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Faculty of Behavioural, Management and Social  
Sciences (BMS)

## **Ways to deal with stress: A mixed-method study comparing flourishers and non-flourishers regarding their coping approach**

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## ABSTRACT

**Introduction:** The field of stress receives increasing attention in the news, in health classes, in entertainment media and in the workplace. Research studies indicate that stress is associated to the six leading causes of death (heart disease, accidents, cancer, liver disease, lung ailments and suicide). Positive psychology as a relatively new area in psychology, also receives increasing attention. Positive psychology focuses on raising knowledge about health-promoting factors, rather than illness-promoting factors. The term ‘flourisher’ is used in positive psychology to describe a person with flourishing mental health. At the moment, it is very less researched if flourishers differ in their way to cope with stress from those who do not flourish. To close this gap, the following mixed-method study has been conducted with the main aim to investigate differences between flourishers and non-flourishers regarding their coping strategies, coping resources and mindsets about stress.

**Methods:** Semi-structured interviews were employed to keep data collection as close as possible to the daily life situations and to put emphasis on the perspective of participants. The Perceived Stress Scale (PSS) was used to ensure that only participants with a substantial level of stress were considered. The Mental Health Continuum – Short Form (MHC-SF) was utilized to categorize participants as either flourishers or non-flourishers. The sample consisted of twelve adults (seven German/five Dutch) with a mean age of 39.08 (standard deviation 14.70). Their age ranged from 26 to 71 years.

**Results:** Flourishers had (compared with non-flourishers) coping resources such as self-compassion, acceptance and optimism in a greater extent available, were using much more often active coping and cognitive restructuring. Flourishers’ mindsets about stress could be characterized as willingly to face difficulties and recognizing positive aspects of stress. The MHC-SF revealed that six of the twelve participants were flourishing (three of the seven women and three of the five men) and six were moderately mentally healthy.

**Conclusions:** It is still not known if flourishers and non-flourishers were differing in the effectiveness of coping approaches and in which extent. It can be assumed that flourishers were more able to keep a positive emotional state in the condition of stress and were therefore influencing their stressor appraisal in a beneficial way. Moreover, this might have helped them to keep more of their coping strategies repertoire available in a stressful situation.

**Keywords:** *Stress, flourishing, coping strategies, coping resources, mindset about stress*

## 1. INTRODUCTION

The following thesis summarizes a cross-sectional mixed-method study about participants' different approaches to cope with stress. The conducted study has the primary objective to investigate differences between flourishers and non-flourishers concerning their coping approach. More specifically, the coping approach includes in this study ones' coping strategies, coping resources and mindsets about stress. Participants with a flourishing mental health are considered as flourishers. Firstly, the terms flourishing and stress will be introduced. Subsequently, research about typically used coping strategies will briefly be summarized. Thereafter, the construct mindset about stress and the three coping resources acceptance, self-compassion and optimism are picked out as central themes. The construct mindset is chosen due to earlier research that emphasizes the importance of a positive mindset as a crucial factor of one's stress response. The mentioned coping resources are taken into account due to their positive impact on emotional wellbeing (optimism and self-compassion) and the therapy of chronic pain (acceptance). In detail, these findings are further discussed below. Given that flourishing indicates high levels of wellbeing, the constructs optimism and self-compassion appear crucial to explore in this study. Seeing that acceptance has a positive impact on chronic pain (which is often accompanied by intense distress), also the construct acceptance appears reasonable to explore in the field of stress research.

Using interviews as primary research instrument, the emphasis of this mixed-method study is on the qualitative approach. Given that the reaction to stress is subjective and very individual, any further investigation of stress should be done qualitatively through narratives in order to understand the lived experiences of participants (Bryman, 2016). Therefore, the study is mainly based on information from interviews to extract the quality of e.g. a participant's individual mindset about stress. A quantitative approach would be too limited to investigate why e.g. a certain coping strategy is used. It would only be possible to investigate which strategies are used and in which extend, but not why and how exactly. To fill this gap, the qualitative approach is chosen as main method to collect data. Additionally, the field of stress is too complex to understand by means of data that is quantifying the subject. In contrast, qualitative methods are adapting to the participant and allow staying more close to the daily life situations. Using a quantitative questionnaire, the participants would be forced to answer with prepared items. Therefore, individual coping strategies which are not part of the questionnaire could not be encompassed.

After the primary terms flourishing and stress are introduced and relevant research findings are summarized, the research question will be formulated.

While the presence of mental health is described as flourishing, the absence of mental health indicates languishing in life (Keyes, 2002). A widely accepted approach to the investigation of mental health (Keyes, 2002) divides mental health into three components: emotional wellbeing (extent of presence of positive emotions and absence of negative emotions), psychological wellbeing (extent of self-realization) and social wellbeing (extent of feeling connected to others and contribute to society). Flourishing people live within an optimal range of human functioning, associated with wellness, performance, growth, generativity and resilience (Fredrickson & Losada, 2005; Larsen & Prizmic, 2008). A flourishing person functions well psychologically and socially (Keyes & Haidt, 2003) and experiences vitality (Spreitzer, Sutcliffe, Dutton, Sonenshein & Grant, 2005). According to Diener et al. (2010) people flourish when they experience major aspects of social-psychological functioning such as optimism, self-acceptance, relatedness and having supportive and rewarding relationships. Furthermore, a key factor of wellbeing and flourishing is keeping a balance of positive and negative affect (Diehl, Hay, & Berg, 2011). Michalec, Keyes and Nalkur (2009) add the aspect that flourishers are free of mental illness. Flourishers are more satisfied in life, more resilient and more productive than people who do not flourish (Diehl et al., 2011). Flourishing can be measured by means of the Mental Health Continuum (MHC) questionnaire. High levels of mental health indicate flourishing. The Short Form (MHC-SF) consists 14 items and measures emotional, psychological and social wellbeing (Westerhof & Keyes, 2010). Keyes et al. (2008) explored with a sample of 1050 participants from South Africa that 20% were flourishing, 67.8 % were moderately mentally healthy and 12.2 % were languishing.

The term stress can be defined as a change in one's physical or mental state as a response to situations (stressors) that represent challenge or threat (Zimbardo, Weber, & Johnson, 2003). The first stress concept 'General Adaptation Syndrome' (GAS) came from the endocrinologist Hans Selye (1936). His concept included three phases: alarm, resistance and exhaustion. After identifying a stressor one's body produces adrenaline and turns into a state of 'alarm'. If stress becomes persistent, the body turns to a state of 'resistance' using mechanisms of stress protection and defence. During a state of 'exhaustion' one is unable to maintain normal functioning. Selye (1936) distinguished also between the two types of stress eustress and distress. Stress may enhance functioning for example through challenging work

and appears as eustress. If stress becomes distress, it is persistent and is not resolved through coping or adaption. Distress can lead to illnesses, e.g. escape (anxiety) or withdrawal (depression) behaviour (Kranner, Minibayeva, Beckett, & Seal, 2010). Whether a stressor has a positive (eustress) or negative (distress) effect may be appointed by the balance between tolerance and sensitivity (Kranner et al., 2010).

In our present society stress has a predominantly poor reputation. It has been described in a negative light in the news, in health classes, in entertainment media and in the workplace. It is regarded as dangerous, annoying and inconvenient. Furthermore, stress has been seen associated to the six leading causes of death (heart disease, accidents, cancer, liver disease, lung ailments and suicide (Schneiderman, Ironson, & Siegel, 2005). Stress is also causing absenteeism from work, increased medical expenses and loss of productivity (Atkinson, 2004). Under stress, it is more likely to behave aggressively, to cause relational conflicts (Bodenman, Meuwly, Bradbury, Gmelch, & Ledermann, 2010) or to suffer of depression, cognitive impairment and other mental illness (Hammen, 2005; Wang, 2005).

In order to gain a deeper understanding of the mechanisms behind stress, the transactional model of stress and coping of Lazarus and Folkman (1984) will be introduced. Their model indicates that the stress and coping process starts with environmental stressors that have to pass the perception filter of a person in order to cause a reaction. When faced with this stressor one has to range it as dangerous, positive or irrelevant (primary appraisal). In case the stressor is ranged as positive or irrelevant, the process stops without having to cope. In case the stressor is assessed as dangerous, available coping resources have to be analysed (secondary appraisal). Also at this stage, the process is ended when resources are experienced as sufficient. Only if the own coping resources are analysed as insufficient the stressor is successfully causing stress that has to be coped. On the third stage of this model (Coping) one has to choose for a coping strategy that is either problem-focussed (change situation itself) or emotion-focussed (change relation to the situation). The results of this mixed-method study will later be related to this model.

The following paragraph specifies coping strategies that are generally known yet in the field of stress. The Brief Coping Orientation to Problems Experienced (Brief COPE) inventory is a questionnaire to measure typically used coping strategies. The questionnaire comprises the following subscales: active coping, planning, positive reframing, acceptance, humour, religion, emotional support, instrumental support, self-distraction, denial, venting, substance use, behavioural disengagement and self-blame (Steinhardt & Dolbier, 2008).

Coping strategies are traditionally categorized in problem- and emotion-focussed coping. Problem-solving factors such as active coping and planning are similar to what is usually conceptualized as problem-focussed coping. Avoiding factors such as denial, behavioural disengagement and self-blame are commonly conceptualized as emotion-focussed coping (Steinhardt & Dolbier, 2008). In a concrete example of a research study with 264 students, the coping strategies were sports, music, hanging out with friends, sleeping and going into isolation (Shaikh et al., 2004).

Beside findings about coping strategies, research studies reveal insights into the mindsets about stress. Keller et al. (2012) asked in their longitudinal study 28.753 people to rate their stress level (a little, a moderate amount or a lot) over the past year and to indicate how much they believed this stress was influencing their health. Afterwards, over the next eight years, they took public death records to explore the passing of subjects. Surprisingly, participants who indicated to have a lot of stress and believed in a large negative impact of stress on their health had a 43% increased risk of death. Those participants with a lot of stress but not believing in a negative impact of stress on health had no increase of risk of death at all. This result showed that a positive mindset concerning stress can work as a protective factor. As long as participants did not expect negative implications of stress, they were immensely less likely to die due to stress. Apparently, people not believing in the dangerous implications of stress were able to cope better with their stress. Hereby, it appears also questionable if stress consequently has to be avoided. McGonigal (2015) pointed out our individual subjective belief in oneself as someone who can cope successfully with stress as a crucial factor of one's stress response. Following McGonigal (2015) the negative consequences of stress mentioned above (e.g. heart disease, cancer or liver disease) occur only if someone has the belief and expectation that stress is factual dangerous for health.

Crum, Salovey, and Achor (2013) investigated in their study about the role of mindsets in determining the stress response that stress mindsets could be changed by watching short multimedia clips. Crum et al. (2013) explored that seeing a stress-is-enhancing clip caused a significant increase in employees' productivity and a significant decrease in stress-related physical symptoms such as fatigue or headaches. These outcomes consolidate the thesis that a positive mindset or attitude concerning stress can be seen as a protective factor.

In addition to these research findings about coping strategies and mindset, the following coping resources will be illuminated: acceptance, self-compassion and optimism.

Laboratory studies exposed the importance of acceptance in the presence of chronic pain and distress (Hayes, Strisahl, & Wilson, 1999; Keogh, Bond, Hanmer, & Tilston, 2005). Clinical studies confirm this importance (McCracken, Vowles, & Eccleston, 2005; McCracken, MacKichan, & Eccleston, 2007; Wicksell, Melin, & Olsson, 2007; Wicksell, Ahlqvist, Bring, Melin, & Olsson, 2008; Wicksell, Melin, Lekander, & Olson, 2009). Trompetter (2014) postulated that pain acceptance is an important aspect in pain research and practice. This might be applicable also for stress, because pain is often accompanied by intense distress. The acceptance and commitment therapy (ACT) is based on the postulate that avoiding of pain and distress even creates more suffering, whilst acceptance facilitates a more constructive use of this energy.

While people with high scores on self-compassion tend to have lower scores on neuroticism and depression, they indicate higher scores on life satisfaction, social connectedness and emotional wellbeing (Leary, Tate, Adams, Allen, & Hancock, 2007; Neely, Schallert, Mohammed, Roberts, & Chen, 2009; Neff, 2003; Neff, Kirkpatrick, & Rude, 2007; Neff, Rude, & Kirkpatrick, 2007).

Paul Gilbert (2010) established a general therapeutic approach, called Compassion Focused Therapy (CFT), to encourage patients to be more self-compassionate. Pursuing this main objective, patients are supported to identify their maladaptive thought patterns to subsequently replace them with more positive and adaptive alternative thought patterns (Gilbert & Proctor, 2006). A CFT pilot study showed significant decreases in depression, self-attacking, shame and feelings of inferiority in patients with shame and self-criticism (Gilbert & Proctor, 2006). CFT is already being used in the field of eating disorder, depression, bipolar disorder, shame and other psychological conditions (Gilbert, 2010; Goss & Allan, 2010; Kelly, Zuroff, & Shapira, 2009; Lowens, 2010). The results of Gilbert and Proctor (2006) suggest that self-compassion might enhance also flourishing in the condition of stress. Caused to the fact that there is already a great body of research about the advantages of self-compassion, this variable has been taken into account in this mixed-method study. In the given study it is considered as a coping resource. Anyhow, it remains ambiguous, if self-compassion has to be considered as coping resource, coping strategy, state or trait of a person. Self-compassion is certainly used sometimes as a strategy, but might affect also ones' mindset and resilience concerning stress. Therefore, it is considered in this context as a resource. Similarly, also acceptance and mindset are considered as coping resources.



Earlier research emphasized that optimism significantly predicted emotional well-being (Eid & Diener, 2004; Makikangas & Kinnunen, 2003). The results of Makikangas and Kinnunen (2003) illuminated that low levels of optimism had a direct negative effect on emotional exhaustion and mental distress among men. In a sample of university students, Brissette, Scheier, and Carver (2002) investigated that higher levels of optimism were prospectively associated with smaller increases in stress and depression. Scheier and Carver (1985) found that optimism was reversely correlated with focus on emotion, emotional expression and disengagement from the goal and positively correlated with indications of active coping. Brissette et al. (2002) investigated that greater optimism was correlated with greater use of planning and positive reinterpretation and growth (PRG). Taylor and Armor (1996) postulated that optimists employed more problem-focused coping strategies and more effective ways to regulate emotions resulting in better functioning.

Environmental factors such as the quality of family, peer relationships and attachment style in childhood are already known as major predictors of resilience to stress (Buckner, Mezzacappa, & Beardslee, 2003). The concept of resilience might explain why some people with high levels of chronic stress at work do not only fail to burn out, but may even flourish, resulting in a greater ability to manage future challenge (Kinman & Grant, 2011).

Ultimately, participants of this study will be studied respective their different levels of mental health. The group of participants with flourishing mental health will be compared with the remaining participants on the three domains coping strategies, mindset and coping resources. The perspective of people themselves is the central initial point to answer the research question.

Considering the mentioned research findings, the following research question will be answered: how can differences between people with stress who flourish and those who do not flourish be described?

## **2. METHODS**

### **2.1 Study design**

An explorative, mixed-method approach has been employed to investigate the main research question. The quantitative approach has been utilized to ensure that participants have an at least considerable level of stress (by means of the Perceived Stress Scale (PSS)) and to measure their mental health level (by means of the Mental Health Continuum – Short Form (MHC-SF)) to divide participants into two groups: flourishers and non-flourishers. In the following, all not flourishing participants, considered to be moderately mentally healthy, will be called non-flourisher. The qualitative approach has been utilized to collect the main body of data using semi-structured interviews lasting about 30 minutes. These interviews were taken to collect data about how participants perceived their daily stress, how they reviewed the term stress in general and about participants' ways to cope with stress.

Based on the Grounded Theory (Glaser & Strauss, 1967), inductive reasoning (bottom-up logic) has been used to allow the perspective of participants, which was close to their daily life situations, becoming the emphasis of data collection. In contrast to deductive reasoning, this method begins with specific information and observation to later conclude with a generalization. The reasons for choosing a qualitative approach as emphasis for this study were summarized yet in chapter 1 (see second paragraph). The mixed-method study design was cross-sectional, thus without pre-post measurement. The analytic process was not conducted simultaneously. After the data of the last participant has been taken, the data analysis was initiated.

### **2.2 Participants**

Participants were randomly selected from several cities of the Netherlands and Germany. They were participating without a sort of reward. The seven German participants were taken from the circle of friends and relatives of the interviewer. These seven participants were obtained drawing a snowball sample. Twelve Dutch people were approached in public places such as libraries. Ultimately, five of them were willing to participate. These five participants were obtained using a simple random sample.

The total sample consisted of twelve adults (seven German/five Dutch). The age ranged from 26 to 71 years, with a mean of 39.08 (standard deviation 14.70). Five men (three German / two Dutch) and seven women (four German / three Dutch) were interviewed.

Men's mean age was 30.8 years and women's was 48.71 years. Nine participants reached a higher education such as a bachelor, master, diploma or state examination. Two participants had an A level and one a secondary school level. Five of them were unmarried, three married, three engaged and one divorced. Summarized, participants were predominantly female Germans with a higher degree of education.

Inclusion criteria contained being at least eighteen years old, the ability to speak and read Dutch, German or English and a considerable level of stress. Every interview has been introduced with a scale question (1-10) about the perceived level of stress in the previous month. Values between 1 and 4 were considered as less stress, 5-6 as moderate stress and 7-9 as high level of stress. There was no value below 5. All participants perceived at least a moderate level of stress and could therefore be considered for this study. An at least moderate level of stress was the most important inclusion criteria of the study. Subjects were excluded when they had issues with their sense of hearing or when they were currently participating in stress management or stress reduction programs. This last exclusion focussed on avoiding violation by these programs. Furthermore, participants being actively suicidal and/or substance abusing were excluded.

Table 1 provides a short summary of the results about MHC-SF, PSS and scale question, accompanied by some background information of every participant to describe the given sample (N=12).

**Table 1.***Results of MHC-SF and PSS including demographic data*

| Initials | MHC-score<br>(0-70)                        | PSS-score<br>(0-40) | Scale<br>question | Gender             | Age                     | Education                 | Relationship<br>status |
|----------|--|---------------------|-------------------|--------------------|-------------------------|---------------------------|------------------------|
| AH       | 46/70<br>flourishing                       | 18                  | 6                 | male               | 30                      | Higher<br>education       | unmarried              |
| WO       | 56/70<br>flourishing                       | 19                  | 5                 | male               | 29                      | A Level                   | engaged                |
| MW       | 48/70<br>moderately<br>mentally<br>healthy | 18                  | 5                 | male               | 34                      | Higher<br>education       | married                |
| JW       | 38/70<br>moderately<br>mentally<br>healthy | 23                  | 5                 | male               | 29                      | Higher<br>education       | unmarried              |
| BP       | 56/70<br>flourishing                       | 20                  | 7                 | male               | 32                      | Higher<br>education       | engaged                |
| MZ       | 52/70<br>flourishing                       | 17                  | 7                 | female             | 31                      | Higher<br>education       | engaged                |
| IK       | 59/70<br>flourishing                       | 14                  | 6                 | female             | 71                      | Higher<br>education       | married                |
| JK       | 40/70<br>moderately<br>mentally<br>healthy | 25                  | 8                 | female             | 52                      | A Level                   | divorced               |
| LT       | 49/70<br>moderately<br>mentally<br>healthy | 24                  | 9                 | female             | 35                      | Higher<br>education       | unmarried              |
| MP       | 42/70<br>moderately<br>mentally<br>healthy | 16                  | 5                 | female             | 37                      | Higher<br>education       | unmarried              |
| ET       | 52/70<br>flourishing                       | 33                  | 9                 | female             | 63                      | Secondary<br>school level | married                |
| SH       | 47/70<br>moderately<br>mentally<br>healthy | 22                  | 5                 | female             | 26                      | Higher<br>education       | unmarried              |
|          |  |                     |                   |                    |                         |                           |                        |
|          | Mean 48.75                                 | Mean 20.75          | Mean 6.42         | 5 male/<br>7female | Mean age<br>39.08 years |                           |                        |

Table 1 illustrates that eleven participants scored on moderate stress (range 14-25) and one participant on high stress (33). Flourishers had a mean score on the PSS of 20.17 and non-flourishers a mean score of 21.5.

Analysis of the MHC-SF revealed that six of the twelve participants were flourishing and six were moderately mentally healthy. Three of the seven women and three of the five men were flourishing. There was no participant languishing.

## 2.3 Instruments

The collected data was obtained through semi-structured interviews and two validated instruments (PSS and MHC-SF).

### 2.3.1 Questionnaires

Two measurement instruments were given to potential participants. The MHC-SF was used to categorize participants as either flourisher or non-flourisher. The PSS was used to gain insights into stress levels of participants in addition to the scale question used to in/exclude potential participants. Background questions (of a self-developed interview schedule), which were introducing every interview, were used to obtain demographic information such as age, relationship status and level of education.

#### Categorize (non-) flourishers:

The Mental Health Continuum (Short Form) questionnaire provided a useful, brief self-report method to assess positive mental health (Lamers, Westerhof, Bohlmeijer, ten Klooster & Keyes, 2011).

The Mental Health Continuum - Short Form has 14 items, is organized in a six point Likert scale (from 1 'never' to 6 'every day') and has therefore no neutral option. A neutral option would have allowed participants to avoid a decision when they were in doubt about a certain item. The six point Likert scale assured, that any tendencies to the middle were excluded. With item 1-3 the MHC-SF measured *emotional wellbeing*, defined as positive affect and satisfaction in life. Items 4-8 were about *social wellbeing*, whilst there was always one item on each of the facets of social acceptance, social actualization, social contribution, social integration and social coherence (Keyes, 1998). Items 9-14 measured *psychological wellbeing* by means of one item on each domain of autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance.

Depending on the individual scores, the MHC-SF was utilized to categorize participants into three groups: participants with flourishing mental health, moderately mentally healthy people and people with languishing mental health.

The MHC-SF has been evaluated yet as a reliable instrument with a moderate test-retest reliability, a high internal reliability in total ( $\alpha=0.89$ ) and adequate reliability for the subscales emotional wellbeing ( $\alpha=0.83$ ), psychological wellbeing ( $\alpha=0.83$ ) and social wellbeing ( $\alpha=0.74$ ) (Lamers et al., 2011).

The 10 item version of the Perceived Stress Scale (PSS) was used to measure self-perceived stress. Every choice on the PSS with ‘never’ was coded with 0, every ‘almost never’ with 1, every ‘sometimes’ with 2, every ‘fairly often’ with 3 and every ‘very often’ with 4. All total scores ranging from 0-13 indicated low stress, all scores ranging from 14-26 moderate stress and all scores ranging from 27-40 high stress.

The Perceived Stress Scale (PSS) has been evaluated with a moderate test-retest reliability of  $\alpha > 0.70$  (confirmed by four evaluated studies) and an adequate internal reliability of  $\alpha > 0.70$  (confirmed by twelve evaluated studies, ranging from 0.74 to 0.91) (Eun-Hyun Lee, 2012).

### 2.3.2 Interview schedule:

The semi-structured interviews were in particular conducted to gain totally new insights with very broad and open-ended questions. An interview schedule was used to elicit narratives about participants’ ways to perceive daily stress, to review the term stress in general and how they cope with stress. After beginning with very open questions, the questions became more and more specific. An introducing open question was e.g. “Could you describe your general view on stress?”. A more specific question was e.g. “Could you please further concretize what you mean with this?”. First, participants were asked to describe what they generally think and feel about stress. To support participants to answer to the questions how they dealt with stress, they were first requested to describe concrete situations of daily stress, what they felt, thought and did in the situation. Goal of the interview was to focus on coping strategies and their use in a concrete situation of daily life. Interviews lasted in average about 30 minutes. Incipiently, subjects were asked about the way of dealing with stress after a stressful day, later in a particular difficult concrete stressful situation and then in a stressful situation in which it worked particularly well to deal with stress.

## 2.4 Procedure

Before starting the interview, all participants were asked to estimate their perceived stress level during the last 2-3 weeks on a scale of 1-10. They received an information letter with details about the goal and purpose of the study. Participants were informed that the research results might be published, however only in a very abridged version and only in a small library paper of the University of Twente. They were asked for permission to take quotations, of course in an anonymous form. Afterwards, they were asked to sign an informed consent accompanied by the opportunity to ask questions about it. The consent determined among others that participants could stop their participation at any time and that their data is treated anonymously.

There was an ethical review board, the ethical review committee of the University of Twente, the Netherlands. The study design, interview schedule and what participants had to do to participate was published on this board and subsequently approved. The process of approval contained also answering the question of the ethical review committee if it has been thought about provisions in case a participant feels emotional fragile after talking about stress. During the whole research procedure, it didn't occur that a participant experienced an unmanageable distress or needed support. But provisions have been determined for this case such as offering to talk about difficult life circumstances, giving the opportunity to reflect what came up during the interview or referring to psychological counselling institutions.

Before each semi-structured interview, participants had to fill in two quantitative questionnaires, the Mental Health Continuum Short Form (MHC-SF) and the Perceived Stress Scale (PSS) (10 items version). Interviews were tape-recorded and transcribed verbatim by the interviewer. After the interview, subjects were requested to give a short reflection. The interviews, lasting about 30 minutes, have been taken always face-to-face and in the preferred language of the participant during a two-month period in spring 2017. All interviews have been taken by a single researcher and coded by the same. There was no participant giving a negative feedback after the interview. People stated e.g. to have experienced it as very interesting and useful to elaborate this topic of stress because they were usually not that aware of their way to deal with stress. There was only one interview in which a participant had slightly difficulties to answer. Overall, participants were talkative. If someone was beginning to answer too broad, repeating the question helped immediately to come back to the concrete situation. The application of the interview schedule worked very

well and could confirm the use of taking concrete stressful situations to elicit the way to cope. Desired information could be obtained.

## 2.5 Analysis

### Quantitative analysis:

Data has been calculated by hand without any software support. Regarding the Mental Health Continuum – Short Form, every choice with ‘never’ was coded with 0, every ‘once or twice in the past month’ with 1, every ‘about once a week’ with 2, every ‘about 2 or 3 times a week’ with 3, every ‘almost every day’ with 4 and every ‘every day’ with 5. This procedure with all 14 items emerged a possible total score ranging from 0 to 70. By means of the MHC-SF, participants could be categorized into flourishers (at least one score with ‘every day’ or ‘almost every day’ on emotional wellbeing and on at least six items of psychological and social wellbeing), moderately mentally healthy people and people with languishing mental health (at least one score with ‘never’ or ‘once or twice a month’ on emotional wellbeing and on at least six items of psychological and social wellbeing). Everybody not fitting in these criteria of flourishers and languishers had to be considered as moderately mentally healthy (Keyes et al., 2008).

As described already in sub chapter 2.3, every choice on the Perceived Stress Scale with ‘never’ was coded with 0, every ‘almost never’ with 1, every ‘sometimes’ with 2, every ‘fairly often’ with 3 and every ‘very often’ with 4. Every single item score has been count together for every participant. All total scores ranging from 0-13 indicated low stress, all scores ranging from 14-26 moderate stress and all scores ranging from 27-40 high stress. Participants could score between 0 and 40 on the PSS. The 10 item version of the Perceived Stress Scale (PSS) had four positive formulated items. These four items (item 4, 5, 7 and 8) had to be reverse coded (0=4, 1=3, 2=2, 3=1, 4=0). Subsequently, after reverse coding every item was considered to be negative formulated (e.g. item 3: *In the last month, how often have you felt nervous and stressed?*). Thus, high scores on a negative formulated item indicated high values on stress.

Generally, the means for MHC-SF, PSS, scale question and age were calculated counting up all individual scores and dividing the result by the total number of participants (N=12).



### Qualitative Analysis:

In order to increase the replicability and transparency of the coding procedure the following sub chapter describes the qualitative analysis iteratively as specific as possible. To reduce the complexity of the interview data and to make the data more comparable, information mentioned during the interviews was put into categories and codes. After transcribing the twelve interviews verbatim, the text has been coded by means of the comment function of Microsoft Word. Names, locations and dates were not transcribed verbatim to ensure confidentiality. They were substituted with functional codes if necessary. But overall, these data was irrelevant and has not been mentioned in the transcripts. Names were e.g. replaced with 'my husband' or my 'boy-friend'.

Inductive reasoning (bottom-up logic) has been used (based on the Grounded Theory; Glaser & Strauss, 1967) to generate the category and code schedule. In contrast to deductive reasoning, this method begins with specific information and observation to later conclude with a generalization. Specific information of interview sentences was taken to summarize in categories and codes. The coding schedule was developed manually without any software such as ATLAS.ti. In cases of overlap with the codes, context information mentioned above or below has been used to decide for a code. Using a table, all summarized comments of the open coding were listed down for every interview (in the sequence as in the interview). Further, all comments with the same category were highlighted in the same colour. Subsequently, it has been count how often a certain strategy was mentioned by the participants. In general, the data has been coded with the research question in mind. The focus has been put on finding useful information particularly about the coping strategies of participants. Additionally, the interviews have been coded before scoring the two questionnaires, thus without knowing whether a participant was flourisher or not. This has been done to prevent a bias, to be able to code as neutral and objective as possible. The coding schedule emerged exclusively from the codes and categories that were generated by coding all twelve transcripts.

Irrelevant data of the interview, data not directly or indirectly connected to the subject, was coded into category 'irrelevant' and has not been taken into account anymore. Sentence by sentence, answers of participants were analysed. If there were strong semantic connection between sentences, a whole paragraph has become a unit of analysis. Generally, every fragment has been count only once per question. If the same strategy e.g. 'watching TV' has been mentioned twice, but it was part of the answer to the same question, it has been

count only once. In the comment on the right margin, information of every sentence has been summarized (as close as possible with the words of the participant) and put into a category. Codes emerged later by constant comparison (Boeije, 2002) of these summaries. After this procedure with every transcript, every summary has been linked with one of the codes (to be discussed later). The categories were ‘mindset’, ‘coping strategies’, ‘coping resources’ and ‘irrelevant’. The categories were built by reading the transcripts, constant comparison and short mind mapping. They were determined yet before the process of coding. In contrast, the codes were emerging from summarizing the sentences.

The codes have been arranged in a sort of tree structure using constant comparison. The tree trunk was split into branches and branches were split into twigs. In the centre of interest was the phenomenon ‘dealing with stress’ (the tree trunk). It was further divided into categories. Only two categories were further divided into codes. Category ‘coping strategies’ was divided into the codes ‘physical strategy’, ‘relaxing activities’, ‘communication/social support’, ‘cognitive strategy’, ‘active coping’ and ‘using mindsets/character traits/skills’. Category ‘coping resources’ was divided into the codes ‘self-compassion’, ‘acceptance’ and ‘optimism’. The sub codes of relaxing activities were e.g. taking a break, drinking a tea, meditating or playing an instrument. They were thus summarized because all these strategies focus on relaxing, distracting or get distance to the situation. A prototype for a physical strategy was e.g.:

*Then I step on the treadmill and run, run, run. So I can get rid of this tension.*

A cognitive strategy was e.g. cognitive restructuring. Positive cognitive restructuring is, following Allen and Leary (2010), changing one's view of a stressful situation in order to see it in a more positive light. It further includes actions such as engaging in positive thinking, being optimistic and playing down negative consequences. A prototype for a paragraph coded as cognitive restructuring in the interview was:

*Of course, firstly it made me angry that nobody in the tram was offering a seat to my pregnant wife. But if then I realize that today actually almost everybody sits there distracted by the smart phone it is not surprising, that nobody recognizes her. Thinking like this, I can easily stop to mind about it (MW, non-flourisher)*

Caused to the fact that research resources were very limited (there was only a single researcher) inter-subjectivity could not be improved by e.g. co-creation of the coding schedule or independent coding by single researchers of a team of researchers.

After coding all interviews, theoretical saturation of the coding schedule has been assessed. It was firstly too limited to describe properly the differences between flourishers and non-flourishers. Thus, coding rules were changed. Sentences which were at first coded to 'using mindsets/character traits/skills' were later coded to the new category 'coping resources'. The code 'using mindsets/character traits/skills' has been split and indications of self-compassion, acceptance and optimism were subsequently coded in the new category 'coping resources' to make the coding schedule more differentiated.

### 3. RESULTS

The research question of this mixed-method study was: how can differences between people with stress who flourish and those who do not flourish be described? In order to answer this question, firstly the content of the codes will be further concretized using quotations of the participants. By describing the participants, the differences between flourishers and non-flourishers will be extracted.

The structure of the coding schedule was based on the assumption, that all categories were influencing each other reciprocally. A main aspect of the coding structure was that the categories ‘coping resources’ and ‘mindset’ both were determining the choice of coping strategies.

In order to make the coding schedule more comprehensible, the codes of the categories ‘coping strategies’, ‘coping resources’ and ‘mindset’ are described in the following in more detail. After moving from specific information to generalization (as done in chapter 2.5), the generalized information in form of codes and categories has now been broken down back to the specific excerpts of the participants.

The codes of the category ‘coping strategy’ were ‘physical strategy’, ‘relaxing activities’, ‘communication/social support’, ‘active coping’, ‘cognitive strategy’ and ‘using mindsets/character traits/skills’.

The code ‘physical strategy’ summarized all strategies having to do with physical aspects, such as sport and every kind of physical movement. This code contained also strategies such as screaming and crying, because they are strategies to drain tension physically. In the interviews, participants mentioned sport (unspecified), treadmill, fitness studio, jogging, to go for a walk, downhill, badminton, screaming and crying. Examples:

*Sometimes it helps me to scream. (BP, flourisher)*

*Sport helps me so much to calm my mind after a long working day. (LT, non-flourisher)*

*Going to the fitness studio was saving me in this period. (ET, flourisher)*

The code ‘relaxing activities’ contained all strategies to relax, recover, get distance to a situation, to distract or avoid. This code summed up strategies such as taking a shower, enjoy nature, meditation, yoga, QiGong, go to bed earlier than usual, taking sleeping pills, drinking alcohol, smoke, play an instrument, take a break, have a tea/coffee, sit down and look out of the window, check private mails or watching TV. Examples:

*Sometimes I meditate. It helps me to focus better and to calm my mind. (WO, flourisher)*

*To go for a walk in the morning helps me to plan my day. Being in the forest with the singing birds. (IK, flourisher)*

*In the evening I was watching TV to distract me bit. (LT, non-flourisher)*

Participants regularly mentioned to use ‘communication/social support’ to deal with stress. This code was about activities such as meeting friends, have a dinner together, speak with others about difficulties, get advice, say sorry, forgive each other, admit a mistake or calling somebody.

*Then I was thinking about all, am I right or are they right? Later on, I thought, yes, they have a point. It’s true, I did a mistake and I need to change something. (WO, flourisher)*

*In these situations I often call my mother, she was yet often my shoulder to cry on. (MZ, flourisher)*

*To deal with stress it is also helpful for me to meet friends in the evening, to have a dinner and speak together. Then, often my mood improves suddenly. (LT, non-flourisher)*

Participants indicated to deal with stress also with their mental faculty. The code ‘cognitive strategy’ contained all strategies such as cognitive restructuring, anticipate positive life events in the future, comparing with others (and their sometimes less desirable life conditions), rumination and self reflexion.

*At first I was very angry about this person. After thinking through all, I said to myself, okay, these are simply the limitations of this person. I can’t change her. So, better I let go (MP, non-flourisher)*

*It can help also to think about positive things in the future like a planned trip. (MW, non-flourisher)*

*Compared to people less fortunate in other parts of the world, we in Europe have much less daily stress to cope with. That little work stress is nothing against having real difficulties. (AH)*

Particularly flourishing participants mentioned several strategies to deal actively and directly with a cause of stress. Active coping could be described as a behaviour that is pragmatic and simply required by a situation in order to resolve e.g. a problem, as a behaviour that avoids any kind of avoiding strategies. The code ‘active coping’ summarized all activities such as provisions in a case of emergency, applying critique, working more, making a decision, stop the contact to somebody if necessary, saying no to someone, manage a situation actively, calling (many) people to resolve an issue, seeking help or making plans.

*If necessary, sometimes I go strongly into the situation. (IK, flourisher)*

*When I got this call of my boss that this document has to be finish until tomorrow 5 pm, I was calling around, was doing thousand things simultaneously, mobilising colleagues. (BP, flourisher)*

*After years of difficulties with this employee, I finally took the decision to dismiss her. That was so relieving. (ET, flourisher)*

Participants referred also to their personality or character traits that supported them in dealing with stress. The code ‘using mindsets/character traits/skills’ included all strategies that were used of participants to apply their positive personality traits such as pragmatism, self confidence, tolerance, patience, understanding, courage, resilience and willpower. Beside these aspects, this code was also consisting strategies to apply knowledge, work routine and social / cognitive skills.

*At work I automatically grow with the routine. I extend my experience with every day. So, the cake is often almost full yet. Often, I have to add only some small pieces in order to complete something. (MW, non-flourisher)*

*In general, I would perceive myself as resilient. (LT, non-flourisher)*

*As a project manager I try to not stress myself to much because when I am less stressed, also my employees are less stressed. It enhances the working atmosphere. (AH, flourisher)*

*Being in this new life situation, I had to manage so many things at once. It was stress, but I said to myself, I am strong, I can do it. So I deal with stress. It is my courage and willpower that helps. (MP, non-flourisher)*

This code has been a bit more complex. The last fragment of participant MP, for instance, could have also been coded to category mindset. In general, she had apparently the mindset to

be a person with courage and willpower. Therefore, this fragment could have been simply coded to category ‘mindset’ but it has been coded in category ‘coping strategy’ because this mindset has been used directly in the stressful situation. Her answer was stimulated by the interviewers’ question “and what did you do to deal with this stressful situation?”. Caused to the assumption that this mindset was helping this participant to deal better with the situation, this sentence has been coded as a strategy. Participants expressed e.g. also their acceptance of a situation or behaviour. It has been a mindset, but one which was applied in a concrete situation. An example for a mindset, not applied in the situation, was the sentence “for me stress is associated with negative thoughts, negative beliefs, excessive demands and helplessness” (JK, non-flourisher). This sentence mirrored a mindset of the participant about what stress is. This mindset might also have influenced the behaviour of this person, but has not been used in a concrete situation to deal with stress. Thus, these kinds of sentences have been coded in the category ‘mindset’.

Also the construct self-compassion has been particularly difficult to code. It could have been seen as a sort of mindset or attitude towards yourself. On the other hand it might have been used as strategy in a concrete stressful situation to deal with a stressor. Ultimately, self-compassion has been coded separately to category ‘coping resources’ because it likewise influenced the mindset as well as the choice of strategy.

The codes of the category ‘coping resources’ were self-compassion, acceptance and optimism.

The construct ‘self-compassion’ was not part of the interview schedule. It has not been asked directly, but there were many answers of participants, pointing on this construct. In order to apply self care participants were e.g. allowing a meal in a restaurant after a stressful day, were ensuring to recover enough during holiday, were more honest with themselves, were consciously retiring in situations becoming too stressful, were taking care of enough sleep, were distancing themselves if necessary, were taking time for themselves, were practicing active forgiving or were simply not putting themselves too much under pressure.

*I don’t put myself too much under pressure. (AH, flourisher)*

*Today, I am more grown-up. I don’t escape of my problems. I’m more honest with myself. (WO, flourisher)*

*On this stressful day I said no to my sisters' request. I didn't answer a call of my boyfriend. I distanced myself. I simply took 10 minutes for myself, was eating something, drinking a coffee, looking outside and tried to not do anything else. (MZ, flourisher)*

*Sometimes after a stressful day, we allowed ourselves a dinner in a restaurant. We also took a holiday and used this time to recover. (ET, flourisher)*

*When things become too stressful, I retire or reschedule. Then I use this won time e.g. to relax, lay down and read a journal. (IK, flourisher)*

*Definitely, I also take care to get enough sleep. Sleep is very important for me. (MW, non-flourisher)*

*Also active forgiving helps me in situations of stress. When I was screaming to my children I always go to say sorry. And I forgive myself. (JK, non-flourisher)*

Amongst others, participants' answers were about the use of acceptance in their ways to deal with stress. They accepted e.g. limitations of persons or situations, accepted that projects take longer and become more expensive as planned, accepted in general what they have in life, accepted critique or accepted the necessity to face a situation. The following quotations were coded to 'using acceptance as coping resource'.

*Sure, projects are always stressful, but becoming a project manager was my conscious decision. Projects take always longer and become more expensive than planned. You have to accept that. (AH, flourisher)*

*You don't have to complain, you have to face the situation. (AH)*

*Later on, I accepted the critique of my boss. I tried to apply his suggestions and stopped to take it too personal. (MZ, flourisher)*

*You have to be content with what you have. (MW, non-flourisher)*

Ultimately, also optimism occurred several times in the interviews. Participants were optimistic about the outcomes of different life or work situations such as having to finish under time pressure an important document for a client, having to prepare under time pressure a contract for a mandatory, having to perform a presentation or having to succeed with a last exam while having yet a confirmation to get a certain job. The following quotations were coded as 'using optimism as coping resource'.

*Later I thought, okay, there is always a solution. If this won't work, I'll try something else. (BP, flourisher)*



*To fail is not a realistic option for me. (JW, non-flourisher)*

*After imagining the worst case scenario, I thought, from this point of view actually nothing that bad can happen. (MW, non-flourisher)*

Further results were summarized using descriptions of participants' mindsets about stress. In the following, four participants were picked out, described by means of some quotations regarding their mindsets and then compared with each other. Two were flourishers and two non-flourishers.

Participant AH (male, flourisher):

Concerning the mindset about stress this male participant could be described as one who recognized anything good in stress and even believed to need a certain amount of stress. His mindset mirrored the attitude to be able to handle stress as long as one is facing the difficulties of life. He summarized his own interview with the word 'pragmatism'. Particularly his mindset to have done every day his best performance appeared as one of the most helpful for him. During the interview he mentioned to not take his work stress at home. Coming home he switched off his work mode and tried to be aware of his 'fortune in life' (as he said). The ability to do so was caused to the mindset to have done the best job possible and to know that this was all what he could do.

The most remarkable quotations of participant AH concerning his mindset about stress:

*I'm an active person. I need a moderate level of stress. That's fine with me.*

*It seems all stressful at work. There is always pressure to perform and uncontrollable circumstances occur. But when I arrive home, I don't mind about it anymore.*

*Stress is a relative thing. If you are open in life, and I am open, and face the problems of life, see your life as a car which you guide actively, then it's all right.*

Participant IK (female, flourisher)

The mindset of this female participant appeared accepting. She apparently saw anything positive, e.g. that stress could also satisfy emotionally or could make you creative. Her mindset mirrors her trust in her skills and traits.

The most remarkable quotations of participant IK concerning her mindset about stress:

*Yes, the situation was stressful, but in the end emotionally satisfying*  
*Sometimes I really face a situation consciously, I go into it.*  
*I am feeling a great energy, inner energy, but also still physical. That helps me to deal with stress.*  
*Certainly, stress is also something that helps me perform and to unfold my potential.*  
*Stress can make you very creative, all of a sudden.*

Participant SH (female, non-flourisher)

This female participant had the mindset to cause much stress by herself. It was ambiguous if this stress was helping her. In contrast to flourishers, she did not mention to harness stress or to need stress to perform. For her, stress was associated with negative emotions and had negative implications such as a decreasing concentration.

The most remarkable quotations of participant SH concerning her mindset about stress:

*Under stress I feel rushed. I feel that my concentration decreases.*  
*For me, stress has to do with negative feelings, with tension and anxiety.*  
*On this stressful day I thought actually all the time, hopefully this day gets done soon.*  
*Retrospective, I think sometimes it would be better to take things a bit more relaxed.*  
*Much stress I cause by myself.*

Participant JK (female, non-flourisher):

The mindset of this female participant mirrored also positive aspects. There was a confidence in her, that difficulties could find also an end. But on the other hand, these clear indications of a positive mindset about stress, showed by other participants, were missing in her mindset. Possibly, her mindset was not enough investigated during the interview. But her mindset seemed to be dark coloured. Her first association with stress was helplessness and excessive demands. Moreover, she literally said that positive stress was almost not happening in her life.

The most remarkable quotations of participant JK concerning her general mindset:

*I have this trust that there is always an end of difficulties, this is helping me.*  
*Well, thinking of the word stress brings up negative thoughts. Positive stress I almost don't know, is almost not happening in my life.*

*Stress for me is more associated with excessive demands, helplessness and negative beliefs.*

*When I think of these three options fight, flight and freeze, then I see myself definitely in freeze. I go in freeze and then I cry a lot.*

Results of applying the coding schedule regarding coping strategies are summarized in Table 2. The left column contained the codes for category ‘coping strategies’. The middle column indicated the results of flourishers and the right column the results of non-flourishers. Variables have been generated by counting the number of occurrence of all codes. The frequency of use concerning each strategy is shown in Table 2 as total number of use for each group. Additionally, the percentage was illustrated. Taken both numbers together (e.g. 6 of flourishers and 9 of non-flourishers) made the percentage of 100% (both groups together mentioned e.g. 15 times a physical strategy). The percentage in Table 2 revealed how much percent each group contributed to the total number of use.

**Table 2.**

*Descriptive statistics - Strategies to deal with stress in their frequency of use*

|  | Flourishers |        | Non-flourishers |        |
|--|-------------|--------|-----------------|--------|
| Physical strategy                      | 6           | 40%    | 9               | 60%    |
| Relaxing activities                    | 22          | 41.51% | 31              | 58.49% |
| Communication/social support           | 10          | 41.67% | 14              | 58.33% |
| Active coping                          | 24          | 72.73% | 9               | 27.27% |
| Cognitive strategy                     | 15          | 53.57% | 13              | 46.43% |
| Using mindsets/character traits/skills | 12          | 44.44% | 15              | 55.56% |
| Total number                           | 89          | 49.44% | 91              | 50.56% |

The results of Table 2 could be described in the following way. Flourishers and non-flourishers differed the most regarding active coping. Overall, flourishers had higher percentages, in comparison with non-flourishers, only in ‘active coping’ and ‘cognitive strategy’. Particularly cognitive restructuring (coded as cognitive strategy) has been applied more often by flourishers (7 times by flourishers / 3 times by non-flourishers). In all other codes, non-flourishers had more than 50% of the total number of use.

Flourishers and non-flourishers had with 89 and 91 approximately the same total number of uses (regarding all strategies together) but they differed in the proportion between the different coping strategies. The total number of use has been shown in Table 2 only for the whole group and not for single participants. Therefore, the results have to be completed by the following information. Concerning the code ‘active coping’ with the most differences between flourishers and non-flourisher, flourishers mentioned active coping with a range of 2-6 and non-flourishers with a range of 0-3. There were 2 non-flourishers mentioning active coping not a single time. In contrast, all flourishers mentioned this code at least two times. Regarding the remaining codes, there were no noticeable differences in the distribution within the groups (with other words no great ranges). Other noticeable differences in the distribution could be found only for men and women. In compare, men were mentioning much more often the code ‘using mindsets/character traits/skills’ than women and women were mentioning the code ‘relaxing activities’ much more often than men. However, this difference applied to both, flourishers and non-flourishers.

The results of employing the coding schedule regarding coping resources are summarized in Table 3.

**Table 3.**

*Descriptive statistics - Using coping resources as strategy to deal with stress*

|  | Flourishers  |            | Non-flourishers |            |
|--|--------------|------------|-----------------|------------|
|  | Total number | percentage | Total number    | percentage |
| Using self-compassion as coping resource | 9            | 64,29 %    | 5               | 35.71%     |
| Using acceptance as coping resource      | 10           | 55.56%     | 8               | 44.44%     |
| Using optimism as coping resource        | 6            | 66.67%     | 3               | 33.33%     |
| Total number                             | 25           | 60.98%     | 16              | 39.02%     |

Table 3 illuminated that flourishers had their coping resources (self-compassion, acceptance and optimism) in a greater extent available than non-flourishers. The most crucial difference could be found in optimism with a 66% to 33% relation.

## 4. CONCLUSIONS

The main aim of this study was to investigate the different coping strategies which flourishing and non-flourishing individuals employ to cope with stress.

Summarized, the emerging qualitative results from this mixed-method study were that flourishers (compared with non-flourishers) had coping resources such as self-compassion, acceptance and optimism in a greater extent available. They were using active coping and cognitive restructuring more often. According to their mindset about stress, flourishers could be described as more willingly to face difficulties and more recognizing positive aspects of stress. Respective the quantitative results, the MHC-SF revealed that six of the twelve participants were flourishing (three of the seven women and three of the five men) and six were moderately mentally healthy. Eleven participants scored on moderate stress (range 14-25) and one participant on high stress (33), while flourishers had a mean score of 20.17 on the PSS and non-flourishers a mean score of 21.5 (possible score between 0 and 40).

What is known after analysing the collected data is e.g. that flourishers and non-flourishers were using their coping strategies in the described way. What is not known yet is which group was coping with stress more successfully (using these strategies) and which coping strategies were more functional. It is not yet fully researched if flourishers have the 'best' coping style concerning stress.

Not only the total number of use active coping, but also the relation between active and passive coping styles might be a difference between flourishers and non-flourishers of the given sample. Table 2 (see chapter 3) indicated that flourishers used 24 times active coping and 22 times relaxing activities. Non-flourishers used active coping 9 times and relaxing activities 31 times. The code 'relaxing activities' indicated all activities to distract, to avoid and get distance to the situation. This code shows great similarity with emotion-focussed coping (Lazarus & Folkman, 1984). This coping style could be understood as indirect and passive because one changes (only) the own relation to the cause of stress but not the cause of stress itself. Based on these findings it can be assumed that flourishers are more able to use active and passive in a balanced way (52.17% / 47.83%) than non-flourishers applying proportionately mainly passive coping approach (22.5% / 77.5%). Given that flourishers used active and passive coping approaches in a more balanced way it can also be hypothesized that they were more flexible and adaptive to the stressful situations. This could further mean that they had a greater ability to adapt their coping style to the requirements of the stressful situation.

Furthermore, the results might indicate that emotions crucially influenced the coping process of participants. Having a positive mindset about stress and higher levels of self-compassion, acceptance and optimism could have facilitated flourishers of the given sample to keep more positive emotions during the process of coping. Following the broaden-and-build theory (Fredrickson, 2004), positive emotions help individuals to broaden their thought-action repertoire. Applying this insight to the results of the study, this could mean, that flourishers of the given sample could apply a greater range of their coping strategies repertoire supported by more positive emotions. Possibly, the six flourishers and six non-flourishers were not differing that much in their potential repertoire of coping strategies. But flourishers might have kept a greater range 'available' in the concrete situation. Non-flourishers were possibly limiting their repertoire having a less positive emotional state in the situation of dealing with stress.

Regarding the four picked out participants, there was one female participant (JK) mentioning the particular quotation: *When I think of these three options fight, flight and freeze, then I see myself definitely in freeze. I go in freeze and then I cry a lot.* Coincidentally, this aspect of fight, flight and freeze might facilitate the description of coping styles. Active coping strategies might be understood as an equivalent to 'fight'. All strategies to avoid, to distract or get distance to the situation might fit to 'flight'. Freeze appears to be more ambiguous. Freeze could be hypothesized to be a temporary stage taken in between to decide for either fight or flight. Her quotation about being in freeze showed ultimately also a sort of self-compassion. If self-compassion is amongst others seen as caring for oneself it might be applicable for all three options of fight, flight and freeze. Thinking of fight, resolving fearless an issue that causes difficulties, is creating a more acceptable situation and thus a sort of caring for oneself. To use flight, e.g. meeting friends for a dinner to distract after a long stressful working day, can also be considered as caring for oneself. You don't allow your thoughts to get control of you. You supply your mind with more positive stimuli and might create with better thoughts also better feelings. Also freeze could have a self-compassionate component, because you care of yourself allowing you to cry, to be weak. If our daily life requests predominantly that we function and apply our strengths, particularly allowing weakness could be of crucial importance. Possibly, self-compassion was mostly not used of participants directly as a strategy, but rather as emotional self-regulation. More functional regulated emotions could have allowed participants to apply a more functional way to cope. This seems to be in line with the mentioned broaden-and-build theory. It can be assumed that

participants in positive emotions were more able to keep being in charge of the situation of stress, to rather keep the control of the situation. Whilst being in a more negative emotional state could result in being controlled by the emotion.

Summarized, it could be concluded that one's emotional state in the stressful situation was ultimately depending the choice of a coping strategy. If participants kept being curious, kept seeing anything positive in stress, e.g. a challenge to perform better, they subsequently might have been more likely to cope with a more constructive coping style (such as e.g. help seeking). If one saw rather negative aspects of stress, it appeared more likely to employ a more passive or destructive coping style (such as e.g. drinking alcohol). Certainly, this is only an assumption and cannot be over-generalized. It simply appears as a tendency shown by the results of this study. In compare, non-flourishers were coping more passively than flourishers, who kept a better balance between active and passive coping.

Being more self-compassionate, accepting and optimistic has been confirmed yet in the positive impact in the other contexts such as Compassion-Focussed Therapy (Gilbert, 2010), acceptance e.g. in the condition of chronic pain (Hayes et al., 1999; Keogh et al., 2005) and optimism e.g. as predictor for emotional well-being (Eid & Diener, 2004; Makikangas & Kinnunen, 2003). Based on the data of the interviews and the two questionnaires, these three constructs could also be confirmed in their positive impact on dealing with stress. At least, flourishers had these coping resources in a greater extent available than non-flourishers. If their coping style was more efficient is not yet fully understood, but their coping style was accompanied by higher wellbeing. Keller et al. (2012) revealed that people who did not expect negative implications of stress were immensely less likely (43%) to die due to stress than those who expected negative implication. At least, the results of this mixed-method study were pointing to benefits of a positive mindset also according to dealing with stress itself. The given sample size was too small (N=12) to confirm it with certainty and the effectiveness of coping styles has not been evaluated. Anyhow, flourishers showed a more positive mindset about stress (than non-flourishers) and were the group with higher levels of wellbeing.

Scheier and Carver (1985) found that optimism was positively correlated with indications of active coping (see chapter 1). The results of this study could confirm that. The group with higher levels of optimism were mentioning active coping more often. It could be concluded that flourishers of this study were more optimistic (than non-flourishers) to be able

to resolve a problem that causes stress and were therefore using more active/problem-focused coping strategies.

Additionally, there were results about the percentage of flourishers in the given sample. Keyes et al. (2008) evaluated the Mental Health Continuum (MHC-SF) in Setswana-speaking South Africans (N=1050). They revealed that 20% of their sample was flourishing. In contrast, even 50% of the twelve participants of this study were flourishing. This result could be explained by the fact that nine of twelve participants reached a higher degree of education (a bachelor, master, diploma or state examination). For the given sample, the subscale *psychological wellbeing* has been the domain with the highest mean on the MHC-SF. Psychological wellbeing is about self-realisation and developing own interests and talents. Possibly, their time at university has given them a chance to grow in a more complete way, to fulfil intellectual needs, to realize more the own aspirations and thus to flourish more.

The research question of this mixed-method study was: how can differences between people with stress who flourish and those who do not flourish be described? Grounded on the collected data, the research question can be answered in the following way. Flourishers and non-flourishers differed in their mindset about stress, in their available coping resources and their tendency to choose coping strategies. More specifically, flourishers had a more positive mindset about stress, they saw also positive aspects in stress (concept of eustress), used an active coping style more often and were more self-compassionate, accepting and optimistic than non-flourishers. They often described to even harness stress to improve their performances. There were no indications of non-flourishers pointing into this direction.

To further support this answer, the findings of the mixed-method study will be related to the transactional model of stress and coping of Lazarus and Folkman (1984) (see chapter 1). Seeing the results of this study, there were many commonalities with this model. A positive mindset about stress might have positively influenced the primary appraisal of a stressor concerning the three options dangerous, positive or irrelevant. The findings about coping resources (such as self-compassion, acceptance and optimism) might be related to the secondary appraisal (analysis of the available resources) and the findings about active coping bear analogy to problem-focussed coping. Following the transactional model of stress, one has not to cope with a certain stressor in the first place, if the own coping resources are appraised to be sufficient. Probably, flourishers of this study were supported by their coping resources and mindsets, able to buffer stress better than the group of non-flourishers. The results showed, for instance, that flourishers used positive cognitive restructuring more often



than the group of non-flourishers. Their positive mindset could have facilitated the employment of cognitive restructuring, to see a stressor after re-appraisal in a more positive light. Encountering certain stressors with this re-appraisal was possibly weakening the stressor in a crucial extent, so that it became unnecessary to cope with it. Similarly, the concept of resilience explained this phenomenon (see chapter 1). Flourishing participants could have had a wider range or tolerance concerning their eustress. They might have experienced certain parts of their daily demands still as eustress, whilst non-flourishers experienced the same already as distress.

Summarized, it can be assumed that flourishers of this sample were (in average) more resilient against stress supported by protective factors such as a more positive mindset and greater coping resources.

### Limitations and Recommendations

This study was not without limitations. Participants were unique in terms of socio-demographic background, education, personality, personal history and their sum of strategies used to deal with stress. Therefore, the comparability is limited. Given that nine of twelve participants reached a higher degree of education (a bachelor, master, diploma or state examination), the sample was very homogeneous. Hence, there was subsequently less contrast in the data. The phenomenon of social acceptance might have violated the results concerning the scoring on the questionnaires, but also the answers in the interviews. Particularly the seven participants taken from the researcher's social environment could (unconsciously) have felt forced for example to score a bit higher on the MHC knowing that this researcher will conduct the questionnaire evaluation later on. Also the objectivity concerning the interview data might have been limited by the fact that participant and researcher knew each other. Furthermore, the sample size (N=12) was too small to be able to make solid conclusions.

Strength of this study was the interview schedule which allowed generating totally new insights in coping strategies with very open questions that didn't guide participant in a certain direction. Also letting participants first describe a stressful situation might have stimulated them to better recap what they actually did with their stress. Besides, strength was that this mixed-method study approached a research field that is very less researched yet. It might enhance to establish other research about this topic with greater resources regarding sample size, time and amount of researchers.

The field of flourishing in the condition of stress is still less researched. There are still profuse perspectives to be pursued in future research. Particularly, the role of social support as resource to cope with stress was less taken into account in this study. Additionally, it could be useful to investigate in how far other character traits are playing a role in flourishing and coping with stress. By means of larger sample sizes, it could be possible to elaborate if there are certain patterns in peoples' beliefs about stress. In order to amplify the knowledge about stress and flourishing, it could be further researched if there are more particular beliefs about stress that all flourishers have in common. Except one of the five flourishers, all had the belief that stress helped them to perform. It is possible that there are other crucial beliefs that support flourishers or impair non-flourishers concerning their coping approach. Another field of future research could be to explore the differences in the effectiveness of certain coping strategies. In addition, it is still not understood if active coping strategies are automatically more effective than passive strategies. It could be conceivable that the results of coping rather depend on the requirements of the situation.

The results of this study could be practically harnessed by attempts to be more aware of the own coping style. If one is more aware of e.g. repeating patterns in the own coping style, one could also understand the own process of coping more easily in order to adjust maladaptive coping styles. Since stress is a very subjective thing, it appears beneficial to see it at least temporarily in a more objective light to deeper understand the mechanisms behind stress. The results could stimulate people to question their beliefs about stress and to integrate stress into their lives in a more constructive and advantageous way. Ultimately, the results underlined one's own responsibility and influence on the stress response.

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