



LUNDS
UNIVERSITET

INSTITUTIONEN FÖR PSYKOLOGI

SV: Var Snäll mot Dig Själv: En Undersökning av Stressfaktorer i Tjänstemannasektorn

EN: Appraise Stress with Kindness: An Exploration of Predictors to Perceived Stress in
White-collar Workers

Zelda H. Jägryd, Jenny R. Månsson, and Hedvig K. C. Ödahl

Bachelor Thesis, Spring 2020

Supervisor: Mia Maurer and Daiva Daukantaite

Examinator: Farhan Sarwar

Abstract

Many individuals experience high levels of stress at work. This paper aims to explore the relationship between elements that could generate and reduce levels of stress in work organizations. Specifically, the current research looks at the relationship of five individual difference variables: identity threat, fear of negative evaluation, self-compassion, work position, and gender. Identity threat and fear of negative evaluation are predicted to be contributors of stress, whereas self-compassion is predicted to hinder the effects of stress. Additionally, working as a non-manager or being a female is also predicted to lead to more perceived stress. For this study, a convenience sample of 159 Swedish white-collar workers responded to an online survey. A multiple regression analysis revealed significant results for identity threat and self-compassion as two strong predictors of stress. The implications that can be drawn from this study is that self-compassion can serve a beneficial strategy in minimizing stress in work organizations.

Keywords: perceived stress, identity threat, fear of negative evaluation, self-compassion

Sammanfattning

Många individer upplever höga stressnivåer på arbetsplatsen. Denna uppsats avser att utforska sambandet mellan olika aspekter som påverkar arbetsrelaterad stress i organisationer. Studien undersöker sambandet mellan fem individuella variabler: identitetshot, rädsla för negativ evaluering, självmedkänsla, arbetsposition och genus. I denna studie antas identitetshot och rädsla för negativ evaluering vara bidragande faktorer till stress samt självmedkänsla antas minska negativa konsekvenser av stress. Vidare undersöks om stress är mer förekommande hos icke-chefer och kvinnliga medarbetare. I studien gjordes ett bekvämlighetsurval av 159 svenska tjänstemän som svarade på en webbaserad enkät. En multipel regressionsanalys visade signifikanta resultat för identitetshot och självmedkänsla som två starka prediktorer för stress. Slutsatsen som kan dras från denna studie är att självmedkänsla kan vara en potentiellt framgångsrik strategi för att minska stress på arbetsplatser.

Nyckelord: upplevd stress, identitetshot, rädsla för negativ evaluering, självmedkänsla

Appraise Stress with Kindness: An Exploration of Predictors to Perceived Stress in White-collar Workers

Many individuals report feeling stressed at work (Arbetsmiljöverket, 2019b). Occupational well-being is strongly undermined by having high work-related stress. Several previous studies have investigated the relationship between work-related stress and well-being (Landy, Quick, & Kasl, 1994; Burke, 2010; Page et al., 2014; Prada-Ospina, 2019). However, not all aspects that are related to stress in the workplace have been exhaustively studied. For instance, how factors like identity threats (one's self-concept is being challenged, questioned, or diminished) (Aquino & Douglas, 2003; Bies, 1999; Steele, 1988) and fear of negative evaluation (the worry of being perceived or assessed undesirably by others) (Watson & Friend, 1969) relate to stress, and whether a self-compassionate attitude towards the self (Neff, 2003b) could in fact buffer the adverse effects of stress. This leads to the purpose of this paper, namely, to explore the aspects of identity threats and fear of negative evaluation as potential work stressors and self-compassion a beneficial buffer against stress.

Work-related Stress

Many people in Sweden report feeling stressed at work. In 2018, 16% of the Swedish population aged 16-84 reported feeling relatively or very stressed (Folkhälsomyndigheten, 2020). Moreover, between 2015 and 2017, "job strain" was seen in 33% of women and 20% of men (Arbetsmiljöverket, 2019b). To measure work-related stress, the Swedish work environment authority looks at the combination of high demands and low control, usually referred as "job strain" (Arbetsmiljöverket, 2019a). Additionally, a report from AFA insurance showed that mental illness is the most common cause of long-term sick leave in all counties in Sweden (AFA Försäkring, 2019). Around 770 people die every year in

Sweden due work-related stress (Arbetsmiljöverket, 2019a). Significantly more people die due to work-related stress than accidents at work. Sadly, the number of deaths caused by stress seem to only continue to increase according to the work environment authority (Arbetsmiljöverket, 2019a).

Stress is a widely known construct that has been defined in many different ways. Medically speaking, stress involves the process of quickly mobilising the body's resources in order to protect itself from acute stress (Folkhälsomyndigheten, 2020). Stress is also defined as a both biologic and psychological reaction to strains, in other words the mobilisation of resources in order to handle different kinds of demands or stress loads (Institutet för stressmedicin [ISM], 2019b). Psychological definitions of stress include “the adverse reaction people have to excessive pressure or other types of demands placed on them” (Health and Safety Executive, 2017, p. 3). Additionally, Lazarus and Folkman (1984) described stress as “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (p. 19). For this project, we base our understanding of stress and its definition on the theory developed by Lazarus and Folkman (1984).

The Transactional Model of Stress and Coping

The transactional model of stress and coping is a theory that looks at individuals' perception, responses, and adaption to situations as a source of stress (Lazarus & Folkman, 1984). The model discusses three kinds of cognitive appraisals: primary appraisal, secondary appraisal, and reappraisal. Moreover, it also explains the relevance of how individuals' cope with stressful situations.

Primary appraisal. This first phase involves individuals' evaluation of a situation. A situation can be interpreted as either irrelevant, positive, or induce stress (Lazarus &

Folkman, 1984). If an individual appraises a situation as stressful, it can bring feelings of harm/loss, anticipated threat, or challenge. Both feelings of harm/loss and anticipated threat are more related to negative emotions, whereas the challenge appraisal is centered around potential gain. Although distinct from one another, threat and challenge emotions can occur together (Lazarus & Folkman, 1984). If an individual evaluates a situation as threatening or challenging, they move on to the secondary appraisal.

Secondary appraisal. In this phase people evaluate what resources they have to manage the situation and potential consequences (Lazarus & Folkman, 1984). People are more likely to experience higher levels of negative stress if they feel helpless in the situation and dread a negative outcome. On the contrary, if people feel a sense of control (of themselves or/and over the situation) they are more likely to appraise it as a challenge and thus experience lower levels of negative stress. Together primary appraisals and secondary appraisals form how stressful people experience a situation (Lazarus & Folkman, 1984).

Reappraisal. If an individual alters their way of looking at a situation, they make a reappraisal (Lazarus & Folkman, 1984). For example, someone is running late to a meeting with their boss. The individual is driving fast in traffic and stressing to arrive at the meeting in time. But, then the person thinks about the few minutes it will save and how pointless it is. Now, the individual experiences less stress instead. The reappraisal is a matter of appraising the situation again based on new environmental stimuli (Lazarus & Folkman, 1984).

Coping. Another element Lazarus and Folkman (1984) discuss in their theory is coping mechanisms. They describe coping as the cognitive and behavioral ways individuals deal with stressful situations. The way people handle stressful situations can be either problem-focused or emotion-focused (Lazarus & Folkman, 1984). Problem-focused coping is when individuals are trying to manage or change the stressful situation. It might involve

actively working towards addressing the stressor, changing priorities in favor of dealing with the stressor, or seeking social support from others for emotional or instrumental reasons (Flin, O'Connor & Crichton, 2008). For example, an individual asks a co-worker for assistance with a work assignment. Whereas, emotion-focused coping is trying to manage the emotional responses caused by the stressful situation (Lazarus & Folkman, 1984). An illustration of this is when an individual is being mindful or reframing the situation so it changes the emotional impact. Being mindful and reframing a situation is part of the construct called self-compassion (Neff, 2003b). In the present study, it is suggested that self-compassion could be such an emotion-focused coping mechanism. Although explained as two separate coping strategies (problem-focused and emotion-focused coping) they may also occur simultaneously (Lazarus & Folkman, 1984). When people do not manage to successfully cope with a stressful situation, there can be some adverse outcomes.

Consequences of Work-related Stress

Work-related stress can be very detrimental to one's health. When the system has been activated for an excessive amount of time without the possibility to recover, the risk for a wide range of psychological as well as somatic diseases increases (Folkhälsomyndigheten, 2020). Long-term stress can lead to harmful physical consequences such as higher blood pressure, headaches, shoulder and neck pain, cardiovascular diseases, stomach problems, exhaustion, fatigue, and burnout (Arbetsmiljöupplysningen, n.d.). Stress can also bring undesirable cognitive consequences such as concentration difficulties, forgetfulness, and trouble focusing on multiple things (ISM, 2019a). Additionally, it can cause damaging psychological outcomes such as depression, feelings of hopelessness, short-temper, anxiety, panic attacks, and having a harder time feeling content (ISM, 2019a). Besides being a health hazard for individuals who are affected, chronic stress amongst workers can manifest itself in

organizational consequences, such as reduced performance, accident involvement, and frequent staff turnovers (Flin et al., 2008).

Stressors at the Workplace

People experience stress in their workplace for numerous reasons. The experience of stressors can either be improved or worsened by mediating factors that can be seen as “the ‘lens’ through which the effects of stressors are amplified or reduced” (Flin et al., 2008, p. 162). For example, two significant contributors of stress are excessive workload combined with uncertain expectations within their work role (Na, Choo & Klingfuss, 2018). Other common stressors are low salaries, minimal opportunity for growth or advancement, unchallenging or unengaging work, little control of work decisions, contradictory demands or vague performance expectations (American Psychological Association [APA], 2019), disputes, risk of being subjected to threats and violence, working alone (Arbetsmiljöupplysningen, 2020), being under too much pressure, low levels of social support (e.g. friends, family, coworkers, and managers) and particular deadlines (Flin et al., 2008). Lastly, another factor that could be a source of stress is when people’s self-concept is being threatened.

Identity Threat

Most people strive to present a desirable image of oneself (Schlenker, 1980) and of their social identity (e.g., occupation, gender) (Tajfel & Turner, 1985). The failure to portray a positive image of oneself can result in the self-conscious emotions of embarrassment, shame, and guilt (Schlenker, 1980). When one’s social identity is threatened people feel that the capabilities of their perceived group membership is being devalued (Tajfel & Turner, 1985). Furthermore, identity threat has been defined as an explicit action someone does to

challenge, question, or diminish another individual's capabilities, dignity, and self-worth (Aquino & Douglas, 2003; Bies, 1999; Steele, 1988).

A behavior that threatens a person's self-concept can potentially make perceived stress worse. For example, a study conducted by Karademas and colleagues (2013) that explored primal threats, with personal identity and growth as components, showed that primal threat is strongly linked to well-being and stressful situations. In addition, a study on workers with chronic illnesses demonstrated a relationship between perceptions of identity threat and stress (McGonagle & Barnes-Farrell, 2014). Moreover, female participants who were exposed to a social identity threatening situation and felt targeted, did in fact experience induced stress (Townsend, Major, Gangi, & Mendes, 2011). The way they appraised the situation (Lazarus & Folkman, 1984) could have formed how stressful they experienced the situation.

Fear of Negative Evaluation

Another individual difference variable that may make perceived stress worse, is fear of negative evaluation. Watson and Friend (1969) defined the construct of fear of negative evaluation (FNE) as the "apprehension about others' evaluations, distress over their negative evaluations, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively" (p. 449). From their study they concluded that individuals who are high in FNE were prone to nervousness when they encountered situations that involved evaluation. They also tended to put a great deal of effort into either obtaining approval or avoiding disapproval (Watson & Friend, 1969).

However, the occurrence of high FNE does not enable the conclusion that the individual is affected by internal negative self evaluation or is having concerns about disclosure of inferiority (Watson & Friend, 1969). Neither would the opposite of FNE

indicate a desire for positive evaluation, instead the opposite of having high FNE would imply absence of anxiety when being evaluated by others. FNE distinguishes itself from similar constructs such as test anxiety since it can operate in a wider range of social evaluative conditions, such as job interviews or talking to individuals who one finds superior (Watson & Friend, 1969).

Few studies have previously examined the relationship between FNE and occupational stress. However some studies have examined the relationship between FNE and stress in other contexts. Results from a study, published in *Psychology of Sport and Exercise* (Mesagno, Harvey & Janelle, 2012), indicated that athletes who scored high on the FNE scale “displayed a significant increase in anxiety and a significant decrease in performance from low-to high pressure phase” (Mesagno et al., 2012, p. 60). Additionally, another study found that amongst people with low FNE “[c]onstructive coping was marginally and positively related to depression...” (Taniguchi, 2018, p. 163). Their results also suggested that “...constructive coping was marginally and negatively correlated with loneliness only among people with high levels of fear of negative evaluation” (Taniguchi, 2018, p. 163). Furthermore, FNE has been identified as a mediating factor in the relationship between perceived stress and maladaptive perfectionism (Shafique, Gul & Raseed, 2017).

Self-compassion

Self-compassion is an emotionally positive self-attitude that can be a strategy to reduce occupational stress. Self-compassion is similar to the more known concept of having compassion for others (Neff, 2003a). Compassion can be defined as “the humane quality of understanding the suffering of others and wanting to do something about it” (Webster-dictionary, 2020, par. 2). This means offering kindness rather than judging people's

mistakes. Self-compassion is about having compassion for oneself, offering kindness, and a non-judgmental understanding to one's own pain and failures (Neff, 2003a).

Self-compassion consists of three main components which all interact to enhance each other: self-kindness, common humanity and mindfulness (Neff, 2003b). Self-kindness is being kind and understanding toward one's own failures rather than being self-critical or judging oneself. Being self-kind will also increase the feelings of common humanity and mindfulness. Common humanity is the sense of feeling connected to other people when experiencing pain and understanding that we all are going through difficult times. This puts one's thoughts into perspective instead of isolating and separating themselves from others, believing they are the only one struggling in life (Neff, 2003b). Mindfulness is being aware of the present moment with a non-judgmental attitude. Being mindful, one is able to hold painful thoughts and feelings in balance, rather than over-identifying with them (Neff, 2003b). This creates distance from one's negative thoughts and a certain degree of mindfulness is needed for self-kindness and common humanity to arise (Neff, 2003b).

Self-compassion and stress. Some qualitative research findings suggest that self-compassion, stress resilience, and self-reflection can be enhanced by the implementation of mindfulness training (van Wietmarschen, Tjaden, van Vliet, Battjes-Fries, & Jong, 2018). Another study examining the effects of mindfulness-based interventions, found similar gains in the participants' self-compassion and personal mindfulness practice in addition to the experience of reduced stress (Whitesman & Mash, 2015). Findings from a study of adolescents indicated that higher levels of self-compassion was related to greater emotional well-being and lower physiological stress response than people with lower levels of self-compassion (Bluth et al., 2016).

Self-compassion in the workplace. Self-compassion can be beneficial in many different work-related domains. A study conducted by Reizer (2019) revealed that self-compassion is related to many positive organizational outcomes in the service-sector, such as increased job performance, less emotional exhaustion and fewer turnover intentions. Moreover, another study demonstrated that white-collar workers tended to report less feelings of depression, anxiety, and burnout if they scored high on self-compassion (Abaci & Arda, 2013). In addition, with a more self-compassionate attitude, nurse participants indicated increased job satisfaction, improved sleep quality, and fewer symptoms of burnout (Vaillancourt & Wasylkiw, 2019). A study on fifty-seven physicians in Canada, also demonstrated that a self-compassionate attitude brings desirable outcomes (Babenko, Mosewich, Lee, & Koppula, 2019). Participants high in self-compassion reported less feelings of exhaustion because of work demands, more engagement in their work, and being more content with their work life.

Self-compassion in the workplace and stress. Only a few studies have examined the relationship between self-compassion and occupational stress. But, research from BMC Women's Health showed that self-compassion was associated with less stress and depression in female managers (Pires et al., 2018). Furthermore, a study from Umeå University examined the effects of a six weeks web-based mindful self-compassion program in a group of practicing psychologists (Eriksson, Germundsjö, Åström, & Rönnlund, 2018). The program resulted in increased levels of self-compassion as well as reduced stress and burnout symptoms among the participating psychologists. Another mindfulness meditation and self-compassion training program conducted on nurses found similar findings (Mahon, Mee, Brett, & Dowling, 2017). After the intervention the nurses reported reduced feelings of

perceived stress and the results hold promise for mindfulness meditation and self-compassion as potential instruments in combating stress.

Work Position, Gender, and Stress

Aside from previous stated constructs, there may be additional factors that can impact stress, such as work position and gender. Previous research has shown that psychological factors in stress responses are important in relation to gender roles (Lundberg, 2005). Gender proved to be an important factor in a study on workplace stressors (Attell, Kummerow, Treiber, 2017). While investigating bullying as a stressor, Attel and his colleagues (2017) found that women were more affected than men. Also, in another study among university teachers, women reported greater stress at work than men (Slišković & Maslić Seršić, 2011). In contrast to some perceptions of managers being more stressed, a study on Danish managers and their employees found that managers experience lower stress levels than employees (Skakon et al., 2011). The managers reported less stress due to more positive perception of their work and higher levels of control. Also, Flin and her colleagues (2008) point out how well an individual is equipped to face the stressors can depend on their ‘resources’ (e.g. prior experiences, competencies or training). With this stated, the constructs of interest have been explored and this leads to the review of the current study.

Current Study

The purpose of this project is to explore the relationship of various individual difference variables on stress in work organizations. Specifically, we are examining whether identity threats and fear of negative evaluation are related to perceived stress and if self-compassion could be a potential buffer against stress in Swedish white collar workers. Evidence has shown that stress is related to experiencing identity threatening situations (Townsend et al., 2011) and fear of negative evaluation (Shafique et al., 2017). This could be

linked to the transactional model of stress and coping, because appraising a situation as threatening or challenging will affect individuals' amount of perceived stress (Lazarus & Folkman, 1984). Contrarily, self-compassion is a predictor variable that can lessen the effects of stressful situations (Mahon et al., 2017). This goes in line with the emotional-coping strategies that Lazarus and Folkman (1984) present, and could be compared with self-compassion practices when evaluating the effect to reduce stress among employees.

Additionally, this study also looks at work position (manager or non-manager) and gender differences in relationship to stress. Lazarus and Folkman (1984) addresses the significance of being in control (of themselves and/or the situation) in order to experience less negative stress. Arbetsmiljöverket (2019b) also refers to stress as having low control, but in combination of high demands. Hence, since non-managers may have less control and less positive perceptions of their job (Skakon et al., 2011) compared to managers, we predict that non-managers will experience more stress. In addition, statistics have shown that women report being more affected by job-related stress (Arbetsmiljöverket, 2019b). Thus, we believe women will experience higher levels of perceived stress. More specifically, we predicted the following hypotheses.

Hypotheses

H1. It is expected that identity threat and fear of negative evaluation will correlate positively with perceived stress, while self-compassion will correlate negatively with perceived stress.

H2. Non-managers will report more perceived stress than managers.

H3. Female participants will report higher levels of perceived stress than men.

H4. It is expected that identity threat, fear of negative evaluation, self-compassion, work position, and gender together will predict perceived stress differently, such as while

identity threat, fear of negative evaluation, non-managerial work position, and female gender are expected to increase stress, self-compassion is expected to lessen stress.

Method

Participants

A total of 184 participants completed the survey. However, due to not being white-collar workers, 25 participants were removed from the sample. Thus, the final sample size consisted of 159 Swedish white collar workers. There were 101 women (63.9%) and 57 men (36.1%). The participants' ages ranged from 23 to 69 ($M = 41.5$, $SD = 13.5$). All participants had completed high school and the majority (89.9%) had post-secondary education. 145 participants were full-time workers and 12 were part-time. Due to the current situation of covid-19, if a participant had a temporary paid interruption in work, they were still considered a full-time worker in our sample. Most of the sample were non-managers, namely 123 participants (77.4%), compared to the 36 managers (22.7%). Additionally, there were almost twice as many private employees compared to public employees.

Materials

Primary dependent measure. In the present study, the primary dependent measure is perceived stress.

Perceived stress. Participants completed the Swedish translated version of the Perceived Stress Scale (PSS) (Cohen, Kamarck, & Mermelstein, 1983; translated into Swedish by the Institutet för Stressmedicin, 2012). The established scale consists of 14 items, with seven items related to positive experiences and seven items related to negative experiences. Participants were asked to indicate how often they felt or thought a certain way during the last month on a 5-point, Likert-type frequency scale ($0 = \text{Never}$; $4 = \text{Very often}$). A positive example item: "In the last month, how often have you dealt successfully with

irritating life hassles?” A negative example item: “In the last month, how often have you felt that you were unable to control the important things in your life?” The Swedish version of the perceived stress scale displayed good reliability: Cronbach’s alpha ($\alpha = .85$).

Primary predictor variables. In the present study, identity threats, fear of negative evaluation, self-compassion, work position, and gender are the primary predictor variables.

Identity threats. The Identity Threat Measure composed by Aquino & Douglas (2003) was used to measure this construct. It consists of 9 items that are originally drawn from two other instruments that measure harmful behaviors in the workplace towards employees (Aquino, Grover, Bradfield, & Allen, 1999; Björkqvist et al., 1994). The measure was translated into Swedish using the back-translation procedure (Sousa & Rojjanasrirat, 2011). First the measure was translated to Swedish by a native Swedish speaker, then it was translated back into English by another fluent English speaker, and the translated and original versions were compared for similarity in meaning. All parties involved agreed the measure were similar in meaning. Participants were asked to indicate the number of times the targeted behavior was displayed towards them by one or more co-workers the past 6 months, using a 5-point Likert scale ($1 = \text{Never}$; $2 = 1\text{--}3 \text{ times}$; $3 = 4\text{--}6 \text{ times}$; $4 = 7\text{--}9 \text{ times}$; $5 = 10 \text{ or more times}$). An example item: “Did something to make you look bad.” The Identity Threat Measure showed good reliability: Cronbach’s alpha ($\alpha = .92$).

Fear of negative evaluation. The original Fear of Negative Evaluation (FNE) Scale (Watson & Friend, 1969) consists of 30 items. However, due to its more convenient length, participants completed the established Brief Fear of Negative Evaluation Scale (Leary, 1983). Identical to the Identity Threat Measure, this scale was translated into Swedish using the back-translation procedure (Sousa & Rojjanasrirat, 2011). The short version of the scale consists of 12 items and it is a 5-point, Likert-type self-reflective scale ($1 = \text{Not at all}$

characteristic of me; 5 = Extremely characteristic of me). An example item: “I am usually worried about what kind of impression I make.” The Brief-FNE scale is an overall good replacement for its original 30-item scale. The Brief-FNE presented good reliability: Cronbach’s alpha ($\alpha = .89$).

Self-compassion. The established Self-compassion Scale (Neff, 2003a) consists of 26 items and serves as an assessment for individuals’ general self-compassion level. However, participants completed the Swedish version of the short form Self-compassion Scale (Bengtsson, Söderström, & Terjestam, 2016) due to its more convenient length and already translated to participants’ native language. The shorter scale is a 5-point Likert-type frequency scale (*1 = Almost never; 5 = Almost always*). It consists of 12 items and has 6 subscales: self-kindness (e.g., “I try to be understanding and patient towards those aspects of my personality I don’t like”), self-judgement (e.g., “I’m disapproving and judgmental about my own flaws and inadequacies”), common humanity (e.g., “I try to see my failings as part of the human condition”), isolation (e.g., “When I fail at something that’s important to me, I tend to feel alone in my failure”), mindfulness (e.g., “When something painful happens I try to take a balanced view of the situation”), and over-identification (e.g., “When I’m feeling down I tend to obsess and fixate on everything that’s wrong”). The short version of the self-compassion scale demonstrated good reliability: Cronbach’s alpha ($\alpha = .85$).

Work position. All participants answered an item about their work position (manager or non-manager). This item was added to explore whether there could be a difference in managers and non-managers when it comes to perceived stress.

Gender. All participants self-reported their gender identity. This item was added to explore whether there could be a difference in women and men when it comes to perceived stress.

Research Design

This was a quantitative cross-sectional study with a correlational research design. In the study there were five primary predictor variables and one dependent measure.

Procedure

The current research was conducted in April, 2020. Participants were a convenience sample recruited through the internet platforms, Facebook, LinkedIn and by email. All participants responded to an online survey in Qualtrics with 57-items. The questionnaire consisted of ten demographic questions and the four scales described in the materials section (Perceived Stress Scale; Identity Threat Measure; Brief Fear of Negative Evaluation Scale; Self-compassion Scale). The online data collection was maintained during a week-long period.

Data Analysis

Followed by data collection, the data was exported to the statistical program, Jamovi. When cleaning the data, it was needed to reverse-code the negative worded items on the various scales. In addition, the student researchers checked for the scales' reliability. Thereafter, assumption checks were made to insure no violations to the data set. Furthermore, a correlation matrix was conducted between the dependent variable (stress) and the independent variables (identity threat, fear of negative evaluation, self-compassion, work position, and gender). Finally, a multiple regression was made to see the impact of the various independent variables on the dependent variable.

Ethics

Before launching the survey, ethics approval was granted from the course administrator and supervisor at the Department of Psychology at Lund University, Sweden. Responses were collected anonymously and participants were guaranteed confidentiality.

Participants were also told that they could withdraw from the study at any time or skip questions they did not want to answer. There were minimal risks by participating in the survey and participants did not receive any compensation for their participation. Participants had to consent before beginning answering the survey.

Result

Preliminary Analyses

Preliminary analyses showed no violation of normality, with Shapiro-Wilks test showing a non-significant value ($p = .78$). Inspection of scatterplots showed sufficiently linear relationships between the variables. The assumption of multicollinearity was not violated, with VIF and Tolerance values within the acceptable ranges (Pallant, 2010). No missing value imputation or replacement was done, due to a small amount of values missing in the complete sample.

When checking for outliers we found that the identity threat measure score on skewness and kurtosis was not within the acceptable range (i.e. between -1 and 1; see Pallant, 2010). As recommended by Tabachnick and Fidell (2012) we transform the outliers with logarithm and inverse transformation, yet the outliers did not disappear. Thus, using data transformation for the outliers was assessed to not be an option. Since the outliers were believed to be legitimate data (a few participants experienced a high identity threat, while most of the participants did not), the decision was made to keep the outliers because without them it would mean losing a lot of data. Thus, in another attempt to handle the outliers, Tabachnick and Fidell's (2012) recommendation to change the value of the outliers was implemented. Ten outliers were discovered and all of their values were changed to one value lower than the highest non-outlying value. Thereafter, the data was checked with and without outliers and did not see any dramatic changes to our results. Hence, the data that was used for

the analysis was the one with the adjusted outliers. All other variables had acceptable skewness and kurtosis levels without outliers.

Intercorrelations

Using Pearson's product-moment correlation coefficients, there was a positive medium correlation between perceived stress and identity threat, $r = .39, p < .001$ (see table 1). Demonstrating that a high level of identity threat was related to a higher level of stress. Moreover, there was a negative large correlation between perceived stress and self-compassion, $r = -.56, p < .001$ (see table 1). Showing that high levels of self-compassion was related to lower levels of stress. Between perceived stress and FNE there was a positive medium correlation, $r = .31, p < .001$ (see table 1). All of these correlations support the first hypothesis. In addition, gender and work position were coded as dummy variables suitable for Pearson correlations (Pallant, 2010). Thus, despite being categorical variables, they could be used with Pearson correlation. Between perceived stress and gender there was a significant small correlation, $r = -.17, p = .031$ (see table 1). Women measured higher than men on perceived stress. This supports our second hypothesis. A non-significant zero correlation was seen between perceived stress and work position, $r = -.03, p = .668$ (see table 1). This result did not show support for the third hypothesis.

Table 1

Correlations Matrix

| Variable | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------|----------|-----------|--------|------|---|---|---|---|
| 1. PS ^a | 35.9 | 7.55 | — | | | | | |
| 2. IT ^a | 11.3 | 3.02 | .39*** | — | | | | |
| 3. FNE ^a | 27.4 | 7.24 | .31*** | .17* | — | | | |

| | | | | | | | | |
|--------------------------|------|------|---------|-------|---------|-----|------|---|
| 4. SC ^a | 40.7 | 7.82 | -.56*** | -.18* | -.56*** | — | | |
| 5. Position ^b | 0.23 | 0.42 | -.03 | .12 | -.12 | .14 | — | |
| 6. Gender ^c | 0.36 | 0.48 | -.17* | -.18* | -.14 | .06 | -.15 | — |

^a Values reflect total scale scores. PS = Perceived stress scale; IT = Identity threat measure; FNE = Brief fear of negative evaluation scale; SC = Self-compassion scale.

^b 0 = non-managers and 1 = managers.

^c 0 = females and 1 = males.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Main Analyses: Multiple Regression

Multiple regression was used to assess the ability of five independent variables (Identity Threat Measure, Brief Fear of Negative Evaluation Scale, Self-compassion Scale, gender and work position) to predict levels of stress (Perceived Stress Scale). As a whole, the total variance explained by the model was 38.4% (adjusted $R^2 = .38$), $F(4, 152) = 25.4$, $p < .001$. Identity threat significantly predicted perceived stress, ($b = .67$, $p < .001$), indicating that higher levels of identity threat predicted higher levels of stress (see table 2). This result partly supports the fourth hypothesis. Self-compassion also significantly predicted less perceived stress, ($b = -.51$, $p < .001$), indicating that higher levels of self-compassion predicted lower levels of stress, which shows further support for the fourth hypothesis (see table 2). However, FNE did not significantly predict perceived stress, ($b = -.05$, $p = .572$) (see table 2). Compared to identity threat and self-compassion, this result did not support the fourth hypothesis.

Furthermore, gender (female or male) did not significantly predict perceived stress, ($b = -1.60$, $p = .115$) (see table 2). Namely, gender identity did not predict perceived stress. This

result did not show support for the fourth hypothesis. Work position was not included in the main multiple regression analysis since it was shown to have no correlation with stress. Thus, being a manager or non-manager did not affect their perceived stress. Conclusively, this result did not support the fourth hypothesis.

Table 2

Results from Multiple Regression Analysis

| Model Coefficients - Perceived Stress | Estimate | SE | t | p |
|---------------------------------------|----------|------|-------|-------|
| Predictor | | | | |
| Intercept | 51.06 | 5.12 | 9.99 | <.001 |
| IT ^a | .67 | .17 | 4.00 | <.001 |
| FNE ^a | -.05 | .08 | -.57 | .572 |
| SC ^a | -.51 | .07 | -6.91 | <.001 |
| Gender ^b | -1.60 | 1.01 | -1.59 | .115 |

^a Values reflect total scale scores. IT = Identity threat measure; FNE = Brief fear of negative evaluation scale; SC = Self-compassion scale.

^b 0 = females and 1 = males.

Discussion

As previous research also suggests, identity threat seems to be strongly associated with perceived stress. Participants who reported high levels of identity threat at work, also reported high levels of stress. This replicated the findings of Karademas and colleagues' (2013) study that found identity threat as a factor associated with stress. Identity threat was the strongest predictor variable in our multiple regression analysis. This result demonstrates the importance of people perceiving their work environment as a friendly and a

non-judgemental zone. This finding adds further support to, the relatively small research body conducted on, the importance of preventing identity threat in the workplace. Moreover, this is in line with the theory of Lazarus and Folkman (1984) stating that the way people appraise a situation (e.g. threatening) forms how stressful, or non-stressful, they experience it.

In addition to identity threat, self-compassion was another strong predictor to perceived stress. This result is a further contribution to self-compassion as a healthy approach to life challenges, namely stress. Participants who had high scores on the self-compassion scale, also had low scores on the perceived stress scale. A significant finding that could benefit many work organizations. This result suggests that self-compassion could be a way to manage the emotional response to stress in Swedish white-collar workers, which can be defined as an emotion-focused coping mechanism according to the theory of Lazarus and Folkman (1984).

Contrary to some research on stress and FNE, a significant relationship between the two variables was not found. Based on the study's findings, FNE seems not to be a factor that produces high stress at work. This was a rather unexpected result. Based on our understanding, if people are afraid of receiving negative feedback or are being evaluated in a negative way, it would increase their stress levels. However, our findings suggest differently. Thus, these aspects (FNE and stress) and how they related to each other should be further examined. Also, since FNE was not strongly related to stress, it would be interesting to see what relates to high levels of FNE in work organizations. The current study specifically looked at white-collar workers in Sweden, therefore, FNE may predict stress in other work domains and/or societies.

Ultimately, no substantial relationship was found between stress and work position or gender. Whether an individual worked as a manager, or non-manager, did not show great

difference in their stress level. In this study, we solely focused on managers and non-managers. However, the result might have been different if we explored various levels of managerial positions. For example, a clear distinction between managers and middle-managers. High demands and low control is how Arbetsmiljöverket (2019b) refers to stress. Thus, it is possible that middle-managers may experience more stress than managers and non-managers. A middle-manager may work under higher demands than a non-manager and with lower control than a manager. This could be something worthy of further investigation. Also, participating women and men did not display extensive variations to their stress levels. These findings are contrary to several research studies conducted within this area. This could potentially depend on the fact that it was twice as many women than men in our sample. A more equal sample distribution between women and men may have given a different result.

Limitations of the Present Study

There are several limitations with the current research. Initially, the study is a correlational design, examining relationships between variables, and thus causality cannot be inferred. It is also hard to then generalize the study's result to an entire population of Swedish white-collar workers. Another limitation is that the study was based on a survey where participants self-reported their answers. This can be considered a limitation because the participants might not report truthful responses. Hence, in order to increase the participants' likelihood of providing honest responses, participants were informed about their rights of anonymity and ability to withdraw from the study at any time. The length of the survey (around seven minutes) could have bored or distracted the participants while trying to answer the questions properly. Furthermore, to protect the participants' anonymity, they did not put any identifying information on the survey.

In addition, since the sample was a convenience sample, recruited from the student researcher's private social platforms, one could question the diversity of the participants. For example, participants without or not active on social platforms might have been missed. Also, recruiting male participants online seemed to be more difficult than recruiting female participants. The final sample size consisted of the double amount of women. Moreover, the most stressed individuals may not have had the time nor energy to answer the survey. However, people's motivation and decision to partake in the survey, or not to partake, remains unknown. The survey's demographic section might have excluded some important information. Questions concerning participants' ethnicity, socioeconomic status, and type of white-collar work were not included. Thus, these aspects were not taken into consideration while analyzing the data.

During data analysis, many outliers were found for the identity threat measure. This could be seen as a potential limitation. Although Tabachnick and Fidell's (2012) recommendations were followed to handle the outliers, it might still have had an impact on the result. When analyzing the sample with the outliers, self-compassion was seen as the strongest predictor variable. Interestingly, although still a strong predictor, identity threat became the strongest predictor after changing the values of the outliers to a lower score. Another statistical limitation could include the results from the regression model. The regression model only explained 38.4% of the total variance in stress. Thus, there are some independent variables missing from the analysis that could explain more of the variance in stress.

Lastly, the unusual circumstances in people's daily lives could have influenced the results. The contagious and deadly virus, covid-19, is emitting immense worry among people. Not only is this virus bringing heartbreaking fatal outcomes, it also brings tragic economic

consequences. Some people may have lost their job or had someone in their family who lost their job. Other people may have temporary interruptions in work or other negative work complications. Due to this circumstance, data collection was limited to an online survey because reaching out to companies in person was no longer an available option. This current situation could very well affect participants' stress levels. However, this could also be a strength. If people reported higher levels of stress due to covid-19, the strong relationship seen between self-compassion and stress could be of even more powerful relevance. Indicating the importance of self-compassion in the presence of demanding and stressful occasions.

Future Directions and Implications

The present study indicates an importance of the relationship between identity threat and stress in the workplace. This is a concept that has not been widely studied, and thus we propose to explore this further with organizational levels. Companies might benefit from being more aware of the presence of identity threat and the risk of it causing stress amongst the workers. If companies become more aware of their work environment, they may address this issue by taking action towards creating a friendlier environment. Furthermore, it could potentially be interesting to look at the effects self-compassion could have on identity threat.

Since there was a strong relationship between stress and self-compassion, we suggest to further investigate this matter in Swedish work organizations. For example, it might be interesting to explore this concept in an experimental design with an intervention study. Conducting a study like this could explain whether or not there exists causality. A study to increase self-compassion in work organizations with specific self-compassion practices and see if it reduces the employees' stress levels. It would also be interesting to compare different kinds of stress management techniques with self-compassion practices. To explore how

effective self-compassion could be in order to reduce stress in an occupational context.

Further investigations could include how self-compassion may correlate to other aspects, other than stress, in an occupational context.

We believe that adding a more self-compassionate attitude among working professionals will bring positive outcomes for individuals, organization, and society. At the personal level it may reduce the amount of stress, burnouts, and improve general well-being (Abaci & Arda, 2013; Bluth et al., 2016). In an organizational context, an increase in self-compassion could contribute to a better working environment, reduce turnovers, hinder accident involvement, increase performance, and bring positive economic outcomes. Finally, at societal level, self compassion may save society's economic resources by preventing long term sick leave caused by stress. These suggestions should be further studied.

Lastly, since our study showed that self-compassion can serve as a tactic to help working professionals cope more effectively with stress, it might be applicable to other domains as well. Stress is a reoccurring and inevitable part in people's lives, independent of the setting, but self-compassion could hold a promising future.

References

- Abaci, R., & Arda, D. (2013). Relationship between self-compassion and job satisfaction in white collar workers. *Social and Behavioral Sciences*, *106*, 2241-2247. doi:10.1016/j.sbspro.2013.12.255
- AFA Försäkring. (2019). Psykisk ohälsa i olika län. Retrieved from https://www.afaforsakring.se/globalassets/forebyggande/analys-och-statistik/rapporter/2019/f6389_psykisk-ohalsa-lan.pdf
- American Psychological Association. (2019, October). Coping with stress at work. Retrieved April 13, 2020, from <https://www.apa.org/helpcenter/work-stress>
- Arbetsmiljöupplysningen. (n.d.). Stress. Retrieved April 14, 2020 from <https://www.arbetsmiljoupplysningen.se/Amnen/Stress/>
- Arbetsmiljöverket. (2019a). Arbetsrelaterad dödlighet: Delrapport 1 (2019:3). Retrieved from <https://www.av.se/globalassets/filer/publikationer/kunskapssammanstallningar/arbetsrelaterad-dodlighet-rap-2019-3-del-1.pdf>
- Arbetsmiljöverket. (2019b). Arbetsrelaterad dödlighet: Delrapport 2 (2019:4). Retrieved from <https://www.av.se/globalassets/filer/publikationer/kunskapssammanstallningar/arbetsrelaterad-dodlighet-rap-2019-4-del-2.pdf>
- Attell, B. K., Kummerow Brown, K., & Treiber, L. A. (2017). Workplace bullying, perceived job stressors, and psychological distress: Gender and race differences in the stress process. *Social Science Research*, *65*, 210-221. doi:10.1016/j.ssresearch.2017.02.001
- Aquino, K., Grover, S. L., Bradfield, M., & Allen, D. G. (1999). The effects of negative affectivity, hierarchical status, and self-determination on workplace victimization. *Academy of Management Journal*, *42*(3), 260–272. doi:10.2307/256918

- Aquino, K., & Douglas, S. (2003). Identity threat and antisocial behavior in organizations: The moderating effects of individual differences, aggressive modeling, and hierarchical status. *Organizational Behavior and Human Decision Processes*, *90*(1), 195-208. doi:10.1016/S0749-5978(02)00517-4
- Babenko, O., Mosewich, A., & Lee, A., & Koppula, S. (2019). Association of physicians' self-compassion with work engagement, exhaustion, and professional life satisfaction. *Medical Sciences*, *7*(29), 1-8. doi:10.3390/medsci7020029
- Bengtsson, H., Söderström, M., & Terjestam, Y. (2016). The structure and development of dispositional compassion in early adolescence. *Journal of Early Adolescence*, *36*(6), 840-873. doi:10.1177/0272431615594461
- Bies, R. J. (1999). *Interactional (in)justice: The sacred and the profane*. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational behavior*. San Francisco: The New Lexington Press.
- Björkqvist, K. (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex Roles*, *30*(3), 177–188.
doi:10.1007/BF01420988
- Bluth, K., Roberson, P. N. E., Gaylord, S. A., Faurot, K. R., Grewen, K. M., Arzon, S., ... Girdler, S. S. (2016). Does self-compassion protect adolescents from stress? *Journal of Child and Family Studies* *25*(4), 1098–1109. doi:10.1007/s10826-015-0307-3
- Burke, R. J. (2010). Workplace stress and well-being across cultures: Research and practice. *Cross Cultural Management*, *17*(1), 5–9. doi:10.1108/13527601011016871
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*(4), 385-396. doi:10.2307/2136404

- Eriksson, T., Germundsjö, L., Åström, E., & Rönnlund, M. (2018). Mindful self-compassion training reduces stress and burnout symptoms among practicing psychologists: A randomized controlled trial of a brief web-based intervention. *Frontiers in Psychology* 9, 1-10. doi:10.3389/fpsyg.2018.02340
- Flin, R., O'Connor, P., & Crichton, M. (2008). *Safety at the sharp end: A guide to non-technical skills*. Boca Raton: CRC Press.
- Folkhälsomyndigheten. (2020, March 16). Stress. Retrieved April 20, 2020, from <https://www.folkhalsomyndigheten.se/folkhalsorapportering-statistik/tolkad-rapportering/folkhalsans-utveckling/resultat/halsa/psykisk-ohalsa/stress/>
- Health and Safety Executive. (2017). Tackling work-related stress using the management Standards approach: A step-by-step workbook. Retrieved April 21, 2020 from <https://www.hse.gov.uk/pubns/wbk01.pdf>
- Institutet för stressmedicin ISM. (2019a, August 14). Allmänna symtom på stress. Retrieved April 14, 2020, from <https://www.vgregion.se/ov/ism/stress--rad-och-behandling/vad-ar-stress/symptom-pa-stress/>
- Institutet för stressmedicin ISM. (2019b, June 24). ISM:s definition på stress. Retrieved April 20, 2020, from <https://www.vgregion.se/ov/ism/stress--rad-och-behandling/vad-ar-stress/definition-pa-stress/>
- Karademas, E. C., Nikolaou, P., Mermiga, S., Psaroudakis, A., & Garipi, C. (2013). Perceived primal threat, stress, and health: Further examination of the role of perceived primal threat in the stress process. *The Journal of Psychology*, 147(3), 261-276. doi:10.1080/00223980.2012.685204

- Landy, F., Quick, J. C., & Kasl, S. (1994). Work, stress, and well-being. *International Journal of Stress Management, 1*(1), 33–73. doi:10.1007/BF01857282
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer Publishing Company.
- Leary, M. R. (1983). A brief version of the Fear of Negative Evaluation scale. *Personality and Social Psychology Bulletin, 9*(3), 371-375. doi:10.1177/0146167283093007
- Lundberg, U. (2005). Stress hormones in health and illness: The roles of work and gender. *Psychoneuroendocrinology, 30*(10), 1017-1021. doi:10.1016/j.psyneuen.2005.03.014
- Mahon, M. A., Mee, L., Brett, D., & Dowling, M. (2017). Nurses' perceived stress and compassion following a mindfulness meditation and self compassion training. *Journal of Research in Nursing, 22*(8), 572–583. doi:10.1177/1744987117721596
- McGonagle, A. K., & Barnes-Farrell, J. L. (2014). Chronic illness in the workplace: Stigma, identity threat and strain. *Stress Health, 30*(4), 310-21. doi:10.1002/smi.2518
- Mesagno, C., Harvey, J. T., & Janelle, A. M. (2012). Choking under pressure: The role of fear of negative evaluation. *Psychology of Sport and Exercise, 13*(1), 60-68. doi:10.1016/j.psychsport.2011.07.007
- Na, C., Choo, T., & Klingfuss, J. A. (2018). The causes and consequences of job-related stress among prosecutors. *American Journal of Criminal Justice, 43*(2), 329–353. doi:10.1007/s12103-017-9396-4
- Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223-250. doi:10.1080/15298860390209035
- Neff, K. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*, 85-101. doi:10.1080/15298860390129863

- Page, K. M., Milner, A. J., Martin, A., Turrell, G., Giles-Corti, B., & LaMontagne, A. D. (2014). Workplace stress: What is the role of positive mental health? *Journal of Occupational and Environmental Medicine*, *56*(8), 814–819. doi:10.1097/JOM.0000000000000230
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using the SPSS program*. (4th ed.). McGraw Hill, New York.
- Pires, F. B. C., Lacerda, S. S., Balardin, J. B., Portes, B., Tobo, B. R., Barrichello, C. R. C., ... Kozasa, E. H. (2018). Self-compassion is associated with less stress and depression and greater attention and brain response to affective stimuli in women managers. *BMC Women's Health* *18*(1), 195. doi:10.1186/s12905-018-0685-y
- Prada-Ospina, R. (2019). Social psychological factors and their relation to work-related stress as generating effect of burnout. *Interdisciplinaria Revista de Psicología y Ciencias Afines*, *36*(2), 39–53. doi:10.16888/interd.2019.36.2.3
- Reizer A. (2019). Bringing self-kindness into the workplace: Exploring the mediating role of self-compassion in the associations between attachment and organizational outcomes. *Frontiers in Psychology*, *10*, 1-13. doi:10.3389/fpsyg.2019.01148
- Schlenker, B. R. (1980). *Impression management: The self-concept, social identity, and interpersonal relations*. Monterey, CA: Brooks/Cole.
- Shafique, N., Gul, S., & Raseed, S. (2017). Perfectionism and perceived stress: The role of fear of negative evaluation. *International Journal of Mental Health*, *46*(4), 312-326. doi:10.1080/00207411.2017.1345046
- Skakon, J., Kristensen, T. S., Christensen, K. B., Lund, T. Labriola, M. (2011). Do managers experience more stress than employees? Results from the intervention project on absence and well-being (IPAW) study among danish managers and their employees.

Work: A Journal of Prevention, Assessment & Rehabilitation, 38(2), 103-109.

doi:10.3233/WOR-2011-1112

Slišković, A., & Maslić Seršić, D. (2011). Work stress among university teachers: Gender and position differences. *Archives of Industrial Hygiene and Toxicology*, 62, 99-307.

doi:10.2478/10004-1254-62-2011-2135

Sousa, V. D., & Rojjanasrirat, W. (2011). Translation, adaptation and validation of instruments or scales for use in cross-cultural research: A clear and user-friendly guideline. *Journal of Evaluation in Clinical Practice*, 17(2), 268–274.

doi:10.1111/j.1365-2753.2010.01434.x

Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self.

Advances in Experimental Social Psychology, 21, 261-302.

doi:10.1016/S0065-2601(08)60229-4

Tabachnick, B. G., & Fidell, L. S. (2012). *Using multivariate statistics*. (6th ed.). Person Education, Boston.

Tajfel, H., & Turner, J. C. (1985). The social identity theory of intergroup behaviour. In Worchel, S., & Austin, W. G. (Eds.). *The Psychology of Intergroup Relations: Key Readings* (pp. 7-24). Chicago, IL: Nelson-Hall.

Taniguchi, H. (2018). Individual differences in the effects of interpersonal stress coping: Focusing on fear of negative evaluation. *The Japanese Journal of Personality*, 27(2), 159-163. doi:10.2132/personality.27.2.7

Townsend, S. S. M., Major, B., Gangi, C. E., & Mendes, W. B. (2011). From “in the air” to “under the skin”: Cortisol responses to social identity threat. *Personality and Social Psychology Bulletin*, 37(2), 151–164. doi:10.1177/0146167210392384

- Vaillancourt, E. S., & Wasyliw, L. (2019). The intermediary role of burnout in the relationship between self-compassion and job satisfaction among nurses. *Canadian Journal of Nursing Research*, 0(0), 1-9. doi:10.1177/0844562119846274
- van Wietmarschen, H., Tjaden, B., van Vliet, M., Battjes-Fries, M., & Jong, M. (2018). Effects of mindfulness training on perceived stress, self-compassion, and self-reflection of primary care physicians: A mixed-methods study. *British Journal of General Practice*, 2(4) 1-11. doi:10.3399/bjgpopen18X101621
- Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. *Journal of Consulting and Clinical Psychology*, 33(4), 448-457. doi:10.1037/h0027806
- Webster-dictionary. (2020). In *Webster-dictionary.com*. Retrieved from <https://www.webster-dictionary.org/definition/compassion>
- Whitesman, S., & Mash, R. (2015). Examining the effects of a mindfulness-based professional training module on mindfulness, perceived stress, self-compassion and self-determination. *African Journal of Health Professions Education*, 7(2), 220-223. doi:10.7196/AJHPE.460