to encounter at work" (Cooper, 2005; p. 74). It is not about just coping with stressors, but rather about "enjoying certain types of eustressful stimuli" (Hargrove et al., 2013, p.66). Furthermore, Salanova, Bakker and Llorens (2006) stressed, that work- related flow deals with work absorption, work enjoyment and intrinsic work motivation.

Feelings of growth, development and mastery (Quick et al., 1997) lead to positive

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experiences and positive emotions, which have been described by the participants during the whole interview concerning eustress. These positive emotions broaden the individual's awareness, cognitions and are even able to undo the cardiovascular aftereffects of negative emotions as stated by Fredrickson (2001) in her theories about the *broaden- and undoing- effect*. Resilience is an important aspect of positive emotions, in that it enables the individual to regenerate more quickly after a negative stressful event (Scheer & Withaar, 2013). Furthermore, positive emotions even facilitate creativity and flexibility in that they enable the individual to take different perspectives in order to achieve a goal and by that, promoting the individual's self-efficacy (Bandura, 1977). Over time, this broadened sense of creativity and flexibility and their actual actions in practice build resources of help and knowledge in the long- term; this is called the *build-effect* (Fredrickson, 2001). These resources can be applied in the future to deal with a stressor (Bohlmeijer, Bolier, Westerhof & Walburg, 2013) and therefore increase the chance of growth of the individual. If this is the case, the individual feels challenged, more optimistic and is more able to deal with setbacks when facing a stressor (Bolier, 2012). This goes in line with the reported positive attitude towards new tasks. When conducting the interviews, most of the participants had no clear idea how they could promote their daily amount of experienced eustress. This may be due to the focus on distress rather than eustress and that participants do not face up with eustress in their daily lives.

Regarding the JR-D model (Bakker et al., 2003); job demands promoting the emergence of distress can be described in terms of work pressure, emotional demands, and role ambiguity (Doi, 2005). The most important job demands in this study promoting distress were *Workload* and *Work Pressure*. Research by Bickford (2005) pointed these circumstances out as well in that they play an important role in the emergence of distress. The participants often mentioned *Time* as well, which was often related to *Workload* and *Work Pressure*, as supported by research from Kälvemark, Höglund, Hansson, Westerholm and Arnetz (2004). Wallace (1997) supports the relation between time pressures, work pressure and work overload in the emergence of distress. As a main reason for that, the participants reported a lack of staff. When working conscientiously as many participants reported, it may be that they simply needed more time to process than was actually scheduled. A lack of time to accomplish tasks may thus also be due to an insufficient time management of the participants in combination with a lack of staff. Circumstances, which are not elaborated directly in previous literature, yet found in this study, were *Disturbances*, which hindered the participants from working and *Uncertainty*, which uttered itself in self-doubt of the participants asking themselves whether they did their work right. According to the

participants, another circumstance evoking distress is the reciprocal impact stressors have on employees, because of carrying *Responsibilities* further. If one employee perceives distress because he is not able to accomplish his own tasks, he transfers job demands to other colleagues. By doing so, he tries to complete the remaining tasks in a proper way. This results in a negative spiral, resulting in many employees experiencing distress. This negative spiral can also be due to a poor task allocation, in which tasks are not distinct enough for employees, so that misunderstandings and shoving aside from responsibilities may occur. Because of that, arguments with *Colleagues* are to occur more frequently.

All participants described the reactions to distress in terms of a lack of concentration, control and an imbalance as confirmed by Spector and Jex (1998). Most of them were aware, that there is no actual difference in the physical sensations to the stressors responsible for the emergence of distress and eustress, but described their reactions to them as different from each other, which is in line with the stress mindset theory (Crum, Akinola, Martin and Fath, 2017). This theory differentiates between a stress- is-enhancing mindset and a stress- is-debilitating mindset. The former holds the mindset that stress has enhancing consequences for the individual, whereas the latter stresses the debilitating consequences, resulting in a loss of performance and productivity or health and wellbeing. Both mindsets are related to shape the stress response. Because of that, the perception and evaluation of a stressor determines the stress response as reported earlier (Lazarus and Folkman, 1987). The participants described the same physical arousal to both types of stress, but described their reactions to distress in a more negative way. This goes in line with Hans Selye (n.d., p. 15), who states, "During both eustress and distress the body undergoes virtually the same nonspecific responses to the various positive or negative stimuli acting upon it." However, the participants reported physical reactions to distress twice as much as to eustress. Because of the many existing models trying to explain the notion of distress and interventions trying to decrease distress, the focus of psychology, media and organizations was mainly on distress instead of eustress (Gable & Haidt, 2005). Hence, the participants did not occupy themselves with the effects eustress has on their body and were thus little aware of the effects eustress can have.

Bakker and Demerouti (2007) state that job resources do not necessarily have to relate to job demands, but that they are inherently important. Hence, different codes for the circumstances contributing to distress and eustress were used. Since the participants were free in formulating their answers and did not receive any suggestions, circumstances contributing to distress mostly did not evoke eustress and the other way round according to the participants. This may be due to the perceptions of the participants, viewing distress not as the

opposite of eustress, but as something different. Although eliciting the same physical arousal, distress and eustress are assumed to be different and distinct from each other (Selye, 1987).

Strengths and Shortcomings

One strong point of this study was the content the coding scheme covered. It particularly offered a good overview about when eustress and distress are perceived as well as about physical and mental reactions to both experiences. The participants of this study had no further questions, they understood sufficiently what was asked from them, and were motivated to contribute to the results, which actually represents the quality of the questions asked and the relevance of this topic.

Since the sample consisted mainly of participants familiar with the concept of distress and eustress because of their education, they were possibly aware of what the study was about and therefore just tried to answer the research questions. Others may have responded in social conformity, but since the participants came out of the researchers' social environments and did not receive any incentives for their attendance in the semi- structured interviews, their motivation was of intrinsic nature (Ryan, 2000). Besides, all of them wanted to be informed about the development and results of this study, which represents their motivation to participate as well. The motivation of the participants was thus a strength of this study as well.

The coding scheme contained many circumstances retrieved from the participants as from relevant current literature. Deleting codes, creating new codes and adjusting codes was a task enduring for the whole period of data analysis and still, some adjustments should be made. As mentioned earlier, there were different codes in the circumstances concerning distress and eustress. For example, the code "Other" belonging to circumstances leading to eustress is not created for distress and hence some answers not belonging to any other code were left out. This point attracted attention not until the results were brought together and seven codes were found about social support, for which no code was generated. Further, many quotes regarding distress were double coded, because the codes were not delimited sufficient. Especially *Workload* was double coded with *Work Pressure*.

Although the opportunity sample taken varied by age, it did not with regard to education and socio- economic status (SES). All of the participants were high or at least middle educated and thus worked in a higher profession. Because of that, employees working in lower education jobs were not taken into account as well as employees having a lower SES, resulting in a selection bias because the sample was conducted too unilaterally. Due to the homogeneity in the sample regarding education and SES and the small sample size (N=10),

the results hardly represent the whole population and are not generalizable as such, but rather serve as a direction for further research.

Lastly, it should also be noted that the researchers had difficulties translating the German quotes into English ones, because the German quotes were complex in nature and had a difficult sentence structure, which was not easy to translate. Temple and Young (2004) supports this dilemma of translation difficulties in qualitative research. Because of that, one native English-speaking individual might find other meanings in the quotes worked out in this study.

Recommendations

To enhance the reliability of further research, more in depth- questions to measure smaller entities instead of whole constructs could supplement the semi- structured interviews. McVicar (2003, p.635) reports that "temporal changes in the sources of stress might also be anticipated, as working conditions are not static." Due to that, occupational stress is a dynamic construct, which changes under certain conditions. In order to grasp as much as possible responses, the semi- structured interviews could be held over a longer period by performing an intensive longitudinal method. Following this, repeated measurements could be taken from the participants (Bolger & Laurenceau, 2013). Further research should combine these repeated longitudinal measures with repeated physical measures in order to find a relation between perceived eustress or distress and physical arousal.

Noticeable was, that the participants showed different behaviours and response patterns while conducting the interviews. Because of that, further research could examine third variables like personality or mental health status beforehand. Research by McWilliams, Cox and Enns (2003) states, that personality, major depressive disorder and the way of coping are linked to the experience of distress. By assessing the individual characteristics and mental health of the participants, the first step could be set to examine individual differences in the cognitive processes of perception, interpretation, coping and ultimately the stress response more explicitly. Further, Mesurado, Rachaud and Mateo (2015) found out, that cultural factors alter the perception of eustress. Therefore, it may have an added value for further studies to assess the origin and culture of the participants as well.

Regarding the coding scheme, some adjustments must be made in order to make the concepts of eustress and distress more comparable. By this, it is meant that the coding schemes for both eustress and distress should measure the same dimensions to form a

comparison. The codes covering distress were not delimited to a sufficient extent despite continual adjustments. This was due to the limited timeframe of this research.

Conclusion

In times, where pressure to achievement, productivity and a fast- paced society have a leading priority, it is no longer sufficient to focus on distress and its negative effects on physical and mental health, but to look at the positive effects of stress as well. In order to get a better grasp of the underlying causes of distress and eustress, this study provided an overview of circumstances contributing to both types of stress as well as the reactions to them. Not only individual coping strategies play an important role in experiencing eustress, but also the circumstances the individual is exposed to. Since the results have shown that these circumstances interact and influence each other, a circumstance should not be seen as distinct from other circumstances contributing to the emergence of both types of stress respectively, but rather as a mixture of various and changing circumstances.

Because of that, different circumstances instead of a single circumstance promoting eustress found in this research, such as appreciation or accomplishments, should be encouraged and created in companies, while circumstances contributing to the emergence of distress, such as workload, a lack of time and work pressure should be reduced. As the physical arousal accompanying eustress and distress were reported to be the same, these constructs can be seen to have the same point of origin, yet there are more positive reactions to eustress and more negative ones to distress. Companies and health insurances should stress the importance and promote the awareness of both kinds of stress as well as how to deal with stressors not only at the workplace. By doing so, individuals could be made more sensitive about their own and others' level of eustress and distress and with that, individually finding strategies to enhance eustress while minimizing distress at work and at home. Further research can dig deeper into the circumstances found in this study for the purpose of promoting wellbeing and preventing mental disease and burnout at work and increase productivity as a profit for both employees and companies.

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6. Appendix

A) Translated Semi- Structured Interview

INTRODUCTION

Hello! First of all, my colleague and I would like to thank you, that you made time for participating in our study. We are conducting interviews with different participants; you are one of them. Of course, your answers will be treated anonymously, but it is your choice, which questions you answer and to what extent. There are no right or wrong answers. You can abort this interview at any time if you don't feel comfortable. This interview is scheduled to endure about 60 minutes, but this depends on how much you can or like to tell us.

Our study within the scope of our Master study "Positive Psychology and Technology" at the University of Twente deals with the topic of work stress and how it is perceived and experienced by employees. Our aim is to determine in which situations and to what extent employees perceive stress in their daily working lives. Therefore, we try to examine strategies and conceptions, how this stress can be avoided and productivity and wellbeing can be enhanced. You as participant are an important part of this study.

Also, we focus on the positive part of stress. This means, that one can take positive aspects out of stressful situations as well. To this more information later on.

DISTRESS

In the following, I will ask you some questions to the topic stress and when and how you experience it. It is important at that point, that we differentiate between two types of stress, namely negative stress, the so-called distress and positive stress, also referred to as eustress.

When we talk about "stress" in our daily lives, mostly we mean a negative, unpleasant perceived state of tension, the so-called distress. Distress is defined by Hans Selye (1976) as a state of overload, for example overextension at work, thus negative stress.

1.1. So far, is the concept of „Distress" clear to you?

1.1.1 If no: Okay, then I will give you another example of distress. Distress emerges when you are in a situation in which you have the feeling, that it is asked too much from you. For example, if you have many things to do at work, but no sufficient time to finish them. In such a situation, you can experience negative tension. Then, we refer to it as distress. Is it clear now?

1.2. Could you give me your definition of how you would define distress?

1.3. How many times do you experience distress per week?

1.4. Could you tell me about some situations, in which you experienced distress?

1.4.1. (optional) Could you give us a detailed explanation of a situation in which you experienced distress?

1.5. How does distress influence your daily life?

1.6. How do you react to distress?

What happens to your body? Your thoughts? Your feelings? Your behaviour?

1.7. What do you personally do to reduce the effects distress has on you?

1.7.1. Can you cope with distress in this way?

1.8. In your opinion, what makes you experience distress in certain situations?

1.8.1. What exactly is the reason for distress in these situations?

1.9. In your opinion, what could be changed in your daily life in order to reduce distress?

EUSTRESS

Now it is time to look at your experiences with positive stress. As already mentioned, when we talk about stress, we do not always mean distress by that, but eustress as well. In how far straining situations become negative stress does depend on the length of tension, as well as on the individual coping strategies and experiences from earlier situations, but also on your perceived coping abilities, thus the perceived self-efficacy. If the ability and skills are existent to manage the demands and if you have the opportunity, to release the physical and mental energies, then we talk about positive stress, thus eustress.

2.1. So far, is the concept of „Eustress"clear to you?

2.1.1. If no: Okay, then I will give you another example. Eustress can occur when you have the feeling that you can handle all your responsibilities well. For example, when you have a lot to do at work, but you are able to finish all your tasks with satisfaction. In such a situation, you can experience a positive tension. In that case, we refer to eustress. Is it clear now?

2.2. Could you give me your definition of how you would define eustress?

2.3. How many times do you experience eustress per week?

2.4. Could you tell me about some situations, in which you experienced eustress?

    2.4.1. (optional) Could you give us a detailed explanation of a situation in which you experienced eustress?

2.5. How does eustress influence your daily life?

2.6. How do you react to eustress?

What happens to your body? Your thoughts? Your feelings? Your behaviour?

2.7. What do you personally do to enhance maintain the amount of eustress? Does it work?

2.8. In your opinion, what makes you experience eustress in certain situations?

    2.8.1. What exactly is the reason for eustress in these situations?

2.9. In your opinion, what could be changed in your daily life in order to enhance?

QUESTIONS ABOUT WORK

So much for stress. Now I would like to ask you some questions about your profession and your work. This information can help us to identify factors that possibly are related to the experience of eustress and/or distress at your workplace.

4.1. For this purpose, I would like to you know how long you are already employed?

4.2. In which profession?

4.3. And which position?

4.4. Since when?

4.5. How many hours do you work in an average work week?

    4.5.1. Overtime as well?

4.6. How many vacation days do you have in a year?

4.7. How do you experience the working climate at your work place?

4.8. On a scale from 1 to 10, how satisfied are you with your work?

    4.8.1. Why?

At the end, I would like to ask you some general questions.

5.1. How old are you?

5.2. What is your marital status?

5.3. What is your living and housing situation?

END

We are now at the end of the interview.

5.1. How did you experience the interview?

5.2. Do you have any remarks?

5.3. What do you take home from the interview?

5.4. Would you like to be informed about the findings and conclusions of our study?

→ If so: Then I will add you to our e-mail list.

Thank you very much for your participation. Have a nice day!