

STRESS AT THE CRISIS LINE

UNIVERSITY OF TWENTE.



**Stress At The Crisis Line: Investigating The Wellbeing Of
Crisis Line Volunteers**



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Abstract

Background. Previous studies showed no clear results for the prevalence of declined mental wellbeing in crisis line volunteers. The studies that were conducted on the issue often used a qualitative design or did not use validated instruments. Moreover, comprehensive, theory-based research into the factors that influence wellbeing in crisis line volunteers is lacking. **Aim.** This study examined the prevalence of Secondary Traumatic Stress (STS) and Engagement in crisis line volunteers and which factors, based on the Job-Demands-Resources-Model, influence these. This study focused on self-compassion as a personal resource and examined whether self-compassion (1) predicts STS and Engagement. Whether self-compassion (2) moderates the relationship between Job Demands and STS and (3) moderates the relationship between Job Resources and Engagement. **Methods.** In the current study a survey was completed by 543 Dutch volunteers at de Luisterlijn. Intercorrelations between variables of the Job Demands Resources Model were assessed by pearson-correlations. Regression analyses were conducted to examine to what extent Job Demands, Job Resources, and Self-compassion could predict STS and Engagement. The PROCESS-macro for SPSS was used to conduct a moderation analysis. **Results.** The results showed that crisis line volunteers experienced low secondary traumatic stress levels and high engagement levels. Intercorrelations show that STS was most significantly related to higher Job Demands ($r=.28$ and $r=.29$) and lower self-compassion ($r=-.27$) and that Engagement was most significantly related to higher Job Resources ($r=.34$ and $r=.35$) and lower Caller-related Stress ($r=-.25$). A multiple linear regression analysis demonstrated that variables of Job Demands and Job Resources could explain 11% of total variance in STS and could explain 20% of total variance in Engagement. Self-compassion could increase the total variance with 3% in STS but none in Engagement. There was no evidence that the relation between STS and the variables of the Job Demands was moderated by self-compassion. **Conclusion.** Studies often report high secondary traumatic stress levels perceived by crisis line volunteers whereas this study demonstrated low secondary traumatic stress levels. For further research it is advisable to: investigate the relationship between self-compassion and the Job Demands Resources Model on a longer period of time, to conduct more quantitative research on identification of factors influencing wellbeing of crisis line volunteers and decrease their secondary traumatic stress and to include different crisis line organisations in order to investigate the differences in the experience of secondary traumatic stress perceived by crisis line workers.

Keywords: crisis line; volunteer; wellbeing; stress; Self-compassion; Job Demands Resources; moderation

Introduction

Numerous organizations afflicted with financial complications that involve social services heavily depend on volunteers to assist their functioning because they provide important and inexpensive resources (Cyr & Dowrick, 1991), which is why the wellbeing of these volunteers needs to be protected. Telephone crises services are one of these organizations that depend greatly on their volunteers as they provide free services to people who are in need of advice or a sympathetic ear. Telephone crisis services are quite popular nowadays because of their reachability and the lack of support many individuals experience in their lives (Kinzel & Nanson, 2000). The volunteers of crisis line services need to deliver a quality of care, while also dealing with a lot of political and societal changes, which can have consequences for their own wellbeing (Lloyd, King & Chenoweth, 2002). Additionally, they have to consider their own needs as well as those of others, which in turn can also be difficult and demanding on their mental health (Kinzel & Nanson, 2000).

There is assumed that crisis line volunteers experience high amounts of Secondary Traumatic Stress due to their work at the crisis line services. Many crisis line services have to face specific client populations (sexual assaults or suicidal clients) which are likely to influence their stress levels (Cyr & Dowrick, 1991). Also, Kinzel and Nanson (2000) found that volunteers' desire to dropout was influenced by the exposure to trauma and stories of others. The exposure to the suffering and the impact this has for others is often described as compassion fatigue in other words 'the cost of caring'. Other causes Kinzel and Nanson (2000) found of the volunteers' compassion fatigue were repeated callers, callers with sexual intentions but also insufficient personal coping mechanisms and no standards for evaluation. Additionally, Belander (1999) found that persons who have been personally traumatized and are exposed to greater amounts of traumatic material will show higher amounts of secondary traumatic stress.

Higher amounts of secondary traumatic stress could lead to voluntary turnover. Dropout rates were studied by Yanay and Yanay (2008) within the work of crisis line volunteers. They discovered that dropouts are not always due to lack of motivation but more a conscious battle between what is expected of them as volunteers and their actual experiences. For instance, most crisis line volunteers expected to feel good about themselves as they were doing good work, but actually noticed that they felt worse than before and therefore dropped out in order to protect themselves.

Despite the fact that volunteering at a crisis line service is demanding on mental health, there is not much attention for the wellbeing of these volunteers within literature and how high the experienced secondary traumatic stress of crisis line volunteers exactly is, is still unknown. Studies on the subject of mental wellbeing of crisis line volunteers are scarce. Over a period of twenty years there are only a dozen studies that were aimed at the perceived stress and mental wellbeing of crisis line volunteers and the studies that have been conducted about this subject are often qualitative of nature or do not use validated instruments (Willems, Drossaert, Vuijk & Bohlmeijer, 2020).

Next to the fact that there is much unclear about how high the perceived secondary traumatic stress and wellbeing of crisis line volunteers is, there is also much unclear about the factors that influence the wellbeing of crisis line volunteers. There are admittedly, a few studies that examined one or two factors of wellbeing (Dunkley & Whelan, 2006; Cyr & Dowrick, 1991; Mishara & Giroux, 1993; Kitchingman, Wilson, Caputi, Wilson & Woodward, 2017; and O'Sullivan & Whelan, 2011), but these studies all investigated different facets of wellbeing (vicarious traumatisation, burn-out, functional impairment, personality traits, adversarial growth, stress, motivation, and coping strategies). Therefore, there is a need for an integrated research on this subject based on a theoretical model.

Ultimately, researchers agree that it is necessary to investigate factors that can influence the wellbeing of crisis line volunteers (Kinzel & Nanson, 2000; Yanay & Yanay, 2008; Kitchingman et al., 2018) and that studies on the exact amount of perceived secondary traumatic stress are essential. In conclusion, more research is needed on the factors that influence the wellbeing of crisis line volunteers, as the quality of the current research varies a lot and there is no clear overview of the scope of the problem yet (Willems et al., 2020). A theoretical model that could provide more insight into the factors influencing (work related) wellbeing and perceived secondary traumatic stress, is the Job Demand Resources Model. This theoretical model will be discussed below.

Job Demands Resources Model

Every profession has their own specific risk factors for stress and not all professions are susceptible to the same forms of stress. One theoretical model that is commonly used to understand job related wellbeing is the Job Demands Resources Model (JDR). This model that was developed by Demerouti, Bakker, Nachreiner and Schaufeli (2001), is a model designed for employees at organisations and assumes that wellbeing of employees can be attributed to

features of various professions and environments that have specific risk factors for stress and motivation. In the original model, two factors were distinguished that influenced employees' perceived Work Stressors and Engagement: Job Demands and Job Resources.

Job Demands. The first category, Job Demands, can be defined as: the physical, psychological, social, or organizational aspects of a job that ask for constant physical and/or psychological effort or skills and are associated with certain physiological costs (Bakker & Demerouti, 2007). An assumption within the JDR-model is that high Job Demands can lead to overcharging employees' mental and physical resources. The consequence is that these challenging aspects of the job turn into Work Stressors, also known as exhaustion (Bakker, Demerouti & Verbeke, 2004).

Work Stressors. When employees experience Work Stressors, they will not be able to perform well in their job, experience more stress and as a consequence perceive a decrease in their mental wellbeing (Bakker & Demerouti, 2007). Examples of Work Stressors are heavy workload, unrealistic demands, lack of recognition, and poor interpersonal relationships with colleagues (Goh, Pfeffer, Zenios, & Rajpal, 2015). STS can be measured as a part of the Work Stressors.

Personal Outcomes. Personal Outcomes, also known as in-role performance, are the outcomes of the experienced stressors that have an influence on the wellbeing of the employee and will have an impact on their performance in the job (Bakker & Demerouti, 2007). This chain from Job Demands to Work Stressors to eventually Personal Outcomes is described as the "path of exhaustion" (Demerouti et al., 2001).

High Job Demands that express themselves in psychological and physiological distress are commonly experienced by crisis line volunteers (Kitchingman et al., 2018), which might explain the high turnover rates found by Yanay and Yanay (2008) and Kinzel and Nanson (2000). An example of the exhaustion path for a crisis line volunteer might be that they experience a couple of unpleasant calls in a row to the service line that increases stress levels (work stressors) which increases their experience of secondary traumatic stress. Next, when there is no time for a break, the volunteer continues with the next caller in line. They might ask for help from other volunteers, but they might also be busy. As a consequence, the volunteer's performance deteriorates (personal outcome).

In conclusion, high Job Demands can lead to more Work Stressors, which can lead to impaired Personal Outcomes. However, the effect that high Job Demands can have on Work Stressors can be reduced by high Job Resources.

Job Resources. The second category of the JDR-model, Job Resources, can be defined as: physical, social and psychological aspects of the job that are functional in accomplishing work objectives, reduce Job Demands and the psychological and physiological costs and excite personal growth and advancement (Bakker & Demerouti, 2007). Examples of Job Resources are encouragement of colleagues or division of labour. An assumption within the JDR-model is that Job Resources need to be provided within the organisation to enable employees to achieve goals and be committed towards the organization. When employees have enough Job Resources, they will be more engaged (Bakker et al., 2004).

Engagement. When employees are engaged in their work, they will be more satisfied with their job, have motivational potential and better performance (Bakker & Demerouti, 2007). As a consequence, this will also influence the Organizational Outcomes.

Organization Outcomes. The Organizational Outcomes, also known as extra-role performance, are specified as the turnover intention and commitment of employees toward the organization (Bakker & Demerouti, 2007). This chain from Job Resources to Engagement to ultimately Organizational Outcomes is described as the path of Engagement (Demerouti et al., 2001).

A lack of Job Resources will prevent that goals are reached and will reduce motivation and Engagement in employees which might also explain the psychological and physiological distress (Kitchingman et al., 2018) and high turnover rates (Yanay & Yanay, 2008; Kinzel & Nanson, 2000). An example of the Engagement path for a crisis line volunteer could for instance be that they receive specified training for dealing with callers, receive help from other volunteers, and will be appreciated by the organization through rewards and receiving compliments (Engagement). As a consequence, the Engagement of the volunteer will be boosted, and this will increase the performance and compassion towards callers. Also, a more engaged volunteer will be motivated to stick to the organization (organizational outcome).

In conclusion, high Job Resources can lead to more Engagement which may lead to improved Organizational Outcomes. Still, the negative effect that low Job Resources can have on Engagement can be reduced by low Job Demands.

Personal Resources. In the past few years, the JDR-model has been extended by adding the role of employees' "Personal Resources", because they can be essential determinants in the adaptation to work settings (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). The concept of Personal Resources can be defined as aspects and capacities of the self that are linked to resiliency and refer to an individuals' ability to control and impact their environment. Self-

efficacy hope and optimism can be examples of Personal Resources (Xanthopoulou et al., 2007). The connection between Personal Resources, Job Demands, and Job Resources is that Personal Resources are often related to stress reduction and better physical and mental wellbeing (Chen, Casper, & Cortina, 2001). Furthermore, Personal Resources are often dependent on environmental factors and can function as moderators and mediators in the relationship between environmental factors and organizational factors (Judge & Bono, 2001).

There are some previous studies that have examined the role of Personal Resources within the framework of the JDR-model. For example, compassion satisfaction, self-efficacy, optimism, and self-esteem were considered as Personal Resources within the framework of the JDR-model. Compassion satisfaction had a moderating effect on the relationship between Job Demands and job strain among 122 military chaplains (Tremblay and Messervey, 2011), self-esteem and optimism showed a mediating effect of Job Demands on Work Stressors in a sample of 498 Chinese employees working in specialized software development, electronic engineering and agricultural products (Huang, Wang and You, 2015) and self-efficacy, self-esteem and optimism displayed a mediating effect of Job Resources on Engagement among 714 Dutch employees (Xanthopoulou et al., 2007). Thus, Personal Resources might offer a solution to the psychological distress crisis line volunteers experience within their line of work, therefore, in this study one non-conforming personal resource will be investigated: Self-compassion.

Self-compassion

Self-compassion as a construct in psychology has led to new insights in understanding mental wellbeing (Neff, 2003). Self-compassion has been reviewed for ages in Buddhist philosophy, still the concept of Self-compassion arose not long ago in psychological literature with the articles of Neff (2003) about Self-compassion. In short, Self-compassion can be defined as openness and being moved by your own suffering and feelings by taking a non-judgmental attitude toward your own failures and by recognizing that these failures are part of being human (Neff, 2011). According to Neff (2003), Self-compassion consist of three main components: self-kindness vs self-judgment, feelings of common humanity vs isolation, and mindfulness vs over-identification. The first component refers to being kind and caring rather than being hard and judgmental at oneself. The second component involves recognizing that everybody makes mistakes and that it is part of being human. The last component refers to being aware and living in the moment of one's own pain and suffering in order to be able to be mindful (Neff, 2011). The reason why Self-compassion has a positive effect on wellbeing is

because people who have compassion for themselves feel cared for, calm and connected (Gilbert, 2005).

Self-compassion has many positive effects on health and on wellbeing and has been studied in various settings with different groups. Studies showed for example that Self-compassion was strongly related with physical and mental wellbeing (Neely, Schallert, Mohammed, Roberts, & Chen, 2009; Neff & McGehee, 2010; Bluth & Blanton, 2014). Other studies showed that self-compassionate people deal better with negative life events than non-self-compassionate people (Krieger, Altenstein, Baettig, Doerig, & Holtforth, 2013; Leary, Tate, Adams, Batts Allen, & Hancock, 2007). Heffernan, Quinn Griffin, McNulty, and Fitzpatrick (2010) found positive correlations between self-compassion and emotional intelligence in their study. Breines and Chen (2012) studied the effect of self-compassion on motivation and found that being self-compassionate in times of failure improved motivation. Researchers try to apply the basics of Self-compassion and mindfulness interventions on workers in health care in order to reduce stress and increase the effectiveness of health care (Raab, 2014).

Thus far, self-compassion has not been studied in relation to crisis line volunteers. Also, self-compassion could function as a personal resource within the context of the JDR-model, but empirical research on this behalf is lacking.

Because of the positive effect that self-compassion has on health and wellbeing it is interesting to study if these positive effects are also applicable for crisis line volunteers within the crisis line services. Also, self-compassion as a personal resource might influence Organizational Outcomes. Personal Resources, such as self-compassion, can be defined as moderators within the JDR-model and therefore buffer the impact on the relationship between Job Demands and work-related stress (Bakker et al, 2005). A high Self-compassion might prevent crisis line volunteers from experiencing high amounts of stress which influences their wellbeing.

This study

This study will examine on the basis of the JDR-model (1) how high the perceived secondary traumatic stress of crisis line volunteers is and (2) what the most influential factors of secondary traumatic stress in crisis line volunteers are. In sum, there is still a lot unknown about the exact amount of the prevalence of secondary traumatic stress in crisis line volunteers and also there is a lack of theory based comprehensive studies into the factors that cause secondary traumatic stress. In addition, this study will also focus on the role of Self-compassion

as a personal resource. It is expected that in accordance with the perspective of the JDR-model, the personal resource, Self-compassion, might function as a moderator in the relationship between Self-compassion and the exhaustion path and might function as a moderator in the relationship between Self-compassion and the Engagement path.

This study examined if there was a moderation effect within the exhaustion path. It was tested whether ‘Self-compassion’ affected the strength of the relation between ‘Caller-related Stress’ and ‘Emotional Workload’ which could be described as ‘Job Demands’ on ‘Work Stress’. See Figure 1.1.

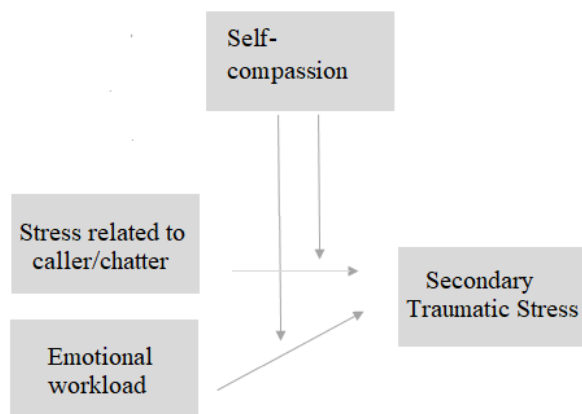


Figure 1.1 Assumption that Self-compassion moderates the relationship of Caller-related Stress and Emotional Workload on Secondary Traumatic Stress.

Moderation within the Engagement path tested whether ‘Self-compassion’ affected the strength of the relation between ‘Relations with colleagues’ and ‘Supervision/coaching/guidance’ on ‘Engagement’. See Figure 1.2. The expectation was that the influence of the moderation would be higher on the exhaustion path than on the Engagement path because Self-compassion ultimately explains how volunteers deal with adversities.

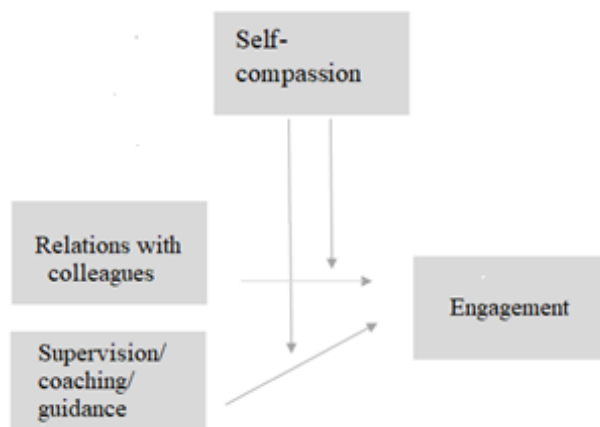


Figure 1.2 Assumption that Self-compassion moderates the relationship of relations with colleagues and supervision/coaching/guidance on Engagement.

Thus, this study will examine the secondary traumatic stress crisis line volunteers experience due to their work at the crisis line services and this study will investigate if Self-compassion could function as a moderator in the relationship between Job Demands and STS and as a moderator in the relationship between Job Resources and Engagement. In order to study this, the following research questions were stated:

- 1 To what extent do crisis line volunteers experience Secondary Traumatic Stress and Engagement due to their work in the crisis line service?
- 2 To what extent can Job Demands (Caller-related stress and Emotional Workload) and Job Resources (Relations with colleagues and Supervision/coaching/guidance) predict Secondary Traumatic Stress and Engagement?
- 3 To what extent is Self-compassion related to Secondary Traumatic Stress and Engagement?
- 4 To what extent can Self-compassion contribute in the prediction of Secondary Traumatic Stress next to Job Demands and Job Resources?
- 5 To what extent is Self-compassion moderating the relationship between Job Demands and Secondary Traumatic Stress and is Self-compassion moderating the relationship between Job Resources and Engagement?

Method

Design

This study was part of a larger study (PhD study from Renate Willems) that focused on volunteers and professionals who work at the crisis line service. In this larger study crisis line volunteers were asked, by means of an online survey, if they experienced their work as stressful and how their experiences within their work influenced their secondary traumatic stress and mental wellbeing. In the current study we analysed a subset of variables and we only targeted participants of de Luisterlijn as an organisation because of the complexity and differences of multiple organisations and because de Luisterlijn represents the volunteers.

Participants & Procedures

Approval for the study was obtained by the Ethical Board of the Faculty of Behavioural and Management studies from the University of Twente (no: 190943). The research target group consisted of volunteers who work at de Luisterlijn. De Luisterlijn offers non-formal care to everyone who feels the need to get in contact anonymously. The organisation can offer a sympathetic ear and offers advice on every moment of the day, through electronic or telephone contact. Chatters, mailers, and callers are enabled to tell their stories and by the means of this can filter their pain, sorrow, and sadness for a while. De Luisterlijn consists of 1500 volunteers that will listen to the stories of these people. They are being trained by professionals until they are expert conversation partners. Professionals did not take calls or answered chats but were employed to give training. All the professionals did receive a social-scientific education. (De Luisterlijn, 2019).

Volunteers were approached by an invitation mail that was sent with a link that opened the questionnaire. Of all sent questionnaires, 543 questionnaires were returned. Participants had to read the instructions at the beginning of the questionnaire and had to give informed consent in order to participate. Conditions for participating the questionnaire was that they were sufficiently informed about the research method. The completion time was about 30 minutes.

Instruments

The questionnaire contained questions on six topics: Personal background variables, Job Demands, Job Resources, Personal Resources, Work Stressors and Engagement. Below is explained how each variable was measured.

Personal background variables.

The questionnaire started with some personal background variables which consisted of age, gender, if they had a training or professional experience in healthcare or not, the amount of years that the volunteers worked at the crisis line services, the amount of hours of voluntary work and the location where the crisis line volunteers worked.

Job Demands

The first part of the questionnaire assessed the Job Demands. This part consisted of four variables of which two will be used in this study:

Caller-related Stress. Stress resulting from calls was assessed with a self-constructed questionnaire of 16 items, each representing a typical situation or characteristic of the caller (examples: 'A caller or chatter calls multiple times with exactly the same story' and 'A caller or chatter is distracted during the call by (doing the dishes, having a conversation with somebody else) while you focus on the conversation'). The situations were derived from literature and an interview study. Volunteers were asked to indicate how often they experienced the given situation in their work on a 5-point scale ranging from 'never (0) to very often' (4), and how stressful they perceive the situation on a 5-point scale ranging from 'totally not stressful (1) to very stressful' (5). A scale score was computed by averaging the products of each pair of items (which could range from 0-20). Higher total mean scale scores indicate a higher caller-related stress. The combined scale showed good reliability in this study ($\alpha=0.87$).

Emotional Workload (QEEW). Emotional Workload was measured using the Emotional Workload subscale from the Questionnaire on Experience and Assessment of Work (QEEW, Dutch abbreviation: VBBA) (van Veldhoven & Meijman, 1994). The QEEW is a 252-item questionnaire that assesses the perception of work and work environment. The Emotional Workload subscale consists of 7 items that measures how the volunteers experience their emotional workload when working at the crisis line services (examples: 'Do you feel personally attacked or threatened in your work?' and 'Do you have difficult clients or patients within your work?'). Volunteers were asked to indicate how often they experience emotional workload when working at the crisis line service, on a 4-point scale ranging from 'never (1) to always (4)'. The items of the scale were combined by calculating an average total score. Higher total mean scores indicate higher levels of Emotional Workload. The scale showed questionable reliability in this study ($\alpha=0.61$). Yet, since there were no items that could be deleted in order

to raise the reliability of the scale, and since the scale has shown to be reliable in previous studies (van Veldhoven & Meijman, 1994) we decided to use the scale-scores.

Job Resources

The second part of the questionnaire assessed the Job Resources. This part consisted of four variables of which two were used in this study:

Relationship with colleagues (QEEW). Relationship with colleagues was measured using the relations with colleagues subscale from the Questionnaire on Experience and Assessment of Work (van Veldhoven & Meijman, 1994). The relations with colleagues subscale consists of 9 items, each representing a question on how the work relationship between the volunteer and their colleagues is at the crisis line service (examples: ‘Do you have any conflicts with your colleagues?’ and ‘Are your colleagues friendly towards you?’). Volunteers are asked to indicate how often they experience the given situation in their work on a 4-point scale ranging from ‘never (1) to always’ (4). The items of the scale were combined by calculating an average total score. Higher total mean scores indicate better relationships with colleagues. The reliability of the scale within this study was good ($\alpha=0.80$).

Supervision/Coaching/Guide (SCG). The SCG-questionnaire was a self-constructed questionnaire that entailed the supervision, coaching, or guidance that volunteers receive at the crisis line services in order to do their job. The questionnaire consists of 4 items, each representing an act of the supervisor/coach/guide (examples: ‘The SCG encourages me to talk about my experiences at the telephone crisis service’ and ‘The SCG stimulates me to take care of myself’). Volunteers are asked to indicate to what extent they agree with the items on a 5-point scale ranging from ‘totally disagree (1) to totally agree (5)’. The items of the scale were combined by calculating an average total score. Higher total mean scores indicate higher levels of supervision, coaching or guidance. The scale showed good reliability in this study ($\alpha=0.82$).

Personal resource

Self-compassion (SCS-SF). Self-compassion was measured using the Self-compassion Scale Short Form (Raes, Pommier, Neff & Gucht, 2011). The Self-compassion Scale Short Form is the short version of the Self-compassion scale and consists of 12 items (long version 26 items) (Garcia-Campayo, Navarro-Gil, Andrés, Montero-Marin, López-Artal & Demarzo, 2014). The questionnaire assesses the coping with emotions and setbacks and how these influence stress. All 12 items from the questionnaire were used that measured how volunteers

coped with their negative emotions and experiences (examples: 'I try to consider my weaknesses as human' and 'When I am not happy, I am inclined to be obsessed and fixated at everything that is wrong'). Volunteers were asked to indicate to what extent the items were applicable to them on a 5-point scale ranging from 'Very rarely applicable (1) to me to Very often applicable to me' (5). The items of the scale were combined into a total scale score by averaging. Higher total mean scores indicate higher levels of coping with emotions. The scale showed good reliability in this study ($\alpha=0.80$).

Work stress

The fourth part of the questionnaire assessed the work stress. This part consisted of one questionnaire of which one will be used in this study:

Secondary Traumatic Stress (STS) (ProQol). Secondary Traumatic Stress was measured using the Secondary Trauma Scale from the Professional Quality of Life Scale (ProQol) (Stamm, 2010). The ProQol is a 30-item self-report questionnaire that assesses for positive and negative effects of working with people who have experienced stressful events. The Secondary Trauma Scale consists of 10 items that measures to what extent volunteers are confronted with stress due to the confrontation of others' suffering (examples: 'I think it's hard to make a distinction between my private life and my work as a volunteer' and 'As a consequence of my work, I have penetrating and frightening thoughts'). Volunteers are asked to indicate how often they have the feeling that they experience stress due to the confrontation of other people's suffering, on a 5-point scale ranging from 'never (1) to very often' (5). The items of the scale were combined by calculating an average total score. Higher total mean scores indicate higher levels of STS. The scale showed acceptable reliability in this study ($\alpha=0.71$).

Engagement

The fifth part of the questionnaire assessed Engagement. This part consisted of two variables of which one will be used in this study:

Engagement (UWES). Engagement was measured using the Work & Wellbeing Survey (Balducci, Fraccaroli, & Schaufeli, 2010). The Work & Wellbeing Survey is the short version of the Utrecht Work Engagement Scale (UWES-9) and consists of 9 items (long version 17 items). The questionnaire assesses how people experience and feel about their work. The questionnaire measures three aspects of work Engagement: vigour (3 items), dedication (3 items) and absorption (3 items). All 9 items from the questionnaire were used that measured

how volunteers felt about their work in the crisis line and how they experienced their work (examples: 'I am enthusiastic about my job at the telephone crises service' and 'I am proud of the work that I deliver at the telephone crisis service'). Volunteers were asked to indicate how often the items were applicable to them on a 7-point scale ranging from 'never (1) to always' (7). The items of the scale were combined by calculating an average total score. Higher total mean scores indicate higher levels of Engagement. The scale showed excellent reliability in this study ($\alpha=0.91$).

Data-analysis

Data were analysed using SPSS 24. Mean scores and standard deviations were assessed for the variables and the characteristics of the crisis line volunteers. Intercorrelations between the variables of the JDR-model were assessed by Pearson correlation. Results were considered as significant if the p-value was lower than .01. Correlation of .10 was seen as small, .30 was seen as a moderate correlation and .50 was seen as a high correlation (Valentine & Cooper, 2003). To examine if Job Demands, Job Resources and Self-compassion could contribute to predict variance in the dependent variables, STS and Engagement, a hierarchical regression analysis was conducted. Finally, after checking for the assumptions, the PROCESS macro for SPSS (Hayes, 2012) was used to conduct a moderation analysis to decide whether self-compassion was a moderator of the relation between the variables of the Job Demands and STS. Caller-related Stress and Emotional Workload were added as the independent variables. Self-compassion was added as the moderator variable.

Results

Description of the study group

A total of 543 crisis line volunteers completed the questionnaire and were included in the analyses, see Table 1. The mean age was 63 (SD=11), the youngest participant was 22 years and the eldest 87 years old. Most of the participants were females who did not have an education in social work, psychology or healthcare, most of them worked for 1 to 3 years at the crisis line service and were stationed at home or at location with an average of 4 to 6 hours of voluntary work a week.

Table 1. Description of the characteristics of the crisis line volunteers (N=543)

Variables	Mean (SD)	n (%)
Gender		
Male		155 (28,5%)
Female		387 (71,3%)
Other		1 (0,2%)
Age (years)	63 (11)	
Education (social work, psychology, healthcare?)		
Yes		196 (36,1%)
No		347 (63,9%)
Average years of working at the telephone crisis line		
< 1 year		105 (19,3%)
1-3years		193 (35,5%)
3-6 years		89 (16,4%)
6-10 years		58 (10,7%)
10 > years		98 (18,0%)
Average hours of voluntary work		
< 4 hours a week		97 (17,9%)
4-6 hours a week		408 (75,1%)
6-8 hours a week		31 (5,7%)
8-10 hours a week		4 (0,7%)
10 > hours a week		3 (0,6%)
Location of work		
Always on location		133 (24,5%)
Most of the time on location, sometimes home		91 (16,8%)
Sometimes on location, sometimes home		55 (10,1%)
Most of the time at home, sometimes on location		126 (23,2%)
Always home		138 (25,4%)

Descriptive statistics of Job Demands and Resources

Job Demands. Table 2 shows the mean scores and standard deviations of the subscales. For the Caller-related Stress scale the item scores are shown, and display that the most important stressor is a caller with psychiatric problems which causes him/her to be confused, agitated or very gloomy. Other important stressful calls (meaning that they either occur often or are

perceived as highly stressful) are those in which the caller tells so much information that there is a speech waterfall and the situation in which the caller complains and whines much.

The measurement of Emotional Workload displayed a below average score which indicates that crisis line volunteers never to sometimes experience Emotional Workload.

Table 2. Descriptive statistics of Job Demands, Job Resources, Personal Resources, Work Stressors and Engagement (N=543)

Questionnaire	Mean	SD
Job Demands		
<i>Stressors related to caller, total Scale [range 0-20*]</i>	2.6	1.2
Q6 Psychiatric problems	4.6	3.0
Q4 Speech waterfall	3.5	2.7
Q11 Complains and whines	3.4	2.7
Q16 Client is suicidal	3.3	2.1
Q13 Passive attitude and assumes victim role	3.1	2.6
Q12 Client does not listen, thinks in extremes	3.0	2.5
Q8 Manipulates, scolds, discriminates, seeks quarrel	2.8	1.9
Q5 Calls several times a day with same story	2.7	2.1
Q9 Client has sexual intentions with conversation	2.4	2.1
Q14 Client had life-threatening or serious physical illness	2.2	1.6
Q2 Children or animals are victims	1.9	1.7
Q10 Physical complaints while in fact psychological	1.9	1.5
Q15 Under influence of alcohol or drugs	1.9	1.5
Q1 Client tells a bizarre story that is probably not true	1.9	1.3
Q7 Client is busy with other things during conversation	1.8	1.8
Q3 Intention to mistreat human or animal	0.7	1.4
<i>Emotional Workload QEEW [range 1-4]</i>	1.8	0.3
Job Resources		
<i>Relations with Colleagues QEEW [range 1-4]</i>	3.7	0.3
<i>Supervision/Coaching/Guidance [range 1-5]</i>	4.3	0.6
Q4 Stimulating coaching to take care of themselves	4.4	0.7
Q3 Tactful comments about working methods	4.3	0.7
Q1 Feedback helps to deal with challenges	4.2	0.8
Q2 Encouragement to talk about experiences	4.1	0.8
Personal Resources		
<i>Self-compassion SCS-SF [range 1-5]</i>	3.6	0.5
Work Stressors		
<i>Secondary traumatic stress ProQol [range 1-5]</i>	1.6	0.4
Engagement		
<i>Engagement UWES [range 1-7]</i>	5.0	1.0

*Mean: 0-20

* Scores were obtained by multiplying the occurrence of stressor (0-4) with the impact (1-5)

Job Resources. The measurement of relations with colleagues displayed an average to above average score which indicates that crisis line volunteers often to always experience good relationships with their colleagues. The SCG subscale showed an above average score which indicates that crisis line volunteers agree to totally agree with the statements about the act of the supervisor, coach, or guide. Respondents were positive on all aspects: the feedback, comments on working methods, encouragement, and the stimulation to take care of themselves.

Personal Resources. The Self-compassion subscale displayed an average to above average score which indicates that crisis line volunteers experience that the statements about coping with emotions and setbacks, are sometimes to often applicable to them.

Work Stressors. The subscale of STS displayed a below average score which indicates that crisis line volunteers never to rarely experience stress due to the suffering of others.

Engagement. Finally, the Engagement subscale displayed an above average score which indicates that crisis line volunteers often (about once a week) experience vigour, dedication, and absorption.

Associations between the variables of the Job Demands Resources

Intercorrelations between variables of the JDR-model are displayed in Table 3. STS was significantly associated with all assessed variables, except supervision. However, all correlations were rather weak. Higher Emotional Workload ($r=.29$), higher caller-related distress ($r=.28$) and lower Self-compassion ($r=-.27$) were most strongly correlated to STS.

When looking at Engagement, it was found that nearly all variables, except Emotional Workload, were significantly associated with Engagement. Especially, Better relations with colleagues ($r=.35$) and more satisfaction about SCG ($r=.34$), but also less Caller-related Stress ($r=-.25$) were important.

Table 3

Bivariate correlations between the variables of the JDR-model (N=543)

	1	2	3	4	5	6
1 OU - Secondary traumatic stress	-					
2 OU- Engagement	-.13*	-				
3 PR - Self-compassion	-.27*	.13*	-			
4 JD – Caller related stress	.28*	-.25*	-.25*	-		
5 JD - Emotional Workload	.29*	-.10	-.20*	.47*	-	
6 JR- Supervision/coaching/guidance	-.11	.34*	.11*	-.15*	-.09	-
7 JR - Relations with colleagues	-.18*	.35*	.18*	-.20*	-.21*	.38*

* Correlation is significant at the 0.01 level (two-tailed)

Self-compassion was significantly associated with all assessed variables. However, all correlations were rather weak. Lower STS ($r=-.27$), less Caller-related Stress ($r=-.25$) and lower Emotional Workload ($r=-.20$) were most strongly correlated to Self-compassion. As expected, there were moderate correlations between Emotional Workload and Caller-related stress ($r=.47$) because these two variables were part of the Job Demands, and also moderate correlations between SCG and Relations with colleagues ($r=.38$) because these two variables were part of the Job Resources.

In sum, almost all variables were significantly intercorrelated except for the association between STS and SCG, Emotional Workload and Engagement and the association between SCG and Emotional Workload. On the level of Job Demands, Self-compassion displayed associations with Caller-related Stress, Emotional Workload and STS which indicates that Job Demands can be associated to Self-compassion. These variables of Job Demands were considered in the assumption of a moderating relationship. Also, on the level of Job Resources, Self-compassion displayed associations with SCG, relations with colleagues and Engagement which indicates that Job Resources can be associated to Self-compassion. These variables of Job Resources were considered in the assumption of a moderating relationship.

Job Demands and Secondary Traumatic Stress

Table 4 below shows the results of the hierarchical linear regression analysis to predict STS and Engagement. In the first model of the prediction of STS, the Job Demands variables were added. The variables of the Job Demands could explain in total 11% of the variance and both predictors were significantly associated with STS.

Table 4.

Hierarchical Linear Regression analysis to predict Secondary Traumatic Stress and to predict Engagement (N=543)

	<u>Secondary Traumatic Stress</u>			<u>Engagement</u>		
	Variables	β	P	Variables	β	P
Model 1:						
Job Demands	Caller-related Stress	.18	*	Caller-related Stress	-.27	*
	Emotional Workload	.21	*	Emotional Workload	.02	
	R ² =.11, R ² Change =.11 p <.01			R ² =.06, R ² Change =.06 p <.01		
Model 2:						
+ Job Resources	Caller-related Stress	.16	*	Caller-related Stress	-.20	*
	Emotional Workload	.20	*	Emotional Workload	.07	
	Relations with Colleagues	-.10		Relations with Colleagues	.24	*
	Supervision/coaching/guidance	-.03		Supervision/coaching/guidance	.22	*
	R ² =.12, R ² Change =.01 p =.04 (p <.05)			R ² =.20, R ² Change =.14 p <.01		
Model 3:						
+ Self-compassion	Caller-related Stress	.13	*	Caller-related Stress	-.20	*
	Emotional Workload	.18	*	Emotional Workload	.07	
	Relations with colleagues	-.07		Relations with colleagues	.24	*
	Supervision/coaching/guidance	-.02		Supervision/coaching/guidance	.22	*
	Self-compassion	-.19	*	Self-compassion	.02	
	R ² =.15, R ² Change =.03 p<.01			R ² =.20, R ² Change =0 p=0.56		

* Correlation is significant at the .01 level (2-tailed)

Thereafter, in the second model the Job Resources were added. This increased the total amount of explained variance slightly but significantly with 1% to 12%. In this second model both Job Resources were not significantly associated with STS.

Finally, in the third model Self-compassion was added. The results showed that Self-compassion could further significantly increase the total amount of explained variance with 3% to 15%. In the final regression analysis three factors were significant: Caller-related Stress, Emotional Workload, and Self-compassion. In sum, there can be concluded that Self-compassion did increase the total amount of explained variance and therefore predicts STS.

Job Resources and Engagement

Second, we were interested in predicting Engagement (Table 4). In the first model, the Job Demands were added. The variables of the Job Demands could explain in total 6% of the variance and Caller-related Stress as a predictor was significantly associated with Engagement.

Thereafter, in the second model the Job Resources were added. This increased the total amount of explained variance significantly with 14% to 20%. In this second model both predictors were significantly associated with Engagement.

Finally, in the third model Self-compassion was added. The results showed that Self-compassion could not further increase the total amount of explained variance. In the final regression analysis three factors were significant: Caller-related Stress, Relations with colleagues and SCG. In sum, there can be concluded that Self-compassion did not increase the total amount of explained variance and therefore did not predict Engagement.

Moderation Analysis and Secondary Traumatic Stress

In order to examine if Self-compassion is the moderator in the relationship between the exhaustion path, a moderation analysis was conducted. Table 5 shows the results of the moderation analysis with STS as the dependent variable and Caller-related Stress as the independent variable. Table 6 shows the results of the moderation analysis with STS as dependent variable and Emotional Workload as the independent variable.

Table 5.

Moderation analysis including Caller-related Stress as the independent variable and Secondary Traumatic Stress as the Dependent Variable (N=543)

	Coefficients		<i>t</i>	<i>p</i>	<i>R</i>	<i>R</i> ²
	B	SE				
(Constant)	1.64	.02	103.22	.01*	.35	.12
Caller-related Stress	.07	.01	5.43	.01*		
Self- compassion	-.18	.04	-5.15	.01*		
CRS * SC	.02	.03	.70	.46		

* Correlation is significant at the 0.01 level (2-tailed)

CRS = Caller-related Stress, SC = Self-compassion

Table 5 shows the first analysis in which two variables were added: Caller-related Stress and Self-compassion. These variables could explain in total 12% of the variance. The moderation analysis shows that there was a statistically significant effect of Caller-related Stress on STS ($p < .01$). Furthermore, there was also a statistically significant effect of Self-compassion on STS ($p < .01$). However, the interaction variable (Caller-related Stress * Self-compassion) was not significant, meaning that there is no evidence that Self-compassion moderates the relation between Caller-related Stress and STS ($p < .46$).

Table 6.

Moderation analysis including Emotional Workload as the independent variable and Secondary Traumatic Stress as the Dependent Variable (N=543)

	Coefficients		<i>t</i>	<i>p</i>	<i>R</i>	<i>R</i> ²
	B	SE				
(Constant)	1.64	.02	105.38	.01*	.36	.13
Emotional Workload	.34	.06	6.12	.01*		
Self-compassion	-.18	.03	-5.26	.01*		
EW * SC	-.03	.11	-.30	.76		

* Correlation is significant at the 0.01 level (2-tailed)

EW = Emotional Workload, SC = Self-compassion

Table 6 shows the second analysis in which two variables were added: Emotional Workload and Self-compassion. These variables could explain in total 13% of the variance. The linear regression analysis shows that there was a statistically significant effect of Emotional Workload on STS ($p < .01$). Furthermore, there was also a statistically significant effect of Self-compassion on STS ($p < .01$). However, the interaction variable (Emotional Workload* Self-compassion) was not significant, meaning that there is no evidence that Self-compassion moderates the relation between Emotional Workload and STS ($p < .76$).

Discussion

The present study investigated secondary traumatic stress perceived by crisis line volunteers due to their work at the crisis line services and investigated what the most influential factors of secondary traumatic stress in crisis line volunteers were. Also, the study examined self-compassion as a personal resource within the JDR-model. Special attention was paid to the exhaustion and engagement path and whether self-compassion moderates these relationships.

Crisis Line Volunteers and experience of Secondary Traumatic Stress

In relation to the first research question it was found that the experienced secondary traumatic stress of crisis line volunteers was less than expected based on previous studies. The expectation was that crisis line volunteers would experience high amounts of secondary traumatic stress and a decrease of their wellbeing due to their work at the crisis line services. However, this study shows that crisis line volunteers experience low levels of STS and high levels of Engagement. This seems to contradict previous studies, suggesting that crisis line volunteers experience higher amounts of secondary traumatic stress (Kinzel & Nanson, 2000; Belander, 1999).

One explanation for this could be that this study was particularly aimed at crisis line volunteers who worked at de Luisterlijn, an organisation that offers a sympathetic ear for everyone who feels the need to get in contact anonymously (de Luisterlijn, 2019). This means that the subjects that are being discussed during a call can vary enormously. Some subjects that callers might discuss during a call can for example be fears, loneliness, financial problems and unemployment, addiction, gloom and depression, insecurity, identity or relations and sexuality (De Luisterlijn, 2019). Within the Netherlands there is a distinction between, for example, de Luisterlijn and the suicide prevention service. This means that people with thoughts about suicide call the suicide prevention service and often not de Luisterlijn, which means that, de Luisterlijn is not always particularly used as a service for traumatizing subjects aimed at, for example, suicide in comparison with other organisations. This concept is different in other countries that do not know the unique concept of a Luisterlijn that people can call whenever they feel the need to talk to someone anonymously. This might explain why volunteers at the crisis line services experience lower amounts of secondary traumatic stress and experience higher amounts of work engagement. Therefore, it might be interesting for future studies to include different crisis line services, as for example, the suicide prevention service in order to

investigate the differences in the experience of secondary traumatic stress perceived by crisis line workers.

Another explanation for the low levels of secondary traumatic stress found in this study might be that high self-compassion already seems present within the volunteers at the Luisterlijn. Volunteering seems to be significantly associated with a more pro-social personality, other-oriented empathy, and helpfulness (Penner, 2002). Moreover, people with better personality resources, greater mental and physical health seem to invest more hours in voluntary service (Thoits & Hewitt, 2001). Therefore, starting with volunteering in the first place might already include a form of compassion. Also, a high amount of self-compassion leads to perseverance in times of difficulty (Breines & Chen, 2012) and volunteers who do not possess a high amount of self-compassion might leave the crisis line when it becomes too complicated or demanding for them. Volunteers that already quit were not asked to fill in the questionnaire and thus only volunteers that showed presumably higher amounts of self-compassion were asked to fill in the questionnaire which could be an explanation for the low levels of perceived secondary traumatic stress.

A third possible explanation for the low levels of secondary traumatic stress found in this study might be that SCG was highly assessed by crisis line volunteers. This finding is in line with the study of Cyr and Dowrick (1991) who examined factors that prevented burn-out in crisis line volunteers. A factor that was often described by volunteers as important in preventing burn-out was supervisor support (67%). This factor seems to be related to SCG within this current study. Because crisis line volunteers felt that they had good supervision, coaching and guidance from their superiors this worked as a buffering effect and caused them to perceive secondary traumatic stress as less traumatizing and caused them to experience higher (work) engagement.

To conclude, future research aimed at the wellbeing of crisis line workers should include paid employees next to crisis line volunteers as their target group in order to check for the differences between the two groups on the amount of experienced stress and wellbeing. In addition, research should not only include volunteers that are currently working at the crisis line services, but also check for volunteers that quit their voluntarily work in order to see what their reasons were and to look for differences in the amount of experienced stress and wellbeing. Finally, future studies should be aimed at more quantitative research with validated instruments based on a theoretical framework in order to examine what the main factors are that influence the wellbeing of crisis line volunteers.

Job Demands and Job Resources

In this study the JDR-model was used as a theoretical model to investigate the most influential factors in the wellbeing of crisis line volunteers. In relation to the second research question it was found that the most influential factors of STS in crisis line volunteers within this study were higher Job Demands and lower Self-compassion and the most influential factors of Engagement were higher Job Resources and lower Caller-related Stress. However, the total explained variance was quite low with only 12% explained variance on STS and only 20% total explained variance on Engagement. This is in line with two other studies that showed lower explained variance within the JDR-model. The study of Bakker, Emmerik and van Riet (2008) showed that two dimensions of burn-out (emotional exhaustion and cynicism) could only explain 8% of the variance in performance (personal outcomes and organizational outcomes). Another study by Van den Broeck, De Cuyper, De Witte and Vansteenkiste (2010) showed three categories of job characteristics and employees' well-being (job hindrances, job challenges and job resources) as predictors of exhaustion and found that the three categories could explain 45% of the variance in exhaustion. This means that the three categories separately could only explain a low amount of variance in exhaustion and thus show a variance that is quite low.

The total explained variance within this study was quite low which means that there are other factors that play an important role in the prediction of STS and Engagement. However, there is still much unclear about these factors and future research is needed to investigate what factors could play a role in the prediction of STS and Engagement.

Self-compassion and Engagement

The third and fourth research question were aimed at the addition of self-compassion to the JDR-model. Firstly, the results of the multiple linear regression showed that Self-compassion was significantly correlated with engagement. However, self-compassion could not further increase the total amount of explained variance on engagement and therefore, not predict engagement. The direct relation between self-compassion and (work) engagement has not been studied before. Only a study by Lilius, Worline, Maitlis, Kanov, Dutton, and Frost (2008) found that people who experience self-compassion often, report more positive emotions at their work, which is related to the JDR-model's organizational outcomes. Nevertheless, a previous study by Babenko, Mosewich, Lee and Koppula (2019) examined the relationship between self-

compassion and professional wellbeing, which included work engagement, indirectly showed significant associations between self-compassion and work engagement. To conclude, different studies show different results. Therefore, future research is needed to investigate the relationship between self-compassion and engagement further.

Self-compassion and Secondary Traumatic Stress

The third until the fifth research question were aimed at the correlation to stress, the addition of self-compassion to the total variance and the question whether self-compassion was moderating the relationship between the variables of the Job Demands and STS. Firstly, the results of the multiple linear regression showed that self-compassion was significantly correlated with STS. Self-compassion could further increase the total amount of explained variance to 15% which showed that self-compassion could predict STS. A moderation analysis was conducted in order to see if the relationship between the variables of the Job Demands and STS was moderated by self-compassion. Nevertheless, there was no evidence that this relationship was moderated by self-compassion. These findings are in line with Richardson, Jaber, Chan, Jesse, Kaur, and Sangha (2016) who studied the influence that self-compassion and empathy can have on burnout and secondary traumatic stress within medical training. They found similar results in the way that self-compassion was significantly associated with secondary traumatic stress and that higher self-compassion led to less secondary traumatic stress, although, this association was weak.

Similarly, a pilot study of a mindfulness intervention for adolescents studied by Bluth, Roberson, and Gaylord (2015) showed the potential role of self-compassion in reducing stress. The researchers suggested that there is an effect of greater self-compassion on lower stress, which is important for understanding mental health and resilience. Unfortunately, there is a lack of research on the direct relation between self-compassion and secondary traumatic stress and the few studies that have been conducted show mixed results.

To conclude, different studies show different results. Therefore, future research should aim on the direct relation between self-compassion and secondary traumatic stress and should investigate this relation further.

Strengths and limitations

The present study contains various strengths but also limitations, which will be made clear in this paragraph. A first strength of this study was the sample size, which was particularly large with 543 participants. This large of a sample size reaches volunteers with different backgrounds, educations, and work characteristics. Particularly, the age distribution is a strength within this study because there is much variation. The youngest participant was 22 years and the eldest was 82 years old, which shows a representative population.

Secondly, almost all instruments used in this study, except Emotional Workload (.61), showed a good reliability (.71 to .91) which indicates that these instruments are valid and will guarantee consistent results with repeated measurements.

Thirdly, this current study provides more insight into a quantitative point of view about the subject of stress in crisis line volunteers and can be of additional value, whereas previous studies have shown to study this subject from a qualitative point of view.

However, this study also displays limitation that need to be taken into account. Firstly, this study was a self-report study in which volunteers received a survey which they had to fill in by themselves. Self-reported data can contain some sources of bias that need to be taken into account. Some biases that might played a role in this study were: (1) Attribution: volunteers might attributed positive events to their own agency, and attributed negative events to their organization. (2) selective memory: volunteers might not remember how certain events and experiences occurred in the past; and (3) exaggeration: volunteers might represent certain outcomes or events as more overwhelmingly for them than it was in reality.

Secondly, there was a lack of previous quantitative studies in the research area of wellbeing of crisis line volunteers which made it more difficult to substantiate with relevant literature.

Conclusion

Previous studies demonstrated needs for identification of factors that could influence the wellbeing of crisis line volunteers. Moreover, there is a need for more quantitative research, where qualitative research on the subject is already present. Qualitative studies often report high amounts of secondary traumatic stress perceived by crisis line volunteers whereas this study only shows low levels of secondary traumatic stress. The JDR-model is used as a theoretical model to investigate the perceived STS and factors influencing wellbeing of volunteers. Results show that Job Demands and Job Resources are significantly correlated to

STS and that they can only explain 15% and 20% of the total variances. Furthermore, Self-compassion is associated to STS and Engagement and can predict STS. There is, however, no evidence that Self-compassion moderates the relation between Job Demands and STS. For further research it would be advisable to: investigate the relationship between self-compassion and the Job Demands Resources Model on a longer period of time, to conduct more quantitative research on identification of factors influencing wellbeing of crisis line volunteers and decrease their secondary traumatic stress and to include different crisis line organisations in order to investigate the differences in the experience of secondary traumatic stress perceived by crisis line workers.

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