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Mindfulness in Leadership:

Examining the Impact of Leader Mindfulness on Compassion and Employee Satisfaction with Supervisor

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Abstract

The present research examines the relation between leader trait mindfulness and employee satisfaction with the leader. Based on reviewing existing literature the author hypothesizes a positive relation between leader trait mindfulness and employee satisfaction with the leader mediated by supervisor compassion. A study of dyadic leader-employee data ($N = 40$) shows that leader trait mindfulness is not significantly related to employee satisfaction and no mediation mechanism through compassion was confirmed. Nonetheless, a positive relationship between compassion received and employee satisfaction could be supported. Hence, the findings of the study were only partially consistent with the introduced Hypotheses.

Keywords: mindfulness, leadership, employee satisfaction, compassion

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Introduction

Mindfulness has become a trending topic in the business environment. Powerful companies such as Apple, Google, or Goldman Sachs have established mindfulness practice as part of their agenda to promote workplace functioning (Levin 2017). Successful business leaders like Jeff Weiner, CEO of LinkedIn, or Marc Benioff, the founder of Salesforce, practice mindfulness themselves (DeMers 2018). So far, research on mindfulness has uncovered many effects on individuals. However, only little is scientifically known of its effect on the relationship between business leaders and their subordinates. Particular, little research about the influence of leader mindfulness on satisfaction of employees has been done – although employee satisfaction has large impacts on companies. Among these, are impacts on employee turnover intentions (Scott et al. 2006) and moral commitment to the company (Jernigan and Beggs 2006). Thus, after reviewing relevant literature, the underlying study aims to examine the effect of leader mindfulness on employee satisfaction through quantitative research.

Literature Review

To investigate the value of mindfulness for organizational leadership, it is, first of all, crucial to review the effect mindfulness has on human functioning and which effects of mindfulness at the workplace are known so far. Second, outlining current evolvments in leadership literature helps to become aware of leadership traits and behaviors valued by the workforce and affecting the relationship between supervisor and employee.

Mindfulness and its Impact on Human Functioning

In general, mindfulness can be described as a process of awareness in which an individual openly attends to the present moment experience (Creswell 2017). This means one registers a stimulus from the environment without interpreting it at this exact point in time (Good et al. 2016). Thus, being mindful is contrary to letting one's mind wander without intention,

running on autopilot, or suppressing unsolicited experiences (Creswell 2017). The concept of mindfulness can be described as a state or a trait. The former refers to the mental state during or right after mindfulness practices, such as meditation (Lau et al. 2006). The latter refers to the predisposition to be mindful in daily life (Baer et al. 2006) and remains stable over time unless the individual engages in certain mindfulness interventions (Carmody et al. 2008). Examples for interventions are meditations retreats or training via meditation Apps for Smartphones (Creswell 2017).

In general, research shows that mindfulness impacts human functioning in five different domains: attention, cognition, emotions, behavior and physiology. Mindfulness increases attentional stability, sustaining attention on a target, (Smallwood and Schooler 2015), attentional control, selecting appropriate attention targets, as it helps the brain to identify distractions (Cahn, Delorme, and Polich 2013) and attentional efficiency, using attentional resources economically (Cahn and Polich 2009; Slagter et al. 2007). Furthermore, mindfulness enhances cognitive capacity (Ruocco and Wonders 2013; Gard et al. 2014) and cognitive flexibility (Colzato, Ozturk, and Hommel 2012; Ostafin and Kassman 2012). The former describes our working memory, the ability to memorize and process information (Baddeley 1983), as well as or fluid intelligence, our capability to handle and respond to new information (Good et al. 2016). The latter is associated with convergent and divergent thinking and is linked to our problem-solving ability (Colzato, Ozturk, and Hommel 2012; Ostafin and Kassman 2012). A study showed that people participating in mindfulness training were more looking for new perspectives to solve a problem than people who did not. This is explained by less bias resulting from past experiences (Ding et al. 2015). Further, increased mindfulness appears to reduce emotional reactivity to stimuli, including our response to imposed stress (Creswell et al. 2007). Moreover, it improves the emotional tone of a person, reflecting the overall positivity or negativity of emotions (Eberth and Sedlmeier 2012). This could be explained by the fact that a more mindful person is less

concerned with negative emotions related to past experiences (Good et al. 2016). Besides, it is argued that human behavior is influenced through mindfulness resulting in higher self-regulation (Tang et al. 2007; Glomb et al. 2011). This is in line with research on automaticity revealing that mindfulness helps to overcome deeply instilled automatic behavior (Elwafi et al. 2013; Westbrook et al. 2013), as it facilitates decoupling the stimulus from the usual response (Elwafi et al. 2013). Finally, in the physiological domain, effects of mindfulness include, again, reduced stress reactions (Brown, Weinstein, and Creswell 2012) or reduced age-related brain degeneration (Luders, Cherbuin, and Kurth 2014).

Knowing how mindfulness influences different domains of human functioning, an investigation of how this affects the workplace is meaningful.

Effects of Mindfulness at Work

Interest in mindfulness started to rise within the last decade. An increasing number of researchers specifically focus on how mindfulness can be applied to fields including education (e.g. Karunananda et al. 2016), business organizations (e.g. de Bruin et al. 2017), or even the military (e.g. Stanley et al. 2011). Practical research in the business context has focused on effects of mindfulness at the workplace, such as its effect on employees and leadership.

Effects of Mindfulness on Employees

Research on employee mindfulness mainly covers the following two areas: employee performance and well-being.

Regarding employee performance, researchers predominantly argue that the phenomenon has a positive effect. They suggest that mindfulness reduces attention lapses (Smallwood and Schooler 2015) and similarly, that more effective, controlled and stable attention to one's current task leads to reduced failures (Good et al. 2016). Furthermore, fluid intelligence, as well as a positive emotional tone, is argued to have a positive influence on job performance (Miner

and Glomb 2010). Hafenbrack (2017) argues that employees can utilize on-the-spot mindfulness interventions (mindfulness meditation) on different workplace situations to increase performance by reducing counterproductive behaviors and escalation of commitment. Further, less anxiety caused by increased state mindfulness is suggested to lead to alteration of negotiation performance. Reduced anger, however, also a result of the on-the-spot interventions, is proposed to diminish negotiation performance in situations it would indeed be helpful (Hafenbrack 2017). When focusing on team performance, mindfulness has proven to improve team meetings due to more active listening (Singh et al. 2006). In general, it is argued that mindfulness, leading to better handling with conflicts, improves teamwork (Barnes et al. 2007).

Besides effects related to employee performance, mindfulness influences employee well-being as it is negatively related to work-related stress and illness (de Bruin et al. 2017). In addition, it diminishes negative feelings such as rumination and retaliation (Long and Christian 2015) and negative affect, describing negative moods, as well as hostility and nervousness (Roche, Haar, and Luthans 2014). Moreover, it is inversely related to burnout, a psychological phenomenon associated with emotional exhaustion (Flook et al. 2013).

Beyond effects directly related to employee performance and to well-being, literature suggests that mindfulness improves creativity at the workplace (Kudesia 2015), leads to better resilience (Glomb et al. 2011) and greater empathy towards others (Dekeyser et al. 2008).

Besides benefits of mindfulness at work, negative impacts have also been found as it decreases task motivation explained by decreased focus on the future and reduced arousal (Hafenbrack and Vohs 2018).

Effects of Mindfulness on Leadership

Despite that most empirical studies about mindfulness at work examine intrapersonal effects, like those outlined in the previous section, fewer work looks at interpersonal effects, such as the relationship between leader and follower. Even though scholars have suggested that

mindfulness should improve leadership (Reb et al. 2018) there is limited empirical research on these theorized effects. Some of these are discussed below.

In general, effective leadership is described as “the ability to attain organizational goals by influencing others” (Reb et al. 2015, 264) and includes giving direction, feedback and support as well as motivating subordinates (Scandura and Schriesheim 1994).

Studies on intrapersonal effects of mindfulness and leaders at the workplace show, that supervisors who are more mindful, demonstrate greater self-mastery, representing the expertise, skills, knowledge, strengths and weaknesses of the leader himself (King and Haar 2017). Additionally, they are less likely to behave abusively after an employee shows bad performance (Liang et al. 2016). Regarding leadership styles, evidence exists that more mindful leaders show more characteristics related to servant leadership, described by three different dimensions: humility, standing back and authenticity (Verdorfer 2016). Further, there is a positive relation to transformational leadership, characterized through individual support and an emphasis on team goals, and a negative relationship to deconstructive leadership, leading with hostile behavior (Lange, Bormann, and Rowold 2018).

In recent years, first scientific articles were published which focus on interpersonal issues, examining the relationship between leader mindfulness and effects on their employees. These studies show that employees of supervisors with a higher degree of mindfulness in communication are more satisfied (Arendt, Verdorfer, and Kugler 2019) and employees of leaders with higher trait mindfulness report greater psychological need satisfaction (Reb and Chaturvedi 2014). Further, leader mindfulness enhances employee well-being, in particular, it lowers emotional exhaustion of employees and enhances employee work- life balance. In addition, leader trait mindfulness has a positive relation to employee performance as task deviance is lower (Reb and Chaturvedi 2014). More recently, Reb and others (2018) further investigated

how leader mindfulness affects employee performance in consideration of Leader Member Exchange quality (LMX), representing the quality of relationship between leader and follower (Graen and Uhl-Bien 1995). Their study proves that leader mindfulness is positively related to LMX quality and employee performance, thereby confirming prior findings (Reb et al. 2014). Furthermore, they found that LMX quality is positively influencing employee performance and that it mediates the positive effect between leader mindfulness and employee performance. Additional aspects of the study are a positive relationship between leader mindfulness and employee interpersonal justice and a negative relationship between leader mindfulness and employee stress (Reb et al. 2018).

By using LMX quality as a mediator to explain the relationship between leader trait mindfulness and employee performance, Reb et al. (2018) started the first indirect attempt to investigate the mechanism through which leader trait mindfulness is related to employee satisfaction. This is because LMX quality is known to increase employee satisfaction with the leader (Gerstner and Day 1997). However, further research on the effect of leader mindfulness on employee satisfaction with the leader is still missing. Filling this gap of knowledge is highly relevant as previously emphasized in the introduction.

To investigate whether there is a relationship between the leader's mindful disposition and employee satisfaction with the leader, it is important to understand which leadership traits and behaviors are considered as valuable of our current workforce.

Importance of Compassion in Leadership

Reviewing current leadership literature to find out which leadership traits and behaviors are valued by employees, points to high interest in more people-oriented, relational leadership styles such as servant leadership (e.g. Parris and Peachey 2013; Peterson et al. 2012). This trend is also supported by recent research about the Millennial generation, people born between

1980 and 2000 (Rudolph et al. 2018). This generational cohort represents a significant part of the personnel, as by 2025, they will form three quarters of the global workforce (EY 2015). Concrete findings highlight that employees value very close relationships as well as open communication with their superiors (Gursoy, Maier, and Chi 2008; Martin 2005) who should be dedicated, listen well, are focused and encouraging (Sessa et al. 2007). Further, challenging followers, communicating optimism about the future and providing individual consideration for the employee are considered as important. Regarding leader traits, literature proposes that leaders should be sensitive, caring and compassionate (Putriastuti and Stasi 2019). This last aspect is underlined by recent findings indicating that Millennials are motivated by a leader who is understanding (Omilion-Hodges and Sugg 2019), shows concern and cares for the employee (Faller and Gogek 2019; Omilion-Hodges and Sugg 2019). Whereas Millennials find themselves demotivated by a leader being rude and not caring (Omilion-Hodges and Sugg 2019). Knowing now that compassion and compassionate behavior, like showing concern and being sensitive, is valued by employees, looking closer at the phenomenon of compassion helps to see whether it can be associated with mindfulness.

Compassion and its Connection to Mindfulness

Compassion is defined as “the feeling that arises when witnessing another’s suffering and that motivates a subsequent desire to help” (Goetz, Keltner, and Simon-Thomas 2010, 2). Similarly, Strauss et al. (2016) define compassion as a process consisting of recognizing, understanding and tolerating suffering of another person, feeling empathy and remaining open as well as being motivated to help to reduce suffering.

Research on compassion at work and its effects on the person receiving it shows that it enhances positive emotions like gratitude or pride and counteracts negative emotions such as anxiety and shame. Additionally, it is positively linked to an employee’s commitment to the

company (Lilius et al. 2008). General findings on effects of compassion on the person providing it indicate that there can be negative consequences including compassion fatigue, a phenomenon explaining a person's reduced capacity or interest in enduring suffering of another person (Figley 2002) as well as distress caused by the inability to adequately help the other person (Halifax 2011). However, positive consequences include trust, respect for each other and the ability to empower another person (Dutton et al. 2007).

Findings regarding compassion and leadership show that it affects leadership perception. People showing more compassionate behavior are recognized as more intelligent, resulting in a stronger perception as a leader (Melwani, Mueller, and Overbeck 2012). Furthermore, compassionate behavior of supervisors improves workers' engagement, organizational citizenship behavior and knowledge sharing but decreases chances to suffer from burnouts (Eldor 2018).

Based on prior research on the effects of mindfulness on individuals, such as increased attention to the presence and higher empathy (Good et al. 2016), it can be assumed that mindfulness facilitates compassionate behavior. First studies in this field show that people who participated in a mindfulness program behave more compassionate afterward (Condon et al. 2013). This finding is in line with a study by Kristeller and Johnson (2005), who discovered that mindfulness meditation can increase the strength of compassionate action.

Reflecting the key aspects of the above discussed literature review, namely that there is a current demand for compassionate behavior of leaders and that mindfulness might facilitate compassionate behavior leads to following research question guiding this thesis: **“Does leader trait mindfulness lead to increased employee satisfaction with the leader?”**. To fully answer this research question, following hypotheses are proposed:

H₁: The higher the trait mindfulness of a leader, the more satisfied his subordinate.

H₂: *The higher the leader trait mindfulness, the more he is perceived as being compassionate by his subordinate.*

H₃: *The more compassion received by the supervisor, the higher the satisfaction of subordinates with the supervisor.*

To fully understand whether compassionate behavior explains the relationship between leader mindfulness and employee satisfaction with the leader a fourth Hypothesis is added:

H₄: *The relationship between leader trait mindfulness and employee satisfaction with the leader is mediated by compassion.*

To conclude, the following conceptual model is derived based on the Hypotheses drawn as a result of existing findings in the literature:

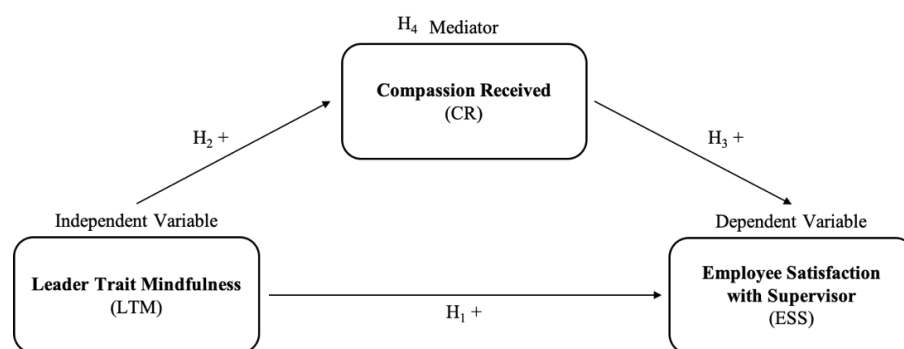


Figure 1: Conceptual Model¹

Methodology

The following chapter gives an overview of the methodology used to test the four hypotheses and to answer the research question by elaborating on research method and design, participants and procedure as well as used measurements of underlying variables.

¹ The conceptual model proposed does not imply causality.

Research Method and Design

The goal of this study is to find out whether there is a relationship between the level of leader trait mindfulness and employee satisfaction with their supervisor. Furthermore, the study aims at investigating whether this hypothesized relationship can be explained by the phenomenon of compassion. To do this, matched pairs of employees and supervisors completed surveys, constituting quantitative methodology. Quantitative research was chosen as it is commonly used to answer relational questions regarding variables (Williams 2007). It can be broadly classified into descriptive, experimental and causal-comparative. The underlying study focuses on descriptive research, implying the exploration of the correlation of two or more variables (Williams 2007). As quantitative research typically involves the collection of numeric data, which is subsequently analyzed using mathematical models (Williams 2007), an online survey was used to collect data using the survey platform Qualtrics. Such online surveys have been proven to be advantageous in several ways including cost- and time efficiency, flexibility and ease of data entry and analysis (Evans and Mathur 2005). Potential disadvantages of the chosen method are addressed in a later section about limitations.

Participants

Participants for the study were recruited in three different ways to increase the probability of answers. First, employed individuals from the author's personal network were approached. Second, five professors from Nova School of Business and Economics were contacted of whom four confirmed to share the survey within their networks. As a third way, HR personnel of several companies was addressed and representatives of four German-based companies agreed to distribute the survey internally in exchange for a summary of the final results. Via these three channels, a total of 170 employees and 51 supervisors responded to the survey. After the data cleaning process, described later, 40 dyads of employees and their supervisors

were left for analysis. Information about the characterization of the final sample follow in the results section of the paper. All supervisors and their subordinates participated voluntarily.

Procedure

To obtain both perspectives on mindfulness and its effect on leadership, employees, as well as their supervisors, were surveyed. Data from either party was collected only at one point in time. First, the employee filled out a survey asking about satisfaction with the supervisor as well as compassion received from the supervisor. At the end, another survey link was generated which the employee was requested to forward to his supervisor. This link contained embedded data about a randomly generated worker identity number (WID), used to match the surveys later for analysis. As a second and final step, the supervisor conducted his version of the survey containing items assessing his level of trait mindfulness and his perception of compassion given to the employee. Refer to Appendix A to Appendix H for detailed surveys.

Measurement of variables

The questionnaire was comprised of pre-existing scales, validated in literature. As the majority of people approached were German, a German version was created alongside the English one. In case no official scale was available in German, the author translated the scale items using DeepL an online-based translation tool based on artificial intelligence, and then validated results with another German native speaker, who translated the German version back to English. Thus, the author updated the back-translation procedure (Brislin 1970) with technology. Below, scales used with further adaptations to this study are described. To assess the reliability of each scale, Cronbach alphas were checked. Scales with values $> .90$ are considered as excellent, $> .80$ as good, $> .70$ as acceptable, $> .60$ as questionable, $> .50$ as poor and $< .50$ as unacceptable. As suggested in literature, values below $.70$ were reinvestigated (Gliem and Gliem 2013).

Independent variable: Leader Trait Mindfulness

Similarly to Reb et al. (2018), a trait-level approach was used to measure mindfulness as the study is investigating interpersonal relationships based on experiences made over time. Leader trait mindfulness was measured via the short version of the Five Facets Mindfulness Questionnaire (Bohlmeijer et al. 2011). This self-report questionnaire assesses how mindful individuals are in daily life based on five facets: observing, describing, acting with awareness, non-judging of inner experiences and non-reactivity to inner experience. These facets describe the ability to label internal experiences, to attend to activities of the moment, not to evaluate feelings and thoughts and finally, to accept thoughts and feelings without getting carried away (Baer et al. 2008). The 24-item short form of the questionnaire used for this study was developed and validated by Bohlmeijer et al. (2011) and includes statements like *“I rush through activities without being really attentive to them”*, from the awareness subscale (Bohlmeijer et al. 2011). For the German survey, the version provided by Michalak and others (2016) was used. Participants answered on a 5-point Likert scale ranging from *“never or very rarely true”* to *“very often or always true”* referring to the last six months. For total leader trait mindfulness Cronbach’s $\alpha = .75$. Appendix J provides an overview of reliability measures for the subscales.

Dependent variable: Employee Satisfaction with Supervisor

To assess employee satisfaction with the supervisor, the supervisor subscale of the Job Description Index (JDI) was used (Balzer et al. 1997). Particularly, the German version was used (Neuberger and Allerbeck 2014). Hereby the subordinate is asked to assess how well specific words such as *“impolite”* or *“fair”* describe his supervisor on a 4-point Likert scale ranging from: *“yes”* to *“rather yes”*, *“rather no”* and *“no”*. Cronbach’s $\alpha = .81$.

Mediator variables: Compassion Received and Compassion Given

To assess how much compassion the employee received from the supervisor, the 10-item compassion-from-others scale developed and validated by Gilbert et al. (2017) was used. The scale is composed of two subscales, one measuring compassion received through engagement and the other measuring compassion received through action. Examples for the respective subscales are “*My supervisor notices and is sensitive to my distressed feelings when they arise in me*” and “*my supervisor takes actions and does the things that will be helpful for me*”. Being asked to consider experiences of the past seven days, subordinates answered this by using a 5-point Likert scale ranging from “*Never or very rarely*” to “*Very often or always*”. To obtain the supervisor’s perspective on compassion given, the 10-item compassion-to-others scale (Gilbert et al. 2017) was included measuring the ability of the supervisor to be compassionate to distressed employees. Similar to the compassion-from-others scale, items measure two dimensions: engagement and actions related to compassion to others. Being also asked to consider experiences of the last week, supervisors answered on a 5-point Likert scale ranging from “*Never or very rarely*” to “*Very often or always*”. For supervisors, Cronbach’s alphas range from $\alpha = .57$ to $\alpha = .72$. For employees, Cronbach’s alphas range from $\alpha = .87$ to $\alpha = .93$.

Control variables: Employee Suffering and Supervisor Suffering

As a control variable, for both groups, the experience of suffering was measured using the questionnaire introduced by Schulz and others (2010). It assesses physical symptoms such as “*lack of energy*”, psychological symptoms like “*anxious*” and existential symptoms (e.g. “*I felt peaceful*”) of suffering. Survey participants were asked to indicate the frequency of each symptom within the last week based on a 5-point Likert scale “*not at all*” to “*every day*”. For supervisors, Cronbach’s alphas range from $\alpha = .89$ to $\alpha = .86$. For employees, Cronbach’s alphas range from $\alpha = .66$ to $\alpha = .80$. No Cronbach’s alpha is calculated for physical suffering scales as items are not unidimensional.

Demographic Variables

In addition, each survey contained questions about demographic variables such as employee's own leadership responsibility and supervisor's management level. An overview of all demographic variables can be found in Appendix I.

Addressing the Low Reliability of Some Scales

Mindfulness subscales with low reliability are: Mindfulness observing Cronbach's $\alpha = .65$, mindfulness awareness Cronbach's $\alpha = .69$, and mindfulness non-reactivity Cronbach's $\alpha = .62$. Reinvestigation of scales with $\alpha < .7$ led to deletion of following item of the mindfulness observing scale: "Generally, I pay attention to sounds, such as clocks ticking, birds chirping or cars passing". This led to an increase in Cronbach's alpha for the overall trait mindfulness scale Cronbach's $\alpha = .77$, and the mindfulness observing scale Cronbach's $\alpha = .71$. For all other scales – mindfulness awareness and mindfulness non-reactivity – no item deletion led to a Cronbach's alpha above .70.

Compassion scales with low reliability are: Total compassion given by supervisor Cronbach's $\alpha = .68$ and compassion given through engagement Cronbach's $\alpha = .57$. Further investigation led to the deletion of one item of the compassion given through engagement scale ("I am emotionally moved by expressions of distress of my employee."). This led to total compassion given Cronbach's $\alpha = .71$ and compassion given through engagement Cronbach's $\alpha = .59$. To ensure comparability, this adaption was also made to all scales measuring compassion from others. Subsequently, scale items measuring compassion received from the supervisor, compassion received through engagement and compassion received through action show Cronbach's $\alpha = .93$, Cronbach's $\alpha = .88$, Cronbach's $\alpha = .87$, respectively.

Lastly, scales measuring employee suffering were investigated. The subscales psychological suffering (Cronbach's $\alpha = .67$) and existential suffering (Cronbach's $\alpha = .66$) showed

low reliability. Again, based on further analysis one item of the subscale measuring psychological suffering (“Irritable”) as well as one item of subscale measuring existential suffering was deleted (“My life lacked meaning and purpose”). The new Cronbach alphas for total employee suffering was increased to $\alpha = .82$, for employee suffering from psychological symptoms to $\alpha = .71$ and employee suffering from existential suffering to $\alpha = .72$. Applying the same adaptations for the scales measuring suffering of supervisors, the scale for total suffering of supervisor showed a Cronbach’s $\alpha = .89$, the subscale psychological suffering a Cronbach’s $\alpha = .84$ and existential suffering a Cronbach’s $\alpha = .74$.

Hence, after adjustment, scales are considered as acceptable, good or excellent except for mindfulness awareness subscale, mindfulness non-reactivity subscale and compassion given through engagement subscale.

Results

The following section will outline all relevant results which help to test the Hypotheses and consequently help to answer the research question. Moreover, a section on additional findings is included. In awareness of the research method, none of the following results implies causality.

Data Preparation and Cleaning

Overall, a total of 123 employees participated using the German version and 47 employees took part using the English version of the survey. Regarding the supervisor survey, 46 answered via the German survey and five supervisors answered via the English one. As the response rate to the English version for the supervisor survey was low, it was dropped from analysis to avoid issues with equivalence (e.g. language and cultural differences) (Hult et al. 2008). Further, 29 responses from the German employee survey as well as six responses from the German supervisor questionnaire had to be excluded because they were incomplete. Once

the data cleaning process was terminated, the data was prepared for analysis by matching the answers of supervisors and employees using the unique identification number (WID), embedded in the survey data. This led to a total of 40 matching data points for the analysis.

Sample Characterization

Employee Sample Characteristics. Of all 40 employees considered for analysis, 72.5% belonged to the age group² 23-30 years, 57.5% were male and 98% indicated to come from either Germany or Austria. Finally, 60% work under their current supervisor for less than two years and 65% claimed not to have leadership responsibility.

Supervisor Sample Characteristics. Of the 40 supervisors who were matched, 76.9% were male and the most represented age group was 31-40 years (35% of participants). Similar to the employee sample, most leaders come from the German-Speaking area (95%). Further, most (42.5%) indicated that they belong to upper/C-level management. Finally, 40% of supervisors stated that they supervise a maximum of five employees.

A detailed description of the sample including all variables can be found in Appendix I.

Hypotheses Testing

To test the Hypotheses, several inferential statistical analyses were conducted using the statistic software SPSS and the PROCESS macro introduced by Hayes (2018). Analyses and drawn conclusions refer to a significance level of 5% (confidence interval: 95%). For correlation analyses, the Pearson Correlation Coefficient was analyzed ranging from -1, strong negative correlation of variables to 1, strong positive correlation of variables (Swank and Mullen 2017). For linear regression analysis, plots were checked and no violations of assumptions

² Age groups instead of continuous age was assessed as companies in which the survey was distributed requested it to protect privacy

for normality, homoscedasticity and linearity were detected (see Appendix N-R for plots) following common instructions (Ghasemi and Zahediasl 2012; Field 2013). Examining the Variance Inflation Factors (VIF), the absence of multicollinearity was proven (VIF were below ten).

H₁: Leader Trait Mindfulness and Satisfaction of Subordinates

Hypothesis 1 states that higher leader trait mindfulness leads to higher employee satisfaction with the leader. To examine this relationship a bivariate correlation analysis was run. Results show no significant correlation between leader trait mindfulness and employee satisfaction with the leader ($r(38) = -.16, p = .32$). Hence, there is no evidence to support H₁.

To investigate the effect different facets of leader trait mindfulness might have on the satisfaction of employees with the supervisor, a multiple regression analysis was conducted using one dependent variable, employee satisfaction, and five independent variables, each representing one of the five facets of mindfulness. The output shows that none of the independent variables has a significant effect (see Appendix O, Table 22). Adding another multiple regression analysis to control for the effect of the demographic variables supervisor management level ($b = -.02, t(38) = -.39, p = .70$) and number of employees supervised by the leader ($b = -.08, t(38) = -1.41, p = .17$) does not show significant results on employee satisfaction either.

H₂: Leader Trait Mindfulness and Compassion Received by Supervisors

Hypothesis 2 proposes that leader trait mindfulness increases compassion. Compassion of the supervisor was measured by the employee and self-rating by the supervisor. A correlation analysis showed that, overall, there is no relationship between leader trait mindfulness and total compassion received from supervisor ($r(38) = -.07, p = .66$). There was also no correlation between leader trait mindfulness and subscales of compassion received from supervisor through engagement ($r(38) = -.03, p = .93$) nor compassion received from supervisor through action ($r(38) = -.12, p = .47$). Hence, there is no support for H₂.

Correlations between leader trait mindfulness and self-rated leader compassion towards their employees showed similar results: total compassion given ($r(38) = -.01, p = .94$), compassion given through engagement ($r(38) = -.01, p = .94$) and compassion given through action ($r(38) = -.01, p = .96$).

Conducting a multiple regression analysis to control for the effect of the demographic variables management level of supervisor ($b = -1.40, t(38) = -1.20, p = .24$) and number of employees supervised by the leader ($b = -0.84, t(38) = -.82, p = .42$) on compassion received, no significant effects were detected either.

H₃: Compassion Received from Supervisor and Satisfaction of Employees

To test Hypothesis 3, a correlation analysis was conducted examining the relationship between compassion received from supervisor and employee satisfaction with the supervisor. Results were in line with the Hypothesis indicating a significant, strong, positive relationship between compassion received and employee satisfaction ($r(38) = .78, p < .001$). Subscales measuring compassion received through engagement ($r(38) = .71, p < .001$) and compassion received through action ($r(38) = .79, p < .001$) were also significantly related to employee satisfaction with supervisor and in the expected direction. Hence, H₃ is supported.

To analyze the extent to which compassion received contributes to employee satisfaction, a linear regression analysis was run. Results show that compassion received significantly predicts the variable employee satisfaction with the supervisor, $b = .041, t(38) = 7.77, p < .001$. The model shows good quality in predicting the effect as $R^2 = .61$ ($F(1, 38) = 60.32$), meaning that the variable compassion received explains approximately 61% of variance in the variable employee satisfaction with supervisor. Hence, the unstandardized regression equation is:

$$1) \text{ Employee satisfaction with supervisor} = 1.869 + .041 * \text{compassion received}$$

meaning that for one unit increase in the predictor variable (compassion received) the dependent variable (employee satisfaction) increases by .041. All assumptions for linear regression analysis were considered and can be found in Appendix N.

However, interesting to note is that there was no significant correlation between supervisor compassion given to employees and satisfaction of employees ($r(38) = .09, p = .57$), suggesting an issue of employee perception or employee assessor bias.

Conducting a regression analysis with the whole employee data available ($N = 94$), comparable results occur regarding compassion received and employee satisfaction with the supervisor ($b = .04, t(92) = 10.36, p < .001$). However, $R^2 (F(1, 92) = 107.27)$ diminishes to .54.

H₄: Compassion Mediating Leader Trait Mindfulness and Employee Satisfaction

The final Hypothesis states that a relationship between leader trait mindfulness and employee satisfaction with the supervisor is mediated through compassion received. No significant relationships between the variables leader trait mindfulness and compassion received by subordinates as well as the variables leader trait mindfulness and employee satisfaction were observed. Nevertheless, a mediation analysis using model 4 of the PROCESS macro in SPSS was run with 5,000 bootstrap samples. In general, a mediating variable explains the relation between the independent and the dependent variable (Hayes 2018). That is, we expect that the effects of leader mindfulness on employee satisfaction to be explained by the compassion behaviors of leaders. To test this, a mediation analysis with leader trait mindfulness as independent variable, satisfaction of employees as dependent variable and compassion received as mediator variable, was conducted. Results show no significant mediation of compassion received (indirect effect = $-.01$; 95% CI [$-.02, .01$]) (see Appendix L).

Based on this, we fail to accept H₄ as well as the conceptual model introduced previously.

Additional Results

Leader Trait Mindfulness and Suffering

Considering the control variable, suffering, there is a significant negative correlation between leader trait mindfulness and total supervisor suffering ($r(38) = -.48, p = .002$) as well as suffering from existential symptoms ($r(38) = -.37, p = .02$) and suffering from psychological symptoms ($r(38) = -.56, p < .001$). Taking a look at different mindfulness facets shows that all facets, except for the observing facet, negatively correlate with supervisor suffering (see Appendix K, Table 4). Conducting a multiple regression analysis to see which of the facets account for most of the effect on total suffering of supervisor shows that, in general, the model is significant ($p = .05$) and explains 38% (R^2) of the variance in suffering. However, only the mindfulness facet non-reactivity shows significance ($b = -1.29, t(38) = -2.38, p = .02$).

Interestingly enough, there is no significant correlation between leader trait mindfulness and employee suffering ($r(38) = -.06, p = .70$) as well as between total supervisor suffering and total employee suffering ($r(38) = .21, p = .20$). There is, however, a significant relationship between supervisor physical suffering and employee physical suffering ($r(38) = .42, p = .01$).

Given Compassion and Received Compassion

Analyzing how the variables leader-rated compassion given and employee-rated compassion received relate, show a significant positive correlation between compassion given through engagement and compassion received through engagement ($r(38) = .37, p = .02$). However, no significant correlations are seen between other variables regarding compassion.

To test whether leader trait mindfulness influences the strength of the relationship between the two variables, compassion given through engagement, and compassion received through engagement a moderation analysis using Model 1 in PROCESS was conducted (Hayes 2018). Results show, that leaders with higher levels of mindfulness not necessarily have more

convergence between what is perceived about them and how they intended to behave (interaction effect = $-.01$; $p = .81$; 95% CI $[-.07, .08]$).

Another moderation analysis was conducted to control for the influence of covariates (see Appendix M, Table 11). Results only show a significant effect of the covariate management level (effect = -1.47 ; $p = .05$; 95% CI $[-2.90, -.03]$). This implies that the variable management level of supervisor adjusts the variable compassion received through engagement. Checking if the management level of the supervisor moderates the relationship between compassion given through engagement and compassion received through engagement did not show any significance (interaction effect = $.00$; $p = .99$; 95% CI $[-.69, .68]$). For moderation, all interaction terms were mean-centered.

Employee Suffering and Given Compassion

Finally, a moderation analysis investigating whether leader trait mindfulness moderates employee suffering and compassion given showed no significant interaction effects (interaction effect = $-.01$; $p = .39$; 95% CI $[-.03, .01]$). All interaction terms were mean-centered.

Discussion

Summary of Research Findings

The present study aims at contributing to the existing literature on mindfulness at the workplace by examining how leader trait mindfulness is related to employee satisfaction and compassion, specifically focusing on supervisors and followers. Data of supervisor-employee dyads shows that leader trait mindfulness does not seem to have a significant relation to employee's satisfaction with supervisor, thereby answering the main research question. As satisfaction with the leader is part of the overall job satisfaction, this result is not in line with previous research stating that leader mindfulness has a positive effect on employee job satisfaction

(Pinck and Sonnentag 2018). Furthermore, supervisor trait mindfulness does not relate to compassion received by employee nor compassion given by supervisor. Consequently, no evidence was found that compassion mediates a relationship between leader trait mindfulness and employee satisfaction. This, in turn, means that there is no significant evidence to confirm the conceptual model introduced based on the literature review.

However, the importance of supervisor compassion for employee satisfaction was underlined. Examining whether supervisors assess themselves correctly when it comes to being compassionate, shows that there is only a significant relationship between compassion given and received through engagement. Hence, it seems that compassion through engagement reaches the employee whereas compassion given through action does not, implying a perception discrepancy between leader and follower.

In line with previously mentioned studies, the value of trait mindfulness on the person itself was emphasized, detecting an inverse relationship between leader mindfulness and his suffering, especially psychological suffering. However, unlike studies on the effect of leader mindfulness and employee well-being (e.g. Reb et al. 2014), no relation between leader mindfulness and suffering of employees was detected.

Theoretical and Practical Contributions

A series of noteworthy managerial, as well as theoretical contributions, can be drawn. First of all, this study contributes to the still small field of research on mindfulness and interpersonal relationships at work by providing insights on the relationship between leader mindfulness and employee satisfaction as well as compassion. In this way, a gap in literature is filled. Second, the results add to the current research on intrapersonal effects by pointing out that higher trait mindfulness is negatively related to suffering. Lastly, this thesis contributes to research on leadership in general, by highlighting the importance of compassion in leadership.

Beyond implications for the academic world, this research provides useful managerial implications in the field of management. First, compassion of supervisors is important in day-to-day contact with employees. It positively affects their satisfaction with the supervisor which in turn has positive effects for the organization as a whole. Among these are decreases turnover intentions (e.g. DeConinck & Stilwell 2004) and higher employee performance through higher total job satisfaction (e.g. Judge et al. 2001). Therefore, emphasizing leader compassion in an organizational context appears to be valuable, always keeping in mind that too much compassion can have negative implications on the person providing. Leaders and organizations already started to grasp the benefits of compassion in organizations. LinkedIn CEO, Jeff Weiner, believes for instance that compassion is one of the most important leader traits, so employees at LinkedIn can regularly participate in compassion workshops (Inam 2019).

The second major contribution is related to the phenomenon of suffering. The importance of investigating workplace suffering is generally rising in literature as companies more and more feel the impact. One example is a case study investigating the suffering subject at work in response to a series of suicide cases in French companies (Allard-Poesi and Hollet-Haudebert 2017). Indeed organizations can contribute to human suffering (Dutton et al. 2006) which in turn can have significant impacts on the organizations (e.g. Bagi 2013). As the underlying study confirms that mindfulness can be a way to help reduce an individual's suffering, especially psychological suffering, increasing the overall level of mindfulness by mindfulness interventions might be a welcome mean and, in this way, also contribute to human healing.

Limitations and Further Research

When looking at the results, limitations of the underlying study must be considered. These refer to lower reliability of scales measuring mindfulness facet awareness, mindfulness facet non-reactivity and compassion given through engagement. Further, the analyses are based

on a small sample size limiting the generalizability of the findings asking for a larger, confirmatory study (Hackshaw 2008). In addition, the data collected only represents a snapshot taken in extraordinary times as at the point of data collection the majority of countries in Europe went into lockdown because of the Covid19 Pandemic. This significantly influenced the situation in organizations as big uncertainties towards general health and economic situation prevailed (Tagesschau 2020). Based on feedback received by (potential) respondents, this also explains the small sample size. They reported not to feel comfortable with forwarding the link to their supervisor because the relationship is tense or stated that there is no time for such studies during times where the future success of the organization is in question. One reason for the results could be that there is indeed no empirical support. However other reasons might be caused by these circumstances. Lastly, it is important to acknowledge that the results do not imply causality and that future research can examine how induced changes in leader mindfulness can impact compassion and employee satisfaction.

As already indicated, potential further research could investigate whether the level of compassion received by employees could be increased. This could, for instance, be done by conducting qualitative research through focus groups or semi-structured interviews to find out which concrete actions of supervisors are perceived as compassionate. Subsequently, one could check whether these behaviors really increase satisfaction through an experimental setting. Adding to this, future research should focus on investigating the perception discrepancy between compassion given and received to find out how leaders can more accurately deliver compassion.

Even though the underlying study does not provide evidence that leader mindfulness influences employee satisfaction with the leader, mindfulness has proven to be beneficial for individual well-being. Thus, following the example of Apple or Salesforce and emphasizing mindfulness in business organizations might be valuable and easy-to-implement.

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APPENDIX A

Consent Form Employee Survey

German Version

Titel der Forschungsstudie: Studie zur Masterarbeit von Pauline Epple

Leitende Wissenschaftler: Pauline Epple, Professor Samantha Sim

Zweck der Forschungsstudie: Der Zweck dieser Forschungsstudie ist es, zu verstehen, wie Mindfulness (Achtsamkeit) Mitarbeiterführung beeinflusst.

Ablauf und Dauer der Studie: Um an der Studie teilzunehmen, müssen Sie über 18 Jahre alt sein. Für diese Studie werden Sie zunächst kurze Umfragen und einige demographische Fragen beantworten;

anschließend werden Sie gebeten, Ihrer Führungskraft eine Einladung zur Teilnahme an einer separaten Umfrage zu übermitteln (diese Umfrage enthält Fragen zur Persönlichkeit und zum Verhalten am Arbeitsplatz sowie demographische Fragen).

Sowohl Ihre Umfrage als auch die Befragung der Führungskraft dauert nicht länger als 10 Minuten.

Vorteile der Studie: Durch Ihre Teilnahme tragen Sie zur Forschung über Mindfulness (Achtsamkeit) am Arbeitsplatz bei. Ihre Teilnahme an dieser Studie ist freiwillig, Ihre Verweigerung der Teilnahme oder Ihr Rücktritt von dieser Studie ist nicht mit einer Strafe verbunden und Sie können die Teilnahme jederzeit abbrechen.

BITTE BEACHTEN SIE:

Es würde uns wirklich helfen, wenn Sie die Umfrage ausfüllen, indem Sie ihr Ihre volle Aufmerksamkeit widmen, alle Anweisungen und Aussagen sorgfältig lesen und dann auf alle Punkte entsprechend antworten. Dies hilft uns dabei ein genaues Bild von Ihren Erfahrungen zu erhalten.

Mögliche Risiken der Studie: In dieser Studie sind keine Risiken oder nachteiligen Auswirkungen zu erwarten, die über das hinausgehen, was man normalerweise im täglichen Leben erlebt.

Vertraulichkeit und Datenschutz von Forschungsdaten: Die von allen Befragten angegebenen Informationen sind anonym und vertraulich und werden nur für Forschungszwecke verwendet. Die Antworten auf die Umfrage enthalten keine identifizierenden Informationen (z.B. E-Mail, Namen usw.). Außerdem hat niemand außer den leitenden Wissenschaftlern Zugang zu Ihrer ausgefüllten Umfrage. Ihr Vorgesetzter wird Ihre Antworten nicht kennen! Bitte beantworten Sie daher alle Fragen so ehrlich und genau wie möglich.

Bitte wählen Sie "Ich stimme zu" und klicken Sie auf ">>", um zu beginnen.

Wenn Sie nicht an der Umfrage teilnehmen möchten, können Sie den Browser jetzt schließen, um diese zu beenden.

English Version

Title of Research Study: Study for Master Thesis of Pauline Epple

Principle Investigators: Pauline Epple, Professor Samantha Sim

Purpose of Research Study: The purpose of conducting this research study is to understand how mindfulness affects leadership.

Study Procedures and Duration: To participate in the study, you must be above 18. For this study, you will first complete short surveys and some demographic questions; then you are requested to forward an invitation to your supervisor to complete a separate survey (this survey contains questions regarding their personality and behavior at work as well as demographic questions).

Both your survey and the supervisor survey take no more than 10 minutes.

Benefits of Study: By participating, you will contribute to research conducted about mindfulness at the workplace. Your participation in this study is voluntary, your refusal to participate or your withdrawal from this study will involve no penalty and you may discontinue participation at any time.

PLEASE NOTE:

It would really help us if you complete the survey by giving your fullest attention, reading all instructions and statements carefully and then responding accordingly to all the items. This helps us get an accurate picture of your experience.

Possible Risks of Study: There are no anticipated risks or adverse effects in this study beyond what one would typically experience in daily life.

Confidentiality and Privacy of Research Data: The information provided by all respondents will be anonymous and confidential and will be used for research purposes only. The survey responses contain no identifying information (e.g. email, names, etc). Also, no one will have access to your completed survey except for the Principal Investigators (PI). Your supervisor will not know your responses! As such, please answer all questions as honestly and accurately as possible.

Please select "I consent" and click ">>" to begin.

If you do not wish to participate in the survey, you may close the browser now to exit.

APPENDIX B

Compassion-From-Others Scale German Version (Gilbert et al. 2017)

German Version

Für den ersten Teil dieser Umfrage möchten wir Sie bitten, über den täglichen Kontakt mit Ihrer Führungskraft nachzudenken.

Wie oft hat Ihre Führungskraft in den letzten 7 Tagen auf folgende Weise reagiert?

- 1 „nie oder selten“ bis 5 „sehr oft oder immer“
- 1. Meine Führungskraft bemerkt meine Verzweiflung, wenn sie in mir aufkommt, und ist dafür empfänglich.
- 2. Meine Führungskraft ist motiviert, sich auf meine Notlage einzulassen und mit ihr zu arbeiten, wenn sie auftritt.
- 3. Meine Führungskraft denkt über meine Gefühle der Verzweiflung nach und versteht sie.
- 4. Meine Führungskraft ist von Äußerungen über meine Verzweiflung emotional bewegt.
- 5. Meine Führungskraft akzeptiert meine Notlagen, ist unkritisch und urteilt nicht darüber.
- 6. Meine Führungskraft toleriert meine Gefühle, die Teil meiner Notlagen sind.
- 7. Meine Führungskraft denkt über hilfreiche Wege nach und lässt sich Wege einfallen, wie ich mit meiner Notlage umgehen kann.
- 8. Meine Führungskraft lenkt seine/ihre Aufmerksamkeit auf das, was für mich wahrscheinlich hilfreich ist.
- 9. Meine Führungskraft trifft Maßnahmen und tut Dinge, die für mich hilfreich sein könnten.
- 10. Meine Führungskraft drückt mir gegenüber Gefühle der Unterstützung, Hilfsbereitschaft und Ermutigung aus.

English Version

For the first part of this survey, we would like you to think about the day to day contact with your supervisor.

How often did your supervisor respond to you in the following way in the last 7 days?

- 1 “never or very rarely“ bis 5 “very often or always“
- 1. My supervisor notices and is sensitive to my distressed feelings when they arise in me.
- 2. My supervisor is actively motivated to engage and work with my distress when it arises.
- 3. My supervisor reflects on and makes sense of my feelings of distress
- 4. My supervisor is emotionally moved by my distressed feelings
- 5. My supervisor is accepting, non-critical and non-judgmental of my feelings of distress
- 6. My supervisor tolerates my various feelings that are part of my distress.
- 7. My supervisor thinks about and comes up with helpful ways for me to cope with my distress.
- 8. My supervisor directs his/her attention to what is likely to be helpful to me.
- 9. My supervisor takes actions and does things that will be helpful for me.
- 10. My supervisor treats me with feelings of support, helpfulness and encouragement.

APPENDIX C

Satisfaction with Supervisor Scale (Balzer et al. 1997; Neuberger and Allerbeck 2014)

German Version

Bitte nehmen Sie auf dieser Seite Stellung zu Ihrer Führungskraft.

Beurteilen Sie, ob die folgenden Wörter diesen/diese beschreiben. Äußern Sie dabei bitte Ihre ganz persönliche Meinung und beziehen Sie sich darauf, wie Sie im Großen und Ganzen darüber denken.

Überlegen Sie nichtlange - die erste Reaktion ist meistens die beste.

- 1 „nein“ bis 4 „ja“

- | | |
|-----------------------------------|--------------------------|
| 1. Ungerecht* | 8. Fair |
| 2. Aktiv | 9. Unbeliebt* |
| 3. Rücksichtsvoll | 10. Vertraue Ihm |
| 4. Unhöflich* | 11. Informiert schlecht* |
| 5. Versteht was von seiner Arbeit | 12. Lässt uns mitreden |
| 6. Einflussreich | 13. Nörglerisch* |
| 7. Setzt sich nicht für uns ein | |

English Version

For this part of the survey, please think of the kind of supervision you receive from your supervisor.

How well does each of the following words or phrases describe this?

Please select “Yes” if it describes the supervision you get on the job, “No” if it does not describe it and “?” if you cannot decide.

- 1 “yes“, 2 “no“, 3“?“

- | | |
|----------------------|----------------------------|
| 1. Supportive | 10. Tells me where I stand |
| 2. Hard to please* | 11. Annoying* |
| 3. Impolite* | 12. Stubborn* |
| 4. Praises good work | 13. Knows job well |
| 5. Tactful | 14. Bad* |
| 6. Influential | 15. Intelligent |
| 7. Up to date | 16. Poor planner* |
| 8. Unkind* | 17. Around when needed |
| 9. Has favorites* | 18. Lazy* |

*Note: Items with * were reverse coded*

APPENDIX D

Suffering Scale (Schulz et al. 2010)

German Version

Physical Suffering

Für diesen Teil dieser Umfrage möchten wir Ihnen einige Fragen dazu stellen, wie Sie sich in der vergangenen Woche gefühlt haben.

Bitte geben Sie an, wie oft Sie jedes der folgenden Symptome in den letzten 7 Tagen gespürt haben.

- 0 „überhaupt nicht“ bis 4 „jeden Tag“

- | | |
|----------------------------|---|
| 1. Energiemangel/Müdigkeit | 6. Übelkeit |
| 2. Appetitlosigkeit | 7. Schwierigkeit beim Schlafen |
| 3. Schmerz | 8. Verstopfung/ Durchfall |
| 4. Trockener Mund | 9. Verwirrung/ Schwierigkeiten beim Konzentrieren |
| 5. Kurzatmigkeit | |

Wie sehr hat Sie jedes Symptom gestört oder geplagt?

- 0 „überhaupt nicht“ bis 4 „Außerordentlich“

- | | |
|----------------------------|---|
| 1. Energiemangel/Müdigkeit | 6. Übelkeit |
| 2. Appetitlosigkeit | 7. Schwierigkeit beim Schlafen |
| 3. Schmerz | 8. Verstopfung/ Durchfall |
| 4. Trockener Mund | 9. Verwirrung/ Schwierigkeiten beim Konzentrieren |
| 5. Kurzatmigkeit | |

Psychological Suffering

Bitte geben Sie an, wie oft Sie die unten aufgeführten Emotionen in den letzten 7 Tagen erlebt haben.

- 0 „überhaupt nicht“ bis 4 „jeden Tag“

- | | |
|------------------------|-------------------------|
| 1. Ängstlich | 9. Belastung für andere |
| 2. Zuversichtlich* | 10. Wütend |
| 3. Besorgt | 11. Einsam |
| 4. Gereizt | 12. Beschämt |
| 5. Deprimiert | 13. Schuldig |
| 6. Fröhlich* | 14. Verlassen |
| 7. Hoffnungslos | 15. Abgelehnt |
| 8. Traurig, trübsinnig | |

Existential Suffering

Bitte geben Sie an, wie wahr jede der folgenden Aussagen in den letzten 7 Tagen für Sie war.

- 0 „überhaupt nicht“ bis 4 „Außerordentlich“
- | | |
|---|--|
| 1. Ich fühlte mich friedlich* | 6. Ich fühlte ein Gefühl der Harmonie in mir selbst* |
| 2. Ich hatte einen Grund zum Leben* | 7. Mein Leben hatte keinen Sinn und Zweck |
| 3. Mein Leben war ein Misserfolg | 8. Ich weiß, dass wenn ich krank bin, alles gut werden wird* |
| 4. Ich hatte Schwierigkeiten, den Seelenfrieden zu finden | 9. Das Leben war nicht mehr lebenswert |
| 5. Ich fühlte einen Sinn in meinem Leben* | |

*English Version**Physical Suffering*

On this page, we would like to ask you some questions about how you have been feeling over the past week.

Please indicate how often you have experienced each of the following symptoms during the last 7 days.

- 0 “not at all“ up to 4 “every day“

- | | |
|------------------------|---------------------------------------|
| 1. Lack of energy | 6. Nausea |
| 2. Lack of appetite | 7. Difficulty sleeping |
| 3. Pain | 8. Constipation or Diarrhea |
| 4. Dry mouth | 9. Confusion/Difficulty concentrating |
| 5. Shortness of breath | |

How much did each symptom bother or distress you?

- 0 „not at all“ up to 4 „extremely“

- | | |
|------------------------|---------------------------------------|
| 1. Lack of energy | 6. Nausea |
| 2. Lack of appetite | 7. Difficulty sleeping |
| 3. Pain | 8. Constipation or Diarrhea |
| 4. Dry mouth | 9. Confusion/Difficulty concentrating |
| 5. Shortness of breath | |

Psychological Suffering

Please indicate how often you experienced the emotions listed below during the last 7 days.

- 0 “not at all“ up to 4 “every day“

- | | |
|-----------------------|--------------|
| 1. Afraid | 5. Depressed |
| 2. Confident* | 6. Cheerful* |
| 3. Worried or anxious | 7. Hopeless |
| 4. Irritable | 8. Sad, blue |

- | | |
|--------------------------------|---------------|
| 9. Burden to others | 13. Guilty |
| 10. Angry | 14. Abandoned |
| 11. Lonely | 15. Rejected |
| 12. Embarrassed about yourself | |

Existential Suffering

Please indicate how true each of the following statements was for you during the past 7 days.

- 0 “not at all“ up to 4 “extremely“
1. I felt peaceful*
 2. I had a reason for living*
 3. My life had been a failure
 4. I had trouble feeling peace of mind
 5. I felt a sense of purpose in my life*
 6. I felt a sense of harmony within myself*
 7. My life lacked meaning and purpose
 8. I know that whatever happens with my illness, things will be ok*
 9. Life was not worth living anymore

*Note: Items with * were reverse coded*

APPENDIX E

Instructions to Forward Message to Supervisor

German Version

Vielen Dank für das Ausfüllen der Umfrage! Ihre Antwort erlaubt es uns, die Perspektive des Mitarbeiters zu erfassen.

Bitte kopieren sie nun diese Nachricht und leiten sie an Ihre Führungskraft weiter, damit diese die Umfrage ausfüllen kann und wir die Perspektive des Vorgesetzten einholen können:

"Hallo Chef,

Ich habe gerade eine Umfrage über Mindfulness (Achtsamkeit) am Arbeitsplatz im Rahmen einer Masterarbeit einer Studierenden abgeschlossen. Die Arbeit würde von Ihrer Teilnahme wirklich profitieren. Wenn Sie bereit sind, daran teilzunehmen, füllen Sie bitte diese kurze Umfrage aus:

[https://novasbe.az1.qualtrics.com/jfe/form/SV_0kv08PgZ1x1D2mh?WID=\\${e://Field/randomID}\\${SU.firstname/ChoiceTextEntryValue}\\${SU.lastname/ChoiceTextEntryValue}](https://novasbe.az1.qualtrics.com/jfe/form/SV_0kv08PgZ1x1D2mh?WID=${e://Field/randomID}${SU.firstname/ChoiceTextEntryValue}${SU.lastname/ChoiceTextEntryValue})

Danke!"

Bitte klicken Sie auf ">>", um die Umfrage zu beenden.

English Version

Now, **please copy and forward this message to your supervisor** for them to complete their survey, so that we can get the perspective of the supervisor:

Hi boss,

I just completed a survey about Mindfulness at the workplace as part of a student's master thesis. The research on mindfulness and leadership would really benefit from your participation as well. If you are willing to participate, please complete this short survey: [https://novasbe.az1.qualtrics.com/jfe/form/SV_3dPyrwgKWiX4b3L?WID=\\${e://Field/randomID}\\${SU.firstname/ChoiceTextEntryValue}\\${SU.lastname/ChoiceTextEntryValue}](https://novasbe.az1.qualtrics.com/jfe/form/SV_3dPyrwgKWiX4b3L?WID=${e://Field/randomID}${SU.firstname/ChoiceTextEntryValue}${SU.lastname/ChoiceTextEntryValue})

Thanks!

APPENDIX F

Consent Form Supervisor Survey German Version

German Version

Hallo! Sie erhalten diese Umfrage, weil einer Ihrer Mitarbeiter, an unserer Umfrage über Mindfulness (Achtsamkeit) und Führung bei der Arbeit teilgenommen hat und gebeten wurde, Ihnen diese Umfrage zu übermitteln. Bitte nehmen Sie an dieser Umfrage teil, damit wir die Führungsperspektive bei der Arbeit verstehen können! Vielen Dank und viel Spaß!

Titel der Forschungsstudie: Studie zur Masterarbeit von Pauline Epple

Leitende Wissenschaftler: Pauline Epple, Professor Samantha Sim

Zweck der Forschungsstudie: Der Zweck dieser Forschungsstudie ist es, zu verstehen, wie Mindfulness (Achtsamkeit) Mitarbeiterführung beeinflusst.

Ablauf und Dauer der Studie: Um an der Studie teilnehmen zu können, müssen Sie über 18 Jahre alt und die Führungskraft des Mitarbeiters sein, der Ihnen den Link zugesendet hat. Für diese Studie werden Sie zunächst kurze Umfragen ausfüllen und danach einige demographische Fragen beantworten. Die Umfrage dauert nicht länger als 10 Minuten.

Vorteile der Studie: Durch Ihre Teilnahme tragen Sie zur Forschung über Mindfulness (Achtsamkeit) am Arbeitsplatz bei. Ihre Teilnahme an dieser Studie ist freiwillig, Ihre Verweigerung der Teilnahme oder Ihr Rücktritt von dieser Studie ist nicht mit einer Strafe verbunden und Sie können die Teilnahme jederzeit abbrechen.

BITTE BEACHTEN SIE:

Es würde uns wirklich helfen, wenn Sie die Umfrage ausfüllen, indem Sie Ihre volle Aufmerksamkeit widmen, alle Anweisungen und Aussagen sorgfältig lesen und dann auf alle Punkte entsprechend antworten. Dies hilft uns dabei ein genaues Bild von Ihren Erfahrungen zu erhalten.

Mögliche Risiken der Studie: In dieser Studie sind keine Risiken oder nachteiligen Auswirkungen zu erwarten, die über das hinausgehen, was man normalerweise im täglichen Leben erlebt.

Vertraulichkeit und Datenschutz von Forschungsdaten: Die von allen Befragten angegebenen Informationen sind anonym und vertraulich und werden nur für Forschungszwecke verwendet. Die Antworten auf die Umfrage enthalten keine identifizierenden Informationen (z.B. E-Mail-Adresse, Name usw.). Außerdem hat niemand außer den leitenden Wissenschaftlern

Zugang zu Ihrer ausgefüllten Umfrage. Ihr Mitarbeiter wird Ihre Umfrageantworten nicht kennen! Bitte beantworten Sie daher alle Fragen so ehrlich und genau wie möglich.

Bitte wählen Sie "Ich stimme zu" und klicken Sie auf ">>", um zu beginnen.

Wenn Sie nicht an der Umfrage teilnehmen möchten, können Sie den Browser jetzt schließen, um diese zu beenden.

English Version

Hi there! You are receiving this survey because one of the employees you manage has participated in our survey about mindfulness and leadership at work and was asked to forward this survey to you. Please participate in this survey to allow us to understand the leader perspective at work!

Title of Research Study: Study for Master Thesis of Pauline Epple

Principle Investigators: Pauline Epple, Professor Samantha Sim

Purpose of Research Study: The purpose of conducting this research study is to understand how mindfulness affects leadership.

Study Procedures and Duration: To participate in the study, you must be above 18 and the supervisor of the employee who gave you the link. For this study, you will first complete short surveys and after you will complete some demographic questions. The survey takes no more than 10 minutes.

Benefits of Study: By participating, you will contribute to research conducted about mindfulness at the workplace. Your participation in this study is voluntary, your refusal to participate or your withdrawal from this study will involve no penalty and you may discontinue participation at any time.

PLEASE NOTE:

It would really help us if you complete the survey by giving your fullest attention, reading all instructions and statements carefully and then responding accordingly to all the items. This helps us get an accurate picture of your experience.

Possible Risks of Study: There are no anticipated risks or adverse effects in this study beyond what one would typically experience in daily life.

Confidentiality and Privacy of Research Data: The information provided by all respondents will be anonymous and confidential and will be used for research purposes only. The survey responses contain no identifying information (e.g. email address, name, etc). Also, no one will have access to your completed survey except for the Principal Investigators (PI). Your

employee will not know your survey responses! As such, please answer all questions as honestly and accurately as possible.

Please select "I consent" and click ">>" to begin.

If you do not wish to participate in the survey, you may close the browser now to exit.

APPENDIX G

Five Facets Mindfulness Questionnaire (Bohlmeijer et al. 2011; Michalak et al. 2016)

German Version

Auf dieser Seite finden Sie eine Sammlung von Aussagen über Ihre alltäglichen Erfahrungen. Bitte geben Sie anhand der untenstehenden Skala an, wie häufig oder selten Sie in den letzten 6 Monaten die einzelnen Erfahrungen gemacht haben.

Bitte antworten Sie nach dem, was Ihre Erfahrung wirklich widerspiegelt, und nicht nach dem, was Ihrer Meinung nach Ihre Erfahrung sein sollte.

- 1 „nie oder sehr selten wahr“ bis 5 „sehr oft oder immer wahr“
- 1) Ich kann meine Gefühle gut in Worte fassen (DS)
- 2) Es fällt mir leicht, meine Überzeugungen und Erwartungen in Worte zu fassen (DS)
- 3) Ich nehme meine Gefühle wahr, ohne mich von ihnen mitreißen zu lassen. (NR)
- 4) Ich sage mir, dass ich nicht das fühlen sollte, was ich fühle* (NJ)
- 5) Es fällt mir schwer, Worte zu finden, die meine Gedanken beschreiben* (DS)
- 6) Ich achte auf Empfindungen, wie zum Beispiel Wind in meinem Haar oder Sonnenschein auf meinem Gesicht (OB)
- 7) Ich urteile darüber, ob meine Gedanken gut oder schlecht sind* (NJ)
- 8) Ich finde es schwierig, auf das konzentriert zu bleiben, was im gegenwärtigen Augenblick passiert* (AA)
- 9) Wenn ich beunruhigende Gedanken oder Bilder habe, lasse ich mich nicht von ihnen mitreißen (NR)
- 10) Ich achte auf Geräusche, wie beispielsweise das Ticken von Uhren, Vogelzwitschern oder das Geräusch vorüber fahrender Autos (OB)
- 11) Körperliche Empfindungen sind für mich schwer zu beschreiben, weil mir die richtigen Worte dazu fehlen* (DS)
- 12) Es sieht so aus, als würde ich "automatisch funktionieren", ohne viel Bewusstsein für das, was ich tue* (AA)
- 13) Wenn ich belastende Gedanken oder Vorstellungen habe, beruhige ich mich kurz danach wieder (NR)
- 14) Ich sage mir, ich sollte nicht so denken, wie ich denke* (NJ)
- 15) Ich nehme die Gerüche und Düfte der Dinge wahr (OB)
- 16) Sogar wenn ich schrecklich verärgert bin, kann ich das in Worte fassen (DS)
- 17) Ich hetze durch Aktivitäten, ohne wirklich aufmerksam für sie zu sein* (AA)
- 18) Wenn ich belastende Gedanken oder Vorstellungen habe, kann ich sie in der Regel einfach wahrnehmen, ohne auf sie zu reagieren (NR)
- 19) Ich denke, dass manche meiner Gefühle schlecht oder unangemessen sind, und dass ich sie nicht haben sollte* (NJ)
- 20) Ich bemerke visuelle Elemente sowohl in der Kunst als auch in der Natur, zum Beispiel Farben, Formen, Strukturen oder Muster aus Licht und Schatten (OB)
- 21) Wenn ich belastende Gedanken oder Vorstellungen habe, registriere ich sie nur und lasse sie wieder ziehen (NR)
- 22) Ich erledige Aufträge oder Aufgaben automatisch, ohne mir bewusst zu sein, was ich tue* (AA)
- 23) Ich merke, wie ich Dinge tue, ohne auf sie zu achten* (AA)
- 24) Ich missbillige mich selbst, wenn ich unlogische Ideen habe* (NJ)

English Version

On this page, you will find a collection of statements about your everyday experience. Using the 1-5 scale below, please indicate, in the row to the right of each statement, how frequently or infrequently you have had each experience in the last 6 months?

Please answer according to what really reflects your experience rather than what you think your experience should be.

- 1 “never or very rarely true“ up to 5 “very often or always true“
1. I am good at finding the words to describe my feelings (DS)
 2. I can easily put my beliefs, opinions, and expectations into words (DS)
 3. I watch my feelings without getting carried away by them (NR)
 4. I tell myself that I shouldn't be feeling the way I am feeling* (NJ)
 5. It is hard for me to find the words to describe what I am thinking* (DS)
 6. I pay attention to physical experiences, such as the wind in my hair or sun on my face (OB)
 7. I make judgements about whether my thoughts are good or bad* (NJ)
 8. I find it difficult to stay focused on what is happening in the present moment* (AA)
 9. When I have distressing thoughts or images, I don't let myself be carried away by them (NR)
 10. Generally, I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing (OB)
 11. When I feel something in my body it is hard for me to find the right words to describe it* (DS)
 12. It seems I am “running automatic” without much awareness of what I am doing* (AA)
 13. When I have distressing thoughts or images, I feel calm soon after (NR)
 14. I tell myself I shouldn't be thinking the way I am thinking* (NJ)
 15. I notice the smells and aromas of things (OB)
 16. Even when I am feeling terribly upset, I can find a way to put it into words (DS)
 17. I rush through activities without being really attentive to them* (AA)
 18. Usually when I have distressing thoughts or images, I can just notice them without reacting (NR)
 19. I think some of my emotions are bad or inappropriate and I shouldn't feel them* (NJ)
 20. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow (OB)
 21. When I have distressing thoughts or images, I just notice them and let them go (NR)
 22. I do jobs or tasks automatically without being aware of what I am doing * (AA)
 23. I find myself doing things without paying attention* (AA)
 24. I disapprove myself when I have illogical ideas* (NJ)

*Note: Items with * were reverse coded; DS=describing, OB=observing, AA=awareness, NJ=non-judging, NR=non-reactivity*

APPENDIX H

Compassion-To-Others Scale (Gilbert et al. 2017)

German Version

Nun möchten wir Sie bitten, über den täglichen Kontakt mit Ihrem/Ihrer Mitarbeiter*in nachzudenken. Bitte geben Sie an, wie oft Sie mit Ihrem/Ihrer Mitarbeiter*in in der letzten 7 Tagen auf folgende Weise umgegangen sind.

- 1 „nie oder sehr selten“ bis 5 „sehr oft oder immer“
- 1. Ich bemerke und bin empfänglich für Verzweiflung meines Mitarbeiters/meiner Mitarbeiterin, wenn sie entsteht.
- 2. Ich bin motiviert, mich auf Notlagen meines Mitarbeiters/meiner Mitarbeiterin einzulassen und damit zu arbeiten, wenn sie auftreten.
- 3. Ich denke über Gefühle der Verzweiflung meines Mitarbeiters/meiner Mitarbeiterin nach und verstehe sie.
- 4. Ich bin von Äußerungen über Notlagen meines Mitarbeiters/meiner Mitarbeiterin emotional bewegt.
- 5. Ich akzeptiere die Notlagen meines Mitarbeiters/meiner Mitarbeiterin, bin unkritisch und urteile nicht darüber.
- 6. Ich toleriere die verschiedenen Gefühle, die Teil der Notlage meines Mitarbeiters/meiner Mitarbeiterin sind.
- 7. Ich denke über hilfreiche Wege nach und lasse mir Wege einfallen, wie mein Mitarbeiter/meine Mitarbeiterin mit der Notlage umgehen kann.
- 8. Ich lenke die Aufmerksamkeit auf das, was für meinen Mitarbeiter/meine Mitarbeiterin wahrscheinlich hilfreich ist.
- 9. Ich ergreife Maßnahmen und tue Dinge, die für meinen Mitarbeiter/meine Mitarbeiterin hilfreich sein könnten.
- 10. Ich drücke gegenüber meinem Mitarbeiter/meiner Mitarbeiterin Gefühle der Unterstützung, Hilfsbereitschaft und Ermutigung aus.

English Version

Now we would like you to think about the day to day contact with the employee who sent you this survey. Please indicate how often within the last 7 days you have responded in the following way to your subordinate?

- 1 “never or very rarely“ up to 5 “very often or always“
- 1. I notice and am sensitive to distress in this subordinate when it arises.
- 2. I am motivated to engage and work with this subordinate's distress when it arises.
- 3. I reflect on and make sense of this subordinate's distress.
- 4. I am emotionally moved by expressions of distress in this subordinate.
- 5. I am accepting, non-critical and non-judgmental of this subordinate's distress.
- 6. I tolerate the various feelings that are part of this subordinate's distress.
- 7. I think about and come up with helpful ways for them to cope with the distress of this subordinate.
- 8. I direct attention to what is likely to be helpful to this subordinate.
- 9. I take the actions and do the things that will be helpful to this subordinate.
- 10. I express feelings of support, helpfulness and encouragements to this subordinate.

APPENDIX I

Overview Sample Characteristics

Table 1: Sample Characteristics Employees

		Frequency	Percent (%)	Valid Percent (%)
Respondents total #		40	40	40
Gender	Female	17	57.5	57.5
	Male	23	42.5	42.5
Age (in years)	23-30	29	72.5	72.5
	31-40	4	10.0	10.0
	41-50	6	15.0	15.0
	51-60	1	2.5	2.5
Nationality	German	37	92.5	92.5
	Austrian	2	5.0	5.0
	Other	1	2.5	2.5
Department Size (# of employees)	Up to 5	5	16.0	16.0
	Up to 10	8	20.0	20.0
	Up to 20	8	20.0	20.0
	> 20	7	17.5	17.5
	No info	1	2.5	2.5
Leadership Responsibility	Yes	14	35.0	35.0
	No	26	65.0	65.0
Work Experience (in years)	<1	5	12.5	12.5
	1	4	10.0	10.0
	2	4	10.0	10.0
	3	8	20.0	20.0
	4	2	5.0	5.0
	5	3	7.5	7.5
	6-10	5	12.5	12.5
	11-15	1	2.5	2.5
	15-20	3	7.5	7.5
	>20	5	12.5	12.5
	Tenureship under this Supervisor (in years)	<1	14	35.0
1		10	25.0	25.0
2		6	15.0	15.0
3		4	10.0	10.0
5		3	7.5	7.5
<5		3	7.5	7.5

Table 2: Sample Characteristics Supervisors

		Frequency	Percent (%)	Valid Percent (%)
Respondents total #		40	40	40
Gender	<i>Female</i>	9	22.5	22.5
	<i>Male</i>	31	77.5	77.5
Age (in years)	<i>23-30</i>	6	15.0	15.0
	<i>31-40</i>	14	35.0	35.0
	<i>41-50</i>	13	32.5	32.5
	<i>51-60</i>	6	15.0	15.0
	<i>61-70</i>	1	2.5	2.5
Nationality	<i>German</i>	34	85.0	85.0
	<i>Austrian</i>	4	10.0	10.0
	<i>Other</i>	2	5.0	5.0
Management Level	<i>Junior Management</i>	3	7.5	7.5
	<i>Middle Management</i>	15	37.5	37.5
	<i>Senior Management</i>	5	12.5	12.5
	<i>Upper/C-Level Management</i>	17	42.5	42.5
Size of Organization (# of employees)	<i>Up to 20</i>	6	15.0	15.0
	<i>20 to 100</i>	10	25.0	25.0
	<i>100 to 500</i>	7	17.5	17.5
	<i>500 to 2000</i>	13	32.5	32.5
	<i>>2000</i>	4	10.0	10.0
Industry	<i>Automotive & Mobility</i>	1	2.5	2.5
	<i>Consumer Goods</i>	2	5.0	5.0
	<i>Energy & Environment</i>	1	2.5	2.5
	<i>Technical Products and Infrastructure</i>	1	2.5	2.5
	<i>Financial Institutions</i>	1	2.5	2.5
	<i>Insurance</i>	1	2.5	2.5
	<i>Private Equity</i>	1	2.5	2.5
	<i>Public Sector</i>	1	2.5	2.5
	<i>Retail</i>	2	5.0	5.0
	<i>Technology Industry</i>	2	7.5	7.5
	<i>Telecommunications</i>	10	25.0	25.0
	<i>Other</i>	16	40.0	40.0
	Nr. Of Employees to be supervised	<i>Up to 5</i>	16	40.0
<i>Up to 10</i>		10	25.0	25.0
<i>Up to 20</i>		4	10.0	10.0
<i>>20</i>		10	25.0	25.0

APPENDIX J

SPSS Output Reliability Analysis

Table 3: Cronbach's Alpha Reliability Analysis

Construct	#items	Cronbach's Alpha	Cronbach's Alpha (after item deletion)
Leader Trait Mindfulness	24	$\alpha = .75$	$\alpha = .77$
Mindfulness Facet Observing	3	$\alpha = .65$	$\alpha = .71$
Mindfulness Facet Describing	5	$\alpha = .82$	
Mindfulness Facet Awareness	5	$\alpha = .69$	
Mindfulness Facet Non-Judging	5	$\alpha = .74$	
Mindfulness Facet Non-Reactivity	5	$\alpha = .62$	
Compassion Received	9	$\alpha = .93$	$\alpha = .93$
Compassion Received: Engagement	6	$\alpha = .89$	$\alpha = .88$
Compassion Received: Action	4	$\alpha = .87$	
Compassion Given	10	$\alpha = .68$	$\alpha = .71$
Compassion Given: Engagement	6	$\alpha = .57$	$\alpha = .59$
Compassion Given: Action	4	$\alpha = .72$	
Employee Satisfaction with Supervisor	13	$\alpha = .81$	
Employee Suffering	33	$\alpha = .80$	$\alpha = .82$
Employee Suffering Psychological	15	$\alpha = .67$	$\alpha = .71$
Employee Suffering Existential	9	$\alpha = .66$	$\alpha = .72$
Supervisor Suffering	33	$\alpha = .89$	$\alpha = .89$
Supervisor Suffering Psychological	15	$\alpha = .86$	$\alpha = .84$
Supervisor Suffering Existential	9	$\alpha = .71$	$\alpha = .74$

APPENDIX K
SPSS Results Correlation Analysis

Table 4: Mean, Standard Deviation and Pearson Correlation Coefficient

	Mean	Std. Devia- tion	N	Pearson Correlation																					
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1 Leader Trait Mindfulness	80.88	8.51	40	1.00																					
2 Mindfulness Facet Observing	10.33	2.25	40	.42**	1.00																				
3 Mindfulness Facet Describing	19.00	3.36	40	.80**	.28	1.00																			
4 Mindfulness Facet Awareness	17.13	2.95	40	.66**	.14	.45**	1.00																		
5 Mindfulness Facet Non-Judging	18.13	3.31	40	.53**	-.04	.28	.19	1.00																	
6 Mindfulness Facet Non-Reactivity	16.30	2.81	40	.42**	.04	.20	.09	-.08	1.00																
7 Employee Satisfaction	3.38	0.39	40	-.16	-.09	-.05	-.22	.11	-.26	1.00															
8 Compassion Received	36.38	7.33	40	-.07	.08	-.09	-.20	.12	-.10	.78**	1.00														
9 Compassion Received Engagement	20.25	4.37	40	-.03	.18	-.06	-.19	.07	-.05	.71**	.96**	1.00													
10 Compassion Received Action	16.13	3.35	40	-.12	-.05	-.13	-.19	.17	-.15	.79**	.93**	.80**	1.00												
11 Compassion Given	36.38	3.21	40	-.01	.26	.12	-.13	-.30	.10	.09	.17	.23	.07	1.00											
12 Compassion Given Engagement	19.70	1.99	40	-.01	.40*	.06	-.13	-.21	-.05	.22	.29	.37*	.16	.83**	1.00										
13 Compassion Given Action	16.55	1.92	40	-.01	.02	.14	-.09	-.28	.21	-.07	-.02	-.002	-.04	.81**	.34*	1.00									
14 Employee Suffering	30.80	8.77	40	-.06	.04	-.20	-.04	.08	-.03	-.14	-.02	.03	-.09	.12	.17	.03	1.00								
15 Employee Suffering Physical	3.70	2.41	40	.11	.22	-.003	.05	.08	.03	-.19	-.20	-.12	-.28	.08	.09	.03	.63**	1.00							
16 Employee Suffering Psychological	11.30	4.53	40	-.04	-.02	-.18	-.01	-.03	.14	-.09	.03	.09	-.05	.15	.16	.09	.88**	.39*	1.00						
17 Employee Suffering Existential	15.80	3.87	40	-.16	-.04	-.23	-.10	.15	-.26	-.10	.04	.04	.03	.05	.14	-.06	.84**	.35*	.59**	1.00					
18 Supervisor Suffering	30.93	10.96	40	-.48**	.13	-.34*	-.39*	-.32*	-.36*	.02	-.02	.02	-.06	.15	.18	.06	.21	.22	.11	.21	1.00				
19 Supervisor Suffering Physical	3.28	2.57	40	-.18	.36*	-.10	-.10	-.25	-.33*	-.20	-.07	.02	-.17	.15	.26	-.02	.27	.42**	.11	.22	.75**	1.00			
20 Supervisor Suffering Psychological	11.48	6.03	40	-.56**	.06	-.38*	-.50**	-.40*	-.31	.08	-.02	-.001	-.03	.23	.23	.13	.15	.09	.08	.20	.95**	.59**	1.00		
21 Supervisor Suffering Existential	16.18	3.77	40	-.37*	.03	-.32*	-.27	-.12	-.33*	.08	.01	.03	-.02	-.03	-.02	-.02	.13	.20	.11	.14	.89**	.55**	.75**	1.00	

** . p < .01 * . p < .05

APPENDIX L

PROCESS SPSS Results Mediation Analyses Leader Trait Mindfulness, Employee Satisfaction and Compassion Received (Conceptual Model)

Table 5: Model Summary Leader Trait Mindfulness predicting Compassion Received

R	R Square	MSE	F	Df1	Df2	p
.712	.0051	54.8098	.1935	1.00	38.00	.6625

Outcome variable: Compassion Received

Table 6: Model Leader Trait Mindfulness predicting Compassion Received

	coefficient	se	t	p	LLCI	ULCI
constant	41.3289	11.3230	3.6500	.0008	38.00	.6625
Leader Mindfulness	-.0613	.1393	-.4399	.6625	-.3432	.2207

Outcome variable: Compassion Received

Table 7: Model Summary Leader Trait Mindfulness and Compassion Received predicting Employee Satisfaction

R	R Square	MSE	F	Df1	Df2	p
.790	.6248	.0595	30.8023	2.00	37.00	.0000

Outcome variable: Employee Satisfaction

Model Leader Trait Mindfulness and Compassion Received predicting Employee Satisfaction

Table 8: Model Leader Trait Mindfulness and Compassion Received predicting Employee Satisfaction

	coefficient	se	t	p	LLCI	ULCI
constant	2.2751	.4336	5.2472	.0000	1.3965	3.1536
Leader Mindfulness	-.0048	.0046	-1.0536	.2989	-.0142	.0045
Compassion Received	.0411	.0053	7.6831	.0000	.0302	.0519

Outcome variable: Employee Satisfaction

Table 9: Total, Direct and Indirect Effects of leader Trait Mindfulness on Employee Satisfaction via Compassion Received

Path	β	SE	t	95% CI	
Total Effect of X on Y	-.0074	.0073	- 1.0093	-.0221	.0074
Direct Effect of X on Y	-.0048	.0046	- 1.0536	-.0142	.0045
Indirect Effect of X on Y through M	-.0065	.0070	-	-.0204	.0072

Note. * $p < 0.05$; ** $p < 0.01$

Note: X=Leader Trait Mindfulness, Y=Employee Satisfaction, M=Compassion Received

APPENDIX M

SPSS Results of Moderation Analyses

Table 10: Interaction Effect Compassion Given through Engagement and Leader Mindfulness on Compassion Received through Engagement

	β	SE	t	p	95% CI	
Interaction Effect (Compassion Given Engagement x Leader Trait Mind- fulness)	.0086	.0363	.2366	.8143	-.0651	.0822

Note. *p < 0.05; **p < 0.01

Table 11: Results for Covariates in the Moderation Analysis Compassion Given through Engagement and Leader Mindfulness on Compassion Received through Engagement

	β	SE	t	p	95% CI	
Age	1.2238	.9723	6.7774	.2173	-.7568	3.2045
Female	1.7648	1.8931	2.3933	-.3582	-2.0914	5.6210
Management Level	-1.4651	.7036	-2.0823	.0454	-2.8982	-.0319
Nr. Of Employees under Supervision	-.5801	.7912	-.7332	.4688	-2.1917	1.0316

Note. *p < 0.05; **p < 0.01

Table 12: Interaction Effect Compassion Given through Engagement and Management Level Mindfulness on Compassion Received through Engagement

	β	SE	t	p	95% CI	
Interaction Effect (Compassion Given Engagement x Leader Management Level)	-.0034	.3370	-.0102	.9919	-.6870	.6801

Note. *p < 0.05; **p < 0.01

Table 13: Interaction Effect of Employee Suffering and Leader Mindfulness on Compassion Given

	β	SE	t	p	95% CI	
Interaction Effect (Employee Suffering x Leader Trait Mindfulness)	-.0076	.0087	-.8773	.3861	-.0252	.0100

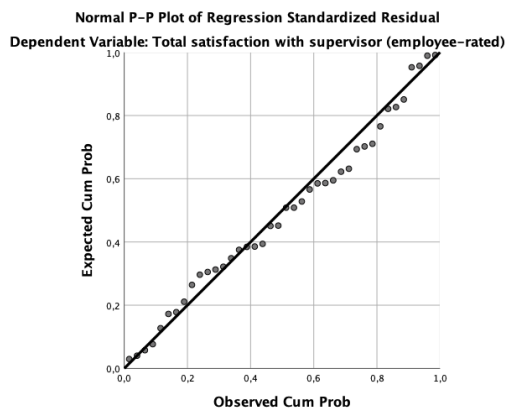
Note. * $p < 0.05$; ** $p < 0.01$

APPENDIX N

SPSS Output Regression Analyses Compassion Received and Employee Satisfaction

Employee Dataset N=40

Graphic 1: P-P plot to check Normality Assumption



Graphic 2: Scatterplot of Residuals to check Homoscedasticity Assumption

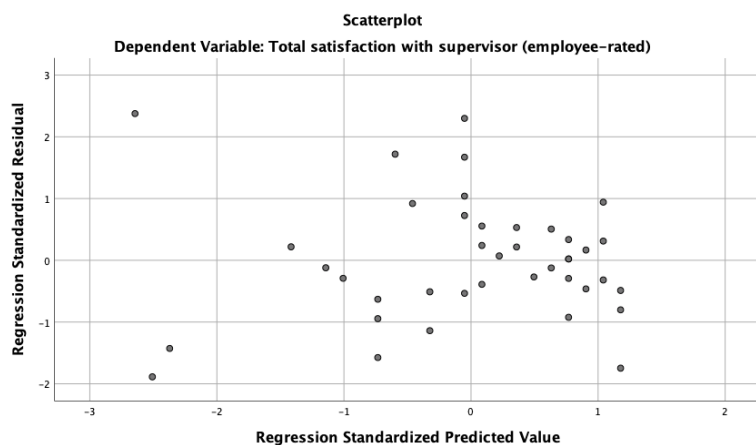


Table 14: Model Summary Compassion Received and Employee Satisfaction

R	R Square	Adjusted R Square	Std. Error of the Estimate
.783 ^a	.614	.603	.24429

a. Predictors: (Constant), compassion_received

Table 15: ANOVA^a Compassion Received and Employee Satisfaction

	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.600	1	3.600	60.320	.000 ^b
Residual	2.268	38	.060		
Total	5.867	39			

a. Dependent Variable: Total satisfaction with supervisor

b. Predictors: (Constant), compassion_received

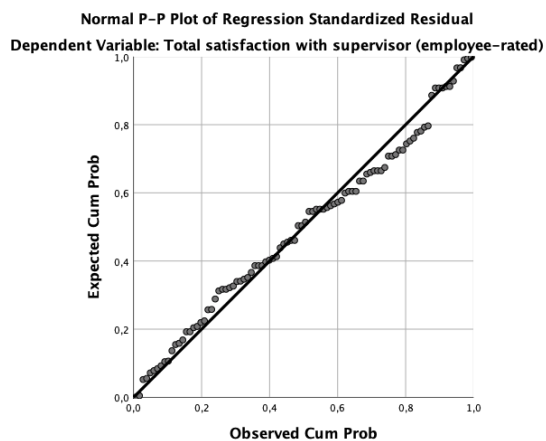
Table 16: Coefficients^a Compassion Received and Employee Satisfaction

	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	1.869	.198		9.436	.000
Compassion_received	.041	.005	.783	7.767	.000

a. Dependent Variable: Total satisfaction with

Employee Dataset N=94

Graphic 3: P-P plot to check Normality Assumption



Graphic 4: Scatterplot of Residuals to check Homoscedasticity Assumption

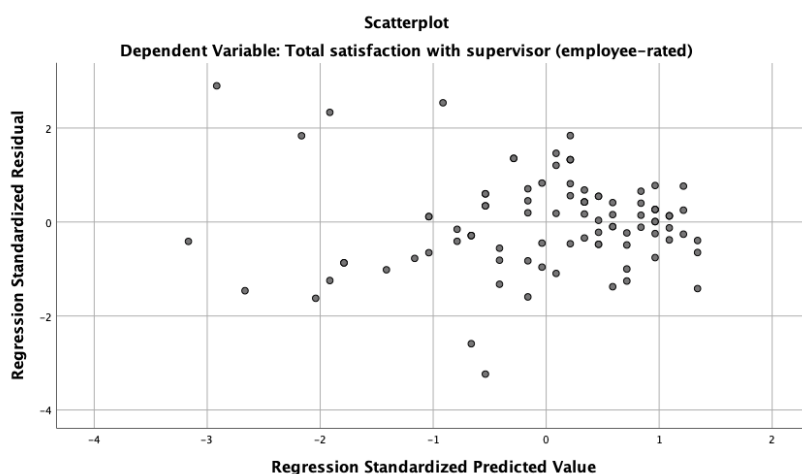


Table 17: Model Summary Compassion Received and Employee Satisfaction

R	R Square	Adjusted R Square	Std. Error of the Estimate
.734 ^a	.54	.533	.30081

a. Predictors: (Constant), compassion_received

Table 18: ANOVA^a Compassion Received and Employee Satisfaction

	Sum of Squares	df	Mean Square	F	Sig.
Regression	9.706	1	9.706	107.266	.000 ^b
Residual	8.325	92	.090		
Total	18.031	93			

a. Dependent Variable: Total satisfaction with supervisor

b. Predictors: (Constant), compassion_received

Table 19: Coefficients^a Compassion Received and Employee Satisfaction

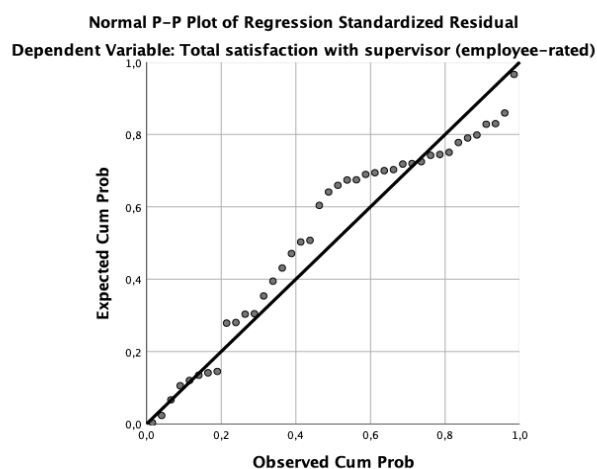
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.914	.137		13.925	.000
Compassion_received	.040	.004	.734	10.357	.000

a. Dependent Variable: Total satisfaction with Supervisor

APPENDIX O

SPSS Results of Multiple Regression Analyses Analysis of Employee Satisfaction and all five facets of Leader Trait Mindfulness

Graphic 5: P-P plot to check Normality Assumption



Graphic 6: Scatterplot of Residuals to check Homoscedasticity Assumption

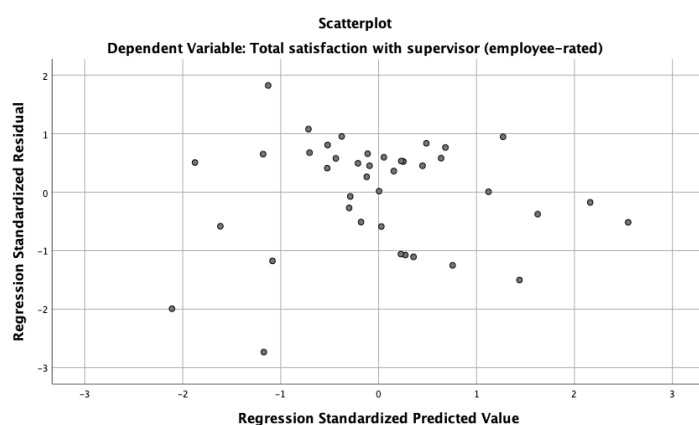


Table 20: Model Summary Employee Satisfaction and all Five Facets of Mindfulness

R	R Square	Adjusted R Square	Std. Error of the Estimate
.365 ^a	.133	.006	.38677

a. Predictors: (Constant), mindfulness_nonreactivity, mindfulness_observing, mindfulness_nonjudging, mindfulness_awareness, mindfulness_describing

Table 21: ANOVA^a Employee Satisfaction and all Five Facets of Mindfulness

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.781	5	.156	1.045	.408 ^b

Residual	5.086	34	.150
Total	5.867	39	

- a. Dependent Variable: Total Satisfaction with Supervisor
b. Predictors: (Constant), mindfulness_nonreactivity, mindfulness_observing, mindfulness_nonjudging, mindfulness_awareness, mindfulness_describing

Table 22: Coefficients^a Employee Satisfaction and all Five Facets of Mindfulness

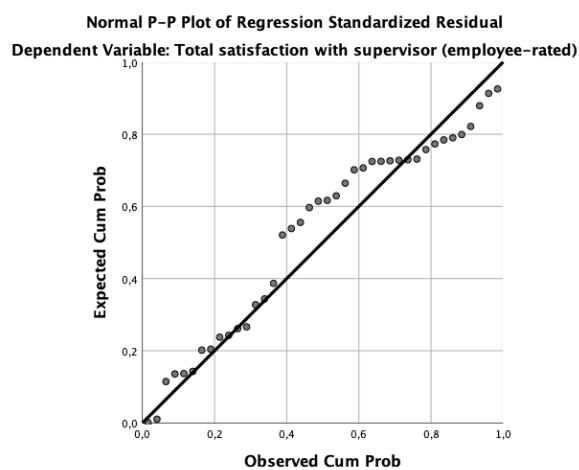
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	4.137	.632		6.605	.000
mindfulness_observing	-.012	.029	-.069	-.411	.684
mindfulness_describing	.012	.022	-.106	.544	.590
mindfulness_awareness	-.034	.024	-.262	-1.459	.154
mindfulness_nonjudging	.013	.020	.108	.636	.529
mindfulness_nonreactivity	-.033	.023	-.243	-1.471	.150

- a. Dependent Variable: Total Satisfaction with Supervisor

APPENDIX P

SPSS Results of Multiple Regression Analyses of Employee Satisfaction and demographic variables Leader Management Level and Number of Employees supervised by the Leader

Graphic 7: P-P plot to check Normality Assumption



Graphic 8: Scatterplot of Residuals to check Homoscedasticity Assumption

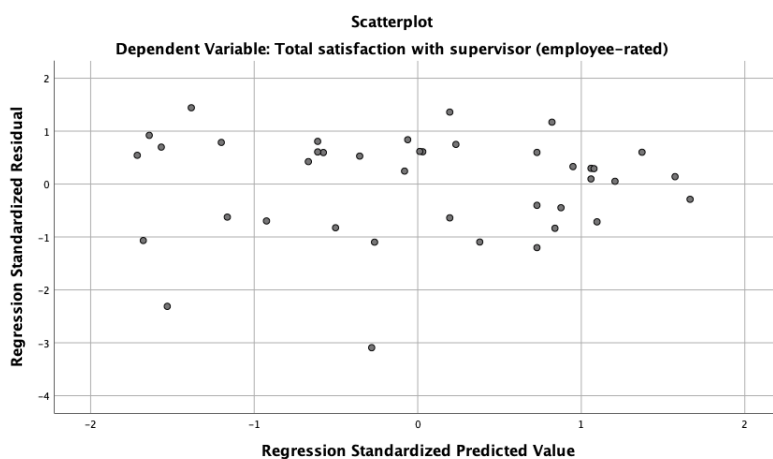


Table 23: Model Summary Employee Satisfaction and Demographic Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.162 ^a	.026	.000	.38778
2	.204 ^b	.042	-.010	.38984
3	.303 ^c	.092	.016	.38479

a. Predictors: (Constant), mindfulness_total

b. Predictors: (Constant), mindfulness_total, mgnt_level

c. Predictors: (Constant), mindfulness_total, mgnt_level, nr_of_employees

Table 24: ANOVA^a Employee Satisfaction and Demographic Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.153	1	.153	1.019	.319 ^b
	Residual	5.714	38	.150		
	Total	5.867	39			
2	Regression	.244	2	.122	.804	.455 ^c
	Residual	5.623	37	.152		
	Total	5.867	39			
3	Regression	.537	3	.179	1.209	.320 ^d
	Residual	5.330	36	.148		
	Total	5.867	39			

a. Dependent variable: Total Satisfaction with Supervisor

b. Predictors: (Constant), mindfulness_total

c. Predictors: (Constant), mindfulness_total, mgnt_level

d. Predictors: (Constant), mindfulness_total, mgnt_level, nr_of_employees

Table 25: Coefficients^a Employee Satisfaction and Demographic Variables

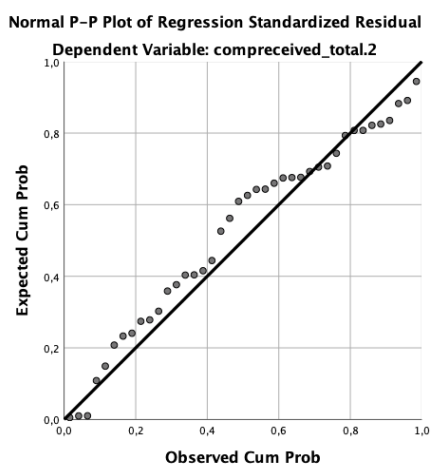
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.972	.593		6.698	.000
	Mindfulness_total	-.007	.007	-.162	-1.009	.319
2	(Constant)	4.025	.600		6.707	.000
	Mindfulness_total	-.006	.007	-.139	-.853	.399
	mgnt_level	-.046	.060	-.127	-.774	.444
3	(Constant)	3.960	.594		6.665	.000
	Mindfulness_total	-.004	.007	-.095	-.575	.569
	mgnt_level	-.024	.061	-.065	-.386	.702
	nr_of_employees	-.076	.054	-.238	-1.406	.168

a. Dependent Variable: Total Satisfaction with Supervisor

APPENDIX Q

SPSS Results of Multiple Regression Analyses of Compassion Received and Demographic Variables Leader Management Level and Number of Employees supervised by the Leader

Graphic 9: P-P plot to check Normality Assumption



Graphic 10: Scatterplot of Residuals to check Homoscedasticity Assumption

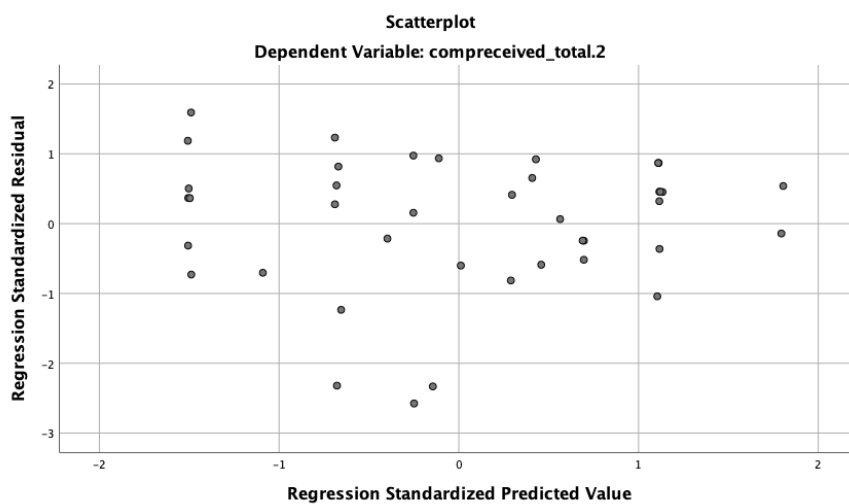


Table 26: Model Summary Compassion Received and Demographic Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.071 ^a	.005	-.021	7.40336
2	.245 ^b	.060	.009	7.29255
3	.278 ^c	.077	.000	7.32467

a. Predictors: (Constant), mindfulness_total

b. Predictors: (Constant), mindfulness_total, mgnt_level

c. Predictors: (Constant), mindfulness_total, mgnt_level, nr_of_employees

Table 27: ANOVA^a Compassion Received and Demographic Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.604	1	10.604	.193	.663 ^b
	Residual	2082.771	38	54.810		
	Total	2093.375	39			
2	Regression	125.665	2	62.833	1.181	.318 ^c
	Residual	1967.710	37	53.181		
	Total	2093.375	39			
3	Regression	161.946	3	53.982	1.006	.401 ^d
	Residual	1931.429	36	53.651		
	Total	2093.375	39			

a. Dependent variable: Compassion_received

b. Predictors: (Constant), mindfulness_total

c. Predictors: (Constant), mindfulness_total, mgnt_level

d. Predictors: (Constant), mindfulness_total, mgnt_level, nr_of_employees

Table 28: Coefficients^a Compassion Received and Demographic Variables

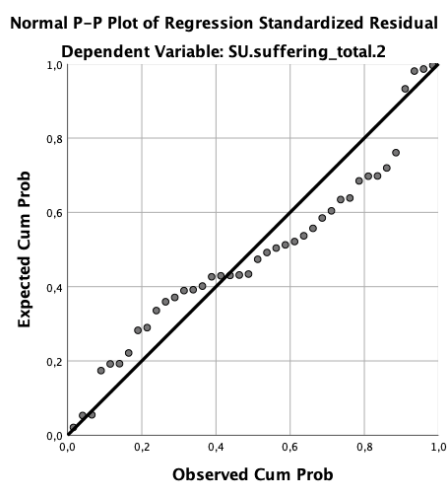
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	41.329	11.323		3.650	.001
	Mindfulness_total	-.061	.139	-.071	-.440	.663
2	(Constant)	43.210	11.227		3.849	.000
	Mindfulness_total	-.025	.139	-.029	-.182	.857
	mgnt_level	-1.650	1.122	-.238	-1.471	.150
3	(Constant)	42.486	11.310		3.756	.001
	Mindfulness_total	-.003	.143	-.003	-.018	.985
	mgnt_level	-1.397	1.168	-.202	-1.196	.240
	nr_of_employees	-.840	1.022	-.140	-.822	.416

a. Dependent Variable: Compassion_received

APPENDIX R

SPSS Results of Multiple Regression Analysis Total Suffering of Supervisor and all Five Facets of Leader Trait Mindfulness

Graphic 11: P-P plot to check Normality Assumption



Graphic 12: Scatterplot of Residuals to check Homoscedasticity Assumption

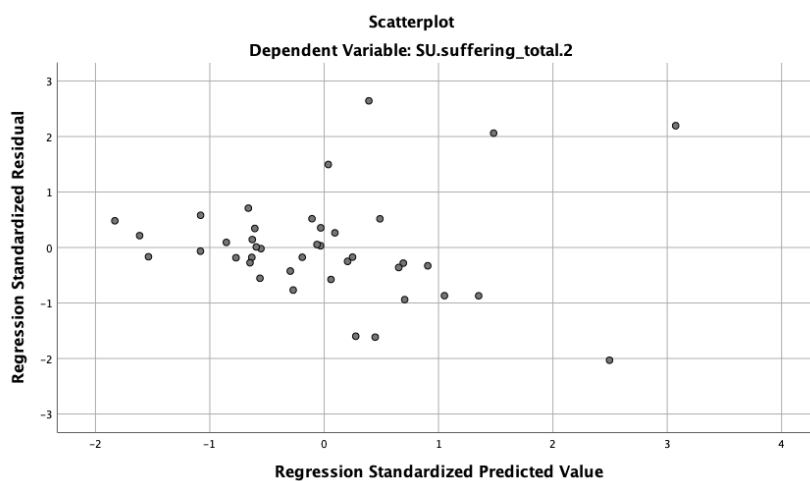


Table 29: Model Summary Total Suffering of Supervisor and all Five Facets of Mindfulness

R	R Square	Adjusted R Square	Std. Error of the Estimate
.616 ^a	.380	.289	9.24741

a. Predictors: (Constant), mindfulness_nonreactivity, mindfulness_observing, mindfulness_non-judging, mindfulness_awareness, mindfulness_describing

Table 30: ANOVA^a Total Suffering of Supervisor and all Five Facets of Mindfulness

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1781.281	5	356.256	4.166	.005 ^b
Residual	2907.494	34	85.515		
Total	4688.775	39			

a. Dependent Variable: Supervisor Suffering

b. Predictors: (Constant), mindfulness_nonreactivity, mindfulness_observing, mindfulness_nonjudging, mindfulness_awareness, mindfulness_describing

Table 31: Coefficients^a Total Suffering of Supervisor and all Five Facets of Mindfulness

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	82.503	15.104		5.462	.000
mindfulness_observing	1.027	.692	.210	1.484	.147
mindfulness_describing	-.455	.537	-.139	-.847	.403
mindfulness_awareness	-1.042	.564	-.280	-1.847	.074
mindfulness_nonjudging	-.806	.476	-.244	-1.691	.100
mindfulness_nonreactivity	-1.294	.544	-.332	-2.381	.023

a. Dependent Variable: Supervisor Suffering