e computer for a while and do something else,
hat is yes, that is nice to do." "I have been an-
ed the border in some other way. People who
" "I've also had a conversation about suicide,
ught: 'Did I say the right things?' Not that any
had more experience at the time might have
there is so much suffering, so much suffering.
a happy life." "Callers who irritated me in the
roles. Over time, I learned that
nd that helped me to deal with
depth conversation. Therefore,
so important. If I've had a dif-
t doesn't help the next caller if
oing to have a cup of tea first."

The Compassionate Listener

Resources and Barriers for Mental Health in Crisis Line Volunteers

Renate Willems

THE COMPASSIONATE LISTENER:

RESOURCES AND BARRIERS FOR THE MENTAL HEALTH OF CRISIS LINE VOLUNTEERS.

Renate Catharina Wilhelmina Johanna Willems

2022

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THE COMPASSIONATE LISTENER:
RESOURCES AND BARRIERS FOR THE MENTAL HEALTH OF CRISIS LINE VOLUNTEERS.

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Compassion is not a virtue, it is a commitment.
It’s not something we have or don’t have,
it’s something we choose to practice.
~ Brené Brown ~

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1

General introduction

INTRODUCTION

In the past decade, the Netherlands has gone through a transition from a welfare state to a participation society. King Willem Alexander first introduced the term 'participation society' in his 2013 speech as part of the annual tradition in which the Dutch government presents the programme and budget for the coming year. The King said:

> *"It is an undeniable reality that in today's network and information society people are both more assertive and more independent than in the past. This, combined with the need to reduce the budget deficit, means that the classical welfare state is slowly but surely evolving into a participation society: Everyone who is able will be asked to take responsibility for their own lives and immediate surroundings. When people shape their own futures, they add value not only to their own lives but to society as a whole. In this way, the Dutch people can continue building a strong nation of confident citizens. A nation with a small but strong government which gives people the space they need ."*[1]

The transition from a welfare state to a participation society was necessary due to (1) double ageing, (2) dejuvenation, and (3) rising healthcare costs. First, double ageing refers to the phenomenon whereby a population's mean age is increasing while the elderly also form a relatively larger part of the society (e.g. as a result of the 'baby boom' after World War II). In 1990, 12.8% of the Dutch population was older than 65; this has increased to 19.5% in 2020 and it is expected to further increase to up to 26% in 2040. In addition, the percentage of people over 80 years of age has also increased from 3.9% in 2010 to 14.8% in 2020 [2]. Second, dejuvenation refers to the phenomenon that there is a decrease in the proportion of young people in the population due to a stable and long-lasting decline in the birth rate. In the Netherlands, the average number of children per woman was 1.57 in 2019. This is below the level at which the population can eventually replace itself (approximately 2.1 children per woman) [3]. The combination of an ageing population and a decreasing young population is creating 'grey pressure': the ratio of persons over 65 years of age to persons between 20 and 65 years of age. This number provides an insight into the proportion of the elderly to the working part of the population. In 2020, the grey pressure was 33%: for every person over 65, there were three persons of working age (20 to 65). In the coming years, this will increase to almost 50% (2040) (meaning only two persons in the working age for every elderly) and then decrease slightly, according to the population prognosis [4]. Third, healthcare costs have been rising in recent years, due to innovation in early disease detection as well as increasing medical knowledge. People therefore end up receiving healthcare

earlier, and are often treated longer and more intensively with new technology and (often expensive) medicines [5]. These aspects make the welfare state unaffordable and a participation society necessary.

The core of the participation society is that citizens, in addition to taking responsibility for their own lives, actively contribute to society through volunteer work and civic initiatives in neighbourhoods and communities [6]. About half of the Dutch population volunteer at least once a week, for an average of 4.5 hours a week [7]. Most volunteers are involved in sports clubs, schools, youth associations, philosophical organisations, and organizations that supplement formal care. People with higher education, aged between 35 and 45, and those who attend religious services at least once a month, volunteer the most [7].

Continuity of volunteer work

Of the group of volunteers, almost 10% do voluntary work that complements formal care [8], for example: youth work (such as buddy projects for children who are socially vulnerable), care for the dying in hospices, or buddies for people with chronic (terminal) illnesses [9]. This group of volunteers is essential for building the participation society. It was expected that there would be a decrease in the number of volunteers in the Netherlands due to the ageing population, and due to the expectation from the government that Dutch citizens take over some of the care for their loved ones (informal care). However, there is no evidence for such a trend; since 2002 the percentage of volunteers has fluctuated between 36% and 47% [10]. From 2008 a decreasing trend seemed to emerge, but in 2019 the percentage of volunteers (40%) is again higher than in 2016 (36%) [10]. However, there is a slight decrease in volunteers who work in the health care sector, from 11% in 2018 [7] to 10% in 2020 [8].

Volunteers who work to supplement formal care are often confronted with people who are suffering. This suffering can be caused by physical or mental illnesses, but also (traumatic) events that the other person experiences, such as being bullied, being victim in an accident, having a loved one that died, or being lonely. Volunteers are expected to feel compassion for these people and to have the intention to alleviate this suffering as much as possible. Due to this continuous exposure to suffering, volunteers working in the health care sector may be at risk of reduced wellbeing and compassion fatigue [11]. Compassion fatigue consists of two parts: burnout and secondary traumatic stress. Burnout manifests as emotional exhaustion, feelings of hopelessness, anger, frustration and difficulty in coping. Secondary traumatic stress (work-related, secondary exposure to people who have experienced extremely or traumatically stressful events [12]) manifests as intrusive imagery, cognitive changes, difficulty in separating personal and work

life, decreased frustration tolerance, self-destructive behaviour, loss of hope, decreased sense of self-competence and reduced functioning [12,13]. Groups of volunteers who have been found to be at increased risk of compassion fatigue include: volunteers in animal shelters, who are exposed to animals being euthanized because no one wants to care for them [14]; volunteers in hospices, who are exposed to dying patients and their families [15]; and volunteers who are exposed to trauma from other individuals such as terror victims, traffic victims, and people who have lost a loved one [11,16].

Volunteering at the crisis line service

This dissertation focuses on a specific group of volunteers who are an important supplement to formal care: crisis line volunteers who work at the Dutch 'Listen Line'. The purpose of the 'Listen Line' is providing support and recognition to people who are in need of a conversation and who mostly experience some kind of suffering. People who contact the 'Listen line' can anonymously express their feelings, problems, and concerns [17]. The crisis line service is run by trained volunteers who are available 24/7. Every year, around 1400 volunteers of the 'Listen Line' answer 360,000 calls via telephone, email, and chat [18]. The topics of conversation that callers[1] want to talk about vary widely. The most common topics in 2020 were: mental health, relationships (family, friends, love), loneliness, daytime fulfilment, physical health, and Corona [18]. The volunteers invite callers to self-reflect with the aim of increasing their self-efficacy [17]. The input of the caller guides the conversation. The volunteers speak to everyone without exception unless there is inappropriate behaviour, such as scolding or manipulation. An important principle in the conversations is equality between both parties. Anonymity of both the caller and the volunteer is the basic principle of a crisis line service [17].

The principles of humanistic psychology are reflected in the work of the 'Listen Line' [17]. In this approach human beings are considered to be creative, growing, meaning-oriented and appreciative. Empathy, unconditional positive acceptance, and a non-judgmental attitude of the volunteer help the caller to reflect and see individual possibilities [19]. Besides the principles of humanistic psychology, the 'Listen Line' uses the "presence approach" [17]. This implies that the volunteer relates to the other with attention and dedication, develops an understanding of the meaning of the other's suffering (for example, desires or fears), realizes what the other needs, and how the contact can be meaningful for the other [20]. Being present also means not to abandon the other person, neither emotionally nor relationally, but rather to remain committed to the other person, even when healing is not possible [20]. This requires the volunteer to adapt to the callers by

1 'Caller' can also refer to someone communicating via chat or email. For readability, only the word caller is used.

being open and receptive to them, so that callers can open up and experience "being heard", an existential experience of recognition [20].

A central concept in both humanistic psychology and the presence approach is compassion. Over the last 30 years there has been an increase in scientific interest in the concept of compassion. Gilbert [21] describes compassion as "a deep awareness of the suffering of another coupled with the desire to relieve it." He describes three flows of compassion: the compassion from others, the compassion towards others, and the compassion for the self. These flows of compassion are three different but related concepts [22]. Dutton et al. [23] described compassion as an interpersonal process involving four key processes: noticing/attending to another's suffering, sense-making or meaning-making related to suffering, feelings that resemble empathic concern, and actions aimed at easing the suffering. Strauss et al. [24] conducted a review of different definitions and approaches to (self-)compassion. They suggest the following overarching definition: "a cognitive, affective, and behavioural process consisting of the following five elements that refer to both self and other-compassion: 1) recognizing suffering; 2) understanding the universality of suffering in human experience; 3) feeling empathy for the person suffering and connecting with the distress (emotional resonance); 4) tolerating uncomfortable feelings aroused in response to the suffering person (e.g. distress, anger, fear) so remaining open to and accepting of the person suffering; and 5) motivation to act/acting to alleviate suffering".

The presence approach is the main premise of the support provided by volunteers to callers. The definition of the presence approach has important similarities to the definition of compassion. Both the presence approach and compassion are about sensing the suffering of the other, without judging it, and the intention to alleviate this suffering. Even if this suffering cannot be solved immediately, by being present one can offer comfort, and thus alleviate the suffering.

Studies have shown that crisis line services are a valuable addition to formal care. For example, a survey by the Verweij-Jonker Institute [25] among 244 callers form the 'Listen Line' showed that 68-95% were positive about the way they were approached by volunteers. Even though some callers were not fully satisfied because they had expected more help, most felt encouraged to find out things for themselves and take the initiative to solve problems. The most frequently mentioned outcome of calling the 'Listen Line' is: "I could tell my story". Other outcomes that were mentioned relatively often by callers are: "I gained more insight into my problems or griefs" and "I got good tips". Less than 10% of the callers indicated that the call had not provided them with any benefits. Also, foreign studies have demonstrated the importance of other crisis line services comparable to

the ‘Listen line’. For example, emotional distress, feelings of hopelessness, psychological pain, and suicidality decrease over the course of a conversation with the crisis line service [26-30].

Although the value of crisis line services for callers and society has thus been demonstrated, the work itself may be quite demanding for the volunteers. Constant confrontation with the suffering of callers, in combination with inappropriate behaviour of certain callers may cause distress or compassion fatigue in crisis line volunteers. In order to prevent volunteers from leaving the organization, and thus, maintain the continuity of these important services, monitoring of volunteers’ mental health, and of the factors that improve or impede this, is needed.

The mental health of crisis line volunteers

The World Health Organization (WHO) describes mental health as a positive state that is defined as “a state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” [31]. Keyes [32] described the two-continua model of mental health. He states that positive mental health (mental wellbeing) can coexist with mental illness, even though mental illness and mental wellbeing are related concepts. A person who experiences a high level of distress is more likely to have a reduced level of mental wellbeing. However, individuals suffering from mental illness may have a relatively high mental wellbeing. Conversely, individuals without mental illness may still experience low mental wellbeing.

Below, we will first explore the concept of mental wellbeing in a more general way, then we will focus on what is known about the mental health of crisis line volunteers.

The concept of mental wellbeing is complex. In science, wellbeing is often described from two approaches: The first is the hedonic approach, which states that wellbeing consists of experiencing pleasure, high positive affect, satisfaction with life, and happiness [33,34]. The second approach, the eudemonic paradigm, defines wellbeing as the degree to which a person is functioning well as an individual and in a societal context. For example: experiencing autonomy, self-acceptance, positive relations with others, environmental mastery, and purpose in life [35-38]. These approaches to mental wellbeing, however, are not definitions. The Oxford English dictionary defines wellbeing as “the state of being comfortable, healthy, or happy” [39]. Dodge et al. [40] proposed a new definition. They focused on three core areas: the idea of a fixed point for wellbeing, the inevitability of balance/homeostasis, and the fluctuating state between challenges and resources. When a person faces a challenge, the system of challenges and resources

enters a state of imbalance. The person will adjust his or her resources to return to a state of balance. From these three core areas, Dodge et al. defines wellbeing as follows: "In essence, stable wellbeing is when individuals have the psychological, social and physical resources they need to meet a particular psychological, social and/or physical challenge." When individuals have more challenges than resources, the see-saw dips, along with their wellbeing, and vice-versa [40]" (see Figure 1 for a visual representation).

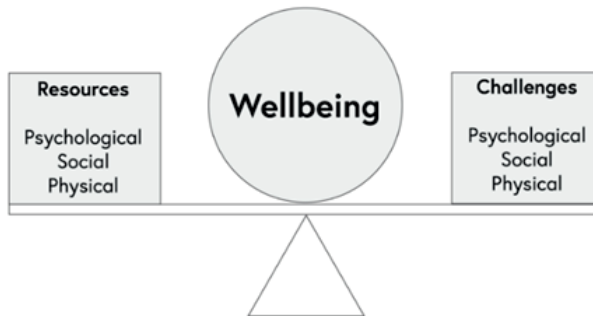

Figure 1: The definition of wellbeing [40]

There is a lack of scientific knowledge about the mental health of crisis line volunteers. In a systematic review, Kitchingman et al. [41] examined psychological distress and impairment among crisis line volunteers. They concluded that some volunteers experience symptoms of vicarious trauma, stress, burnout, and psychiatric disorders, and that this subgroup may not respond optimally to callers when they experience increased symptoms of distress. However, due to the paucity of research as well as the methodological limitations of existing studies, the conclusions were very tentative.

Volunteers do not only experience negative consequences from volunteering, but also positive impact. For example, a review by Guiney and Machado [42] shows that volunteering can have a positive influence on cognitive functioning in the elderly: volunteering leads to more physical, social and cognitive activity, which has a positive influence on mental health. A review of volunteers in palliative care [43] demonstrated that volunteers experienced personal gain (e.g. learning and self-growth) and that they developed new relationships (e.g. connectedness with others). A review of volunteers in general showed that volunteering has a positive impact on depression, life satisfaction, and wellbeing [44]. However, there is still a lack of review research on the positive effects of volunteering at the crisis line service.

Comprehensive research on the mental health of crisis line volunteers.
To comprehensively examine the mental health of crisis line volunteers and the influencing factors, models that examine wellbeing in work settings among paid workers can be used.

In the last four decades, there has been an increase in scientific research on the relationship between work characteristics (such as workload, role ambiguity, social support, and autonomy) and employees' mental health (such as job strain, burnout, and engagement). One of the first models used for this research was the Demands-Control Model (DCM) [45]. This model describes job strain as being caused by high task demands and low job control. No job strain is experienced when one can decide for oneself how a task will be performed. Evidence was found for the strain hypothesis (high task demands lead to job strain), but hardly any evidence was found for the buffer hypothesis (high job control leads to low job strain) [46].

In response to the DCM, an alternative model was developed: the Effort Reward Imbalance (ERI) model [47]. This model describes that job strain is the result of imbalance between effort (such as demands, obligations) and reward (such as salary, esteem, and status control) [47].

A limitation of both the DCM and the ERI model is that both models have a static character. Bakker and Demerouti [46] argued that one should not assume a balance of positive and negative work characteristics, but that each work characteristic is a potential source of work stress or work energy. Therefore, they designed the job demands-resources (JD-R) model [48]. This model is based on the assumption that although each occupation may have its own specific risk factors related to work stress, these factors can be classified into two general categories: job demands and job resources. The JD-R model is an overarching model that can be applied to different paid and unpaid occupational situations, regardless of the specific demands and resources involved.

The Job Demands-Resources (JD-R) model
The JD-R model is a well-studied model that provides insight into the factors potentially influencing the wellbeing of employees. It also provides direction for interventions to improve their wellbeing [47, 49, 50]. In this model, working conditions are divided into *job demands* (physical, psychological, social, or organizational aspects of the work that require effort and/or skills) and *job resources* (those physical, psychological, social, or organizational aspects of the work that help to achieve goals and reduce work-related stress). Both job characteristics may influence the level of employees' distress and engagement [46,48,49]. The JD-R model consists of two underlying psychological pro-

cesses: the exhaustion and motivational process. The exhaustion process predicts that high work demands in the absence of job resources cause a decrease in mental health, such as distress. The motivational process predicts that the presence of job resources will contribute to increased mental health, such as engagement and productivity [46,48,49]. These processes predict organizational outcomes, such as commitment and turnover intentions. The JD-R model has been studied mainly among paid employees. Less is known about the applicability of the JD-R model among volunteers.

Job demands of crisis line volunteers

Up until now some studies have tried to identify the challenges/demands that crisis line volunteers have to cope with. These demands are mainly related to the topics they are confronted with, the inappropriate behaviour of callers, and frequent callers. The topics of conversation can range from very complex (e.g. suicidality, abuse [28,50]) to low complex (e.g. relationship problems, loneliness, boredom [18,51]). Inappropriate behaviour that volunteers are confronted with include callers who try to get sexual satisfaction during the conversation [52,53], callers who discriminate or scold or are insulting towards the volunteer, or callers who try to get personal information from the volunteer [54]. A specific group of callers are the so-called "frequent callers": callers who call the crisis line several times a day, often with the same story [55-57]. Frequent callers are not timewasters, but they do keep the telephone line busy. Switching between complex and intrusive topics and coping with the difficult behaviour of callers requires great mental flexibility on the part of volunteers. However, no information is known about the occurrence and impact of these demands.

Job resources of crisis line volunteers

Volunteering at the crisis line comes with a number of job resources. Training is perceived as an important resource for crisis line service volunteers [58-62]. At the 'Listen line', after a careful selection, all volunteers are offered a training before they were allowed to start. The training consists of an e-learning part and several practical meetings in which conversations are practiced. During the training the starting volunteer receives practical guidance from an experienced volunteer. During the training program the starting volunteer and the trainer evaluate regularly whether the volunteer's work meets expectations. After the training program, the volunteer receives personal guidance in the form of supervision meetings [63]. Another important job resource for crisis line volunteers is co-worker support. Support of co-workers is a factor that has been found to be associated with increased mental health [58,61,64-66]. Volunteers reported that they derived motivation from social connectedness, meeting other people and maintaining ties with the community [64-66].

The few studies that explored the demands that volunteers encounter in their work, and the resources they use to cope with these challenges, usually focus on just one single challenge and/or resource instead of providing a comprehensive overview. There is a need for comprehensive research on demands that crisis line volunteers face, the available resources that promote adaptive coping with the demands, and the effect of balancing these demands and resources on mental health. A better understanding of the factors that influence mental health, helps in understanding the impact of volunteering at crisis line services and provides input for personalized interventions to maintain or increase volunteers' mental health.

The addition of personal resources to the J-DR model

Traditionally, studies of the JD-R model have largely focused on work characteristics [67]. In recent years, there has been an increasing interest in adding 'personal resources' to the model. Personal resources are characteristics of the person that are related to their resilience and ability to influence the work-environment, such as self-confidence, self-efficacy, and optimism. Such characteristics can enable a person to achieve work goals and encourage personal growth [49]. Because many psychologists argue that human behaviour is the result of an interaction between person and (work) environment, personal resources, such as optimism, perceived self-competence, and self-confidence were added to the JD-R model [49]. Figure 2 provides a visual representation of the existing JD-R model with the personal resources added.

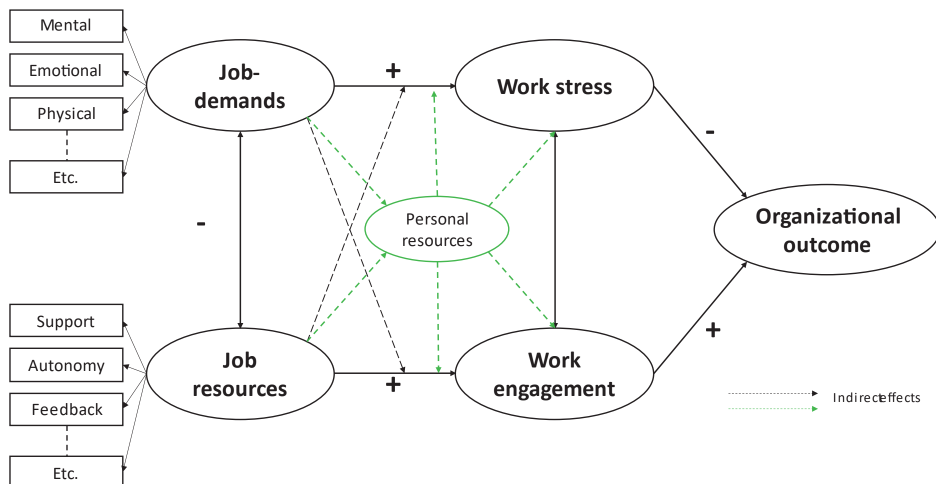

Figure 2: The Job Demands-Resources model [47] with added personal resources [49]

Self-compassion as a personal resource in the JD-R model

A potentially relevant personal resource within the context of crisis line volunteering is self-compassion. The most commonly used definition of self-compassion in the scientific literature was suggested by Neff [68]: "Self-compassion involves being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness. Self-compassion also involves offering non-judgmental understanding to one's pain, inadequacies and failures, so that one's experience is seen as part of the larger human experience". Strauss et al. [24] conducted a review of different definitions and approaches to (self-) compassion. They suggest the following overarching definition: "a cognitive, affective, and behavioural process consisting of the following five elements that refer to both self and other-compassion: 1) recognizing suffering; 2) understanding the universality of suffering in human experience; 3) feeling empathy for the person suffering and connecting with the distress (emotional resonance); 4) tolerating uncomfortable feelings aroused in response to the suffering person (e.g. distress, anger, fear) so remaining open to and accepting of the person suffering; and 5) motivation to act/acting to alleviate suffering". Based on this extensive definition, a questionnaire aimed at self-compassion has recently been developed: the Sussex-Oxford Compassion for the Self Scale (SOCS-S) [69]. There is as yet no validated Dutch version of this promising questionnaire.

In the past decade, self-compassion has been increasingly studied as a predictor of mental health. A number of studies have now shown that self-compassion can enhance resilience [70], engagement and mental wellbeing, and reduce distress [71,72] and burnout [73,74]. In addition, it has shown to be a predictor of increased mental wellbeing [75,76] and engagement [77,78]. However, despite the increasing scholarly attention for the concept of self-compassion, only three studies on self-compassion as a personal resource within the JD-R model were found. Anjum et al. [79] found that self-compassion has a moderating effect on the relationship between job demands (being bullied and excluded at work) and exhaustion among employees of various service sector organizations. Monaghan et al. [80] did not find evidence for the moderating effect of self-compassion on the relationship between job demands and exhaustion among animal care professionals; however, there was a strong negative association between burnout and self-compassion. In addition, in a study among physician assistants it was found that self-compassion increased engagement and reduced the risk of burnout [81]. Since self-compassion is an important resource for coping with negative emotions and cognitions resulting from stressors and adversity, it may buffer the relationship between job demands and distress. Self-compassion may also mediate the motivational process. For example, job resources, such as training, supervision and co-worker support could

enhance self-compassion, in turn leading to greater engagement. Both lower distress and larger engagement could positively impact desired organizational outcomes.

The JD-R model, which has hardly been studied within volunteer organizations, can help to examine mental health and the influencing factors (demands and resources) in crisis line volunteers. It is also interesting to examine the influence of the exhaustion and motivational process on compassion towards others, because this is the most important product that the crisis line service provides. In addition, adding self-compassion to the JD-R model, in which self-compassion acts as a buffer in the exhaustion process and as a mediator in the motivational process, may provide information about the influence of self-compassion on volunteers' mental health and on the organizational outcome of compassion toward others.

THE AIM AND OUTLINE OF THIS THESIS

The aim of this thesis is to contribute to the knowledge of mental wellbeing among crisis line volunteers and the influencing factors (job demands and job resources). In addition, this thesis aims to explore the role of self-compassion as personal resource for crisis line volunteers in the context of the JD-R model. The research questions addressed in this thesis are:

1. To what extent do crisis line volunteers experience mental health issues?
2. What challenges do volunteers encounter while working in crisis line services, and what resources do they have to deal with these challenges?
3. Is self-compassion a valuable personal resource for crisis line volunteers?

Chapter 2 describes a systematic review of what is known in the scientific literature about the mental health of crisis line volunteers and the factors that are associated with this. Because there is a lack of knowledge about this target group, an extensive search strategy was set up, in which mental health was defined broadly to include a variety of terms ranging from burnout to distress, and from engagement to motivation. All factors associated with decreased or increased mental health were examined.

Chapter 3 describes a qualitative study in which thirty active and former volunteers were asked about the challenges they face and the emotional impact the work at the crisis line has on them. In addition, they were asked which coping mechanisms they use to deal with the challenges in their work.

The challenges that were obtained from the systematic review and the qualitative study were incorporated into a questionnaire, to measure the frequency of occurrence and the perceived stressfulness of each challenge. Chapter 4 describes the survey in which we presented this questionnaire to volunteers. Aside from the frequency of occurrence and the perceived stressfulness, we examined to what extent the perceived challenges were associated with volunteers' mental distress and intention to quit the volunteer work.

The Self-Compassion Scale - Short Form (SCS-SF) is a questionnaire that measures self-compassion, from Neff's definition [68]. This is the most widely used questionnaire in the scientific literature. Since the scientific interest in self-compassion has increased in the last decades, the definition of self-compassion has been continuously refined, resulting in newly developed questionnaires. Based on the overarching definition formulated by Strauss et al. [65], Gu et al. [70] developed the 'Sussex-Oxford Compassion for the Self Scale' (SOCS-S). Chapter 5 describes how the Dutch version of this newly developed questionnaire is translated and validated in three groups: crisis line volunteers, military personnel, and nursing students.

Chapter 6 describes the study in which we applied the JD-R model to the situation of crisis line volunteers. In this study we also examined whether self-compassion (as a personal resource) could be a valuable addition to the JD-R model. In this study, the moderating influence of self-compassion on the exhaustion process (relationship between job demands and distress) and the mediating influence of self-compassion on the motivational process (relationship between job resources and engagement) were examined. We also examined the influence of the exhaustion and motivational process on compassion towards others.

Finally, in the general discussion in chapter 7 we will summarize the main results, provide answers to the research questions, and discuss recommendations for future research and implications for practice.

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2

Impact of Crisis Line Volunteering on Mental Wellbeing and the Associated Factors: A Systematic Review

Willems, R. C. W. J., Drossaert, C. H. C., Vuijk, P., & Bohlmeijer, E. T. (2020). Impact of Crisis Line Volunteering on Mental Wellbeing and the Associated Factors: A Systematic Review. *International Journal Of Environmental Research And Public Health, 17*(5), 1641. https://doi.org/10.3390/ijerph17051641

ABSTRACT

Background: Crisis line services, operated by volunteers, have been proven to be effective in decreasing psychological pain and preventing suicidality. Although working at the crisis line may be rewarding, for some the confrontation with highly complex topics (i.e., suicidality, abuse, and loneliness) in combination with inappropriate calls (i.e., sexually abusive calls), may lead to distress or vicarious trauma. The aim of this paper is to systematically review the studies that have examined mental wellbeing of crisis line volunteers and the factors associated with it.

Method: A systematic literature search was carried out in CINAHL, Medline, PubMed, PsycINFO, and Scopus, covering the period until November 2018. Three inclusion criteria were used: (a) The article describes an empirical study; (b) the study samples volunteers from a crisis line or chat line; (c) the study addresses positive and/or negative impact of volunteering at the crisis line on the volunteer's mental wellbeing.

Results: Thirteen published empirical studies on the topic were found. These showed that crisis line volunteers are at increased risk of declined mental wellbeing. However, a wide range of operationalizations were used and most studies did not use validated instruments. On the other hand, studies showed that many volunteers experience satisfaction and gratification from their work.

Conclusion: This review gives insight into some of the work-related, organization-related, and volunteer-related factors that may be associated with the decrease of mental wellbeing. More high quality, comprehensive, and quantitative research using validated instruments is urgently needed to assess the impact of the work on mental wellbeing and the relative impact of influencing factors.

INTRODUCTION

Crisis line services, operated by volunteers, can be considered as an important addition to the existing formal care for people who cannot or do not want to use formal care. Crisis line services offer immediate emotional support by telephone, chat or email in case of personal crisis [1]. In Europe, there are more than 21,000 trained crisis line volunteers, who are available day and night to provide emotional support to vulnerable people in need of immediate help. These volunteers conduct over five million telephone calls and 130,000 chat and email conversations each year [1]. Crisis line services have been shown to be effective in decreasing feelings of hopelessness and psychological pain [2,3] and even in preventing suicidality [2].

Volunteering at the crisis line requires great mental flexibility, because volunteers are confronted with intense suffering and continuously need to switch between a wide range of intrusive and complex topics, such as loneliness, insomnia, suicidal thoughts, and abuse experiences [1,4]. In addition, volunteers have to deal with other call complications and/or inappropriateness, such as frequent callers (calling several times a day, with the same story) [5,6] and sexual abusive calls (in which the caller's goal is to gain sexually gratification from the call) [7,8]. It is important that attention is paid to the impact of volunteering on the mental wellbeing of crisis line volunteers, because a decline in mental wellbeing is associated with poorer quality and safety of care, higher absenteeism, and higher turnover rates [9]. In addition, insight into the factors that are associated with mental wellbeing is needed in order to develop strategies to improve mental wellbeing in crisis line volunteers.

Mental wellbeing and the factors affecting it have been extensively studied in professional health care workers, but research among crisis line volunteers is scarce. Studies in nurses, social workers, and psychologists have identified various positive effects of caring for others, such as compassion satisfaction (the pleasure experienced by caring for others [10]) and job satisfaction [11,12]. However, negative effects have also been reported, for instance elevated symptoms of anxiety and depression [13,14], symptoms of burnout [15,16], secondary traumatic stress (experience of emotional disruption due to helping a traumatized person) [17,18], and compassion fatigue (the physical, emotional, and psychological effects of exposure to traumatic stories or events) [19-21].

The factors associated with mental wellbeing were also extensively studied in professional caregivers. They can be divided into three categories [10]: (a) The nature of the work; (b) the organization; and (c) characteristics of the care providers themselves. Factors related to the nature of the work that have been associated with mental wellbeing

of nurses or other professional caregivers are, for example, the severity of the disease (e.g., caring for patients who are dying) [20] and having to deal with patients who are hostile or suicidal [14-16]. Organizational factors associated with a decrease of caregivers' wellbeing are, for example, lack of support by managers [11,13,15,19], lack of respect and recognition [11,12], insufficient training [14], and lack of autonomy [12]. Finally, characteristics of the caregiver that have been related to decreased wellbeing include maladaptive and emotion focused coping styles [18,19], and feeling too preoccupied with patients [19,21]. All these factors may apply to crisis line volunteering as well.

Despite this substantial body of knowledge on the mental wellbeing of professional caregivers, much less research had been conducted on the impact of caregiving in crisis line volunteers. In a recent systematic review, Kitchingman et al. [22] analysed seven studies investigating whether telephone crisis support workers experience elevated symptoms of psychological distress. The results revealed that telephone crisis support workers are experiencing stress, burnout, vicarious trauma, and psychiatric disorders. Despite the usefulness of this first review, it has two limitations. First, the review did not examine potential positive effects of volunteering. Insight into the positive experiences, motivations, and satisfaction is, however, important because positive feelings may compensate for any distress and may help to understand why people continue volunteering. Second, the review did not focus on potential factors associated with distress and mental wellbeing in crisis line volunteers. Yet insight into these factors is important for informed development and implementation of organizational or personalized interventions aimed at increasing the mental wellbeing of volunteers.

The aim of this paper is therefore to conduct a systematic review of studies that have examined positive and negative mental wellbeing in crisis line volunteers and the factors that are associated with mental wellbeing.

METHODS

Search strategy

A systematic review was conducted, with a narrative representation of the results [23]. A systematic literature search was carried out in CINAHL, Medline, PubMed, PsycINFO, and Scopus, covering the period until November 2018. Main search terms were "crisis line", "volunteer", and "mental wellbeing". Comparable terms were added based on the literature found. The following terms for crisis line were used: Crisis line, crisis hotline, telephone line, telephone help line, telephone intervention, hotline, helpline, chat, chat-line, chat service, and chat support. Terms for volunteer were: Volunteer, worker,

and staff. These terms were combined with terms related to mental wellbeing: mental health, professional quality of life, compassion fatigue, resilience, burnout, wellbeing, empathy fatigue, vicarious trauma, secondary trauma, secondary traumatic stress, distress, stress, help-seeking, anxiety, depressive, suicidal, supervision, treatment, service provision, skills, performance, satisfaction, exhaustion, frustration, anger, depression, and countertransference. Reference lists of the selected studies and earlier reviews [22,24] were cross-checked.

Inclusion Criteria and Selection of Studies

Three inclusion criteria were used: (a) The article describes an empirical study; (b) the study samples volunteers from a crisis line or chat line; (c) the study addresses positive and/or negative impact of volunteering at the crisis line on the volunteer's mental wellbeing. Excluded were (a) studies not written in English; (b) review studies; and (c) studies which were not published or peer reviewed.

The initial database search returned 1942 studies. After a first selection of useful studies, 90 additional studies were identified through reference lists and via forward citation. A total of 2032 records were screened on title and abstract by two independent reviewers (RCWJW and PV); 1978 were excluded, based upon the in- and exclusion criteria. The full texts of the remaining 54 potentially relevant articles were screened by the same reviewers. In the case of disagreements between the reviewers, a third reviewer (CHCD) was consulted. Finally, thirteen studies met the inclusion criteria and were included in the review. Figure 1 presents a flow chart of the selection process of included studies.

Data extraction

Data extraction was performed by the first reviewer (RCWJW) and checked by the second (CHCD) and third (PV) reviewer. Of the thirteen included studies, the following characteristics were extracted and described in Table 1: Author(s) and publication year, sample characteristics, study design, measures, positive or negative influence on mental wellbeing, and factors associated with mental wellbeing in crisis line volunteers. Of the qualitative studies, all information, which is relevant to answer the research questions, is described in Table 1.

Quality assessment

The quality of the included quantitative (survey) studies was assessed using a 15-item quality rating list [25]. Each criteria could be scored as yes (1 point) no (0 points), or unclear (0 points). Criteria and results are presented in appendix Table A1. The quality of the included qualitative studies was assessed using a 9-item list of quality criteria [26], see Appendix Table A2. Each criteria could be scored yes (1 point), no (0 points)

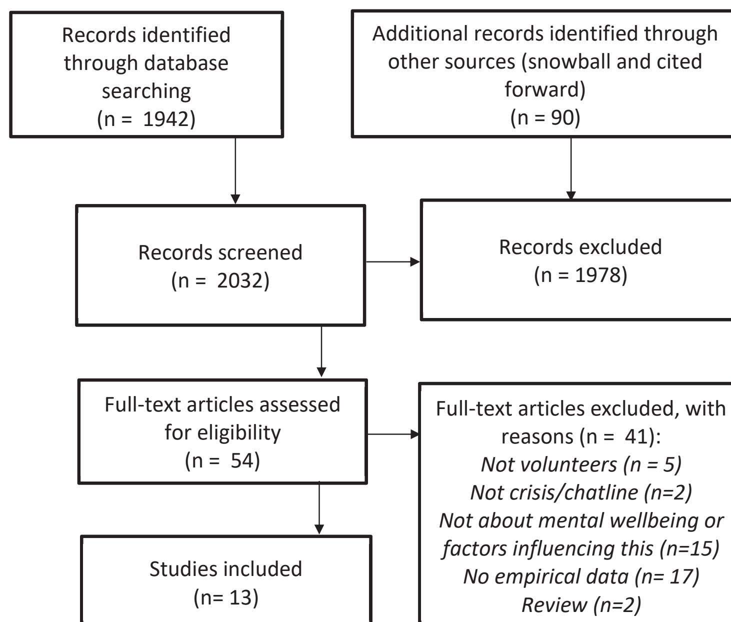

Figure 1*:* Flow chart of included studies.

or unclear (0 points). The scoring was conducted by two independent coders and any disagreements were discussed until consensus was reached. Due to the low number of studies found, no study was excluded based on the quality appraisal.

Analysis

Since the included studies used a wide variety in outcome measures, a meta-analysis was not possible. The results will therefore be described narratively.

RESULTS

Characteristics of the included studies

Only thirteen studies, published between 1973 and 2018, were included in the current review: eight quantitative surveys [27-34] and five qualitative studies (observation, participation, document study, and interviews) [35-39]. No clinical trials or longitudinal studies were found. The quality of the studies varied widely. Only four of the eight surveys used validated instruments to assess mental wellbeing or the factors influencing mental wellbeing [28,30,33,34]. The other four surveys used a single item to measure subjective mental wellbeing [27,29,31,32]. Of the qualitative studies, four presented a clear research goal or question [35-38], for example "What positive or negative experi-

ences have volunteers had as a helpline volunteer?" [38]. The number of respondents included in the survey studies varied from 28 to 216, and in the qualitative studies from 15 to 66. The respondents in the studies were all crisis line volunteers, although two studies [28,33] also included professional employees.

Negative effects of working at the crisis line in mental wellbeing

Ten studies investigated potentially negative effects on mental wellbeing of volunteering at the crisis line [27,28,30-34,36-38], but the outcome measures differed widely. McClure et al. [31] focused on *psychiatric diagnosis*, and found that 22% of the telephone crisis support workers met criteria for any disorder. Two studies [27,34] measured *symptoms of burnout*. Cyr and Dowrick [27] found that more than half (54%) of the volunteers in their sample ever felt burned out while working at the crisis line. Roche and Ogden [34] measured three stages of burnout (emotional exhaustion, depersonalization, personal accomplishment). A minority of the volunteers scored moderate or high on emotional exhaustion (6%); and depersonalization (15%); half of the volunteers (50%) scored low or moderate on personal accomplishment (ability to use skills). O'Sullivan and Whelan [33] found that more than three quarters of the volunteers (77%) showed symptoms of *compassion fatigue*. Dunkley and Whelan [28] reported that almost half of the respondents (46%) scored high on one of the *disruptions in beliefs* scale (safety, trust, esteem, intimacy, and control). They also reported that a quarter of the volunteers (26%) scored "quite a bit" or "extremely" on a *subjective distress* scale (hyper arousal, avoidance, or intrusion). Mishara and Giroux [32] found that pre-shift *perceived stress* in volunteers was reported as "light". During the most stressful call perceived stress was reported "moderate". One week after the shift perceived stress was reported as being between "light" and "moderate". Kitchingman et al. [30] also found that more than a quarter (28%) of the volunteers scored moderate to very high on symptoms of psychological distress. In this study a few volunteers (3%) reported minimal *suicidal ideation*.

Looking at the qualitative studies, Pollock et al. [36] investigated how volunteers deal with ambiguous and anonymous conversations. They reported that *frustration and irritation* due to inappropriate calls were frequently mentioned. Yanay and Yanay [39] interviewed twenty novice volunteers and found that half of them *dropped out* immediately after training.

In sum, the studies suggest that crisis line volunteers are at risk of declined mental health. It is difficult to determine the extent of the problem, because the studies vary in the outcome measure and few used validated instruments. Consequently, prevalence rates varied widely from 3% to 77%.

Table 1: Characteristics of included studies.

Author(s) and Date	Design and Sample Characteristics	Measures	Results on Positive and Negative Mental Wellbeing
Cyr and Dowrick (1991) [27]	Design: Survey, descriptive. Respondents (*n* = 39) Female: 69% Age: 74% under age of 40 Active volunteers: 62% Mean years of experience at the crisis line: 52% more than a year Mean hours per month: 16 hours	Mental wellbeing measure: • Burnout Questionnaire (developed for this study, 1 item): "Have you ever felt burned-out from working on the crisis line" • Checklist of burnout stages: (a) Excessive Enthusiasm (great expectations and excessive energy in volunteer work), (b) Stagnation (disappointment from lack of fulfilment of initial expectations), (c) Frustration (doubts of effectiveness and the value), and (d) Apathy (an emotional detachment, a feeling of numbness or boredom along with an attitude of resignation – mechanically going about duties, the loss of feeling care/concern for clients). Factors related to mental wellbeing: Self-reported factors for preventing/managing burnout and factors contributing to burnout.	• 54% of the respondents have felt burned out on the crisis line. 75% indicated that the feeling of burnout arose within a year. • 97% of all respondents experienced at least one stage of burnout within one year: Excessive enthusiasm: 77%; stagnation: 18%; frustration: 39%; apathy: 28%.

Factors Influencing Mental Wellbeing

Factors related to the nature of work:
Lack of completion in the volunteer work (28%) (anonymity)
Factors related to the organization:
Factors managing/preventing burnout:

- Supervisor support (67%);
- Feeling of being appreciated (67%);
- Sufficiently trained to perform as volunteer work (62%);
- Attendance of a reasonable number of volunteer meetings was required (56%).

Factors contributing to burnout:

- Volunteer turnover (44%);
- Lack of contact with volunteers (36%);
- Lack of discussion about work stresses and/or complaints among peer volunteers (36%);
- Lack of identification by the volunteer group of ways to manage burnout (31%).

Factors related to the volunteer:
Factors managing/preventing burnout:

- Identification of some benefits from the volunteer work (69%);
- Realizing the limits of your importance and effectiveness (59%);
- Realizing that clients cannot or do not always make the most of help available (56%);
- Realizing that not all clients and problems will profit from help (56%).

Factors contributing to burnout:

- No standards to evaluate success (31%);
- Feeling of incompetence in counselling skills (31%);
- Expecting appreciation (28%);
- Lack of completion in the volunteer work (28%).

Strategies for managing burnout:

- Setting limits on involvement (e.g., limiting volunteer hours)
- Avoiding high expectations
- "Venting" with peer volunteers and staff (e.g., debriefing, expressing feelings)
- Requesting performance evaluations
- Taking time off
- Attending to health
- Engaging in relaxing activities

Non-productive coping:

- Not seeking help from supervisor

Table 1: Characteristics of included studies. (continued)

Author(s) and Date	Design and Sample Characteristics	Measures	Results on Positive and Negative Mental Wellbeing
Roche and Ogden (2017) [34]	Design: Survey, descriptive. Respondents (*n* = 216) Female: 69,1% Age: (*M* = 28.7, *SD* = 11.81), Range 18–80. Active volunteers: 100% Mean years of experience at the crisis line: no information Mean hours per week: (*M* = 4.17, *SD* = 1.7), Range 1–15 h.	<u>Mental wellbeing measure:</u> • Burnout: using the Maslach Burnout Inventory (MBI-HSS; Maslach, 1982) modified for Samaritans' listening volunteers. This 22 item questionnaire has three subscales: (a) Emotional Exhaustion; low: 0–16, moderate: 17–26, high: 27 or over. (b) Depersonalization; low: 0–6, moderate: 7–12, high: 13 or over. (c) Personal Accomplishment; low: 39 or over; moderate: 32–38; high: 0–31 [40]. <u>Factors related to mental wellbeing:</u> • Social Support: using the Short Form Social Support Questionnaire (SSQ6; Sarason, Shearin, Pierce, and Sarason, 1987) [41]. • Empathy: using the Interpersonal Reactivity Index (IRI; Davis, 1983); Perspective Taking, Fantasy, Empathic Concern and Personal Distress [42]; • Coping: using the Brief COPE (Carver, 1997) grouped into two subscales; approach and avoidant [43].	• Emotional exhaustion: o Low = 203 (94%) 0–16 o Moderate = 13 (6%) 17–26 o High = 0 (0%) 27 or over • Depersonalization: o Low = 184 (85.2%) 0–6 o Moderate = 27 (12.5%) 7–12 o High = 5 (2.3%) 13 or over • Personal accomplishment: o Low = 55 (25.5%) 39 or over o Moderate = 52 (24.1%) 32–38 o High = 109 (50.5%) 0–31

Factors Influencing Mental Wellbeing

<u>Factors related to the volunteer:</u>

Demographic variables:

- Gender, living arrange and diary keeping were not significantly related to the burnout scales.
- Age: Younger age predicted higher emotional exhaustion accounting for 9.7% of the variance (F = 2.9; p = 0.001). There was no significant relation with depersonalization and personal accomplishment.

Empathy:

- The perspective taking and empathic concern empathy scales were not significant related to the burnout scales.
- Lower empathy fantasy predicted greater depersonalization scores accounting for 12.7% of the variance (F = 3.6; p = 0.0001). There was no significant relation with emotional exhaustion and personal accomplishment.
- Lower empathy concern predicted higher personal accomplishment accounting for 6.3% of the variance (F = 2.2; p = 0.01). There was no significant relation with emotional exhaustion and depersonalization.

Coping:

- Approach coping was not significant related to the burnout scales.
- Use of an avoidant coping style predicted higher emotional exhaustion accounting for 9.7% of the variance (F = 2.9; p = 0.001).
- Greater avoidant coping predicted greater depersonalization scores accounting for 12.7% of the variance (F = 3.6; p = 0.0001).
- Avoidant coping was not significant related to personal accomplishment.

Non-significant values are not included in the table.

Table 1: Characteristics of included studies. (continued)

Author(s) and Date	Design and Sample Characteristics	Measures	Results on Positive and Negative Mental Wellbeing
Dunkley and Whelan (2006) [28]	Design: Survey, correlational. Respondents (*n* = 64) Female: 88,7% Age: (*M* = 45.54, *SD* = 11.59), range: 24.7 – 75.2 years. Active volunteers: 49.9% volunteers, 58.1% paid counsellors, Mean years of experience at the crisis line: 3,4 years (*SD* = 3.31 years).	<u>Mental wellbeing measure:</u> • TABS (Trauma Attachment and Belief Scale) [44]. Assesses disruptions in beliefs, related to five need areas that are sensitive to the effects of trauma: Safety, Trust, Esteem, Intimacy and Control. 84 items, 5-point Likert scale. Possible range 20–80. Average: 45–55; high average: 56–59; very high: 60–69; extreme high: >70. • IES-R (Impact of Event Scale – Revised) [45]. Assesses subjective distress over past 7 days related to any specific life event. Developed to parallel three of the four PTSD criteria: Hyperarousal, Avoidance and Intrusion. 22 items, 4-point Likert scale (0–4). No cut-off points. <u>Factors related to mental wellbeing:</u> • CSA (The Coping Scale for Adults) [46]. Assesses four coping styles: Dealing with the problem, Sharing, Optimism, and Non-productive coping. High scores indicate that participants are using a coping style frequently. 20 items, on a 5-point Likert scale (1–5). • SWAI (The Supervisee From the Supervisory Working Alliance Inventory) [47]. Assesses the supervisee's perceived working alliance with their supervisor. 19 items on a 7-point Likert scale (1–7). • Trauma history (no description of the construct)	• Mean total score on the TABS (*M* = 45.28, *SD* = 8.18) was in the average range), 4,8% had total scores in the high average range and 3,2% scored in the very high range. 45,9% respondents had high average to extreme high scores on at least one of the TABS subscales). • Mean total score for the IES-R was low, given the possible range of 0–84 (*M* = 9.21, *SD* = 10.36). 25,9% respondents answered "quite a bit" or 4 "extremely" on at least one IES-R question.

Factors Influencing Mental Wellbeing

Factors related to the organization:

Standard multiple regression of predictors and Total Trauma Attachment and Belief Scale total scores (TABS): R^2 (25% adjusted) was significantly different from zero, $F(6, 51) = 4.10$, $p = 0.00$, with 33% of the variance explained.

o Supervision (whether participants received supervision), $b^* = .14$, $t = 1.12$, p –0.27

Standard multiple regression of predictors and Total Impact of Event Scale-Revised scores (IES-R): regression analysis was not significantly different from zero, $F(6, 48) = 1.47$, $p = 0.21$.

- Supervisee total score was negatively correlated with the TABS total score ($r = -0.36$, p=0.02)
- Supervisee total score was not significant correlated with the IES-R total score ($r = -0.26$, $p = 0.10$).

Factors related to the volunteer:

Standard multiple regression of predictors and Total Trauma Attachment and Belief Scale total scores (TABS): R^2 (25% adjusted) was significantly different from zero, $F(6, 51) = 4.10$, $p = 0.00$, with 33% of the variance explained.

- Non-productive coping, $b^* = 0.52$, $t = 3.66$, $p = 0.00$
- Dealing with the problem, $b^* = -0.35$, $t = -2.41$, $p = 0.02$
- Optimism, $b^* = -.19$, $t = -1.19$, $p = 0.24$
- Sharing, $b^* = .10$, $t = 0.71$, $p = 0.48$
- Personal trauma history, $b^* = -.00$, $t = -0.03$, $p = 0.98$

Standard multiple regression of predictors and Total Impact of Event Scale-Revised scores (IES-R): regression analysis was not significantly different from zero, $F(6, 48) = 1.47$, $p = 0.21$.

- Non-productive coping was positively correlated with the TABS total score ($r = 0.38$, $p < 0.01$),
- Dealing with the problem was negatively correlated with the TABS total score ($r = -0.31$, $p < 0.05$),
- Optimism ($r = -0.11$) and sharing ($r = -0.19$) were not significant correlated with the TABS total score ($p > 0.05$);
- Non-productive coping ($r = 0.23$), dealing with the problem ($r = 0.04$), optimism ($r = 0,14$) and sharing ($r = -0,04$) were not significant correlated with the IES-R total score ($p > 0.05$);
- Personal trauma history was not significant negatively correlated with the TABS total ($r = -0,08$, $p > 0.05$);
- Personal trauma history was significant positively correlated with the IES-R total score ($r = 0.28$, $p < 0.05$).

Table 1: Characteristics of included studies. (continued)

Author(s) and Date	Design and Sample Characteristics	Measures	Results on Positive and Negative Mental Wellbeing
Kitchingman et al. (2016) [30]	Design: Survey, correlational. Respondents (*n* = 210). Female: 78.1%. Age: (*M* = 49.05, *SD* = 14.23), range: 20–75 years [48]. Active volunteers: 100%. Mean years of experience at the crisis line: 0–2 years.	Mental wellbeing measure: • K10 [49], assesses general psychological distress. 10 item measure, 5-point Likert scale (1–5). Possible range 0–50. Low: 0–15; moderate: 16–21; high: 22–29; very high: 30–50. • ASIQ-CI (suicidal ideation) [50], assesses the intensity and lethality, together with specificity and availability of a suicide plan in the last month. 7 item measure, 7-point Likert scale. Minimal: 0–8; moderate: 9–32; critical: 33–48. • Functional impairment (two additional items from the K10 [49]): "days out of role" (DOR) and "days cut back" (DCB). Possible range 0–28. Factors related to mental wellbeing: • Demographics: Categorical items were used to assess participants' age, sex, location (regional/rural/remote, metropolitan), highest educational qualification (university degree, none/ high school/apprenticeship/diploma), and number of years of experience as a TCS . • TAS-20 (Toronto Alexithymia Scale) [51], assesses difficulty identifying and describing feelings. Three subscales: Difficulty Identifying Feelings; Difficulty Describing Feelings; and Externally Oriented thinking. 20 items on a 5-point Likert scale (1–5). The externally oriented thinking subscale was excluded (8 items). Possible range 11–55. • GHSQ-V (General Help-Seeking Questionnaire – Vignette version)) [52], assesses help-seeking using intention, two subscales: Intentions to seek help for psychological distress; and Intentions to seek help for suicidal ideation. Both subscales have 3 items on a one 7-point Likert scale (1–7).	• General psychological distress (*M* = 14.10, *SD* = 4.35). 71,9% reported low symptoms, 28,1% reported moderate to very high symptoms of psychological distress. • Suicidal ideation (*M* = 2.00, *SD* = 3.30). 97,1% reported minimal suicidal ideation, 2.9% reported moderate suicidal ideation. • "Days out of role" (*M* = .23, *SD* = 1.84) and days cut back (*M* = 1.17, *SD* = 4.43)

Factors Influencing Mental Wellbeing

Factors related to the volunteer:

- Respondents who reported moderate to high symptoms of psychological distress, reported lower intention to seek help $F(1, 204) = 4.09$, $p = .044$. Respondents who reported moderate suicidal ideation also reported lower intentions to seek help $F(1, 204) = 8.76$, $p = 0.003$;
- Difficultly identifying and describing feelings was significantly correlated with: general psychological distress ($r = 0.53$), suicidal ideation ($r = 0.25$), intentions to seek help for psychological distress ($r = -0.15$), intentions to seek help for suicidal ideation ($r = -0.14$), had to cut down day-to-day activities ($r = 0.19$);
- Difficultly identifying and describing feelings was not significant correlated with being totally unable to manage day-to-day activities ($r = -0.01$).
- Age was significant correlated with general psychological distress ($r = -0.30$) and being totally unable to manage day-to-day activities ($r = -0.17$)
- Gender was significant correlated with: intentions to seek help for psychological distress (r = 0.15), being totally unable to manage day-to-day activities (r = –0.15), and having to cut down on day-to-day activities (r = –0.15)
- Education was significant related to difficulty in identifying and describing feelings ($r = -0.15$).
- Years of experience at the crisis line was significant correlated with having to cut down day-to-day activities ($r = 0.17$)

Table 1: Characteristics of included studies. (continued)

Author(s) and Date	Design and Sample Characteristics	Measures	Results on Positive and Negative Mental Wellbeing
McClure et al. (1973) [31]	Design: Interviews conducted by researcher and two psychiatrists Self-selecting. Respondents Call For Help (CFH) and (*n* = 74) Youth Life Line (*n* = 51). Total (*n* = 125). Active volunteers: 100%	<u>Mental wellbeing measure:</u> Psychiatric diagnosis by interviewer and two psychiatrists (diagnostic criteria unspecified)	• Current illness CFH: o Depressive disorder: 7% o Antisocial personality: 3% o Possible psychosis: 3% o Other neurosis: 3% o No psychiatric disorder: 78% • Current illness YLL: o Depressive disorder: 4% o No psychiatric disorder: 96%
Mishara and Giroux (1993) [32]	Design: Survey, correlational. Respondents (*n* = 80) Female: 51% Age: (*M* = 28.6 years, *SD* = 9.94), range 19–64 years. Active volunteers: 100%. Mean years of experience at the crisis line: 9.1 months (*SD* = 12.7 months),	<u>Mental wellbeing measure:</u> Level of perceived stress concerning their telephone intervention work before they started the shift, after the shift (perceived stress during the most stressful call), and after the shift when they were contacted later (level of stress concerning their previous telephone intervention shift). One item, on a visual analogue scale from 0–100. No description of cut-off points <u>Factors related to mental wellbeing:</u> • Ways of Coping Checklist, revised version [53], assesses possible cognitive and behavioural coping strategies. 66 items on a 4-point Likert scale; • Personal experiences with suicide [54,55]; • Motivations for doing volunteer work with suicidal people, open question; • Certain beliefs concerning their role as volunteer, open question.	Perceived stress before shift was called "light" (*M* = 29.80, *SD* = 19.14) during the most stressful call "moderate" (*M* = 49.74, *SD* = 21.47), after shift between "light" and "moderate" (*M* = 33.85, *SD* = 22.90).
Pollock et al. (2012) [36]	Design: Qualitative, by observation of volunteers' activities and interviews. Respondents (*n* = 66) Active volunteers: 100%.	Three central themes are described: (a) How volunteers categorized calls and configured the caller in intrinsically ambiguous and anonymous encounters; (b) Volunteer strategies of self-protection from abusive and manipulative calls; and (c) How these strategies of categorization and self- protection resulted in the judging of calls and callers. Information about the last category is not mentioned, because this information is beyond the scope of this study.	Frustration and irritation over the bad/inappropriate calls was a frequent topic in interviews and in discussion with and between branch volunteers. It was regularly attributed as a cause of volunteers leaving the organization.

Factors Influencing Mental Wellbeing

Factors related to the caller / nature of the problem / care question:

- Urgency of call ($F = 27.86$, $p < 0.001$), with 26.8% of the variance explained, total length of calls ($F = 6.13$, $p < 0.05$), with 32.4% of the variance explained, were positively correlated with perceived stress during the most stressful call;
- Total length of calls ($F = 24.29$, $p < 0.001$), with 24.2% of the variance explained, was positively correlated with perceived stress after the shift.

Factors related to the organization:

- Number of persons present during shift, is negatively correlated with perceived stress after the shift ($F = 9.69$, $p < 0.01$), with 32.9% of the variance explained.

Factors related to the volunteer:

- Experience at the crisis line was negatively correlated with perceived stress before shift ($F = 11.15$, $p < 0.001$), with 12,8% of the variance explained;
- Magical thinking ($F = 4.70$, $p < 0.05$), with 36,4% of the variance explained and feeling personally responsible ($F = 3.99$, $p < 0.05$), with 43,2% of the variance explained, were positively correlated with perceived stress during the most stressful call.
- Detachment ($F = 4.51$, $p < 0.05$), with 40,1% of the variance explained, was negatively correlated with perceived stress during the most stressful call;
- Magical thinking ($F = 5.01$, $p < 0.05$), with 46.3% of the variance explained, was positively correlated with perceived stress after the shift.
- Education ($F = 6.28$, $p < 0.01$), with 38.1% of the variance explained. Realistic expectations ($F = 5.55$, $p < 0.05$), with 42.5% of the variance explained, and positive thinking ($F = 4.39$, $p < 0.05$) with 49.4% of the variance explained, were negatively correlated with perceived stress after the shift.

Factors related to volunteers' motivation:

- To help others 98%, to gain experience 88%, for personal growth 90%, to meet people 70%, to share my experience 53%, to feel useful 76%, to give help I once received 43%.

Factors related to the nature of the work:

- Topic of the call: (sexually) inappropriate, abusive, and manipulative calls. Callers who are suffering from mental illness, general anxiety, unhappiness, loneliness and social disconnectedness.
- The principal of non-disclosure, aimed to keep focused on the caller. It inhibits the development of the trust and confidence between callers and volunteers.

Factors related to the volunteers:

- Doubt and uncertainty due to "good" or "genuine" contact.
- Insufficient resources to handle abusive and violent calls.
- Insufficient access to in-call strategies for distancing and self-protection.
- Strategies of self-protection: indicate limits directly to callers and guard personal boundaries, refocus inappropriate calls to the reason for calling the crisis line and the emotion of the caller.

Table 1: Characteristics of included studies. (continued)

Author(s) and Date	Design and Sample Characteristics	Measures	Results on Positive and Negative Mental Wellbeing
Sundram et al. (2018) [38]	Design: Qualitative (focus groups and in-depth interviews). Respondents (*n* = 25) Female: 99,5% Age: 25–67 years. Mean experience: 3 years (range: 1–15 years).	Three key questions that are relevant to this review were answered: (a) What are the key motivations for starting volunteering? (b) What positive or negative experiences have volunteers had as a helpline volunteer?; (c) What factors are associated with volunteers' job satisfaction and intention to stay?; (d) What factors are associated with an intention to leave?	Extrinsic motivation to start volunteering is to give back to the wider community what others had or had not been able to give to them. The intrinsic motivation to start volunteering was to gain skills and work experience and to develop new skills. Making a difference, helping the caller and phone calls ending on a positive note.
Yanay and Yanay (2008) [39]	Design: Qualitative study by observation, participation, document study and interviews. Respondents (*n* = 20) Female: 100% Active volunteers: volunteers who dropped out after training and volunteers who dropped out after a year.	The observation, participation and document study resulted in a description of the content and the atmosphere of the training. The interview question was: "Tell me everything that happened to you from the moment you decided you wanted to volunteer until the day you dropped out". This study is looking at volunteerism through the phenomenon of dropping out.	Feelings of secondary trauma led to dropout within a year. Dropout rate was very high immediately following the course (about 50 percent). The percentage of dropouts among those who had not begun work on the hotline was higher than among volunteers who did begin working and left (about 25 percent). Dropout numbers among young volunteers were higher than among older volunteers, women who had previous volunteering experience persevered longer than those who had never volunteered before, volunteers who were victims of sexual violence stayed longer.

Factors Influencing Mental Wellbeing

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Factors related to the nature of the work:

- There were cultural barriers such as stigma in certain callers. More time is necessary to clarify what the callers' needs were as they were sometimes framed as physical complaints instead of low mood.

Factors related to the organization:

- A supportive network enabled by the organization during supervision leads to job satisfaction.
- Social support of other volunteers.
- The high quality of the new volunteer training program and ongoing supervision leads to job satisfaction.
- Development of a range of skills in training was not only focused on counselling, but also on self-growth and self-care.
- The organization did not explore the skill set of volunteers. This lead to feelings of being underappreciated.
- Volunteers felt underappreciated which affected the volunteers' sense of belonging with the organization.
- Inconsistent communication about changes in the organization.
- A high turnover and differences in motivation of student volunteers leads to dissatisfaction and a sense of isolation in the long-term volunteer.
- New technology changes could be more user friendly.

Results are abstracts from observations and interviews.

Factors related to the organization:

- Volunteers experienced the training as very powerful and fulfilling emotionally, socially, and intellectually, and that the course had a dramatic impact on their consciousness, knowledge, and interrelations. The course sparked great ambivalence and conflict.
- Volunteers did not start with volunteering because the training led to motivational saturation.
- Voluntary organizations often hold the view that volunteerism is based on free will and choice, and that they therefore should not be prompting or motivating volunteers. This approach, however, conveyed to the volunteers that perhaps they were not really needed by the organization.
- The organizational philosophy of freedom and non-intervention that perceives volunteers as autonomous agents remained tacit and misunderstood. It can give rise to anger and feelings of abandonment, eventually leading to volunteers' dropout.

Factors related to the volunteer:

- Lack of knowledge on how to manage emotional difficulties and work ambiguity led to feelings of confusion, overload and a growing feeling of vulnerability. This was the leading reason for dropout after a year.

Table 1: Characteristics of included studies. (continued)

Author(s) and Date	Design and Sample Characteristics	Measures	Results on Positive and Negative Mental Wellbeing
O'Sullivan and Whelan (2011) [33]	Design: Survey, correlational. Respondents: (n = 64) Female: 70.3% Age: (M = 44.84, SD = 15.16), range 18–72 years Active volunteers: 76.6% volunteers, 23.4% paid counsellors Mean experience: 3.24 years (SD = 46.68 months).	Mental wellbeing measure: • PTGI (Post Traumatic Growth Inventory) [56], assesses positive outcomes in relation to either a recent or salient traumatic event (in this study telephone call). Five subscales: Relating to others, New possibilities, Personal strength, Spiritual change and Appreciation of life. 21 items on a 5-point Likert scale (0–5), possible range 0–105. • ProQol (Professional Quality of Life) [57], measure professional quality of life in three scales: Compassion Satisfaction, Burnout and Compassion Fatigue. Only scores from the Compassion Fatigue scale were used for analysis. 10 items on a 5-point Likert scale (0–5) for Compassion Fatigue, possible range: 0–50. Scores below 8 are considered as "not concerning", 8–17 are "concerning" and above 18 may suggest "something about work is frightening" [58]. Factors related to mental wellbeing: • JSPE (Jefferson Scale of Physician Empathy) [59]: measures empathy in a professional helping context. 20 items on a 5-points Likert scale. • CSS (Crisis Support Scale) [60]: measures received support following a crisis. 7 items on a 7-point Likert scale. • Calls per shift	• Posttraumatic growth (M = 41.34, SD = 21.00). • Compassion fatigue: 43% scored less than 8, 60,9% scored between 8–17 and 17.2% scored above 17. • Compassion fatigue was significant positive correlated with Posttraumatic Growth ($r = 0.26, p < 0.05$), specifically in the subscale "Relating to Others ($r = 0.26, p < 0.05$) and Personal Strength ($r = 0.35, p < 0.05$). Compassion Fatigue was predicted by posttraumatic growth $F(6, 57) = 2.38, p < 0.05$, with 16% of the variance explained.
Hector and Aguirre (2009) [35]	Design: Qualitative. Respondents (n = 15) Female: 75% Age: Between 24 and 66+ years old Active volunteers: 100%. Mean years of experience at the crisis line: 9. Respondents had volunteered for over five years	The motivation volunteers get from their work.	All respondents indicated that they are motivated to work at the crisis line.

Factors Influencing Mental Wellbeing

Factors related to the organization:

- Crisis support was not significant correlated to posttraumatic growth ($r = -0.09$, $p > 0.05$) or compassion fatigue ($r = -0.16$, $p = > 0.05$);
- Calls per shift was negatively related with the subscale of posttraumatic growth "relating to others" $F(6, 57) = 2.38$, $p < 0.05$.

Factors related to the volunteers:

- Empathy was not significant related to compassion fatigue ($r = -0.001$, $p \geq 0.05$);
- Empathy was not significant related to overall posttraumatic growth ($r = 0.17$, $p \geq 0.05$), but positive related to the subscale of posttraumatic growth "spiritual change" ($r = 0.30$, $p < 0.05$).

Factors related to volunteers' motivation:

- Feelings of contributing to society, feelings of altruism, challenging, informative, grateful, structure to life.

Table 1: Characteristics of included studies. (continued)

Author(s) and Date	Design and Sample Characteristics	Measures	Results on Positive and Negative Mental Wellbeing
Hellman and House (2006) [29]	Design: Survey, correlational. Respondents: (*n* = 28). Active volunteers: 100%.	Mental wellbeing measure: • Overall satisfaction, single item measure: "Overall, I am satisfied with my experience as a volunteer with (name centre)". 5-point Likert scale (1–5). • Intent to remain, single item measure: "Over the next year, how likely are you to continue as a volunteer for (name centre)" 5-point Likert scale (1–5). • Affective commitment: assesses the emotional attachment that the participant has with the specific organization. Five-item measure, 5-point Likert scale (1–5). Possible range 5–25. Factors related to mental wellbeing: • ACS (emotional attachment with the organization) • Perceived value monthly meetings • Crisis volunteer self-efficacy • Social support • Perceived experience with victim blaming Questionnaires were developed for this study	• Overall satisfaction ($M = 4.6$, $SD = 0.6$), Possible range: 1–5. • Intent to remain ($M = 4.7$, $SD = 0.5$), possible range: 1–5. • Affective commitment ($M = 19.7$, $SD = 3.6$), possible range: 5–25.
Praetorius (2005) [37]	Design: Qualitative. Respondents (*n* = 19) Female (*n* = 17). Age: 18–66 years old. Active volunteers: 100%. Mean years of experience at the crisis line: from less than a year to over 16 years	Benefits and motivation of volunteering at the hotline and reasons for coming back	Volunteers are coming back to the crisis hotline.

Factors Influencing Mental Wellbeing

Factors related to the organization:

- Perceived value of monthly meetings was significant positively correlated with overall satisfaction ($r = 0.55$, $p = 0.003$), intent to remain ($r = 0.50$, $p = 0.008$) and affective commitment ($r = 0.34$, $p = 0.083$).

Factors related to the volunteer

- Self-efficacy was significant positively correlated with overall satisfaction ($r = 44$, $p = 0.019$) and affective commitment ($r = 0.50$, $p = 0.007$), but not significant with intent to remain ($r = 0.21$, $p = 0.28$);
- Social support was significant positively correlated with overall satisfaction ($r = 0.49$, $p = 0.012$), but not significant with intent to remain ($r = 0.19$, $p = 0.34$) or affective commitment ($r = 0.14$, $p = 0.488$);
- Perceived experience with victim blaming was significant negatively correlated with overall satisfaction ($r = -43$, $p = 0.021$) and affective commitment ($r = -0.36$, $p = 0.058$), but not significant with intent to remain ($r = 0.19$, $p = 0.34$).

Factors related to volunteers' motivation:

- Altruism (desire to give back), realizing personal blessings (gaining a new perspective of one's own life, perceived challenges and obstacles), a deeper understanding of the human condition, interconnectedness among us all as part of the social fabric.

Positive effects of working at the crisis line on mental wellbeing

Only five studies examined the positive effects of volunteering at the crisis line on mental wellbeing [29,33-35,38]. Hellman and House [29] measured *overall satisfaction*, *intent to remain* (stay volunteering at the crisis line service), and *affective commitment*, and reported that the volunteers scored on average high to very high on these variables [29]. O'Sullivan and Whelan [33] studied *posttraumatic growth* (a stable positive psychological outcome in response to a traumatic event), but found that crisis line volunteers tended to report relatively low on this measure in comparison with professional caregivers.

Four studies [32,35,37,38] gave insight into the positive effect of motivation on volunteering at the crisis line. These include both other-orientated motivations as well as self-orientated motivations. *Other-orientated motivations* mentioned are: Helping others [32], giving help the volunteer once received [32,38], feelings of altruism [35,37], and contributing to society [35]. *Self-orientated motivations* could be divided as follows (a) a purpose in life, (b) a learning experience or challenge, and (c) a new perspective on their own lives. A purpose in life includes structure in life [35], interconnectedness (meeting people, sharing experiences) [32,37], and feeling useful [32]. The learning experience was comprised of personal growth [32], deeper understanding of the human condition, and [37], developing skills and gaining experience [32,35,38]. A new perspective on their own lives includes gratefulness [35,37] and realizing their own personal blessings [37]. These motivations contributed to role-satisfaction [38] and satisfaction in general [32,35,37].

In sum, the few studies that examined the positive effects of crisis line volunteering showed that the work is satisfying and volunteers are guided by both self-orientated as well as other-orientated motivations.

Factors influencing volunteers' mental wellbeing

Factors associated with mental wellbeing in crisis line volunteers were investigated by twelve of the thirteen studies. Below, we discuss the factors related to the nature of the work, factors related to the organization, and factors related to the volunteer.

Factors related to the nature of work

Five studies mentioned factors related to the nature of the work that were negatively associated with volunteers' mental wellbeing [27,32,36,38,39].

Anonymity, the philosophy of non-intervention and non-disclosure

Anonymity of the caller is an important feature of the crisis line service. For the volunteer, however, not knowing about the outcome and consequences of the contact with a

caller can contribute to burnout. In addition, not having standards to evaluate success (volunteers do not know if they are doing good and if clients are improving from their help), contributed to burnout [27,36,38]. The philosophy of non-intervention may also be difficult for volunteers. This philosophy means that the volunteer only offers a listening ear and has no therapeutic function. Yanay and Yanay [39] found that the philosophy of non-intervention caused volunteers to feel confused and vulnerable and made some even consider stopping voluntary work. Pollock et al. [36] found that the principal of non-disclosure, aimed to keep focus on the caller, is inhibiting to the development of trust and confidence between callers and volunteers. Volunteers mentioned that they feel discomfort as a result of the restrictions imposed on "being oneself".

Urgency and length of calls

Mishara and Giroux [32] found that higher *urgency of calls* resulted in higher levels of perceived stress during the most stressful call. Moreover, a longer *total length of calls* during a shift resulted in more perceived stress after the shift [32]. The total number of calls per shift was negatively related to posttraumatic growth [33].

Difficult or inappropriate calls and characteristics of the callers

Pollock et al. [36] reported in a qualitative study that volunteers experienced a lot of stress and frustration because of *(sexually) inappropriate, abusive, and manipulative calls.* It was regularly attributed as a cause of volunteers leaving the organization. Moreover, some volunteers found it difficult to deal with *complicated topics*, such as callers who are suffering from mental illness, general anxiety, unhappiness, loneliness, and social disconnectedness [36]. Sundram et al. [38] found that volunteers sometimes experienced *cultural barriers*, such as reservations about seeking help on a mental health helpline in certain callers, and volunteers needed more time than available, to clarify what callers mean when they, for example, express physical complaints instead of low mood.

Factors related to the organization

Eight studies investigated the organizational factors associated with volunteers' mental wellbeing [27-29,32,35,37-39].

Supervision and training

Supervision and support by a supervisor were identified as protective factors for burnout [27] and disruptions in beliefs [28]. In addition, supervision contributed to overall satisfaction, intent to remain, affective commitment [29] and job satisfaction [38]. Sufficient training was also identified as a protective factor for burnout [27] and increased job satisfaction [38]. Yanay and Yanay [39] who studied reasons for dropout, however, found that training can be very psychologically and emotionally enriching, wherefore

volunteers did not start with volunteering because the training led to motivational saturation [39].

Organizational support

Support from the organization is an important factor for the mental wellbeing of crisis line volunteers. Frequent policy changes, a change in senior management, or rapid personnel turnover led to burnout [27]. In the study by Sundram et al. [38] several volunteers were unhappy because they felt the organization treated them as employees rather than volunteers. They felt their work was neither recognized nor appreciated [38]. Volunteers also felt underappreciated if the organization did not acknowledge their pre-existing skills [38].

Support of co-workers

Support of co-workers is a factor that has been found to be associated with increased mental wellbeing in five studies [27,32,35,37,38]. High turnover rates of volunteers were experienced as stressful, because that hampered discussing stress and coping strategies with colleagues [27], or caused a sense of isolation [38]. The number of persons present during a shift was negatively correlated with perceived stress [32]. Three studies [32,35,37] reported that volunteers derived motivation from social connectedness, meeting other people and maintaining ties with the community.

Factors related to the volunteer

Eight studies described characteristics of the crisis line volunteer that may influence their mental wellbeing [27-30,32-34,36]. The results are discussed below.

Demographics and Other Specific Factors

Younger age was found to be predictive for higher emotional exhaustion [34], general psychological distress, and the inability to manage day-to-day activities [30]. More years of experience was associated with less perceived stress [30,32]. A higher education level was found to be associated with less perceived stress [30,32][30,32]. Kitchingman et al. [30] found that women experienced more general psychological distress, but less functional impairment than men. Dunkley and Whelan [28] found that more personal trauma history led to more experience of subjective distress related to a stressful telephone call. Hellman and House [29] found that volunteers who perceived victim blaming experienced less overall satisfaction and affective commitment.

Productive and Non-Productive Coping

Volunteers mentioned various productive coping strategies, for example: Having realistic expectations (realizing the limits of their importance and effectiveness, and realizing

that not all clients and problems will profit from help) [27]; focusing on the benefits of the voluntary work (emotional growth, education, use of helping skills, and human contact) [27]; not getting personally involved, and guarding personal boundaries [27,32,36]; "venting" with co-workers [27]; asking for feedback [27]; taking time off [27]; attending to health [27]; and relaxing activities [27].

Non-productive coping strategies were also mentioned, for example expecting appreciation from callers [27]; magical thinking (wishing that things would get better miraculously) [32]; not being able to identify and describe their own negative emotions [28,30]; not seeking help when experiencing distress [27,30]; and self-blame, worrying, and ignoring the problem [28].

More general coping styles were mentioned, such as dealing with the problem, working hard, and humour [28,29]. Finally, Roche and Ogden found a significantly positive correlation between higher emotional exhaustion and the use of an avoidant coping style [34].

Levels of Empathy

Two studies mentioned levels of empathy as an influencing factor on mental wellbeing [33,34]. Roche and Ogden [34] measured subscales of empathy. They found that lower levels of empathy fantasy (emotional identification with characters in books or films [61]) resulted in higher depersonalization. Lower levels of empathy concern (feeling emotional concern for others [61]) resulted in higher personal accomplishment, a subscale of burnout. O'Sullivan and Whelan [33] found that volunteers' empathy led to more spiritual change, a subscale of posttraumatic growth. This section may be divided by subheadings. It should provide a concise and precise description of the experimental results, their interpretation as well as the experimental conclusions that can be drawn.

DISCUSSION

Insight into the mental wellbeing of crisis line volunteers is important because a decline in mental wellbeing is associated with poorer quality and safety of care, higher absenteeism, and higher turnover rates [9]. Yet, our review showed that not much research has been conducted on wellbeing of crisis line volunteers. Despite an extensive search strategy and broad inclusion criteria, this review yielded only thirteen articles covering the period 1973–2018. Moreover, the retrieved studies varied widely in methodological quality, used a wide variety of outcome measures and most did not use validated measures.

Prevalence rates of decreased mental wellbeing ranged from 3% to 77%, showing that crisis line volunteers are at increased risk of declined mental wellbeing. It should be noted, however, that different operationalizations of decreased mental wellbeing were applied: Symptoms of burnout, compassion fatigue, vicarious traumatization, psychological disorders, distress, and feelings of frustration and irritation. To confirm a powerful conclusion about the extent of the problem, more high quality research on the wellbeing of crisis line volunteers using validated instruments is needed.

It is safe to assume that high motivation and satisfaction rates are essential for volunteer organizations, since this is after all the main reason that volunteers keep working at the organization. Only five articles studied the positive effects of volunteering. These studies demonstrated that most volunteers experience some kind of satisfaction or gratification as a result of their work at the crisis line. The qualitative studies in this review gave some insight into the motivations of crisis line volunteers. These include both other-orientated motivations as well as self-orientated motivations. Other-orientated motivations were comprised of aspects such as wanting to help others, to contribute to society, and a desire to give back. Self-orientated motivations included finding a purpose in life (to get structure, to meet other people, or to feel useful), the learning experience (personal growth, deeper understanding of the human condition, developing skills, gaining experience), and to gain a new perspective on their own lives (realizing personal blessings, being grateful). These motivations are in line with research in volunteers in general [62,63]. For example, Stukas et al. [63] found that other-oriented motives in volunteers are positively correlated with satisfaction and intentions to stay volunteering. Höing et al. [64] underlined that volunteers who are intrinsically motivated may be better protected from overburdening and burnout. More quantitative insight into how crisis line volunteering can enhance mental wellbeing is needed.

In this review we searched for factors that are associated with volunteers' mental wellbeing. We looked for factors in three categories: (a) Factors related to the nature of the work, (b) factors related to the organization of the work, and (c) factors related to the volunteer. It should be noted that none of the studies included all these categories. Such a comprehensive approach is warranted for future research.

Factors related to the nature of the work were assessed in three studies, and include specific characteristics of the work (anonymity and philosophy of non-intervention, and non-disclosure), higher urgency of calls, inappropriate or abusive calls (i.e., repeat callers and sex callers), dealing with complex topics (i.e., loneliness, suicidality or mentally ill), and cultural barriers. Difficulties in dealing with unpredictable behaviour, hostility and potential suicide patients was also found in studies among professional health

care providers [14-16,20]. It is important that these topics are addressed in training and supervision. Several training programs have been developed for professionals to learn how to deal with a client's inappropriate sexual and abusive behaviour [65,66], but as far as we know, these have not been evaluated. It would be interesting to find out if these training programs could be a part of training for volunteers at the crisis line service. However, interventions can also be directed at the callers. For example, interventions have been developed to reduce repeat callers in crisis lines [5,6]. In addition, Baird et al. [7] and Matek [8] developed an intervention for volunteers to approach sex callers therapeutically. However, none of these interventions have been evaluated. To minimize the influence of the "difficult callers" on the mental wellbeing of crisis line volunteers, dealing with a "difficult caller" has to be an important aspect of training.

A few studies gave some insight into the factors related to the organization of the volunteer work. Supervision and training, organizational support, and support of co-workers are factors that may prevent decreased mental wellbeing. This corresponds to existing literature about volunteers in general, claiming that a positive organizational and team climate, offering acknowledgement and professional support (training, emotional support, support with daily life issues) are important determinants of mental wellbeing in trained volunteers [64]. Crisis line services should, therefore, not only pay attention to besides the quality of training and supervision, but also to the appreciation and acknowledgement of volunteers.

The third category of factors associated with mental wellbeing regards the characteristics of volunteers. Coping-mechanisms were most frequently studied. Examples of productive coping are the identification of benefits of the work, problem solving, humour, not feeling personally involved or, indicating limits to the caller. Examples of non-productive coping are magical thinking, feeling personal responsible for the outcome of the conversation, or not seeking help. Social support, realistic expectations and not feeling overly responsible for the outcome of the help are frequently studied in volunteers in general [64,67]. Crisis line services could pay attention to the realistic expectations of volunteers about the work at the crisis lines during the selection process of new volunteers. In addition, in the development of interventions attention must be paid to the cultivation of effective coping mechanisms, in order to positively influence the mental wellbeing of crisis line volunteers.

Strengths and Limitations

There are a number of strengths of this review. First, this review is an important addition to the existing literature, because it gives insight in the negative and positive impact of volunteering at the crisis line. Second, this is the first review that gives an overview of

the factors associated with mental wellbeing in crisis line volunteers. Finally, by using a broad search string and inclusion criteria, we were able to find more studies than the previous systematic review on the topic [22] and we believe that we have included all relevant published articles.

There are several limitations to this review that must be mentioned. Firstly, our search yielded two relevant dissertations about this topic, which were not published in peer reviewed journals [68,69]. Despite multiple efforts to contact the authors or retrieving the dissertations via university libraries, we did not succeed in obtaining the dissertations. As a result, relevant information could have been missed. Secondly, there might be a risk of publication bias. Thirdly, five of the thirteen studies scored low on the quality assessment (≤67% of criteria are sufficient). Although the limited quality of these studies may limit the results of our review, we decided to include all studies, because only very few studies were found and therefore all studies have an added value for this review.

Conclusion

Remarkably few studies have examined mental wellbeing in crisis line volunteers. These studies suggest that volunteers are at risk of decreased mental wellbeing, despite the gratification they experience from their work. More high quality research with validated instruments is needed to get a better view of the prevalence of decreased mental wellbeing. Our results show that a variety of work-related, organization-related, and volunteer-related factors seem to be associated with a mental wellbeing of crisis line volunteers. However, more comprehensive research, studying all these factors, is necessary. In addition, there is a need for interventions targeting these factors, to ensure the high quality of care and to maintain or increase the mental wellbeing of crisis line volunteers.

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APPENDIX

Table A1: Quality assessment for all included survey studies, in order of year of publication

	Criterion *															
	Objective	Design				Target population and sample				Variables	Data sources/ collection	Measurement		Statistics		Score out of 15
	1	2	3a	3b	3c	3d	3e	3f	3g	4	5a	5b	5c	6a	6b	
McClure et al. (1973)	Y	N	N	N	N	N	N	N	Y	Y	Y	N	N	Y	Y	6
Cyr & Dowrick (1991)	Y	Y	Y	N	Y	Y	N	Y	N	Y	Y	N	Y	N	N	9
Mishara & Giroux (1993)	Y	Y	Y	N	N	Y	Y	Y	N	Y	Y	N	N	Y	N	9
Hellman & House (2006)	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	11
Dunkley & Whelan (2006)	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	13
O'Sullivan & Whelan (2011)	Y	N	Y	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	11
Kitchingman et al. (2016)	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	14
Roche & Ogden (2017)	Y	Y	N	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	10

* (1) Are the objectives or hypotheses of the research described in the paper stated?; (2) Is the study design presented? (3a) Do the authors describe the target population they wanted to research? (3b) Was a random sample of the target population taken? AND was the response rate 60% or more? (3c) Is participant selection described? (3d) Is participant recruitment described, or referred to? (3e) Are the inclusion and/or exclusion criteria stated? (3f) Is the study sample described? (minimum description sample size, gender, age) (3g) Are the numbers of participants at each stage of the study reported? (Authors should report at least numbers eligible, numbers recruited, numbers with data at baseline, and numbers lost to follow-up). (4) Are the measures and outcome described? (5a) Do authors describe the source of their data AND did authors describe how the data were collected? (e.g., by mail) (5b) Was reliability of the measure(s) mentioned or referred to? (5c) Was the validity of the measure(s) mentioned or referred to? (6a) Were appropriate statistical methods used and described, including those for addressing confounders? (6b) Were the numbers/percentages of participants with missing data for sitting and the health outcome indicated AND If more than 20% of data in the primary analyses were missing, were methods used to address missing data?

Table A2: Quality assessment for all included studies, in order of year of publication (*n* = 5)

	Criterion									Total out of 9
	Clear question?	Theoretical framework and methods explicitly defined?	Selection clearly described and theoretically complete?	Fieldwork described in detail?	View raw data and transcription by others?	Analysis clearly described and theoretically substantiated?	Analysis by more than one researcher?	Explicitly searched for counter-examples?	Display of convincing empirical material?	
Praetorius & Machtmes, (2005)	Y	Y	Y	Y	N	Y	Y	N	N	6
Hector & Aguirre, 2008	Y	Y	Y	Y	N	Y	Y	Y	Y	8
Yanay & Yanay, 2008	N	Y	Y	Y	N	N	Y	Y	Y	6
Pollock, et al., 2012	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
Sundram et al. (2018)	Y	Y	Y	Y	Y	Y	Y	Y	Y	9

3

Mental wellbeing in crisis line volunteers: understanding emotional impact of the work, challenges and resources. A qualitative study

Willems, R. C. W. J., Drossaert, C. H. C., Vuijk, P., & Bohlmeijer, E. T. (2021, 2021/01/01). Mental wellbeing in crisis line volunteers: understanding emotional impact of the work, challenges and resources. A qualitative study. *International Journal of Qualitative Studies on Health and Well-being, 16*(1). https://doi.org/10.1080/17482631.2021.1986920

ABSTRACT

Background: Crisis line volunteers are a valuable addition to formal care. Although there is growing evidence of decreased mental wellbeing of crisis line volunteers, a comprehensive overview of perceived emotional impact from the perspective of volunteers is lacking. This study explores the emotional impact, the challenges that crisis line volunteers encounter, and the resources that they use to cope with these challenges.

Method: A grounded theory approach was used to explore the subjective experiences of the participants. Four focus groups with twenty-two active volunteers and eight interviews with former volunteers were conducted.

Results: Results provide an overview of emotions that volunteers experience in their work. (e.g. gratification, compassion, frustration, and powerlessness). Challenges are related to the characteristics of callers (e.g. inappropriate behaviour) and topics of the calls (e.g. suicidality). Resources to cope adequately with negative emotions are, among others, a self-compassionate attitude and good training.

Conclusion: This study highlights the importance of training of volunteers in dealing with specific callers, and gives input for the development of interventions aimed at increasing personal resources, such as awareness of positive emotions and self-compassion. These resources can help to increase the mental wellbeing of crisis line volunteers and reduce turn-over rates.

INTRODUCTION

Crisis line services offer anonymous emotional support by telephone or chat to anyone who cannot or does not want to use formal care. In Europe, more than 21.000 crisis line volunteers, who are trained to be non-judgmental, empathetic, respectful, and caring, conduct over five million telephone calls and 130.000 chat and email conversations each year [1]. Most crisis line services use the philosophy of non-intervention: a listening ear is offered, but no therapeutic intervention is applied [1,2]. Research has provided some evidence on the effectiveness of crisis line services. For example, callers reported lower levels of distress during and after the call [3,4] and crisis line services have even been shown to be effective in preventing suicidality [3,5]. Therefore, crisis line services are an important addition to the existing care.

Although the work at a crisis line service is highly satisfactory to crisis line volunteers [6,7], volunteers are confronted with a high variety of complex topics, such as suicidality, loneliness, and abuse [3,4,8]. In addition, some callers show inappropriate behaviours such as calling the volunteer names, calling multiple times without clear reason, or calling for sexual gratification purposes [8,9]. Continuously switching between complex topics and simultaneously coping with inappropriate behaviour of callers require a great mental flexibility from volunteers and may eventually have a negative impact on their mental wellbeing.

Paying attention to the mental wellbeing of crisis line volunteers is important, because studies have shown that volunteers in general are at risk of emotional exhaustion and vicarious trauma, meaning that they are emotionally affected by traumatic life experiences of others [10,11]. Reduced mental wellbeing can also lead to lower quality of care, absenteeism or high turnover [12,13] which may in the long term endanger crisis line service continuity. However, despite its importance, research on mental wellbeing among crisis line volunteers is scarce. A recent systematic review [14] showed that in the past three decades, only thirteen studies on the topic were published. The studies varied strongly in quality, and volunteers' mental wellbeing was often not the main focus of the study. The review showed that crisis line volunteers seem to experience satisfaction and gratification as a result of their work [7,15] but are also at increased risk of impaired mental wellbeing, operationalized as symptoms of burnout [16,17], vicarious traumatization [18], psychological disorders [19], distress [20,21], and feelings of frustration and irritation [8,14]. As far as we know, no studies have been conducted in which volunteers talk from their own perspective about the emotional impact of their work.

Insight into factors associated with mental wellbeing in crisis line volunteers and available resources to deal with these factors is important, because it can inform the development of organizational or personalized interventions aimed at increasing or maintaining the mental wellbeing of volunteers. In their systematic literature review, Willems et al. (2020) also examined which particular factors were associated to the mental wellbeing of crisis line volunteers. Three categories of factors were established: (a) factors related to the nature of work, such as the subject of the calls and inappropriate behaviour of callers; (b) factors related to the organization, such as supervision, training and co-worker support; and (c) factors related to the volunteer, such as productive or non-productive coping and years of experience. The review also identified some of the resources available to volunteers to deal with the various challenges in their work with the crisis line service, such as training, co-worker support, and regular relaxing activities [14]. Yet, although these studies have provided some insight into how these factors are associated with the volunteer's wellbeing, most studies focussed on just a single factor, and a more comprehensive overview of the challenges that crisis line volunteers are facing and the resources they use to cope with these challenges is missing.

In sum, crisis line services are a valuable addition to regular care, but working at the crisis line can be challenging. In the long term, this may not only reduce the mental wellbeing of the volunteers, but also lead to reduced quality of care, absenteeism or high turn-over rates. Thus far, only few studies have examined the mental wellbeing of crisis line volunteers. The few studies that explored the challenges that volunteers encounter in their work, or the resources they use to cope with these challenges, usually focus on just one single challenge instead of providing an comprehensive overview. With this study we want to address this gap, and aim to provide a comprehensive overview of the emotional impact of the work, challenges, and resources of volunteers working at the crisis line. The main three research questions are: (1) Which positive and negative emotions do crisis line volunteers experience due to the work at the crisis line service? (2) Which challenges related to the nature of their work and the organization contribute to volunteer work-stress? (3) Which personal and work-related resources are helpful in dealing with job-related-stress?

METHODS

The central aim of this study is to understand the emotional impact of volunteering at the crisis line, and to provide a comprehensive overview of the challenges volunteers encounter in their crisis line work, and the resources they use to deal with these. To this aim we use a qualitative, grounded theory approach of which the basis is pragmatism

and symbolic interaction. In situations where knowledge is lacking, the Grounded Theory Approach is a suitable method to apply. The aim of a grounded theory approach is to generate new insights rather than to test hypotheses based on existing theory [22]. To obtain a complete and balanced view, we conducted focus groups with volunteers currently working at a crisis line service, but also interviewed former volunteers who had stopped volunteering at the crisis line service in the past year. By collecting data in the natural environment and by asking open questions, without steering the answers in a certain direction, valuable raw data was collected. From there, inductive and deductive analysis was applied. Ethical approval for the study was obtained from the Ethical Board of the Faculty of Behavioural and Management studies from the University of Twente (no: 17102).

Sample

The study was conducted at the 'Listen line', which is a Dutch crisis line service that offers twenty-four hours a day and seven days a week a listening ear to anyone who needs it in case of personal crisis. At the 'Listen Line' 1,500 trained volunteers annually hold approximately 330,000 telephone calls, email or chat conversations [23]. The current study was conducted in two regions, one in the east of the Netherlands (Zwolle) and one in the west (Rotterdam). Potential focus group respondents were approached by email by the professional trainers of these regions. In the email the purpose of this study was explained and information about the researchers was given (their personal goals (PhD research) and contact details). In total 22 persons consented to participate, and were assigned to one of four focus groups: two in Rotterdam, one with volunteers who had more than three years of experience at the crisis line service (*n*=8) and the other with less experienced volunteers (*n*=6) and two focus groups in Zwolle, with five and three participants (based on the availability of the volunteers). In Zwolle experienced and less experienced volunteers were mixed. The age of the participants ranged from 24 to 78 years (mean 57), most were women (77%), and on average they had five years of experience (range 4 months – 23 years).

Since it can be expected that those who still volunteer at the crisis line are mainly positive, we also wanted to interview some people who had decided to stop volunteering at the crisis line. In this way we aimed to get a more balanced picture of the perceived emotions, challenges and available resources of volunteers. Therefore, we approached sixteen former crisis line volunteers who gave up volunteering in 2017 for an interview. These former volunteers were selected at random by the headquarters of the 'Listen Line'. They were sent an invitation by email with information about the purpose and procedures of the study and an informed consent form. Eight (50%) responded positively and an interview was arranged with them. The age of the participants ranged from 25

to 72 years (mean 57), all were women, and on average they had 4 years of experience (range 1 – 7,5 years).

This sample mainly corresponds to the total population (gender: female 77 %, male 23 %; mean age: 57 years; mean number of years of work experience: 6 years) [1].

Procedures and Measures

The focus group sessions were conducted on the crisis line service location, in the presence of the respondents and the researchers. They were led by the first author (RCWJW, trained in carrying out focus groups and interviews) and a psychology student of the University of Twente, both of them female, and both had no relationship with the participants in the focus groups. The focus groups lasted about 2 hours, and took place between June 2017 and September 2017. The individual interviews (led by RCWJW and a male psychology student of the University of Twente) were conducted face-to-face (n=2) or via telephone/videocall (n=6). They lasted about 45 minutes. At the start of the focus group and interview, participants were asked to sign an informed consent form. The same topic list was used for the focus groups and the interviews. Participants were first asked to introduce themselves and to briefly describe an experience or a call or chat that had impressed them. Subsequently, three areas were explored: (1) positive and negative emotions, (2) challenges of the work (of the help requests, the caller, the organization, or the volunteers themselves) that can make the work difficult at times, and (3) personal and work-related resources that help in dealing with these challenges (see Table 1 for the focus group and interview schedule).

Table 1 | Focus group and interview schedule

Topic	*Example Questions*
1.) What positive and negative emotions did volunteers experience during their work at the crisis line service?	• Which positive emotions are you experiencing in your work? • Which negative emotions are you experiencing in your work?
2.) What challenges regarding (a) the help requests, (b) the caller, (c) the organization of the crisis line service, or (d) the volunteers themselves do volunteers encounter?	*Focus group:* • Silent brainstorm with the use of 'post its'. After the brainstorming session, the 'post its' were divided over the four categories of factors that make conversation difficult. The 'post its' were discussed per category. *Interviews:* • Can you give examples of conversations that were difficult for you? • Are there any personal characteristics that make the work more difficult for you/some people than for others?
3.) Which resources can facilitate coping with difficult conversations or other challenges?	• What kind of thoughts or behaviours are helpful during or after a conversation? • How does the organization help you to deal with challenges?

Data Analysis

The focus groups and interviews were audiotaped with the prior consent of all participants, and transcribed verbatim. Transcripts of all focus groups and interviews were edited to remove any personal information which could identify the respondent and were uploaded into Atlas-Ti data analysis software.

The data of the interviews and focus groups were analysed by two independent coders (RCWJW and CHCD), using open, axial, and selective coding, and the method of constant comparison.

Data collection and analysis were carried out simultaneously, which means that as soon as the first focus group interview was transcribed, coding took place immediately. Both coders separately read the transcripts of the first two focus groups. Based on these two focus groups, the coders developed a first provisory coding scheme, using inductive coding (open coding). Inductive analysis helps to structure raw data into a summary format and to establish links to the research objectives [22]. After two focus group interviews, themes and the relationships between themes, were identified. On the basis of these themes other focus group interviews and individual interviews were analysed using inductive analysis (axial coding). After the inductive analysis, deductive analysis was applied by selective coding on the basis of previously defined themes (selective coding). Based on this, final themes were determined. The coders discussed the differences in identified themes to fully reach consensus, previously found themes were verified and deepened and subthemes were identified until saturation was reached. This final coding scheme was also used in the analysis of the interviews. At the end of the analysis process, all transcripts from the focus groups and individual interviews were read again and compared with the code tree to ensure that no important information had been overlooked.

Because the themes from the focus group interviews and the individual interviews matched, the results will not be presented separately. Extra themes that arose from the individual interviews will be mentioned. The analyses were conducted in our native language (Dutch). Codes and themes were checked and discussed with a native English speaker. The citations were translated from Dutch into English by a native English speaker, to ensure translation validity.

RESULTS

The results are described on the basis of the research questions. The order in which the results are described is from most frequently mentioned to the least frequently mentioned emotions, challenges and resources. Figure 1 shows a schematic representation (code tree) of the results of the interview.

Emotions due to the crisis line work

In this section we present volunteers' positive and negative emotions.

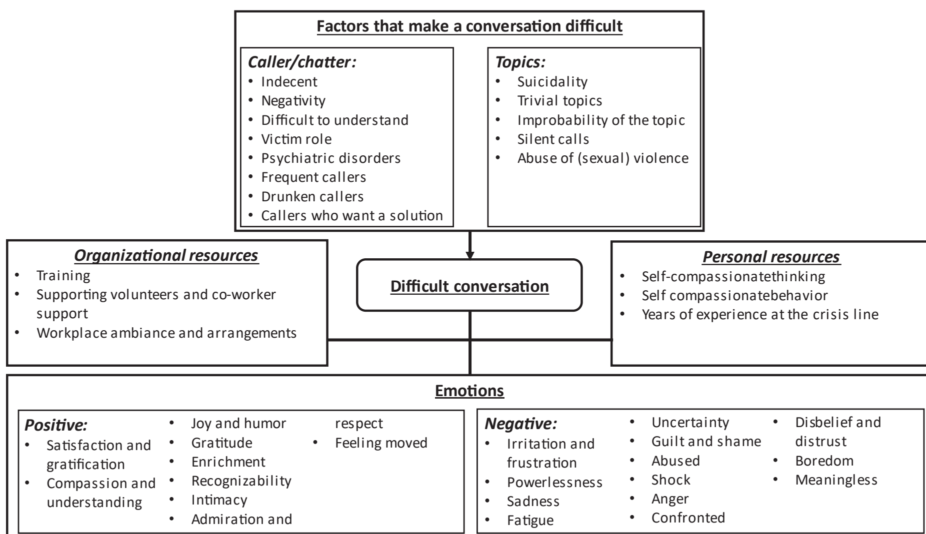

Figure 1 | Schematic representation (coding tree) of the results

Positive emotions

Participants met a wide range of positive emotions and experiences.

Satisfaction was the most frequently mentioned positive emotion. The feeling of satisfaction that volunteers experienced resulted from the realization that the work they do makes a difference in the lives of callers. Volunteers did not always have to fully solve the problems of callers, but to help someone get started on therapy, or to guide someone in the last moments before his death, was experienced as satisfying.

> *"That conversation lasted a long time and he was very happy that he was able to express this for the first time, because he thereby also drew strength from it so that he could go see a counsellor."*

In addition, volunteers also mentioned feelings of satisfaction with their intervention during a call and the positive impact this intervention had on the callers, expressed by their gratitude.

Volunteers identified *compassion and understanding* as a positive emotion, because these skills connected them emotionally with callers, which motivated them to alleviate the suffering of callers.

> *"Then I spoke to a 16-year-old girl who called in the middle of the night, she was in the middle of her 6th chemo treatment. She felt lonely, while her sisters were chatting, and she was shivering from the cold and misery. And then I felt a lot of compassion"*

Volunteers mentioned *joy and humour* as essential emotions to alleviate the heaviness of the conversations. Humour was deliberately used by volunteers to lighten a complex conversation. Many volunteers were very alert to a joke or a laugh from the caller, because they recognized it as the turning point in a conversation.

> *"There you get so much depth, you can reach people in this way, by going out of the serious mode, and going into depth with humour. Then everyone is incredibly grateful, because then they open up."*

By listening to the stories of callers and the circumstances in which they found themselves, volunteers experienced *gratitude* for the favourable conditions in which they themselves lived, but they also experienced gratitude for the enrichment that came from deep conversations and the feeling of being able to contribute.

> *"And then I realize that there is so much suffering, so much suffering. And that I may consider myself lucky that I lead a happy life."*

Volunteers experienced *enrichment* as positive emotion, because they learned a lot from the conversations, for example communication skills, acceptance that callers' behaviour cannot always be influenced by the volunteer, or the ways in which they could handle difficult situations.

> *"If a call is not going smoothly, there is enough reason to see how you did it and then ask for feedback on what to improve next time. I find that very enjoyable."*

Other positive emotions were recognizability, intimacy, admiration/respect, and feeling moved. Volunteers felt comfortable with difficult conversations when they *recognized* the callers' story; they mentioned a positive feeling because they could respond correctly based on their own experience. Volunteers experienced great *intimacy* and involvement during conversations. Some volunteers said that they felt pride that the callers chose them to share their experiences. Volunteers felt *admiration/respect* for the way callers managed to survive despite their problems.

Negative emotions

Participants also met a wide range of negative emotions and experiences:

Irritation and frustration were often experienced, mostly by callers who manipulated and provoked volunteers; callers who were critical or accusatory to volunteers or the crisis line service, and callers who tried to shock by, for example, opening the conversation with a suicide threat.

> *"Or a caller who says (cheerfully): 'Well, then I'll just have to put an end to my life'. (.....) Yes, some callers only really want to shock. Well, I do not like that."*

Irritation and frustration were also provoked by passive callers and callers who blamed everybody else but themselves, who put the responsibility for the course of the conversation on the volunteer, and stayed in the victim role. The slowness of the caller who wanted to tell in detail what he had done triggered irritation, as well as people who called to make fake calls, sex callers and drunken callers.

> *"I find these conversations senseless and certainly drunk callers who, when they are sober, no longer know that they have called. Why call now, it doesn't make any sense."*

The frequent caller (the caller who calls several times a day, often with the same story), people who complain, whine, tend to think in extremes and do not want to listen to tips and advice from the volunteer were also mentioned as irritating and frustrating.

> *"But on the phone, you have frequent callers whose voice I recognize. And if the person actually has the same story as last time and there has been no progress at all, I find that quite difficult."*

Finally, irritation was generated if the caller did something else during the conversation, for example washing dishes or watching TV, while the volunteer was concentrating on the conversation.

The feeling of *powerlessness* often arose when the volunteer was not able to do something for the caller, for example giving a hug when someone is having a hard time or wanting to solve the problem for someone.

> *"People who really suffer, like Sunday night, I had a lady on the phone, who was really depressed. Yes, you can come up with anything, but I just know that it won't help. I find that so difficult."*

Powerlessness also arose from the position in which callers found themselves because of the effects of social policy, in particular cutbacks at mental health organizations.

> *"People who have to live on their own with the current healthcare. Independently as long as possible. And then they have to do with one and a half hour of care once a week, ….."*

Another aspect that caused powerlessness was the fact that volunteers could not do anything because callers call anonymously. In addition, the crisis line service applies the philosophy of non-intervention, this means that volunteers are only supposed to offer a listening ear and will not intervene therapeutically.

Volunteers feel *sadness* about the suffering that the callers experienced. Sometimes they switched off their phone for a moment and then cried because of the distress of the caller. There was also sadness about the suicidality of callers.

> *"And I recently had a conversation with a girl, a woman, in her early 20s, who lost her whole family. It stayed with me and it was also the first time I was actually crying during the chat."*

Fatigue came mainly from callers who tell the same thing over and over again, people who chatter without the volunteer being able to get a word in, people who do not say a word, frequent callers, and callers who expect an immediate solution to their problems.

> *"(…..) but with some people you just know, they just call four times in a row. Within an hour, and they will just tell you exactly the same. You hear that*

> *sometimes, because you speak to your colleague in the room next door, who says: Gosh, I just had that gentleman on the phone."*

Volunteers mentioned feelings of *guilt and shame*, because they made mistakes, felt no connection, or could not help the callers. Shame was caused by making promises to the caller that volunteers could not fulfil.

Volunteers experienced *uncertainty* about their skills, especially when discussing suicide or when there was no connection with the caller. Uncertainty about the outcome of a call (how things ended with a caller) was also mentioned.

> *"You have a conversation with someone and they will disappear from the screen once the conversation has ended. And you don't know how it will go afterwards. There is no follow-up unless you get the same person on the chat again or on the phone."*

Anger was provoked when the caller shouted at volunteers, had an aggressive tone, or called to gain sexual gratification.

> *"I have been angry. Especially on people who scolded me or crossed the border in some other way. People who called for sexual gratification. Well that's my limit."*

Anger was also generated when the volunteer heard that the caller was being misjudged, or when children or animals were involved.

Other negative emotions and experiences were abused, shocked, confronted, disbelief and distrust. Volunteers felt *abused* when they noticed too late that they had a sex caller on the phone, when the caller used them as a wailing wall, or when callers were judgmental or discriminating. *Shock* was felt when callers were angry and scold, if the caller had a suicide wish, or callers told weird stories. Volunteers experienced a conversation as *confrontational* when it evoked memories of painful events which the volunteers have experienced themselves. *Disbelief and distrust* were experienced when volunteers doubted the stories that callers had because they were so weird or implausible.

Two other negative emotions that emerged during the interviews were boredom and meaninglessness. Volunteers felt *boredom* when they had to carry the same type of conversation over and over again, and then failed to keep their attention in the conver-

sation. *Meaninglessness* was felt when the caller did not benefit from the conversation, or when the ability to call keeps the caller from seeking professional help.

> *"….. but I don't have to go looking for contacts either, because I can always call the 'Listen Line', so then you were also a factor for them to no longer challenge themselves to do anything."*

Challenges that make the work difficult at times: job stressors

There were different challenges volunteers met, that make their work difficult at times. Two types of stressors were identified from the focus groups and the interviews: caller/chatter-related stressors and topic-related stressors.

Caller-related stressors

The most frequently mentioned distressing characteristic of the caller was *indecency*. Volunteers found it offending when callers criticized the crisis line service or colleagues, when they were insulting, scolded the volunteer, making discriminating remarks, and manipulated the volunteer.

> *"Then you think, we are all volunteers, we all do our best and you are only complaining about us. That does not feel good."*

Some volunteers did not know how to respond to sexually abusive calls and felt abused when they noticed that a caller was masturbating during the conversation.

A distressing characteristic of the caller was *negativity*. Volunteers found it difficult to connect with callers who were negative and did not listen to the volunteer, callers who only wanted to complain, who kept rattling without the volunteer being able to cut in, or callers who barely made contact.

Sometimes callers were *difficult to understand*, this could be related to dialect, drunkenness, aphasia, stuttering or other speech impediments. It could also be due to the slowness or speed at which the caller spoke, or overly difficult language.

> *"(…) after the umpteenth monologue, after a story that I barely understood, I do not know what it is about, but just leave it, just for the sake of simplicity, let the person tell his story. I got distracted at one point, so that the one on the other side said "hey, are you still there?"*

The caller in the *victim role* was experienced as a stressor. These callers were passive, blamed their problems on others, and had no self-reflection. They did not accept anything from the volunteer and refused to reflect on their own behaviour.

Psychiatric symptoms, such as hyperactivity, slowness, hallucinations, and delusions could disrupted the contact between the caller and the volunteer. Volunteers felt powerlessness towards callers, because of callers' illness.

> *"Then a caller with a bipolar disorder or something related and who is a very intelligent person who sees himself empty-handed. He just knows that there is a disturbance. I mean, those people are not crazy."*

Other characteristics of callers that could make a conversation difficult were frequent callers, drunken callers, callers who wanted a solution, or callers who saw the volunteer as their friend. *Frequent callers,* who called multiple times with the same story. Volunteers experienced *drunken callers* as difficult. Often these conversations were difficult to follow and perceived as meaningless, because volunteers doubted if the caller would remember the conversation when they were sober again. Volunteers mentioned callers who were *doing other things during the conversation*, such as washing dishes or watching television as difficult, because it distracted them from the conversation. Callers sometimes became angry or disappointed when they did not *get a solution*.

Topic-related stressors

The most frequently mentioned topic that puts a lot of strain on the volunteers' concentration was *suicidality*, when callers indicated that they wanted to end their lives. Conversations on this subject were experienced as heavy and intense.

Volunteers found it also stressful if the topics were too *trivial* or if callers called just to be funny.

> *"And calling just to be calling. 'Hello Netherlands.' Who just want to be funny. That's how I characterize it. It is a large group, that offends me."*

Improbably of the topic was experienced as inconvenient. Sometimes volunteers doubted the truth of the stories of callers, thereby they could not make a correct assessment of the caller.

> *"(....) people who tell a beautiful story that you feel, than you think, this is not entirely true. (….) Then you ask a question, and then they hang up. Then you know that your feeling is correct."*

Other topics volunteers found stressful were silent calls and abuse. *Silent calls*, when callers who did not say anything, or placed the responsibility for the course of conversation with the volunteers. A number of volunteers had trouble with conversations about *abuse*, in particular child and animal abuse.

Resources for dealing with challenges

Finally we asked the volunteers what helped them to deal with these challenges. The answers could be divided into personal and organizational resources and are discussed below. In addition, also examples will be discussed if volunteers do not experience this resource.

Personal resources

The personal resources could be divided into self-compassionate thinking, self-compassionate behaviour, and years of experience at the crisis line. Many volunteers had *self-compassionate thinking* by being aware that there was a mutual responsibility for the course of the conversation. They dared to admit their emotions, allowed themselves to make mistakes, and knew how to let go of the content of the conversations. The anonymity helped them to let go.

> *"When the last call is over, it is done. It's good to be involved, to show empathy and things like that, but at the end of the day, it's what it is, you have no control over it."*

Some volunteers tend to be more self-critical than self-compassionate. For example, being ashamed that they had said something that they could not fulfil, being angry when they made mistakes, ruminating on difficult conversations or chats, or being too strict for themselves.

> *"And then I worry all weekend about it. At the training it all came out. Yes, that was stupid of me. I thought I had dealt with it, but I hadn't. I thought that was stupid of myself."*

Self-compassionate behaviour manifested itself by taking timely breaks, setting boundaries for the caller and the organization, or seeking contact with co-volunteers or trainers. Some volunteers were taking breaks in order to process difficult conversations, by

switching off the phone or they ate or drank something, went outside or to the toilet, cried or prayed, or made a report of the conversation. In order to bring the shift to a good end before they picked up their own lives, many volunteers liked to cycle, perform rituals or make an extensive report about the service.

> *"After a difficult conversation, it is nice to leave the computer for a while and do something else, if only to make a cup of tea, something like that, that is yes, that is nice to do."*

There were also volunteers who did not take a break because they forgot to switch off the phone. Other volunteers saw that the lines were busy and, therefore, did not want to take a break. Starting volunteers preferred not to take a break because they wanted to prove themselves. Many volunteers were able to specify limits to the caller. If a caller started to scream or did not want anything, if the subject triggered the volunteer, or if the caller was drunk or a sex caller, the volunteer ended the conversation. Volunteers also indicated their limits by making it clear that they felt uncomfortable with the conversation, for example if they felt irritated or when there was no connection between the caller and the volunteer.

> *"Then I try to refrain in a friendly quiet way from talking to long and end the conversation. 'Sleep it off or go and drink a cup of coffee'."*

Sometimes it was difficult for volunteers to end a conversation, the volunteer spent too much time listening and became curt with the caller. Volunteers sometimes gave too much information about themselves during a conversation.

> *"I am honest and open and I do not mind sharing something, but at some point they will be in my personal space and I really want to protect that space and that is what happened all the time."*

Seeking contact with the trainers or with family (if they worked from home) when a conversation was difficult is another example of self-compassionate behaviour. When they worked at the location of the crisis line service, fellow volunteers often also had a chat with each other.

> *"There is always the possibility to call someone from the management of the crisis line service, but in most cases that is not necessary at all, if you can talk to each other about it when you are having a hard time."*

Sometimes volunteers did not have the opportunity to contact colleagues because they worked from home. Volunteers did not want to bother the backguard and, therefore, did not seek help for their problem.

Specify limits to the crisis line service was reported as a protecting factor. When a shift was almost over, or if the shift had been heavy, some volunteers choose to not answer a telephone call or a chat. Some volunteers refused to conduct talks from the suicide prevention line.

> *"I mean 'suicide prevention' is very pro-life. Then I think, those people have tried everything, had all kinds of therapies and conversations. All at a dead end. And I'll never say 'boy, just put an end to it'. But I can imagine it very well."*

Volunteers could see on the computer screen whether or not all lines were occupied. A few volunteers indicated that they did not log off after a heavy conversation because they saw that all lines were occupied.

Volunteers mentioned that years of *experience at the crisis line* and having more skills, could help them to deal better with their own emotions. Volunteers with life experience stated that they could show more understanding for the situation the caller was in.

Less experienced volunteers had fewer opportunities to respond to difficult questions.

> *"I have also had a conversation about suicide, and I thought: did I handle it well? Not that mistakes were made, but perhaps that someone who had more experience at that moment had a bit more to offer."*

Organizational resources

The *training* and courses organized by the crisis line service were experienced as positive, in particular the intervision, where experiences were shared with co-workers under supervision.

> *"During the intervision a caller is sometimes discussed, about whom others say: 'oh, I also had that caller on the phone, I handled it very differently'. And the way he tells it, I think oh, that's the way I should actually do it in the future."*

Some volunteers said the courses did not add anything. This was mainly related to the suicide prevention training. There were also volunteers who found this training too confronting.

The *supporting of volunteers and co-worker support* was perceived by volunteers as an important resource. When volunteers had heavy conversations, there was always the possibility to contact the crisis line service. The trainer, together with the volunteer, assessed whether extra care was needed. If the reports showed that conversations had made a great impression on the volunteer, the trainer from the crisis line service would contact the volunteer to see how things were going.

> *"Well, they called me, to ask and see what it had done to me. To be certain that my wellbeing was fine."*

Co-worker support was felt by volunteers to be an important form of support. It gives them the opportunity to discuss what has happened during their service and to reflect together on a conversation.

Workplace ambiance and arrangements were experienced as resources. Volunteers experienced the ambiance and culture at the crisis line service as warm, open, safe, and confidential. Telephone shifts of four hours were sometimes experienced as too long, especially when there were heavy conversations that required a lot of concentration. Participants in our study experienced no problems with nightshifts, but they mentioned that a colleague stopped volunteering, because the nightshifts were too burdensome. The crisis line service offered volunteers a *workplace*, but there was also the possibility to work from home. Some volunteers wanted a clear distinction between work and their private life, while other volunteers were glad that they could work at home. When volunteers choose to work at home, the volunteers who worked on location missed the contact with colleagues and the co-worker support.

> *"At the weekend there is no one here, you are alone in the building. You can never tell your story, there are no sparring partners."*

Volunteers sometimes experienced hindrance from the environment, such as the location from where volunteers have to do their work, background noise, too quiet, and too high or too low a temperature.

> *"But if there is a course going on here or something else during my telephone shift, I am quite curious by nature, then I want to know who is there and then I get distracted."*

The crisis line service offers sufficient technical support at the workshop, but also at home. Technical malfunctions can be disrupting. Sometimes a chat conversation ended

because of technical faults. Disruption to the telephone caused the crisis line service to be less accessible to people with problems. Volunteers experienced this as difficult because they want to be there for the callers.

DISCUSSION

This is the first study that comprehensively examined crisis line volunteers' positive and negative emotions during their work, the challenges they experience in their work and the available resources they use to cope with these challenges.

Our study reveals that whereas many volunteers experience positive emotions in their work, such as gratification, compassion, gratitude and joy, they also mentioned a wide range of negative emotions. Most common were irritation and frustration, provoked by inappropriate, manipulative, or passive callers. Frequent callers and fake callers also provoked this emotion in many volunteers. The emotions of fatigue, uncertainty, abuse, anger, and feelings of disbelief and distrust are clearly linked to these types of callers. Shame and guilt arise when volunteers have the feeling that they do not respond adequately to these callers. All these negative emotions were also described in the study of Pollock et al. [8]. A number of negative emotions were not mentioned earlier in previous research, such as the powerlessness that arises when volunteers are not able to give callers what they need, such as a hug, or when callers indicate that they are suffering because of the cutbacks in elderly care and mental health care. Also, the sadness that volunteers feel when a story of a caller touches them, or when they find recognition in a story of the caller are emotions that have not been described before. Two striking negative emotions, namely boredom during a conversation and a feeling of meaninglessness, were mentioned during the interviews with former volunteers. It is important to pay attention to these negative emotions during training and supervision, because negative emotions could lead to higher exhaustion in work, with higher turnover intentions as result [24].

This study identified a wide range of caller-related challenges faced by volunteers in their work: callers who show inappropriate behaviour (such as scolding, being manipulative, (sexually) abusive or remain silent), callers who are difficult to understand, have psychiatric problems, are drunk, call frequently, or seem to make up stories. Similar results were found by Pollock et al. [8]. In order to help volunteers handle these difficult calls and avoid too much involvement, the principle of 'non-disclosure' is often recommended, which means that volunteers are not allowed to share anything of their identity or personal experiences with the caller [8]. However, sharing of personal experiences

could be helpful to connect with the callers; it could be used to demonstrate understanding of the caller's situation, and compensate for the anonymous and disembodied nature of helpline contact [25]. In the past, interventions have been developed to help volunteers to better deal with sexually abusive calls [26,27] and frequent callers [28-30]. Unfortunately, these interventions are dated and have not been tested for effectiveness. As long as there are no effective interventions to deal with inappropriate callers and frequent callers, it is important that during training attention is paid to handling challenging callers and discuss the limit in sharing personal experiences with the callers.

Caller/topic related challenges that have not been described in empirical research before, are: negativity of callers, callers in a victim role, demanding callers who want immediate solutions for their problems, and (too) trivial topics of conversation. These stressors are challenging because volunteers have difficulties in feeling connection with callers who are only negative or who remain in a victim role. These callers often do not want to listen or reject any suggestion or advice from the volunteer, or tend to externalize all of their problems. Also, callers who want immediate solutions for their problems are challenging for the volunteer, because something is expected that they cannot offer. Callers who call with trivial issues can make the volunteer feel that they should actually spend their time better on people with 'real' problems. Future research should address these challenges and examine how often they occur and to what extent they influence the volunteers' mental wellbeing.

Volunteers mentioned several resources to cope with negative emotions and experiences. First, positive emotions can help crisis line volunteers dealing with or balancing work-related stressors. In this study volunteers mentioned a wide range of positive emotions. Most frequently mentioned were gratification, compassion, joy/humour, gratitude, and enrichment. Positive emotions are important because these emotions generate more flexibility, more creativity, and play an important role in bouncing back from negative emotions [31-34]. Positive emotions are also associated with increased self-efficacy, self-esteem, and optimism [35]. Second, self-compassionate thinking (e.g. admitting emotions, allowing themselves to make mistakes) and self-compassionate behaviour (e.g. taking breaks, seeking contact with co-workers) were mentioned as useful coping resources. There is a growing body of evidence that self-compassion decreases negative emotions, such as fear, anger, and shame [36,37] and increases self-reassurance [38], positive emotions, such as happiness, joy, and wellbeing [39,40]. However, as far as we know the role of self-compassion has not been examined in crisis line volunteers. More research on this topic is needed, because especially for this highly challenged group, self-compassion could be essential to buffer the impact of work-related stressors on mental wellbeing. Future interventions could try to enhance these

personal resources by encouraging volunteers to focus on positive emotions and by cultivating self-compassion.

Our findings also underscored the importance of organization-related resources such as training, supporting volunteers and co-worker support, and workplace ambiance and arrangements. Many researchers have emphasized the importance of good training and guidance of crisis line volunteers [7,16,18,41,42]. At the Dutch 'Listen Line', volunteers are obliged to follow a training, which consists of an e-learning part and various meetings in which mainly conversations are practiced. During the training potential volunteers will be supervised by experienced volunteers. In addition, regular meetings are organized with a certain theme (e.g. listening to people with a psychiatric disorder). Once a year, the motivation and wellbeing of the volunteer is discussed with a professional trainer. A professional trainer is available day and night for the volunteer who is in great need of guidance after a telephone conversation [43]. In our study the participants were very positive on training and guidance they receive from the organization. It is recommended that during the selection process potential volunteers are made aware that this work can have an emotional impact and that the volunteer will face a wide range of challenges. It is also recommended that the requirements that volunteers need in order to cope well with the challenges in the work at the crisis line service, are determined in advance.

Co-worker support was also mentioned as an important resource for handling work challenges. A number of volunteers reported a lack of co-worker support. Lack of social support was also mentioned in previous research [7,16,41]. Crisis line organizations should facilitate contact between co-workers, because research has shown that co-worker support can protect from depression, buffer the effect of job demands on workplace stress [44], and generate a sense of belonging to a group with a common goal, which contributes to satisfaction and has a positive influence on mental wellbeing [45]. In the case of crisis line volunteers, contact with co-workers is often hampered because many volunteers choose to work from home. In these cases the organization should search for alternatives for co-worker support, such as online coffee breaks or regular joined activities to facilitate bonding.

Workplace ambiance and arrangements, such as length of shifts and environment, were mentioned as organizational resources. This study also found that the length of the shifts (mostly four hours) was sometimes perceived as too long, especially since some telephone calls require a lot of concentration and are therefore exhausting. In order to keep volunteers motivated and healthy, the crisis line organization could explore the possibility of creating more personalized schedules. Finally, the environment (e.g. noise or unpleasant location of the office) and technical malfunctions (electricity failure) are

perceived as challenging. By offering volunteers the choice to work either from home or from the office, the problem of an unpleasant environment can be overcome. Fortunately, technical malfunctions did not occur very often. In addition, volunteers emphasized the importance of a good ambiance, which is encouraged by organizing regular informal meetings, for example a barbeque or an excursion once a year. Volunteers in this research indicate that these are resources that make the work more enjoyable and enriching for them.

There are a number of strengths of this study. First, by using a qualitative approach we obtained insight in a broad range of emotions, challenges, and resources that are important in the wellbeing of crisis line volunteers. It provides a comprehensive overview of relevant factors and gives input for specific interventions and policies aimed at increasing mental wellbeing in crisis line volunteers and reducing turn-over rates. Second, by including not only active volunteers, but also former volunteers we obtained a complete overview of experiences and views. Future research is needed to get insight into how often particular stressors occur and their perceived levels of stress and their relationship to mental wellbeing. For this reason we are currently constructing a questionnaire to quantitively assess the occurrence and perceived stressfulness of the caller- and organization related stressors mentioned in this study. Yet, the study has also some limitations. The first is the possibility of selection bias, because potential respondents were approached by their trainers and therefore not all volunteers had an equal opportunity to participate. Second, the method of focus groups has the risk that quiet respondents can be overwhelmed by the more verbally skilled. To ensure that everybody's voice was heard, the focus group contained a part in which individuals were asked to write down their opinions/experiences first on post-its, before discussing them in the group. Moreover, a second interviewer was present alongside the main interviewer, to intervene if some respondents were talking too much. The methodology of a focus group also has an important advantage: because the respondents in a focus group question each other and discuss the subject, deeper insights are obtained [46].

Conclusion

To conclude, this is the first study that provides a comprehensive overview, based on the perspective of volunteers, of the emotional impact of work on the crisis line, the challenges volunteers encounter and the resources they use to deal with them. This study highlights the importance of (1) training of volunteers in dealing with various specific types of callers such as inappropriate callers or callers with psychiatric symptoms, and (2) personalized policies to support motivation and job satisfaction of volunteers. In addition, this study provides valuable input for the development of interventions aimed at increasing personal resources, such as awareness of positive emotions and

self-compassion. These personal resources can help to increase the mental wellbeing of crisis line volunteers and reduce turn-over rates. Volunteers with a high degree of mental wellbeing are fundamental to the continuity of the crisis line service.

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3

4

How demanding is volunteer work at a crisis line? An assessment of work- and organization-related demands and the relation with distress and intention to leave.

Willems, R. C. W. J., Drossaert, C. H. C., Miedema, H. S., & Bohlmeijer, E. T. (2021). How Demanding Is Volunteer Work at a Crisis Line? An Assessment of Work- and Organization-Related Demands and the Relation With Distress and Intention to Leave. *Frontiers In Public Health, 9*. https://doi.org/10.3389/fpubh.2021.699116

ABSTRACT

Background: Crisis line services, run by volunteers, offer a listening ear 24/7 to people who cannot or do not want to use professional help. Although previous studies have identified various potential stressors crisis line volunteers face, as yet a comprehensive assessment is lacking with regards to the frequency and perceived stressfulness of work- and organization-related demands, and their relationship with distress and a volunteer's intention to leave.

Objective: To identify the frequency and impact of particular stressful situations (demands). In addition, to examine the extent to which these demands are associated with volunteers' demographics, distress and intention to leave the crisis line service.

Method: In a cross-sectional study among 543 volunteers of a Dutch crisis line service the participants filled out a questionnaire about their experience of a large number of work- and organization-related demands and their perceived stressfulness. To calculate the impact of demands, the occurrence and stressfulness were multiplied. In addition, work-related distress, intention to leave the crisis line service as well as a number of demographics and work-related characteristics were assessed.

Results: Work-related demands with the highest impact on volunteers were calls from people with psychiatric problems and suicidal intentions. 'Having no time for a break' was the organization-related demand with the highest impact on volunteers. 18% of the volunteers scored moderate or high on distress and 4% had the intention to leave the crisis line service within one year. Most work- and organization-related demands were positively associated with volunteers' distress and intention to leave the organization. Being older, being male and spending more hours per week volunteering were significantly, positively correlated with work-related demands. The total explained variance for distress was 16% and for intention to leave 13%.

Conclusion: Although most crisis line volunteers experienced low impact from work- and organization-related demands, these demands were significantly related to experienced distress and the intention to leave crisis line service. For volunteers with moderate to high distress it can be useful to implement interventions aimed at increasing personal resources to help them deal with the challenges of the work at the crisis line.

INTRODUCTION

'The telephone rings. A man says he's injected a very high dose of insulin and he's going to die soon. But he doesn't want to be alone in the last moments of his life, so he asks the crisis line volunteer if she wants to be with him in the last moments of his life. The volunteer and the caller talk about the life and approaching death of the man'.

'After this impressive conversation, the phone rings again. The caller is hard to understand, he seems to have been drinking. After asking a few times what the caller says, the caller starts to curse. He screams that there are a bunch of idiots on the phone, which are of no use to him at all. Angry, he ends the call'.

'A chat comes in: "I'm so worried about my mom. She has Alzheimer's and she lives alone. I don't think it's safe and I want her to go to a nursing home. The doctor doesn't think this is necessary, and the waiting lists are very long. I can't handle the care anymore; nobody wants to listen to me..." The volunteer listens and asks questions. During the conversation the caller calms down and thinks for herself who she can approach for practical support.'

'A new chat is coming in. Someone, calling himself John, says he's having a hard time. Six months ago, he was fired at work and his partner decided to leave him. The volunteer recognizes the story, this chatter chats several times a week, each time with the same story'

(Cases described by crisis line volunteers during an interview).

Crisis line services, an important addition to existing formal care, provide free, emotional support 24/7 by telephone, chat, or email [1]. This form of low-threshold support gives callers[2] quick anonymous and confidential access to emotional support, sometimes until professional care is available [2, 3]. Crisis line services are mostly operated by volunteers, who are recruited and trained to provide a non-judgmental, active listening service, which invites callers to reflect on their suffering and emotional distress in order to understand how they can cope with their problems [1]. Crisis line services are effective in preventing suicidality [4, 5] and reducing caller distress [4, 6]. Although volunteers at the crisis line service are well trained, volunteering can be demanding.

2 For the readability, we only use the word "callers" here. Other users of the crisis line service, such as chatters and emailers, are also included.

Several studies have shown that the demands of the work at the crisis line may impact volunteers' mental wellbeing [7, 8] and their intention to leave the crisis line organization [9]. However, research on the demands faced by volunteers working at a crisis line service is scarce. A few qualitative studies revealed a number of demands related to the work itself (characteristics of callers or the topics) and a number of demands related to the organization of the work.

The literature highlights that crisis line volunteers most commonly face three work-related demands that are potential challenges to volunteering. Firstly, the topics of the calls, such as suicidality or abuse experiences [4, 10]. A qualitative study revealed that these complex topics may generate feelings of powerlessness, sadness, and shock among crisis line volunteers [42]. Topics that are not directly related to suicidality and violence, such as loneliness, relationship problems, and boredom [11, 12], may also be experienced as stressful by the volunteers. In many cases volunteers perceive such conversations to be trivial and that their time may be better used on 'real' problems [11]. Secondly, the inappropriate behaviour of certain callers. This includes callers who try to get sexual satisfaction during the conversation [13, 14], callers who discriminate or scold and are insulting towards the volunteer, or callers who try to get personal information from the volunteer [15]. Thirdly, the so-called "frequent callers": callers who call the crisis line several times a day, often with the same story [16-18]. Frequent callers are not time-wasters, but they do keep the telephone line busy. Pirkis et al. (2016) showed in a literature review that only 3% of the callers are frequent callers, but they are responsible for 60% of incoming calls. Balancing between the great diversity of different conversation topics and dealing with difficult behaviour of clients requires great mental flexibility from the volunteer, which can influence their motivation to continue doing this work, or can lead to distress or leaving the job [7, 8].

Organizational-related demands have to do with the way the work is organized, and may also be perceived as a challenge by the volunteers. For example, most crisis line services use the philosophy of non-intervention, which means that volunteers only offer a listening ear, not a therapeutic intervention [9]. The philosophy of non-intervention may give volunteers the feeling that they are not allowed to offer any concrete solution to the caller, while they do want to take action [9]. Another organization-related challenge is the policy of anonymity, which means that callers can anonymously tell their problems to volunteers. As a result, volunteers will never know whether their conversation has been effective, or what influence this conversation had on the caller. This can create a feeling of insecurity among the volunteers [15, 19, 20]. Inadequate support and backup (e.g. through supervision, training) and the length of shifts are further examples of organization-related demands [9, 20-22].

Studies on work- and organizational-demands among crisis line volunteers have often been conducted with small samples, or they are qualitative in design. Moreover, most studies have focused on a single or a few work- and organization-related demands, rather than studying them in a more comprehensive way. Therefore, it remains unclear to what extent these demands occur and are perceived as stressful. Such insight is important, because previous studies have shown that crisis line volunteers can suffer from high work-related distress, and that traumatic experiences can be a reason for quitting their volunteer work [9, 20, 23].

It is important to study the factors associated with the occurrence and perceived stressfulness of the various demands, in order to better understand why some crisis line volunteers experience more stress at work than others. Previous research has provided some evidence for a relationship between demographic and work-related factors (such as years of experience and former education) and mental wellbeing of crisis line volunteers. For example, younger age [22-24], less experience at the crisis line [22, 23], and being female [23] have shown to be positively correlated with stress. However, research on the issue is scarce, and there is a lack of knowledge about the relationship between demographic and work-related variables on the one hand and distress, and the impact of particular demands on the other hand.

The aim of this study is to identify the occurrence and stressfulness of a wide range of work- and organization-related demands among crisis line volunteers, and to determine to what extent there is a relationship with distress of the volunteers and their intention to leave working at the crisis line service. The questions that will be answered are: (a) What is the perceived frequency and stressfulness of various work- and organizational demands that crisis line volunteers experience? (b) Which demands are most strongly associated with volunteers' distress and intention to leave? (c) To what extent are the impact of demands, volunteers' distress and intention to leave associated with volunteers' demographics (gender, age, education) and work-related variables (years of experience, number of hours a week)?

MATERIAL AND METHODS

Design

The present study used a cross-sectional design with an online survey among crisis line volunteers. The study was approved by the ethical committee of the Faculty of Behavioural and Management studies (BMS) of University of Twente (approval number: 190943).

Participants and procedure

The crisis line volunteers were recruited from the 'Listen Line', a Dutch crisis line service, run by 1400 volunteers who are trained to be non-judgmental, empathetic, respectful and caring. The 'Listen Line' applies the principle of non-intervention, this means that no therapeutic intervention is applied, volunteers are only lending an ear [1, 25].

All crisis line volunteers of the 'Listen Line' (n = 1405) received a link to the questionnaire by email from their management. The respondents were given an explanation of the survey and an online informed consent form. After the respondents had given their consent, they could continue to complete the anonymous questionnaire. After two and four weeks a reminder was sent by email. The questionnaire was completed by 543 volunteers (response rate 39%).

Measures

Personal background variables

Demographic characteristics included age and gender. Regarding their work at the crisis line, we asked participants if they had a professional training in health care (for example social work, nursing, or psychology), the number of years of experience at the crisis line, the number of hours per week at the crisis line, and from which location they mostly conducted their volunteer work (from the crisis line service office, or from home). For an overview of the wording of all questions and response options, see Table 1.

Work-related and organization-related demands

Specific demands: A self-developed questionnaire was used to measure demands that are specific for crisis line work. The items were based upon results from a literature review [8] and a qualitative study among volunteers of the 'Listen Line' [42]. The questionnaire consisted of two parts: work-related demands (16 items) and organization-related demands (9 items). Each item describes a potentially distressing situation that a crisis line volunteer may encounter (see Tables 2 and 3 for an overview of items). For 20 (of the 25) demands two questions were asked: the first question related to the occurrence of the situation ('How often does this situation occur?' with answering options ranging from 'never' (0) to 'very often' (4)) and the second question related to the degree of stress that this situation causes ('How stressful is this situation for you?' answering options ranging from 'not at all stressful' (1) to 'very stressful' (5)). For the remaining five demands the frequency question could be answered with no (1) and yes (2) and the degree of stressfulness was measured on a 5-point scale as described above. The *impact* of each demand was calculated by multiplying the frequency of occurrence with the degree of stress produced by the demand. This calculation was only applied to the 20 questions

that could be answered with the five-point scale. For the other five questions the degree of stress was considered as the impact.

An exploratory factor analysis was carried out regarding the work-related demands. It appeared that all items loaded on a single factor. A Cronbach's α coefficient of 0.88 was obtained for the current sample, indicating an excellent internal consistency. Since the organization-related demands showed very low or double factor loads, no further factor analyses were conducted regarding organization-related demands. Due to the low α (0.53) the organization-related demands could not be combined into one scale.

Outcome variables

Intention to leave: Intention to leave (ITL) was measured with a single-item question: 'How likely is it that you will leave the crisis line service the coming year?' and could be scored on a five-point Likert scale ranging from 'very unlikely' (1) to 'very likely' (5).

Distress: Distress was measured with a subscale of the well validated Four-Dimensional Symptom Questionnaire (4DSQ) [26]. Distress is operationalized as reactions to stress, such as worry, irritability, tension, listlessness, poor concentration, sleeping problems and demoralization [27]. This subscale contains 16 items that can be scored on a five-point Likert scale, ranging from 1 (never) to 5 (always). A Cronbach's α coefficient of 0.90 was obtained for the current sample, indicating excellent internal consistency. The occurrence of distress was determined by reducing the five answer categories of the Likert scale to three answer categories (never = 0, sometimes = 1, regularly or more often = 2), and subsequently summing the items to a total score, ranging from 0 to 32. Based upon these scores, participants were categorized into low (0-10), moderately increased (11-20), or strongly increased distress (21-32), as outlined in the 4DSQ manual [27].

Analysis

Analyses were performed in Statistical Package of the Social Sciences (SPSS), version 26.0. Background variables and work-related variables were described using descriptive analysis. In order to determine the presence of demands and the degree of stress they cause, descriptive statistics were used. To identify the association between the impact of the demands and demographics on 'intention to leave' and 'distress' Spearman's correlation coefficients were computed, because of non-normality of intention to leave and distress. Hierarchical stepwise multiple linear regression analyses were conducted to examine the combined influence of demographics, work- and organization-related demands on distress and intention to leave.

RESULTS

Sample and descriptives

The majority of the participants were female and older than 50 years of age (see Table 1). Most of them had no professional training in health care, worked for 4-6 hours a week at the crisis line services and had 1-3 years of experience in working as a crisis line volunteer. In terms of age and gender, the sample corresponded to the total population [1].

Table 1: Demographics and work-related information by gender

		Total (N = 543)		Male (N = 155)		Female (N = 387)	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
Age	18-29	10	1.8	3	1.9	7	1.8
	30-49	38	7.0	7	4.5	31	8.0
	50-64	200	36.8	46	29.7	154	39.8
	>65	294	54.1	99	63.9	195	50.4
Professional training in healthcare	Yes	196	36.1	42	27.1	154	39.8
	No	347	63.9	114	73.5	233	60.2
Experience at the crisis line	< 1 year	105	19.3	37	23.9	68	17.6
	1-3 years	193	35.5	57	36.8	136	35.1
	3-6 years	89	16.4	24	15.5	65	16.8
	6-10 years	58	10.7	16	10.3	42	10.9
	> 10 years	98	18.0	22	14.2	76	19.6
Hours per week	< 4 hours per week	97	17.9	22	14.2	75	19.4
	4 - 6 hours per week	408	75.1	119	76.8	289	74.7
	6 - 8 hours per week	31	5.7	14	9.0	17	4.4
	8 - 10 hours per week	4	0.7	0	0.0	4	1.0
	> 10 hours per week	3	0.6	1	0.6	2	0.5
Location of work	Always on location	133	24.5	53	34.2	80	20.7
	Usually on location, occasionally at home	91	16.8	30	19.4	61	15.8
	Sometimes on location, sometimes at home	55	10.1	17	11.0	38	9.8
	Usually at home, occasionally on location	126	23.2	28	18.1	98	25.3
	Always at home	138	25.4	28	18.1	110	28.4

A total of 474 respondents (82%) scored low, 79 (15%) scored moderate, and 17 (3%) scored high on distress. Of all respondents, 81% indicated that it is very unlikely or unlikely that they will leave the crisis line service within a year, 16% indicated they 'might

leave' the crisis line service within a year, and 4% indicated they 'were likely' to leave the crisis line service within a year.

Impact of work-related and organization-related demands and their relation to intention to leave and distress.

Table 2 shows the results on frequency and perceived stressfulness of the work-related demands. The most frequent work-related demands were conversations with clients who were confused, agitated or gloomy due to psychiatric problems and with clients who were whining and complaining. The most distressing work-related demands were clients with suicidal intentions or clients who are confused, agitated or gloomy due to psychiatric problems. When looking at the impact (combining frequency and perceived stressfulness), we see that clients with psychiatric problems and clients who were suicidal scored highest. The combined scale of work-related demands was significantly associated with intention to leave the crisis line service (r_S=0.24). The correlations between the impact of the separate work-related demands and intention to leave were generally weak, ranging from insignificant to r_S=0.19 (Table 2). The item 'client has psychiatric problems, is confused, agitated, or gloomy' had the strongest correlation with intention to leave (r_S=0.19). The combined scale of work-related demands was moderately associated with volunteers' distress (r_S=0.33). The correlations between the impact of separate work-related demands and distress are slightly higher than those of intention to leave, ranging from insignificant to r_S=.27 (Table 2). The item 'client is not listening and thinks in extremes' had the highest correlation with distress (r_S=.27), followed by 'client is complaining and whining' (r_S=.26), or 'client is doing other things during the conversation' (r_S=26).

Table 3 shows the frequency, perceived stressfulness, and impact of organization-related demands. The most frequently occurring organization-related demands were: night shifts, hardly having time for a break and duration of shifts, with respectively 74%, 50% and 25% of the volunteers saying that these situations were often occurring. The stressors that caused the highest level of stress were the philosophy of non-intervention and having to do night shifts. The stressor with the highest impact was not having time for a break. The correlations of the items of the organization-related demands with intention to leave and distress, are also shown in Table 3. Four out of nine demands were significantly associated with the intention to leave, with 'little contact with co-workers, due to working from home' having the highest correlation (r_S=.22), followed by 'having to do night shifts ' (r_S=.20). Eight items were positively correlated with distress, with 'The organization applies the philosophy of non-intervention' and 'hardly having time for a break' having the highest correlations (r_S=.20).

Table 2: Summary of descriptive statistics work-related demands: frequency, degree of stress, and impact (product frequency and degree of stress)* and Spearman's rho correlations with Intention to Leave (ITL) and Distress (N = 543)

	Occurrence				Stressfulness	Impact	Correlation with:	
Possible range	1/2	3	4/5	1-5	1 - 5	1-25	ITL	Distress
	Never/ Sometimes	Regularly	Often/ Very often	Mean (SD)	Mean (SD)	Mean (SD)	r_s.	r_s
	%	%	%					
Client has psychiatric problems; is confused, agitated, or gloomy	14	45	41	3.4 (0.9)	1.9 (0.8)	6.4 (3.8)	.19**	.22**
Client is suicidal	82	15	3	2.2 (0.6)	2.8 (1.1)	6.2 (2.9)	.12**	.20**
Client manipulates, scolds, discriminates, shocks, judges, or seeks quarrel	86	13	1	2.1 (0.5)	2.5 (1.1)	5.3 (2.8)	.14**	.22**
Client is talking so much that volunteer can't intervene; speech waterfall	35	50	15	2.8 (0.8)	1.8 (0.9)	5.3 (3.5)	.14**	.21**
Client complains and whines	36	46	18	2.8 (0.8)	1.8 (0.9)	5.2 (3.4)	.13**	.26**
Client puts the problem with the volunteer, adopts a passive attitude, and assumes the victim role	51	40	10	2.6 (0.8)	1.9 (0.9)	5.0 (3.3)	.16**	.18**
Client doesn't listen, thinks in extremes	56	3	10	2.5 (0.7)	1.9 (0.9)	4.9 (3.2)	.11**	.27**
Client has sexual intentions with the conversation	79	18	2	2.2 (0.6)	1.9 (1.1)	4.4 (3.1)	.11**	.15**
Client tells story in which children or animals are victims	92	7	1	1.8 (0.6)	2.3 (1.2)	4.3 (2.6)	*ns*[a]	.23**
Client calls several times a day with the same story	41	45	14	2.8 (0.8)	1.5 (0.8)	4.2 (2.8)	.16**	.21**
Client has a life-threatening or serious physical illness	77	20	3	2.2 (0.6)	1.8 (0.9)	4.1 (2.3)	*ns*	*ns*
Client is under the influence of alcohol or drugs and cannot communicate properly	84	15	2	2.1 (0.5)	1.7 (0.9)	3.6 (2.3)	*ns*	.21**
Client is busy with other things during conversation	89	10	1	2.0 (0.6)	1.8 (0.9)	3.6 (2.6)	*ns*	.26**
Client tells a bizarre story that's probably not true	71	26	3	2.3 (0.6)	1.5 (0.7)	3.4 (1.9)	.13**	.14**
Client presents physical complaints, while in fact there are psychological problems	61	33	6	2.4 (0.7)	1.3 (0.6)	3.2 (1.9)	.11**	.14**
Client says he intends to mistreat someone (human or animal)	99	1	0	1.3 (0.5)	2.2 (1.4)	3.0 (2.3)	*ns*	.16**
Scale score "Work-related demands" (α=.88)						***4.4 (1.6)***	***.24****	***.33****

* Items are ordered by impact. highest impact at the top; **. Correlation is significant at the 0.01 level (2-tailed); [a] *ns* is not significant.

Table 3: Summary of descriptive statistics organization-related demands: frequency. degree of stress. and impact (product frequency and degree of stress)* and Spearman's rho correlations with Intention to Leave (ITL) and Distress (N = 543)

				Occurrence	Stressfulness	Impact	Correlation with:	
Possible range	1/2	3/4	4		1-5	1-25	ITL	Distress
	Never/ Sometimes	Regularly	Often/ Very often					
	%	%	%	Mean (SD)	Mean (SD)	Mean (SD)	r_s.	r_s
Volunteer hardly have time for a break	50	24	26	2,6 (1.3)	1.3 (1.0)	5.2 (4.4)	*ns*	.20**
There is little contact with other volunteers/employees because they work from home	54	20	26	2,6 (1.3)	1.3 (0.6)	3.5 (2.9)	.22**	.18**
Organization does not listen carefully to wishes or needs of volunteer/employee	92	5	3	1,5 (0.8)	1.5 (0.9)	2.5 (3.1)	.11**	.18**
The support teams not accessible, although there is a need for it	100	0	0	1,1 (0.4)	1.3 (0.8)	1.5 (1.5)	*ns*	*ns*
	No	Yes			Degree of stress		ITL	Distress
	%	%			1-5 Mean		Corr.[b]	Corr.[b]
The organization applies the philosophy of non-intervention	-				2.0 (1.1)	-	ns	.20**
Volunteer must work night shifts	26	74			2.0 (1.2)	-	.20**	.15**
The shifts are too long	75	25			1.5 (0.8)	-	.18**	.18**
The client is anonymous, therefore the volunteer does not know what effect the conversation has had	-				1.5 (0.8)	-	*ns*	.19**
The location of the telephone helpline is not optimal	88	12			1.3 (0.7)	-	*ns*	.16**

* Items are ordered by impact. highest impact at the top; **. Correlation is significant at the 0.01 level (2-tailed). ; [a:] *ns* is not significant; [b]. Correlation between degree of stress and ITL/Distress.

Relation between demographics and work-related variables and the impact of demands

Older volunteers and volunteers who worked more hours per week reported significantly less impact of work-related demands (Table 4). Other demographic and work-related variables showed no significant relation with the perceived impact of work-related demands.

Volunteers with more years of experience reported significantly more impact from not having time for a break (r_s = 0.16), and significantly less impact from having to do night shifts (r_s = -0.22). Older volunteers experienced significantly less impact from working long shifts (r_s = -0.17) and night shifts (r_s = -0.19). Volunteers who worked more hours per week experienced significantly less impact from working long shifts (r_s = -0.13). Female volunteers experienced significantly more impact from working night shifts (r_s = -0.22). Other demographic and work-related demands showed no significant relation with the perceived impact of organization-related demands.

Table 4: Correlations between variables and means, and standard deviations of the scale variable

		Intention to leave	Distress	Work-related demands
	Possible range	1 - 5	0 - 32	0 - 20
	Mean (SD)	4.1 (0.9)	6.3 (5.5)	4.5 (1.6)
1	Age	ns	-.14*	-.21*
2	Gender[a]	ns	ns	.12*
3	Professional training in health[b]	ns	ns	ns
4	Years of experience at the crisis line	ns	ns	ns
5	Hours per week at the crisis line	-.20*	ns	-.13*
6	Location of work[c]	ns	ns	ns

*. Correlation is significant at the 0.01 level (2-tailed). a. 1 = male, 2 = female. b. 1 = yes, 2 = no. c. 1 = always on location, 5 = always at home. d. *ns* is not significant.

Demographics and demands as determinants for volunteers' distress and intention to leave?

A summary of the multiple regression analysis of the determinants of distress is shown in Table 5. Demographics and work-related variables explained 4% of the variance of distress. Age, professional training in health, and years of experience in crisis line services were significantly associated with volunteers' distress. When the scale with work-related demands was added, the total amount of explained variance increased to 13%. By adding the organization-related demands, the total explained variance increased significantly to 16%. In particular the items: 'There is little contact with other volunteers/employees because they work from home' and 'The caller/chatter is anonymous, therefore the

volunteer does not know what effect the conversation has had' added significantly to the explanation of volunteers' distress.

Table 5: Summary of multiple regression analysis of determinants of distress (N = 543)

Model	Predictor	B	SE B	β	
1[a]	Age	-0.08	0.02	-0.15***	R^2 = 0.04, $F(6, 536)$ = 4.08**
	Professional training in health	1.01	0.49	0.09*	
	Years of experience at the CLS	0.41	0.18	0.10*	
2[b]	Age	-0.04	0.02	-0.09*	R^2 = 0.13, $F(7, 5356)$ = 11.30***
	Professional training in health	1.01	0.47	0.09*	
	Work-related demands	0.99	0.14	0.30***	
3[c]	Professional training in health	1.09	0.47	0.10*	R^2 = 0.16, $F(16, 526)$ = 6.44***
	Work-related demands	0.59	0.18	0.18***	
	... little contact with other volunteers/employees	0.19	0.08	0.10*	
	… lack of insight into effectiveness because of anonymity	0.69	0.33	0.10*	

*p < .001, **p < .01, ***p < .05

a. Predictors: Age, Gender, Professional training in health, Years of experience at the CLS, Hours per week working at the CLS, Location of work.

b. Predictors: Age, Gender, Professional training in health, Years of experience at the CLS, Hours per week working at the CLS, Location of work, Work-related demands.

c. Predictors: Age, Gender, Professional training in health, Years of experience at the CLS, Hours per week working at the CLS, Location of work, Work-related demands, Organization does not listen carefully to wishes or needs of volunteer/employee, There is little contact with other volunteers because they work from home, The support team is not accessible, although there is a need for it, Volunteer hardly has time for a break, The organization applies the philosophy of non-intervention, The identity caller/chatter is anonymous, therefore the volunteer does not know what effect the conversation has had, The shifts are too long, Volunteer/employee must work night shifts, The location of the telephone helpline is not optimal.

Table 6 shows a summary of the multiple regression a.alysis of t.e determinants of intention to leave the crisis line service. Demographics only explained 4% of the variance. Hours per week working at the crisis line service was the only significant characteristic that explained 4% of the variance of intention to leave. When the scale work-related demands was added, the total amount of explained variance increased to 8%. When organization-related demands were added, the total explained variance increased significantly to 13%. In particular the items: 'There is little contact with other volunteers/employees because they work from home' and the item 'The identity of the caller/chatter is anonymous, therefore the volunteer does not know what effect the conversation has had' added significantly to the explanation of volunteers' intention to leave.

Table 6: Summary of multiple regression analysis of determinants of intention to leave (N = 543)

Model	Predictor	B	SE B	β	
1	Hours per week at the crisis line	-0.31	0.07	-0.2	R2 = 0.04, F(5, 537) = 4.67*
2	Hours per week at the crisis line	-0.28	0.07	-0.19	R2 = 0.08, F(6, 536) = 7.37*
	Work-related demands	0.29	0.07	0.19	
3	Hours per week at the crisis line	-0.31	0.07	-0.2	R2 = 0.13, F(15, 527) = 5.18*
	…little contact with other volunteers	0.13	0.06	0.09	
	… lack of insight into effectiveness because of anonymity	0.12	0.05	0.11	
	…must working night shifts	0.1	0.03	0.14	

*p < .001, **p < .01, ***p < .05

a. Predictors: Age, Professional training in health, Years of experience at the CLS, Hours per week working at the CLS, Location of work.

b. Predictors: Age, Gender, Professional training in health, Years of experience at the CLS, Hours per week working at the CLS, Location of work, Work-related demands.

c. Predictors: Age, Gender, Professional training in health, Years of experience at the CLS, Hours per week working at the CLS, Location of work, Work-related demands, Organization does not listen carefully to wishes or needs of volunteer/employee, There is little contact with other volunteers because they work from home, The support team is not accessible, although there is a need for it, Volunteer has hardly time for a break, The organization applies the philosophy of non-intervention, The identity caller/chatter is anonymous, therefore the volunteer does not know what effect the conversation has had, The shifts are too long, Volunteer/employee must work night shifts, The location of the telephone helpline is not optimal.

DISCUSSION

Main results

This is the first study to examine comprehensively which specific demands volunteers of a crisis line service are confronted with, how often these demands occur, how stressful they are and what impact they have on the volunteers' degree of distress and their intention to leave the crisis line service. In general, it can be concluded that some work-related demands are experienced as highly stressful but do not occur often (including callers who are suicidal and callers who tell stories in which children or animals are victims). Other demands are experienced as less stressful, but are quite common (including clients with psychiatric problems and frequent callers). The work-related demands with the highest impact (combined frequency and stressfulness) are callers with psychiatric problems, followed by callers who are suicidal. Yet, the demands that were most strongly associated to volunteer's distress were callers who do not listen and think in extremes, callers who complain and whine, and callers who are busy doing other things during the conversation.

Of all included stressors, callers with psychiatric problems scored highest on perceived impact, mostly because this stressor occurs often: 86% of the volunteers indicated being regularly or often called by people with psychiatric problems. In recent years, the 'Listen Line' has detected an increase in conversations with psychiatric patients who, due to cutbacks in psychiatric care, received no (or less) treatment from their professional therapist [28]. In 2018, one-third of conversations at the Dutch 'Listen Line' were conducted with (former) clients from the mental health care sector [29]. Other studies, conducted in Ireland and Iran, indicate that approximately 25% of callers have psychiatric problems [30, 31], which is less than callers at the Dutch 'Listen Line'. In our previously mentioned qualitative study [42] some volunteers reported a sense of powerlessness with callers with psychiatric problems, because they are not able to alleviate their problems. However, other volunteers indicated that offering a listening ear to callers with psychiatric problems, made their work experience more meaningful resulting in feelings of gratitude and satisfaction. We recommend preparing new volunteers at crisis lines for the potentially high number of callers with psychiatric problems and to pay attention to the feelings of powerlessness that may arise as a result.

In the Netherlands, there is a separate crisis line for callers with suicidal ideations: 113-suicide prevention [32]. As a result, callers with suicidal ideations are not common: in our study 82% of the volunteers indicate that they rarely or never have contact with people with suicidal ideations. However, when encountered, calls discussing suicidal ideations are (very) stressful. Targeted training and guidance in dealing with callers with suicidal ideations is necessary to maintain the wellbeing of volunteers. Future research could focus on the experienced stress among volunteers who work at a telephone helpline aimed at callers with suicidal ideations. This could provide input for training in dealing with this target group.

"Frequent callers" were less common than could be expected based on previous research. In our study only 14% indicated that they often or very often were confronted with frequent callers. Previous studies have found that frequent callers represent about 3% of callers, but 60% of calls [18, 33]. Although most volunteers do not experience these frequent callers as stressful, they can cause some frustration and irritation [34, 35]. Attention during supervision for dealing with frequent callers can help to reduce frustration and irritation.

As organization related demand, the lack of opportunities to have contact with other volunteers was mentioned quite often (46%). Although this demand was not perceived as very stressful, it was (of all organization-related demands) the most strongly associated with intention to leave. Lack of contact with co-volunteers is caused by the fact that

many volunteers (49%) are working from home most of the time. As a result, volunteers may experience a lack of support or social contact. Yet, it should be noted that for some volunteers the connection with other volunteer workers is the main motivation to do the volunteer work [22, 36, 37]. Lack of contact with co-volunteers also leads to fewer opportunities to talk about experienced stress and deal with difficult situations [19]. It can even lead to a feeling of isolation among crisis line volunteers [20]. Several studies conducted during the Covid-19 pandemic have shown that working from home and the lack of contact with colleagues can lead to distress [38, 39]. Even though this is not entirely comparable to the sample of this study (volunteers can choose to work from home or from the office), it is indicative for the value of contact with co-volunteers. It is important that the organization provides opportunity for working at a common office where volunteers can meet. Also peer support activities should be encouraged to allow volunteers to share their work experiences [40].

Although the correlations between work-related demands and distress were generally low, some work-related stressors were more strongly associated with volunteers' distress: 'callers who do not listen and think in extremes' ($r = 0.27$), 'callers who are complaining and whining' ($r = 0.26$), and 'callers who are busy doing other things during the conversation' ($r = 0.26$). It is striking that these situations showed the highest correlations with distress, because as far as we know, they were not previously described in the literature. A possible explanation for the relatively high impact of these stressors may be found in the motivation of volunteers to do this work. Volunteers working at a telephone helpline often have a strong motivation to make a difference by offering meaningful support [22, 36, 37, 41]. Conversations with callers who are not open for support may be considered less meaningful and therefore less rewarding for crisis line volunteers. The issue of callers who are not open for support can be addressed in supervision meetings. Volunteers could be trained to help these callers to formulate their needs, or to accept that for some callers, complaining and whining can also be a relief. In further research into the contribution of stressors to reduction of wellbeing in crisis line volunteers, these demands should be included.

Only 18% of the respondents scored moderate or high on distress. This is lower than in other studies, where about 30% of crisis line volunteers scored moderate to high on general distress [21, 23]. The low score on distress in all studies at crisis line volunteers can possibly be explained by the fact that respondents are volunteers, who have the possibility to stop volunteering at the crisis line when they experience high distress. Because former volunteers are not included in this study, we cannot make any statements about the level of distress among them when leaving this volunteer work. Further research on volunteers who have stopped volunteering will provide important additional

information on the impact of working at the crisis line service on volunteers' mental wellbeing. Those who continue to work at the crisis line, and are thus in our sample, may be the people with high personal resources, such as self-compassionate thinking and behaviour that may prevent them from getting distressed. Another explanation for the relatively low score on distress in this study could be the available resources at the Dutch 'Listen Line', including good training, guidance, and supervision. At the Dutch 'Listen Line', potential volunteers receive extensive training, aimed at practicing difficult conversations. In addition, in the first months that they work as a volunteer, they receive guidance from a mentor, which is an experienced crisis line volunteer. Experienced volunteers also receive supervision, in which experiences with other volunteers can be exchanged [29]. Information about the positive influence of resources can help to explain why these volunteers score low on distress so that other organizations can learn from this. Further research could also focus on this type of resources.

The total of explained variance for distress was 16%. Only 4% was explained by professional training in health and being older, which has also been demonstrated earlier [23, 24]. In this study, no association was found between gender and the degree of distress. Another study showed that women experienced a higher degree of distress than men [23]. Other causes of distress could come from personal events outside the crisis line service, or low perception of organizational and personal resources. This is beyond the scope of this study.

The low total of explained variance of intention to leave (13%) may reflect the fact that volunteers could have many other reasons than negative experiences to leave the crisis line service, such as moving, changing jobs, training, or babysitting grandchildren. However, these variables were not included in this study. To understand why the explained variance by work-related stressors on intention to leave is low, further (qualitative) research into the reasons why people have the intention to stop volunteering is required.

Strengths and limitations

This is the first study that provides insight into the occurrence and perceived stressfulness of a wide range of demands and their relationship with distress and intention to leave. The sample size of this study was much larger than other studies and was representative for the population in terms of age and gender. The design of our questionnaire (work-related demands) was based on a systematic review [8] and a qualitative study [42] and showed good internal consistency. The factor analysis showed that all items of the work-related demands loaded on one single factor and the instrument scored excellently on reliability. Therefore, the questionnaire can be used in further research into work-related demands among crisis line volunteers.

This study also has some important limitations: First, the study design is cross-sectional, which makes it impossible to establish a causal relationship between demands and intention to leave or distress. The second limitation is that the questionnaire has only been completed by respondents who are still volunteering at the crisis line service. It is possible that people who have experienced a lot of distress through volunteering at the crisis line service, already have stopped this voluntary work and are therefore not in the sample.

Conclusion

Our study shows that many volunteers at a crisis line service experienced some distress, but one in seven reported moderate to high distress. Callers who are difficult to reach and who are not open to support are most strongly associated with volunteers' distress. Having little time for a break and adopting the philosophy of non-intervention are the organization-related demands most strongly associated with distress. Having little contact with fellow volunteers is most strongly correlated with intention to leave. Since volunteers are essential for the continuity of the crisis line services, it is of great importance that the organization management pays attention to these demands through training and supervision, in order to support distressed volunteers in adopting effective coping skills. In addition, it is important that the organization prepares potential volunteers for the topics they will face; and regularly organizes peer support activities aimed at connecting volunteers and share their work-experiences. Further research into the role of organization-related and personal resources can help explain why a large group of volunteers scores low on distress, but can also provide input for developing training courses and interventions aimed at increasing personal resources for volunteers with higher levels of distress.

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5

Further validation of the Sussex Oxford Compassion for the Self Scale (SOCS-S) in samples of crisis line volunteers, military personnel and nursing students

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Submitted

ABSTRACT

Background: Self-compassion is considered an important, transdiagnostic factor for mental health. The Sussex Oxford Compassion for the Self Scale (SOCS-S) is a recently developed comprehensive measure of self-compassion, that was found to have promising psychometric properties among health care staff and university students in the initial validation study.

Objective: The aim of this study is the further psychometric evaluation of the SOCS-S in different populations and settings.

Method: The SOCS-S was administered in three different Dutch samples (crisis line volunteers [n = 560], military personnel [n = 244] and nursing students [n = 255]).

Results: The results confirm the five-factor structure of the SOCS-S and its reliability and concurrent and construct validity across the samples. Measurement invariance was demonstrated for gender but not for different age groups and professions. Finally, the SOCS-S was found to explain additional variance in mental health in comparison to a widely used self-compassion measure.

Conclusion: The SOCS-S was found to be a reliable and valid questionnaire that can be used to measure all five elements of self-compassion. Further research into the comparability of self-compassion measured with the SOCS-S between different groups is needed.

INTRODUCTION

Mental illness has been estimated to affect about 20% of the adult population each year [1], and is one of the leading causes of disability worldwide [2]. Furthermore, research supports the notion that individuals free of mental illness do not necessarily experience mental wellbeing [3]. Mental wellbeing and mental illness appear to represent two related but distinct continua of mental health, instead of the extreme ends of one single continuum. Research suggests that about one in five adults is free of mental illness but also experiencing suboptimal wellbeing, i.e. non-flourishing [4]. It has also been found that people with mental illness and people with suboptimal wellbeing experience similar levels of disability. Both groups report considerably reduced life-satisfaction, more limitations in daily life activities and more loss of (or cutback on) workdays than people with complete mental health [4].

Due to the high prevalence of mental health issues and their personal and societal consequences, there is growing interest in transdiagnostic factors that underlie and maintain mental illness and a lack of flourishing. One relevant transdiagnostic factor is self-compassion [5,6]. Self-compassion can be defined as a supportive and adaptive way of responding to oneself in times of pain or difficulty. Neff (2003) discerns three components of self-compassion: (1) being kind and understanding instead of harsh lycriticial, (2) being mindfully aware of the pain or difficulty instead of shutting it out, and (3) recognizing the common humanity of pain and difficulty and feeling unified with other human beings because of it instead of experiencing feelings of isolation [7]. Other authors have not offered a separate definition for self-compassion but instead assume that self-compassion is part of the larger construct of compassion, that includes both self- and other-directed compassion. Gilbert (2009), for example, defines compassion as a sensitivity to suffering coupled with the motivation to prevent or relieve it and proposes six key elements: sensitivity, care for wellbeing, sympathy, empathy, non-judgement, and distress tolerance [8]. Finally, Feldman and Kuyken (2011) define compassion as an orientation of mind that recognizes pain and the universality of pain in human experience and the capacity to meet that pain with kindness, empathy, equanimity and patience [9].

In the past years many studies found evidence for a negative relationship between self-compassion and distress or mental illness in response to stressful circumstances [6,10-15]. Other studies demonstrated a relationship between self-compassion and various indicators of mental wellbeing such as subjective wellbeing, life-satisfaction, job-satisfaction, social connectedness and emotional intelligence [5,7,13,16-18]. The positive relationship between self-compassion and mental health can be explained

by various processes such as adaptive emotion regulation [19], self-reassurance [20], self-regulation and goal setting [7,21,22]. There is also a growing body of evidence demonstrating the effects of compassion-based interventions on mental health [23-25].

However, an important issue in self-compassion research is the variety of conceptualizations of this construct, and the lack of measures that comprehensively capture it [26]. Widely used measures of self-compassion are the Self-Compassion Scale (SCS) [27] and its short form variant (SCS-SF) [28], measuring six dimensions of self-compassion (i.e. Self-Kindness, Self-Judgment, Common Humanity, Isolation, Mindfulness, and Over-Identification). However, these instruments have been subject of discussion [29-34]. One of the reasons for this discussion is that the six-factor structure of the SCS could not always be confirmed in empirical studies. It has been argued that the SCS and the SCS-SF rather reflect two dimensions: a negative dimension, 'self-criticism', and a positive dimension, 'self-compassion' [30,31,35-37]. Some authors have argued that especially the latter, positive dimension, measures 'true' self-compassion [30,31]. Another measure of self-compassion, the self-compassion subscale of the Relational Compassion Scale (RCS) [38] only focuses on two very specific aspects of self-compassion, namely emotionally connecting with suffering and acting to help [26].

In an effort to unite different conceptualizations and measurements of self-compassion, Strauss and colleagues (2016) conducted a review of the various conceptualizations of compassion and based on this review defined compassion, referring to both self-compassion and compassion to others, as a cognitive, affective and behavioural process consisting of (1) recognizing suffering, (2) understanding the universality of suffering in human experience, (3) feeling empathy for the person suffering and connecting with the distress, (4) tolerating uncomfortable feelings aroused in response to the suffering person, and (5) motivation to act to alleviate suffering. Based on factor-analytic examinations Gu and colleagues (2020) found preliminary support for the five-element definition using a combination of existing and newly generated self-report items. Based on this study, the 20-item Sussex-Oxford Compassion for Others scale and the Sussex-Oxford Compassion for the Self scale (SOCS-S) were developed. Evidence for the five-factor structure and adequate reliability and construct validity was found in samples of healthcare staff and university students [39]. The authors noted, however, that the scales required further testing and cross-validation in other relevant populations [39].

The first aim of the current study was to further examine the factor-structure, reliability and validity of the SOCS-S. Replication of the initial findings on the psychometric properties of a newly developed questionnaire in different countries and populations and using different validation questionnaires is warranted and will contribute to the

evidence-base for the reliability and construct validity of a questionnaire. In our study the SOCS-S was administered in three different samples: crisis line volunteers, soldiers and nursing students.

The second aim was to assess measurement invariance of the SOCS-S across the three samples and with regard to gender and age. It is important to assess measurement invariance for a questionnaire, because this indicates whether a questionnaire measures the same construct in the same way across different groups. Measurement invariance is for example assessed by testing whether factor loadings, intercepts and residual variances are equivalent across different groups. Measurement invariance is an important statistical property of a questionnaire because it is a prerequisite for comparing questionnaire scores across groups [40].

The third aim was to explore the extent to which the SOCS-S adds to the SCS-SF in terms of explaining additional variance in mental wellbeing and mental distress. If the SOCS-S explains additional variance over and above the SCS-SF, this offers support for the incremental validity of the SOCS-S, with respect to mental wellbeing and mental distress. Furthermore, examining the five different subscales of the SOCS-S, and the extent to which they uniquely contribute to the SCS-SF, could provide additional insight into the relative relevance of the five factors with respect to mental well-being and mental distress.

METHODS

Participants and procedure

Data for the current study were derived from three research projects, focusing on exploring the relationship of self-compassion and mental health in three different populations: crisis line volunteers, military personnel, and nursing students. These populations were chosen because of their differences in composition and characteristics. Volunteers carry out their task unpaid and on a voluntary basis, for a few hours a week. Military personnel perform their work professionally, sometimes 24/7. Nursing students (first year) are still in training, they are generally younger than the participants in the other populations and have not yet worked in professional practice. On the other hand, these populations can also be assumed to share an important common characteristic: a strong (social) sense of responsibility and service. Crisis-line volunteers and soldiers are regularly confronted with the suffering of others. At this stage of their training, nursing students are generally not yet directly confronted with suffering, but indirectly through reading case histories, talking to qualified nurses, and talking to patients from various sectors (general hospital,

nursing homes and psychiatric hospitals). The studies were approved by the ethical committee of the Faculty of Behavioural, Management and Social Sciences (BMS) of the University of Twente (approval number: 190943).

Sample 1: Crisis line volunteers (n = 560)

The first sample consisted of volunteers from the 'Listen line', a Dutch crisis line service, run by 1400 crisis line volunteers. These volunteers are trained to provide a non-judgmental, active listening service to callers; people who cannot or do not want to use professional care [41]. All crisis line volunteers of the 'Listen line' (*N* = 1405) received a link to the questionnaire by e-mail from their management. The respondents were informed about the aims of the survey and provided active (online) informed consent. After the respondents had given their consent, they continued to fill out the (anonymous) questionnaire. The questionnaire was completed by 560 volunteers (response rate 40%). The mean age of this group was 63 years (*SD* = 11) and a majority (72%) was female.

Sample 2: Military personnel (n = 244)

The second sample consisted of military personnel. A sample of 1200 soldiers was randomly selected from the personnel file of the Dutch ministry of Defense. These 1200 soldiers received an email with a link to the questionnaire. The questionnaire was preceded by an information letter and consent form that required active online consent. Only those respondents that provided consent were able to continue to the questionnaire. The questionnaire was completed by 244 soldiers (response rate 20%). The mean age in the total sample was 44 years (*SD* = 10.5) and 85% were male.

Sample 3: Nursing students (n = 255)

The third sample consisted of first year nursing students, recruited from the Rotterdam University of Applied Sciences. All students received a link to the questionnaire (*N* = 624) The students were informed about this study by letter. Students could indicate in the questionnaire whether the results could be used for research. The questionnaire was fully completed by 255 students (response rate 41%). The mean age of this group was 19 years (*SD* = 4) and 92% were female. After completing the questionnaire, students could print out their own scores and discuss them with their study coach.

Measures

Self-compassion

Self-compassion was measured with two questionnaires that were administered in each of the three samples.

Sussex-Oxford Compassion for the Self Scale (SOCS-S)

The SOCS-S [39] is a 20-item self-report measure, designed to assess self-compassion. The SOCS-S contains five subscales and items are scored on a 5-point Likert scale, ranging from 1 (almost never) to 5 (almost always). Appendix 1 provides an overview of these subscales and their items. Gu et al. (2020), together with experts from different countries and continents, formulated items for the questionnaire based on the definition of Strauss et al. (2016). After confirmatory factor analysis (CFA) confirmed the presence of the five theorized elements of compassion, they reduced the number of items, choosing four items with the highest factor loadings per element of self-compassion: (1) Recognizing suffering, (2) Understanding the universality of suffering, (3) Feeling for the person suffering, (4) Tolerating uncomfortable feelings, and (5) Acting or being motivated to act to alleviate suffering. Besides a good fit for a correlated five-factor model, a five-factor hierarchical model also proved to fit the data well, indicating that the five factors in turn load on an overarching self-compassion factor. The psychometric quality of both the SOCS-S total scale, as well as the subscales were supported by the findings of the validation study, in terms of internal consistency, interpretability, absence of floor and ceiling effects, and convergent and discriminant validity.

Self-compassion Scale-Short Form (SCS-SF)

The SCS-SF [28] is a 12-item self-report measure designed to assess self-compassion. The SCS-SF is the shortened version of the original Self Compassion Scale (SCS) that contains 26 items [28]. Confirmatory factor analysis on the SCS–SF supported a hierarchical model, representing a a single higher-order factor of general self-compassion consisting of six second-order factors (self-kindness; self-judgement; common humanity; isolation; mindfulness; over-identification) [28]. The SCS–SF showed to be a reliable and valid alternative to the long-form SCS, especially when looking at overall self-compassion scores. Items are scored on a seven-point Likert scale, ranging from 1 (almost never) to 7 (almost always). In the current study, a Cronbach's α coefficient of 0.79 was obtained for the crisis line volunteers, 0.83 for the millitairy personnel, and 0.81 for the nursing students, indicating fair to good internal consistency. For the positive items of the SCS-SF, a Cronbach's α of 0.73 was found for crisis line volunteers, 0.82 for soldiers, and 0.78 for nursing students. For the negative items of the SCS-SF, a Cronbach's α of 0.83 was found for the crisis line volunteers, 0.85 for the soldiers, and 0.87 for the nursing students.

Distress

Distress was measured with a different questionnaire in each sample, because data for the current study was drawn from three separate studies.

Subscale distress of the Four-Dimensional Symptom Questionnaire (4DSQ; sample 1)

The subscale distress of the 4DSQ [42] contains 16 items that are scored on a five-point Likert scale, ranging from 1 (never) to 5 (always). This scale was completed in the sample of crisis line volunteers. A Cronbach's α coefficient of 0.89 was obtained for this sample, indicating good internal consistency.

Perceived Stress Scale (PSS; sample 2)

The PSS [43] is a 10-item self-report measure designed to measure the degree to which participants appraise situations in their lives as stressful. Items are scored on a 5-point Likert scale, ranging from 0 (never) to 4 (very often). This scale was completed in the sample of military personnel. A Cronbach's α coefficient of 0.69 was obtained for this sample, indicating insufficient reliability according to Cicchetti [44]. After removing item 7 ('how often have you been able to control irritations in your life?'), Cronbach's α coefficient was raised to .80. Analyses were conducted with the 9-item version.

Distress Screener (DS; sample 3)

The Distress Screener [45] contains 3 items that are scored on a 3-point Likert scale, ranging from 0 (no) to 2 (regularly/often). This screener was completed in the sample of nursing students. A Cronbach's α coefficient of 0.78 was obtained for this sample, indicating acceptable internal consistency.

Mental wellbeing

Mental Health Continuum-Short Form (MHC-SF; samples 1 and 2))

The MHC-SF [46] is a 14-item self-report measure that is designed to assess mental well-being. Some sample items are: "During the past month, how often did you feel happy?", and "During the past month, how often did you feel confident to think or express your own ideas and opinions?" Items are rated on a 6-point response scale (never, once or twice a month, about once a week, two or three times a week, almost every day, every day). This measure was completed in both the sample of crisis line volunteers and the sample of military personnel. In the sample of crisis line volunteers, a 5-point Likert scale was mistakenly used, omitting the answer 'two or three times a week'. Nevertheless, a good Cronbach's α coefficient of 0.89 was obtained for the total scale. Therefore, we decided to include the results that were obtained in our analyses. For the sample of military personnel, a Cronbach's alpha coefficient of 0.92 was obtained for the total scale, indicating excellent internal consistency.

Utrecht Student Engagement Scale (UBES-S-9; sample 3)

The UBES-S-9 [47] is a 9-item self-report measure of study engagement. Items are rated on an 7-point Likert scale from 0 (never) to 6 (always). This measure was completed in

the sample of nursing students. A Cronbach's α coefficient of 0.85 was obtained for this sample, indicating good internal consistency.

Translation process of the SOCS-S

To cross-culturally translate the SOCS-S into Dutch, the forward-backward translation method was used [48]. In stage 1, three of the authors independently provided a Dutch translation of the SOCS-S. In stage 2 the three authors discussed the three translations from stage 1 to reach consensus on one common translation. In stage 3 a native English speaker, who was blinded to the original English version of the SOCS-S, translated the Dutch translation from stage 2 back into English. In stage 4, the forward and backward translation were compared, and differences were discussed by the four translators and an expert on the concept of self-compassion to reach consensus on the final Dutch translation of the SOCS-S.

Statistical analyses

Statistical analyses were conducted using SPSS version 26 and AMOS version 25.

Psychometric properties

To examine the underlying *factor structure*, confirmatory factor analysis (CFA) was conducted using the same three models tested by Gu et al. (2020): (a) a single factor model in which all items are direct indicators of self-compassion, to examine whether the items measure a strictly unidimensional construct; (b) a correlated five-factor model, with items loading on their respective factor from the five proposed elements of compassion; and (c) a five-factor hierarchical model, to examine the degree to which the five factors are elements of an overarching construct of self-compassion. A plausible model has low, preferably non-significant, chi-square (χ^2) values. However, the χ^2 test is overly sensitive to misfit when the sample size is large (>200), causing difficulty in obtaining non-significant levels [49]. Therefore, three additional fit indices were used to indicate model fit: (1) Root Mean Square Error of Approximation (RMSEA): the estimation error divided by the degrees of freedom as a penalty function, (2) Standardized Root Means Square Residual (SRMR): a scale invariant index for global fit, and (3) Comparative Fit Index (CFI): a comparison of the independent model (i.e., observed variables are unrelated) to the estimated model, taking sample size into account. These fit indices may each be influenced by numerous factors, such as sample size, data distribution and model complexity and specifications [50]. Therefore, we used both liberal and conservative cut-off points for acceptable fit for the CFI, RMSEA, and SRMR: the CFI should be close to or greater than .90 (liberal) or .95 (conservative), RMSEA should be .10 or less (liberal) or .06 or less (conservative), and SRMR should be less than .10 (liberal) or .05 (conservative) [49].

Internal consistency was assessed for both the total scale and the subscales, using Cronbach's alpha (α). Because Cronbach's α underestimates reliability when items are not tau-equivalent (i.e., do not have equal factor loadings) [51,52], McDonald's omega (ω) was also calculated, as it provides a more realistic estimate of the reliability of congeneric measures. Internal consistency was considered adequate when above .70 [44].

Concurrent validity was tested by examining the correlation between the SOCS-S and the SCS-SF. The SCS-SF is one of the most widely used instruments to measure self-compassion. Since the SOCS-S was designed to measure the construct of self-compassion as well, we expected strong correlations (>.50) between the SCS-SF and the SOCS-S. Furthermore, in response to recent evidence suggesting a two-factor structure of the SCS-SF, namely self-compassion (positive items) and self-criticism (negative items), we explored the correlations between the SOCS-S and these two factors of the SCS-SF [35,37].

Convergent validity was tested by examining the pattern of correlations between the SOCS-S and the scales to measure mental wellbeing (MHC-SF, UBES-S-9), and the scales to measure distress (4DSQ, PSS and the DS). Based on evidence for a moderate positive correlation between self-compassion and mental wellbeing and engagement [5], we hypothesized moderate positive correlations between scores on the SOCS-S and scores on scales that measure mental wellbeing (MHC-SF and the UBES-S-9). Based on evidence for a moderate negative correlation between self-compassion and distress [53], we hypothesized moderate negative correlations between scores on the SOCS-S and scores on the scales that measured distress (4DSQ, PSS and DS).

Measurement invariance

To assess measurement invariance of the best fitting model, three multi-group CFA analyses were performed regarding the three different samples: males and females, and age classes (Group 1: under 17 years (n = 164); Group 2: 20 - 25 years (n = 97); Group: 26 - 49 years (n = 197); Group 4: 50 - 64 years (n = 291); Group 5: over 65 years (n = 305)). The following four increasingly stringent factor models were tested in the multi-group analyses:

1. Unconstrained model (configural invariance): This baseline model fits the basic model structure across the respective groups simultaneously and has no restrictions on estimated parameters across groups.
2. Model A: Invariant measurement weights (metric invariance). This model tests possible differences on the measurement models. For this, measurement weights (i.e., factor loadings) were fixed to be equal across the groups.

3. Model B: Invariant measurement weights and intercepts (scalar invariance). In this model both measurement weights and measurement intercepts (i.e., mean values) were fixed to be equal across groups.
4. Model C: Invariant measurement weights, intercepts, and structural covariances (measurement and structural invariance). This model tests both possible changes on the measurement and the structural models. In this model measurement weights, measurement intercepts, and structural covariances (i.e., correlations between factors) were fixed to be equal across groups.

Tested is whether at each level of invariance a more stringent model still has an acceptable/good fit, and not significantly worse fit than the previous less stringent model. For the multigroup analysis, the same fit indices and criteria were used as for the CFA analyses. Because χ^2 difference tests ($\Delta\chi^2$) are sensitive to sample size, this test was only used for descriptive purposes, and the absence of relevant changes in CFI values (ΔCFI > .01) between increasingly restrictive models was seen as evidence for sufficient measurement invariance [54].

5

Incremental validity

Finally, a set of hierarchical block wise multiple regression analyses were conducted to explore whether the SOCS-S could add significantly to the prediction of mental wellbeing and distress, over and above the SCS-SF.

RESULTS

Psychometric properties

Confirmatory factor analyses

CFA analyses were conducted to examine the degree to which the three defined factor models fit the data in each sample. The fit indices of the four CFA models are shown in Table 1. In all three samples, both the correlated five-factor model and the five-factor hierarchical model showed acceptable fit according to the liberal fit indices, with the five-factor model showing a slightly better fit than the five-factor hierarchical model. As expected, the one-factor model demonstrated a poor fit in all three samples, suggesting that the items of the SOCS-S are not direct indicators of a unidimensional self-compassion factor. In both the five-factor model (range .48 - .90) and the five-factor hierarchical model (range .47 - .90), all standardized factor loadings were strong and significant (Table S1, supplementary material).

Table 1: Fit indices for the self-compassion models tested in three samples

Sample	Model	X^2, (df)	RMSEA [90% CI]	SRMR	CFI
Crisis line volunteers (*N* = 580)	One-factor	2087.2 (170)	0.14 [0.14-0.15]	0.11	0.73
	Five-factor	603.5 (160)	**0.07 [0.07-0.08]**	**0.05**	**0.94**
	Five factor-hierarchical	708.4 (165)	**0.08 [0.07-0.08]**	**0.07**	**0.92**
Military personnel (*N* = 244)	One-factor	747.9 (170)	0.12 [0.11-0.13]	0.08	0.81
	Five-factor	393.0 (160)	**0.08 [0.07-0.09]**	**0.05**	**0.92**
	Five factor-hierarchical	435.7 (165)	**0.08 [0.07-0.09]**	**0.07**	**0.91**
Nursing students (*N* = 255)	One-factor	852.4 (170)	0.13 [0.11-0.13]	0.11	0.73
	Five-factor	357.8 (160)	**0.07 [0.06-0.08]**	**0.06**	**0.92**
	Five factor-hierarchical	378.0 (165)	**0.07 [0.06-0.08]**	**0.07**	**0.92**

Note. The numbers in bold indicate a good fit

Table 2: Pearsons correlations between self-compassion subscales in three samples

		UU[b]	FS[c]	TF[d]	AA[e]
SOCS-S RS	Crisis line volunteers (N = 560)	0.47***	0.53***	0.55***	0.48***
	Military personnel (N = 244)	0.53***	0.65***	0.67***	0.60***
	Nursing students (N = 255)	0.35***	0.33***	0.32***	0.30***
SOCS-S UU	Crisis line volunteers (N = 560)		0.38***	0.43***	0.35***
	Military personnel (N = 244)		0.46***	0.50***	0.44***
	Nursing students (N = 255)		0.30***	0.32***	0.29***
SOCS-S FS	Crisis line volunteers (N = 560)			0.80***	0.84***
	Military personnel (N =244.)			0.84***	0.89***
	Nursing students (N = 255)			0.78***	0.87***
SOCS-S TF	Crisis line volunteers (N = 560)				0.74***
	Military personnel (N = 244)				0.79***
	Nursing students (N = 255)				0.73***

a. RS = Recognizing suffering. b. UU = understanding universality. c. FS = Feeling one's own suffering. d. TF = Tolerating feelings. e. AA = action to alleviate suffering.
***p < .001

Pearson correlations among the subscales were moderate to strong and significant across the different samples (Table 2). The factor loadings were very similar in both the correlated five-factor and hierarchical five-factor models (Table S1).

Internal consistency

Omega total estimates ranged from .91 to .95 for the total SOCS-S scale and from .68 to .88 for the SOCS-S subscales across the samples (Table 3). Cronbach's alpha values were similar to the omega values. Observed values were all adequate for measures of psychological constructs, with the exception of the reliability estimates (for the recognizing suffering subscale (α = .67, ω = . 68) in nursing students.

Table 3: Cronbach's alpha and McDonalds omega total coefficients for SOCS-S Scale and subscales in all validation samples

	Crisis line volunteers (N = 560)		Military personnel (N = 244)		Nursing students (N = 255)	
	alpha	omega	alpha	omega	alpha	omega
SOCS-S total scale	0.94	0.94	0.94	0.95	0.91	0.91
SOCS-S RS	0.82	0.82	0.81	0.82	0.67	0.68
SOCS-S UU	0.86	0.86	0.80	0.80	0.83	0.83
SOCS-S FS	0.85	0.85	0.85	0.85	0.83	0.84
SOCS-S TF	0.85	0.85	0.82	0.83	0.76	0.76
SOCS-S AA	0.87	0.88	0.88	0.88	0.83	0.85

a. RS = Recognizing suffering. b. UU = understanding universality. c. FS = Feeling one's own suffering. d. TF = Tolerating feelings. e. AA = action to alleviate

Concurrent and construct validity

Table 4 shows the correlations between the results on the SOCS-S (both the SOCS-S total scores and the subscale scores) and an existing and often used measure of self-compassion (SCS-SF), different measures of mental wellbeing and different measures of distress.

As hypothesized, strong and significant positive correlations were demonstrated between SOCS-S total scores and SCF-SF total scores, ranging from .59 to .75 in all three samples. The subscales 'recognizing suffering' and 'understanding the universality' of the SOCS-S demonstrated the lowest correlations with the SCS-SF.

Furthermore, correlations between the SOCS-S total scale and the 'self-compassion' factor of the SCS-SF were shown to be larger (r = .54 to r = .70 in the three different samples) than correlations with the 'self-criticism' factor of the SCS-SF (r = .39 to r =.53 in the three different samples).

As expected, moderate and significant positive correlations between SOCS-S total scores and scores on the MHC-SF and UBES-S-9 were found, ranging from .28 to .41. Furthermore, scores on the subscales of the SOCS-S demonstrated significant positive correlations with scores on the MHC-SF and the UBES-S-9 ranging from .14 to .41. The subscales 'recognizing suffering' and 'understanding universality' of the SOCS-S demonstrated the lowest correlations with the MHC-SF and the UBES-S-9.

Moderate significant negative correlations were found between SOCS-S total scores and distress in the sample of military personnel (r = -.35) and the sample of nursing students (r = -.36). A small but significant negative correlation was demonstrated between SOCS-S

Table 4: Correlations coefficients between total scores on the SOCS-S and subscales with SCS-SF (and subscales), mental wellbeing (and subscales) and distress

				Self-compassion			Mental wellbeing		Distress		
		Age	Gender[f]	SCS-SF Total scale	SCS-SF Positive	SCS-SF Negative	MHC-SF Positive mental health	UBES-S Engagement students	4DCL	PSS	Distress screener
SOCS-S total	Crisis line volunteers (N = 543)	.06	.08	.59**	.54**	-.43**	.41**		-.28**		
	Military personnel (N = 244)	.15*	.03	.75**	.70**	-.53**	.35**			-.35**	
	Nursing students (N = 255)	.10	-.06	.64**	.68**	-.39**		.28**			-.36**
SOCS-S RS[a]	Crisis line volunteers (N = 543)	.02	.12**	.27**	.32**	-.13**	.17**		-.10*		
	Military personnel (N = 244)	.12	.02	.55**	.51**	-.36**	.24**			-.24**	
	Nursing students (N = 255)	.01	.10	.18**	.18**	-.12*		.18**			.07
SOCS-S UU[b]	Crisis line volunteers (N = 543)	.00	.05	.29**	.38**	-.12*	.21**		-.03		
	Military personnel (N = 244)	.12	-.01	.48**	.49**	-.28**	.25**			-.23**	
	Nursing students (N = 255)	.12	-.05	.37**	.43**	-.15*		.14*			-.10
SOCS-S FS[c]	Crisis line volunteers (N = 543)	.07	.05	.62**	.49**	-.50**	.41**		-.31**		
	Military personnel (N = 244)	.11	-.02	.70**	.64**	-.52**	.34**			-.32**	
	Nursing students (N = 255)	.09	-.09	.63**	.65**	-.42**		.21**			-.43**
SOCS-S TF[d]	Crisis line volunteers (N = 543)	.10*	-.05	.60**	.49**	-.47**	.40**		-.33**		
	Military personnel (N = 244)	.20**	.06	.73**	.71**	-.52**	.32**			-.36**	
	Nursing students (N = 255)	.08	-.07	.59**	.62**	-.38**		.24**			-.39**
SOCS-S UU[e]	Crisis line volunteers (N = 543)	.05	,07	.57**	.46**	-.45**	.41**		-.32**		
	Military personnel (N = 244)	.09	-.06	.68**	.61**	-.52**	.34**			-.32**	
	Nursing students (N = 255)	.07	-.07	.58**	.63**	-.36**		.28**			-.44**

a. RS = Recognizing suffering. b. UU = understanding universality. c. FS = Feeling suffering. d. TF = Tolerating feelings. e. AA = action to alleviate suffering. f. Gender: 1 = man, 2 = woman, 3 = other. **p < .01, *p < .05.

total scores and distress in the sample of crisis line volunteers (*r* = -.28). The subscales of the SOCS-S demonstrated small to moderate but significant negative correlations with distress ranging from -.10 to -.44. The subscales 'recognizing suffering' and 'understanding universality' of the SOCS-S demonstrated the lowest correlations with distress. These findings are in line with the hypotheses.

Measurement invariance

Multi-group analyses were conducted to examine the measurement invariance between the three different samples, between men and women, and between different age groups for the correlated five-factor model, as this model showed the best fit across the samples. Table 5 shows the results of these multi-group analyses.

Table 5: Three multi-group analyses in: the different samples, gender, and age.

	Results of the multi-group analysis: different samples									
	Model	X^2	df	X^2/df	ΔX^2	Δdf	CFI	ΔCFI	RMSEA [IC 90%]	SRMR
Five-factor model	Unconstrained	1354.37	480	2.82			.93		.042 [.039 – .044]	.05
	Model A	1397.29	510	2.74	42.93	30	.93	.001	.041 [.038 - .043]	.05
	Model B	1765.89	550	3.21	368.59***	40	.90	.026	.046 [.043 - .048]	.05
	Model C	1875.89	580	3.23	110.00***	30	.90	.006	.046 [.044 - .048]	.07
	Results of the multi-group analysis: man and woman									
	Model	X^2	df	X^2/df	ΔX^2	Δdf	CFI	ΔCFI	RMSEA [IC 90%]	SRMR
Five-factor model	Uncon-strained	1167.67	320	3.65			.94		.050 [.047 - .053]	.05
	Model A	1194.45	335	3.57	26.78*	15	.93	.001	.049 [.046 - .052]	.05
	Model B	1309.45	355	3.69	114.99***	20	.93	.007	.051 [.048 - .053]	.05
	Model C	1358.10	370	3.67	48.66***	50	.92	.003	.050 [.048 - .053]	.05
	Results of the multi-group analysis: age group									
	Model	X^2	df	X^2/df	ΔX^2	Δdf	CFI	ΔCFI	RMSEA [IC 90%]	SRMR
Five-factor model	Unconstrained	1848.18	800	2.31			.92		.035 [.033 - .037]	.07
	Model A	1933.60	860	2.25	85.42*	60	.91	.002	.034 [.032 - .037]	.07
	Model B	2330.17	940	2.48	481.99***	140	.89	.025	.038 [.036 - .039]	.10
	Model C	2495.74	1000	2.50	647.56***	200	.88	.008	.038 [.036 - .040]	.10

Model A = measurement weights. Model B = measurement intercepts. Model C = Structural covariances.
***p < .001, p < .05.

The multigroup analysis to examine measurement invariance between the three different samples revealed that the $\Delta\chi^2$ test of model A was not significant and that the $\Delta\chi^2$ of models B and C were significant, indicating that invariance is supported on measurement weights but not supported on measurement intercepts and structural covariances. The ΔCFI is was also only smaller than .01 on model A, indicating that only metric invariance was supported.

For men and women the $\Delta\chi^2$ test was signifant for models A, B and C. However, as the ΔCFI was lower than .01 for all increasingly stringent models, it can be assumed that there is no relevant measurement variance for men and women.

Between different age groups the $\Delta\chi^2$ tests for models A, B and C were significant. The ΔCFI was however lower than .01 on model A, indicating that the invariance is supported on measurement weights, but not on measurement intercepts and structural covariances.

Incremental validity

To examine whether the SOCS-S adds to the SCS-SF in terms of explained variance of mental wellbeing (crisis line volunteers and soldiers) and engagement (nursing students), hierarchical block wise multiple regression analyses were conducted in which the SCS-SF was entered in the first step, and the subscales of the SOCS-S were entered in the second step (Table 6). The results revealed that the SOCS-S added significantly to the SCS-SF in terms of explained variance of positive mental health in the samples of crisis line volunteers and military personnel. Among crisis line volunteers, the explained variance of mental wellbeing increased by 6% from 17% to 23%. Among military personnel,

Table 6: Summary of multiple regression analysis of the added value of the SOCS-S (subscales) on positive mental health.

	Model		β	R^2	R^2_{change}	*F (df1, df2)*
Crisis line volunteers	1	SCS-SF	.41***	.17		(1, 558) = 112.5***
	2	SCS-SF	.20***	.23	.06	(5, 553) = 27.2)***
		SOCS-S RS	-.10*			
		SOCS-S UU	.06			
		SOCS-S FS	.07			
		SOCS-S TF	.13			
		SOCS-S AA	.17*			
Military personnel	1	SCS-SF	.36***	.13		(1, 242) = 35.81***
	2	SCS-SF	.21*	.15	.02	(5, 237) = 7.00***
		SOCS-S RS	-.04			
		SOCS-S UU	.08			
		SOCS-S FS	.07			
		SOCS-S TF	.01			
		SOCS-S AA	.11			

a. SCS-SF = Self-Compassion Scale Short Form. b. SOCS-S = the Sussex Oxford Compassion for the Self Scale. c. SOCS-RS = subscale SOCS-S recognizing suffering. d. SOCS-UU = subscale SOCS-S understanding universality of suffering. e. SOCS-FS = subscale SOCS-S feeling one's own suffering. f. SOCS-TF = subscale SOCS-S tolerating uncomfortable feelings. g. SOCS-AA = subscale SOCS-S acting or being motivated to act to alleviate suffering.
***p < .001. **p < .01. *p < .05.

the explained variance of mental wellbeing increased by 2%, from 13% to 15%. Among crisis line volunteers, the subscales 'recognizing suffering' and 'acting or being motivated to act to alleviate suffering' in particular appeared to have added value as independent explaining variables. For military personnel, the subscales of the SOCS-S appeared to have added value in total, but none of the subscales contributed significant to the explained variance of mental wellbeing. In the sample of nursing students the SOCS-S demonstrated no added value with regard to explained variance of engagement.

To examine whether the SOCS-S added to the SCS-SF in terms of explained variance of distress, three additional hierarchical multiple regression analyses were applied, again with the SOCS-S subscales added in step 2. The results revealed that the SOCS-S did not add to the SCS-SF with regard to explained variance of distress in any of the three samples.

DISCUSSION

The current study focused on the psychometric assessment of the Sussex-Oxford Compassion for the Self Scale (SOCS-S) [39], a recently developed, comprehensive measure of self-compassion. In the current study the SOCS-S was administered in three different samples: crisis line volunteers, military personnel and nursing students. The aims of the current study were (1) to assess the factor structure, reliability and construct validity of the SOCS-S in each sample, (2) to assess measurement invariance of the SOCS-S across different groups, and (3) to explore the extent to which the SOCS-S adds to the SCS-SF in terms of explaining mental wellbeing and distress.

First, with regard to the factorial validity of the SOCS-S, confirmatory factor analyses showed support for the proposed five factor structure of the SOCS-S. As in the original study by Gu et al. (2020), both the correlated first-order and the hierarchical five-factor model adequately fitted the data in all three samples. Also, we found adequate to excellent internal consistency of the total scale and subscales. One exception concerns the internal consistency of the subscale 'recognizing suffering'. This subscale demonstrated unacceptable internal consistency in our sample of nursing students. In the other two samples good internal consistency was demonstrated for this subscale. One explanation might be the fact that our sample of nursing students was considerably younger than the other two samples, and that the extent to which they have been confronted with suffering might be less than for the other two samples. Lastly, we found moderate to strong correlations with the SCS-SF and with measures of mental wellbeing, distress and engagement. These findings were in line with our hypotheses and underscored the

concurrent and convergent validity of the SOCS-S. Overall, our findings are in line with the results from the initial validation study [39]. Therefore these results offer support for the psychometric properties of the SOCS-S across different samples, thereby adding to the robustness of evidence for the SOCS-S as a psychometrically sound measure for self-compassion.

Secondly, we assessed measurement invariance of the SOCS-S across the three different samples, across gender and across age. Our results showed support for full measurement invariance of the SOCS-S across gender, but only partial support for measurement invariance of the SOCS-S across our three samples of interest and across age groups. This finding is important because measurement invariance assesses whether the construct that is measured has the same structure and meaning in different groups, and is therefore a prerequisite for meaningful comparisons between groups [40]. Our results suggest that the construct that is measured by the SOCS-S has the same structure and meaning for men and women, and that group means of SOCS-S scores can be validly compared across genders. However, the meaning and structure of this construct seem somewhat different for our three different samples and for different age groups. One explanation might be that the items of the SOCS-S have a different meaning for younger respondents because, in general, they will have experienced less suffering than older respondents. Furthermore, the items of the SOCS-S might have a different meaning for military personnel because of the training that they receive which contains an explicit focus on training hardiness. Military training might influence the way military personnel interpret words like 'caring'. Based on these results, direct comparisons between observed scores in these different samples and between different age groups should be made with care, because these differences could also be dependent on group membership.

Thirdly, we explored the extent to which scores on the SOCS-S add to the SCS-SF in terms of explaining variance in mental wellbeing and distress. Our results showed a modest but significant increase in explained variance of mental wellbeing in two of the samples. This suggests that scores on the SOCS-S add to the SCS-SF, in accurately predicting level of mental wellbeing. In the sample of crisis line volunteers, it was found that specifically the subscales 'recognizing suffering' and 'acting to alleviate suffering' independently added to the explained variance of mental wellbeing. The subscale 'recognizing suffering' appears to differ from the SCS-SF in the sense that the subscale 'recognizing suffering' focuses solely on awareness of the suffering (e.g. 'I notice when I'm feeling sad or stressed'), while items of the SCS-SF focus on *mindful* awareness of the suffering (e.g. 'when something painful happens I try to take a balanced view of the situation'). Our findings suggest that 'recognizing suffering' in itself is relevant for mental wellbe-

ing, apart from a mindful reaction to the painful situation. Furthermore, the association between 'recognizing suffering' and 'mental wellbeing' was negative in the multivariate model, suggesting that 'recognizing suffering' in itself, apart from a mindful reaction to the painful situation, actually relates to a *lower* level of mental wellbeing when adjusting for the other elements of self-compassion. This is consistent with what has been shown in neuropsychological research [55]: merely being exposed to suffering (recognizing suffering) is associated with distress and activates brain networks associated with pain. However, self-compassion includes both recognizing suffering and the motivation and action to alleviate it. In this combination, self-compassion is associated with positive feelings such as comfort and affiliation, thus activating brain networks related to reward and affiliation [55].

The other subscale that uniquely added to the SCS-SF in terms of explained variance of mental wellbeing among crisis line volunteers was 'acting to alleviate'. 'Acting to alleviate' is not specifically measured within the SCS-SF. The SCS-SF does measure the factor 'kindness', which entails care and understanding, but a factor that specifically focuses on acting to make oneself feel better, is not included in the SCS-SF. Our findings therefore suggests that 'acting to alleviate' is a factor that is relevant for mental wellbeing, apart from kindness, care and understanding. This corresponds with several conceptualizations of self-compassion that entail 'acting to alleviate' as an important part of self-compassion [8,56-59]. In fact, the conceptualization proposed by Gilbert (2009) stresses the importance of acting to alleviate, by stating that compassion consists of recognizing suffering *coupled with* the motivation to prevent or alleviate suffering and that one of these factors on its own does not equal compassion.

We did not find an increase in explained variance of distress after adding SOCS-S subscale scores to SCS-SF scores in any of the three samples. One explanation might be the fact that the SOCS-S consists of positive items only, because a meta-analysis performed by Muris and Petrocchi (2016) demonstrated that the negative items of the SCS-SF demonstrate larger correlations with mental health problems than the positive items. If positive items correlate lower with mental health problems, than a measure of self-compassion that consists of positive items only, such as the SOCS-S, might shed a different light on the relationship between self-compassion and psychopathology [6].

Limitations

As would be expected, the three samples that were included in the current study showed systematic differences in age and gender; the sample of nursing students was considerably younger than the other two samples and consisted of mainly females, whereas the sample of military personnel consisted of mainly males. The fact that measurement

invariance was not supported for the three different samples could therefore be caused by the fact that measurement invariance was not supported for different age groups, or the other way around. Systematic differences in age between the three different samples limit a definitive conclusion with regard to this matter.

Furthermore, the validation questionnaires that were administered were different across our three samples. Distress was measured with a different questionnaire in each of the three samples, and 'mental wellbeing' was measured in two of our samples, but in the third sample we measured 'engagement' instead. This inequality in measurement did not form a limitation with regard to assessing convergent validity, but it preclude the possibility of comparing our three samples with regard to level of mental wellbeing and distress.

Finally, the scale that was used to measure mental wellbeing (the MHC-SF) contained an error in the sample of crisis line volunteers. The error consisted of using a 5-point response scale, instead of a 6-point response scale, in which the answer 'two or three times a week' was mistakenly left out. Based on the fact that the scale demonstrated good internal consistency, we decided to include these data in our analyses.

Conclusions

The current study underscores the 5-factor structure, the validity and reliability of the SOCS-S. In addition, the study demonstrates full measurement invariance of the SOC-S across gender. Our findings also suggest that the SOCS-S explains some additional variance of mental wellbeing in comparison with a widely used instrument for self-compassion, the SCS-SF, in two of our samples. Measurement invariance was not supported for the SOCS-S across age and across our three different samples. Direct comparisons between observed scores of different age groups and different professions should therefore be made with care. Future research focusing on different age groups and/or samples of different professions is warranted to improve understanding of these differences.

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APPENDIX

Table S1: Factor loadings of all items on the 1-factor model, the five-factor model and the five-factor hierarchical model

			Five-factor model			Five-factor hierarchical model		
			Crisis line volun-teers (N = 560)	Veterans (N = 244)	Nursing students (N = 255)	Crisis line volunteers (N = 560)	Veterans (N = 244)	Nursing students (N = 255)
RS[a]	1.	I'm good at recognising when I'm feeling distressed.	0.71*	0.68*	0.56*	0.70*	0.68*	0.55*
	6.	I notice when I'm feeling distressed.	0.79*	0.73*	0.55*	0.78*	0.73*	0.55*
	11.	I'm quick to notice early signs of distress in myself.	0.75*	0.78*	0.81*	0.77*	0.78*	0.83*
	16.	I recognize signs of suffering in myself.	0.69*	0.72*	0.48*	0.69*	0.73*	0.47*
UU[b]	2.	I understand that everyone experiences suffering at some point in their lives.	0.68*	0.67*	0.64*	0.69*	0.66*	0.63*
	7.	I understand that feeling upset at times is part of human nature.	0.80*	0.70*	0.74*	0.79*	0.70*	0.74*
	12.	Like me, I know that other people also experience struggles in life.	0.82*	0.74*	0.79*	0.83*	0.75*	0.79*
	17.	I know that we can all feel distressed when things don't go well in our lives.	0.82*	0.75*	0.81*	0.82*	0.73*	0.81*
FS[c]	3.	When I'm going through a difficult time. I feel kindly towards myself.	0.78*	0.69*	0.80*	0.77*	0.69*	0.80*
	8.	When bad things happen to me, I feel caring towards myself.	0.84*	0.84*	0.86*	0.83*	0.84*	0.85*
	13.	When I'm upset, I try to tune in to how I'm feeling.	0.68*	0.74*	0.55*	0.70*	0.74*	0.55*
	18.	Even when I'm disappointed with myself. I can feel warmly towards myself when I'm in distress.	0.79*	0.80*	0.79*	0.79*	0.80*	0.79*
TF[d]	4.	When I'm upset I try to stay open to my feelings rather than avoid them.	0.74*	0.76*	0.62*	0.73*	0.76*	0.61*
	9.	I connect with my own distress without letting it overwhelm me.	0.79*	0.75*	0.64*	0.79*	0.76*	0.64*
	14.	I connect with my own suffering without judging myself.	0.80*	0.77*	0.73*	0.80*	0.78*	0.73*
	19.	When I'm upset, I can let the emotions be there without feeling overwhelmed.	0.72*	0.64*	0.69*	0.72*	0.63*	0.69*

Table S1: Factor loadings of all items on the 1-factor model, the five-factor model and the five-factor hierarchical model (continued)

			Five-factor model			Five-factor hierarchical model		
			Crisis line volun-teers (N = 560)	Veterans (N = 244)	Nursing students (N = 255)	Crisis line volunteers (N = 560)	Veterans (N = 244)	Nursing students (N = 255)
AA[e]	5.	I try to make myself feel better when I'm distressed, even if I can't do anything about the cause.	0.59*	0.68*	0.52*	0.59*	0.68*	0.52*
	10.	When I'm going through a difficult time, I try to look after myself.	0.88*	0.90*	0.85*	0.88*	0.90*	0.85*
	15.	When I'm upset, I try to do what's best for myself.	0.81*	0.78*	0.76*	0.81*	0.78*	0.77*
	20.	When I'm upset, I do my best to take care of myself.	0.90*	0.86*	0.89*	0.90*	0.86*	0.89*
					Recognizing suffering	0.62*	0.75*	0.38*
					Understanding universality of suffering	0.45*	0.55*	0.36*
					Feeling one's own suffering	1.02*	1.04*	1.03*
					Tolerating uncomfortable feelings	0.91*	0.96*	0.90*
					Acting to alleviate suffering	0.94*	0.97*	0.98*

a. RS = Recognizing suffering. b. UU = understanding universality. c. FS = Feeling one's own suffering. d. TF = Tolerating feelings. e. AA = action to alleviate suffering.
* p < 0.001. **p < 0.01. ***p < 0.05

6

The Role of Self-Compassion in the Job Demands-Resources Model, an Explorative Study Among Crisis Line Volunteers.

Willems, R. C. W. J., Drossaert, C. H. C., Klooster, P. T., Miedema, H. S., & Bohlmeijer, E. T. (2021). The role of self-compassion in the job demands-resources model, an explorative study among crisis line volunteers [Article]. International Journal Of Environmental Research And Public Health, 18(18), Article 9651. https://doi.org/10.3390/ijerph18189651

ABSTRACT

Background: The job demands-resources (JD-R) model has hardly been studied in volunteer organizations and there is a scarcity of studies evaluating self-compassion as a personal resource within the JD-R model.

Objective: The present study addresses these gaps in current knowledge, first by examining the applicability of the JD-R model in a crisis line volunteer organization. Second, self-compassion is examined, both in terms of its moderating role on the exhaustion process as well as its role on the motivation process.

Method: Structural Equation Modelling was used for the analyses. The influence on the organizational outcome 'compassion towards others' was examined using multiple regression analysis.

Results: The results showed that the JD-R model has an acceptable fit on this sample and supports the central assumption that exhaustion and motivation are two independent but related processes. This study provides evidence that self-compassion is a valuable addition to the JD-R model, as it has an indirect effect on both processes, and increases the explained variance in compassion towards others by 7% through the exhaustion process and by 3% through the motivational process.

Conclusion: These findings points to the importance of focusing on self-compassion in training and supervision in volunteer organizations.

INTRODUCTION

During the past decades, there has been increasing attention for the wellbeing of employees in all kinds of occupations. The Job Demands-Resources model (JD-R model) is a well-studied model that provides insight into the factors potentially influencing the wellbeing of employees, providing direction for interventions to improve their wellbeing [1-3]. In this model, working conditions are divided into *job demands* (physical, psychological, social, or organizational aspects of the work that require effort and/or skills) and *job resources* (those physical, psychological, social, or organizational aspects of the work that help to achieve goals and reduce work-related stress). Both job characteristics may influence the level of employees' distress and engagement. The JD-R model consists of two underlying psychological processes: the exhaustion and motivational process. The exhaustion process predicts that high work demands in the absence of job resources cause distress. The motivational process predicts that the presence of job resources will contribute to higher engagement and productivity [1-3]. Together, these processes predict organizational outcomes, such as commitment and turnover intentions [1-3].

Previous research has found ample support for this model, including support for the relationship between job demands and distress, and for the relationship between job resources and engagement [4-6]. In addition, it was shown that job resources act as a buffer in the relationship between job demands and distress [7,8]. Evidence was also found for the impact of the exhaustion and motivational processes on organizational outcomes. A recent study on social workers' commitment and turnover intention, using the dual process in the JD-R model, showed that social workers' task demands (i.e. workload) influenced their intention to leave the organization, while their jobs resources (i.e. training.) predicted their commitment to the organization [9].

The JD-R model has been studied mainly among paid employees. Less is known about the applicability of the JD-R model among volunteers. Many organizations depend on volunteers who provide valuable health care [10] and make society more healthy, just and sustainable [11]. Exploring the applicability of the JD-R model in a volunteer setting is thus vital and the aim of this study. We were specifically interested in crisis line volunteers who offer a listening ear 24/7 to anyone who cannot or does not want to make use of professional help [12,13]. There are a number of potential job demands related to this work, including the suffering of other people, such as loneliness, suicidality, mental and physical suffering [13]. In addition, the inappropriate behaviour of callers who make sexual, abusive, and manipulative calls can contribute to job demands [14]. These stressors can result in reduced mental wellbeing [15]. Potential job resources, on the other hand, include training, supervision and co-worker support (job resources), which help

the volunteers cope with their job demands [15]. Crisis line volunteers can experience a high degree of distress [15,16]. In addition, crisis line volunteers are highly motivated and engaged in this volunteer work [15,17]. However, limited scientific research is known in which the association between specific job demands and job resources with distress and engagement is proved for crisis line volunteers. The crisis line service acts from the presence approach [18], meaning that the crisis line volunteer relates to the other with attention and dedication, develops understanding for the meaning of the suffering of the other, and has the intention to alleviate this suffering. Being present also means not abandoning the other person, neither emotionally nor relationally, but rather staying involved with the other person [19]. This approach is very similar to compassion. Gilbert [20] describes compassion as "A deep awareness of the suffering of another coupled with the desire to relieve it." Therefore 'compassion to others' seems to be the major organizational outcome of crisis line services. The JD-R model can be useful to study factors that impact distress and engagement of crisis line volunteers and their relationship with compassion towards others as a vital organizational outcome.

In recent years, an increasing number of researchers have studied personal resources as a new addition to the JD-R model, because human behaviour results from an interaction between the person and the work-context [3]. Personal resources are characteristics of the person that are related to their resilience and ability to influence the work-environment, such as self-confidence, self-efficacy, and optimism. They can enable a person to achieve work goals and encourage personal growth [3]. There are various ways in which personal resources can be added to the JD-R model. First, personal resources can have a direct, positive effect on engagement. A higher degree of engagement may subsequently result in an increased use of job resources such as promoting supportive interaction between colleagues [21]. Second, personal resources can buffer the exhaustion process. For example, self-efficacy has been shown to be a significant moderator in the relationship between job demands and burnout [22]. Third, evidence has also been found for personal resources as mediators in the motivational process. For example, the relationship between job resources and engagement was shown to be mediated by the personal resource 'emotion regulation' among university teachers [23].

A potentially relevant personal resource is self-compassion. There is a growing academic interest in the relevance of (self-)compassion in the context of organizations. Lilius et al. [24], for example, showed that employees who experienced compassionate care when they were suffering, experienced greater connection and engagement with their work. Furthermore, self-compassion has also been shown to promote work performance and prosocial behaviour, and to reduce negative work experiences, such as emotional exhaustion and turnover intention [25]. Various models have been developed to describe

self-compassion. Neff [26] described self-compassion as: "being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness". Another influential theory on (self-)compassion was created by Gilbert [20]. He defines (self-) compassion as: "A deep awareness of the suffering of another (or oneself) coupled with the wish to relieve it". Strauss et al. [27] conducted a comprehensive review to bring together the various definitions of (self-) compassion. Based on this review, they defined self-compassion as a cognitive, affective, and behavioural skill, consisting of the following five elements: recognizing suffering; understanding the universality of suffering; feeling empathy for one's own suffering; tolerating uncomfortable feelings; and acting, or being motivated to act, to alleviate suffering. Research shows that self-compassion can enhance resilience [28], engagement and mental wellbeing, and reduce distress [29,30] and burnout [31,32]. In addition, it has shown to be a predictor of increased mental wellbeing [33,34] and engagement [35,36]. Since self-compassion is an important resource for coping with negative emotions and cognitions resulting from stressors and adversity, it may buffer the relationship between job demands and distress. Self-compassion may also mediate the motivational process. For example, job resources, such as training, supervision and co-worker support could enhance self-compassion, in turn leading to greater engagement. Both lower distress and larger engagement could positively impact desired organizational outcomes.

However, despite the increasing scholarly attention for the concept of self-compassion, and its potential contribution to the JD-R model, three studies have examined the role of self-compassion as a personal resource within the JD-R model. Anjum et al. [37] found that self-compassion has a moderating effect on the relationship between job demands (being bullied and excluded at work) and exhaustion among employees of various service sector organizations. Monaghan et al. [38] did not find evidence for the moderating effect of self-compassion on the relationship between job demands and exhaustion among animal care professionals, however there was a strong association between burnout and self-compassion ($\alpha = -.50$). And in a study among physician assistants it was found that self-compassion increased engagement and reduced the risk of burnout [39].

To summarize, the JD-R model has hardly been studied in volunteer organizations and there is a scarcity of studies comprehensively evaluating self-compassion as a personal resource within the JD-R model, despite the growing evidence for its impact on mental functioning. The present study addresses these gaps in current knowledge.

We hypothesize that:

1. the original JD-R model is applicable to crisis line volunteers;

2. self-compassion acts significantly as a buffer in the exhaustion process;
3. self-compassion acts significantly as a mediator in the motivational process;
4. self-compassion increases significantly the explained variance of compassion towards others, through the exhaustion and motivational process.

MATERIAL AND METHODS

Design

A survey study was performed to explore the JD-R model and the role of self-compassion in a crisis line volunteer organization. The study was approved by the ethical committee of the Faculty of Behavioural and Management studies (BMS) of the University of Twente (approval number: 190943).

Participants and procedure

This study was conducted among volunteers of the 'Listen Line', a Dutch crisis line organization that offers an active, non-judgmental listening service to anyone who cannot or does not want to make use of professional care [40]. All crisis line volunteers (*N* = 1405) received a link to the online questionnaire by e-mail from their management, explaining the purpose and content of the study. After giving their consent, volunteers could continue to complete the anonymous questionnaire.

Measures

Job demands

Job demands were measured by two questionnaires measuring: work-related demands and emotional strain. *Work-related demands* were measured using a 16-item self-developed questionnaire [41]. Each demand described a potentially distressing situation that a crisis line volunteer may encounter, and two questions were asked: The first question related to the occurrence of the situation ('How often does this situation occur?') with answering options ranging from 'never' (0) to 'very often' (4). The second question related to the degree of stress that this situation causes ('How stressful is this situation for you?') with answering options ranging from 'not at all stressful' (1) to 'very stressful' (5). The impact of each stressor was calculated by multiplying the frequency of occurrence with the degree of stress produced by the stressor This questionnaire was created based upon the results of a systematic review on work-related demands of crisis line volunteers and a qualitative study among crisis line volunteers about the emotional impact, challenges, and resources available to them for coping with the challenges of volunteering [15,42]. As a pilot test, the questions were presented to ten crisis line volunteers, who found the items recognizable and clear. Upon their reactions, only a

few minor textual changes were made. *Emotional strain* was measured with the subscale 'emotional strain' of the Experience and Assessment of Work questionnaire [43], a Dutch questionnaire that measures work-perception in many areas. An example of one of the items is: "In your work, are you confronted with issues that affect you personally?". This subscale consists of seven items, scored on a four-point Likert scale, from 1 (never) to 4 (always).

Job resources

Job resources were measured by combining self-developed questions with questions from an existing questionnaire. The questions covered three themes: co-worker support, training, and supervision. To measure co-worker support, the sub-scale 'relation with colleagues' of the Experience and Assessment of Work questionnaire [43] was used. An example of one of the items is: "Can you ask your colleagues for help when needed?". This subscale consists of 9 items, scored on a four-point Likert scale, from 1 (never) to 4 (always). The questions about training (5 items) and supervision (4 items) were self-developed questions, scored on a Likert scale from 1 (totally agree) to 5 (totally disagree). The items in the questionnaire were also, like the job demands, created on the basis of the results of a systematic review and a qualitative study of crisis line volunteers [15,42], pilot-tested among ten crisis line volunteers, which led to only a few minor changes in the wording of the questions.

Distress

Distress was measured with the subscale distress of the validated Four Dimensional Complaint List (4-DCL) [44]. The subscale distress contains 16 items, scored on a five-point Likert scale, ranging from 1 (never) to 5 (always). The occurrence of presence of distress was determined by reducing the five answer categories of the Likert scale to three answer categories (never = 0, sometimes = 1, regularly or more often = 2), and subsequently summing the items to a total score, ranging from 0 to 32. Based upon these scores, participants were categorized in low (0-10), moderately increased (11-20), or strongly increased distress (21-32), as outlined in the 4DSQ manual [44].

Engagement

Engagement was measured with the validated Utrecht Work Engagement Scale short version (UWES-9) [45]. This scale consists of 9 items that can be scored on a seven-point Likert scale ranging from 1 (never) to 7 (always). The mean total score was categorized in very low (< 1.77), low (1.78 – 2.88), moderate (2.89 – 4.66), high (4.67 – 5.50), and very high (> 5.51) [46].

Organizational outcome

Compassion towards others was measured using the 'compassion towards others' subscale of the validated Compassionate Engagement and Action Scales (TCEAS) [47]. Because of the anonymity of the callers and chatters, it is not possible to have them rate the level of compassion given by volunteers. Therefore, it was decided to use this self-assessment questionnaire. This subscale consists of 13 items that can be scored on a 10-point Likert scale ranging from 1 (never) to 10 (always). Following the manual, three reversed items were removed before constructing the scale.

Self-compassion

Self-compassion was measured with the Dutch version of the Sussex-Oxford Compassion for the Self Scale (SOCS-S) [48], a 20-item questionnaire, scored on a 5-point Likert scale, ranging from 1 (not at all true) to 5 (always true). The scale consists of five subscales: 'Recognizing suffering', 'Understanding the universality of suffering', 'Feeling for one's own suffering', 'Tolerating uncomfortable feelings', and 'Acting or being motivated to act to alleviate suffering'.

Statistical analysis

Statistical analyses were performed using IBM SPSS Statistics (version 26) and AMOS (version 25).

Descriptive statistics were used to analyse background and work-related variables, characteristics of all variables, and Pearson correlations between the variables.

To examine the extent to which the JD-R model is applicable to crisis line volunteers, structural equation modelling (SEM) with maximum likelihood estimation, was used. Total model fit was tested using the Root Mean Square Error of Approximation (RMSEA), the Standardized Root Means Square Residual (SRMR), the Comparative Fit Index (CFI), and the Goodness of Fit Index (GFI). The RMSEA and the SRMR should preferably be $< .08$, the CFI should preferably be $> .90$ and the GFI should preferably be $> .95$ [49] for adequate fit. The conventional chi-square test is almost always significant in large samples and therefore likely to overstate the lack of fit [49].

SEM analyses were performed to examine whether self-compassion buffers the exhaustion process, and whether self-compassion mediates the motivational process. Moderation and mediation analyses were performed separately for the specific part of the JD-R model that the moderation or the mediation refers to, namely the relationship between job demands and distress, and the relationship between job resources and engagement. Each variable had only one indicator, namely its standardized score. A significant

interaction effect exists if the 95% bootstrapped confidence interval (2000 bootstraps) of the interaction coefficient does not contain zero.

Hierarchical stepwise multiple regression was used to explore whether self-compassion is a unique predictor of compassion towards others, in addition to demographics and work-related variables (step 1), to job demands and job resources (step 2), and to distress and engagement (step 3).

RESULTS

Descriptives

The total number of respondents was 543 (response rate 39%). Table 1 provides a summary of the demographic and work-related variables. The majority of the participants were female and over 50 years old. Most of them had no professional training in health care, worked for 4-6 hours a week at the crisis line services and had 1-3 years of experience in working as a crisis line volunteer.

Table 2 gives an overview of the descriptive statistics of all variables including a correlation matrix. The Cronbach's alpha's of almost all variables were good ($\alpha > .70$), only that of emotional strain was low but acceptable ($\alpha = .61$). The bivariate correlations between the different variables meet the expected directions, except for the correlation between distress and compassion towards others, which was expected to be negative.

The Cronbach's alphas in the current study of the subscales of self-compassion (not in table) were: 'Recognizing suffering' α =.81, 'Understanding the universality of suffering' α =.85, 'Feeling for the person suffering' α =.85, 'Tolerating uncomfortable feelings' α =.84, and the subscale 'Acting or being motivated to act to alleviate suffering' α =.87.

According to the classification of Terluin et al. (2014) a total of 474 respondents (82%) scored low, 79 (15%) scored moderate, and 17 (3%) scored high on distress. According to the classification of Schaufeli & Bakker (2003) a total of 326 respondents (63%) scored (very) high, 184 (36%) scored moderate, and 6 (1%) scored (very) low on engagement.

The Job Demands-Resources model and crisis line volunteers

For testing whether the JD-R model can be applied to crisis line, SEM analysis was used. The specified JD-R model (Figure 1) demonstrated acceptable fit indices to the data: Chi-square ($df = 16$) = 84.9, $p < 0.001$; GFI = 0.96; CFI = 0.90; RMSEA = 0.09; SRMR = 0.06. Figure 1 shows the standardized relations between the variables of the JD-R model.

Table 1: Demographics and work related information (N = 543).

		Frequency	Percent
Age	18-29	10	1.8
	30-49	38	7.0
	50-64	200	36.8
	>65	294	54.1
Gender	Man	155	28.5
	Woman	387	71.3
Professional training in healthcare	Yes	196	36.1
	No	347	63.9
Experience at the crisis line	< 1 year	105	19.3
	1-3 years	193	35.5
	3-6 years	89	16.4
	6-10 years	58	10.7
	> 10 years	98	18.0
Hours per week	< 4 hours per week	97	17.9
	4 - 6 hours per week	408	75.1
	6 - 8 hours per week	31	5.7
	8 - 10 hours per week	4	0.7
	> 10 hours per week	3	0.6
Location of work	Always on location	133	24.5
	Usually on location, occasionally at home	91	16.8
	Sometimes on location, sometimes at home	55	10.1
	Usually at home, occasionally on location	126	23.2
	Always at home	138	25.4

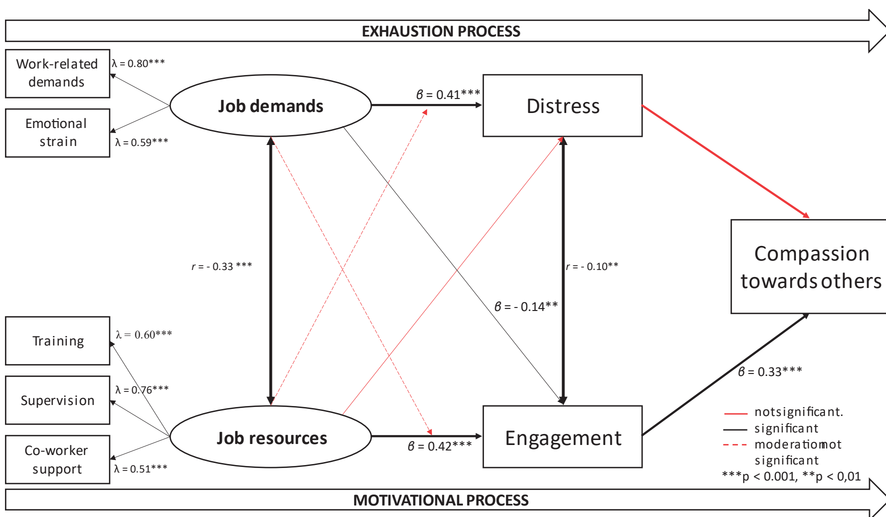

Figure 3: The Job Demands-Resources model in crisis line volunteers.

The relationship between job demands and distress, and the relationship between job resources and engagement are positive and moderate in strength. The results show that there is a significant positive relationship between engagement and compassion towards others, but no significant relationship between distress and compassion towards others. No moderating effect of job resources (training, supervision, co-worker support) on the relationship between job demands (work-related demands and emotional strain) and distress was found. Furthermore, no evidence was found for the moderating role of job demands (work-related demands and emotional strain) on the relationship between job resources (training, supervision, and co-worker support) and engagement.

The role of self-compassion on the exhaustion and motivational processes

To examine the added value of self-compassion in the JD-R model, moderation analyses for the exhaustion process and mediation analyses for the motivational process were conducted.

The moderating role of self-compassion on the exhaustion process

In order to test the moderating influence of self-compassion on the relationship between job demands and distress, SEM analyses were conducted in two separate models. First, a model that included three exogenous variables (work-related demands, self-compassion, and their interaction), and one endogenous variable (distress). Second, the same model was tested, but with emotional strain as an exogenous variable instead of work-related demands.

The first model, the moderation analysis of self-compassion on the relationship between work-related demands and distress, showed significant and negative interaction between self-compassion and work-related demands (β = -0.13, $p < .01$), indicating that self-compassion dampens the positive relationship between work-related demands and distress. Figure 2a illustrates this buffering effect of self-compassion in an interaction plot.

Since self-compassion has a moderating effect on the relationship between work-related demands and distress, moderation analyses were also performed with the separate subscales of self-compassion. Significant and negative moderation effects were found for recognizing suffering (β = -0.08, $p < .05$), feeling suffering (β = -0.13, $p < .01$), tolerating feelings (β = -0.12, $p < .01$), and action to alleviate suffering (β = -0.15, $p < .001$), indicating that these subscales dampen the positive relationship between work-related demands and distress (Figure 2b, 2c, 2d and 2e). No significant moderation effect for understanding the universality of suffering was found.

Table 2: Descriptive statistics, correlations and reliability coefficients for variables of present study.

			Cronbach's Alpha	Possible range	Mean (SD)	1a	1b	2a	2b	2c	3	4	5
Job demands	1a	Work-related demands	.87	0 – 20	2.6 (1.2)								
	1b	Emotional strain	.61	1 – 4	1.8 (0.3)	.47***							
Job resources	2a	Training	.88	1 – 5	4.2 (0.7)	-.20***	-.12***						
	2b	Supervision	.82	1 – 5	4.3 (0.6)	-.15***	-.09**	.49***					
	2c	Co-worker support	.73	1 – 4	3.7 (0.3)	-.20***	-.21***	.24***	.38***				
Strain	3	Distress	.88	0 – 32	6.3 (5.5)	.31***	.28***	-.11**	-.07	-.17***			
Motivation	4	Engagement	.91	1 – 7	5.0 (1.0)	-.25***	-.10**	.24***	.34***	.35***	-.10**		
Organizational outcome	5	Compassion towards others	.76	10 – 100	75.2 (9.6)	-.03	.11**	.20***	.27***	.18***	.04	.32***	
Personal resource	6	Self-compassion	.93	20 - 100	78.1 (9.4)	-.17***	-.10**	.18***	.15***	.17***	-.31***	.20***	.24***

[a] RS = Recognizing suffering, [b]UU = Understanding universality, [c]FS = Feeling one's own suffering, [d]TF = Tolerating uncomfortable feelings, [e]AA = being motivated to act, or action to alleviate suffering. ***p < .001, **p < .01, * p < .05.

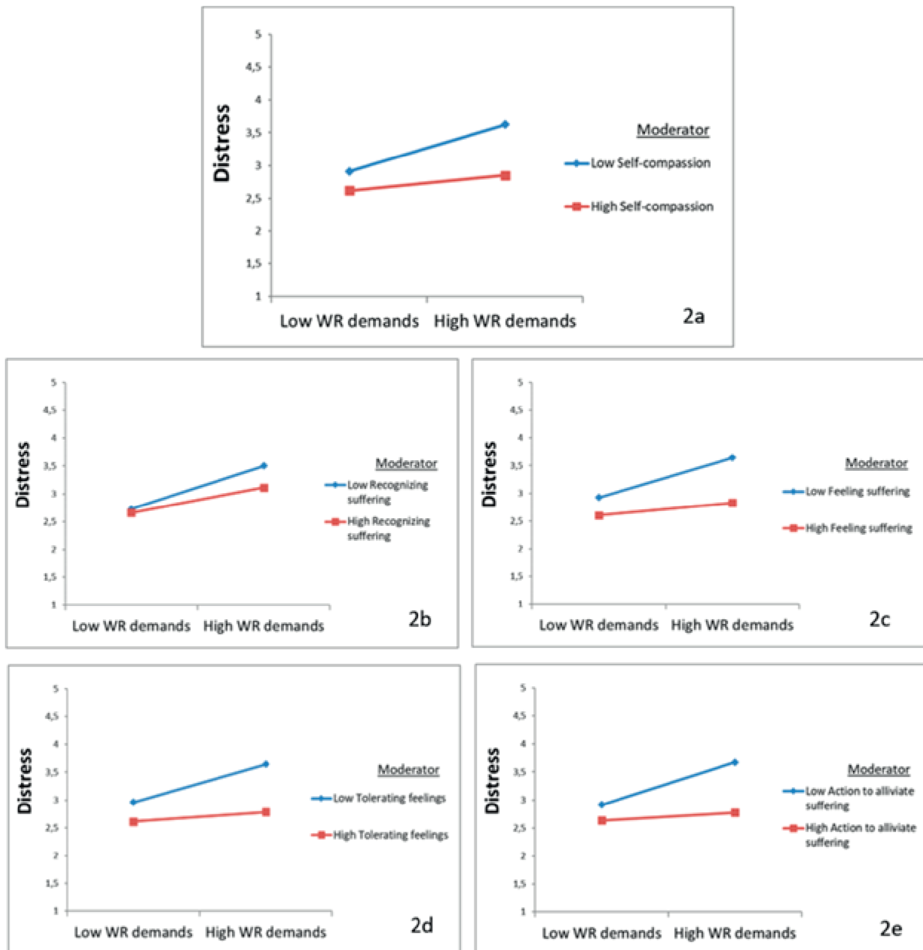

Figure 4: Plots of the interaction between work-related demands (WR demands) and self-compassion (and subscales) in predicting distress.

The second model, the moderation analysis of self-compassion on the relationship between emotional strain and distress shows a similar significant and negative interaction between self-compassion and work-related demands ($\beta = -0.12$, $p < .01$), indicating that self-compassion also dampens the positive relationship between emotional strain and distress (Figure 3a).

Similar to work-related demands, significant and negative interaction effects were found for recognizing suffering ($\beta = -0.11$, $p < .05$), feeling suffering ($\beta = -0.09$, $p < .05$), tolerating feelings ($\beta = -0.13$, $p < .001$), and action to alleviate suffering ($\beta = -0.11$, $p < .01$) and emotional strain, indicating that these aspects of self-compassion also dampen the

positive relationship between emotional strain and distress (Figure 3b, 3c, 3d and 3e). Again, no significant moderation effect by understanding the universality of suffering was found.

The mediating role of self-compassion on the motivational process

In order to test the mediating role of self-compassion in the relationship between job resources and engagement, SEM analyses were carried out in three separate models. First, a model with training as exogenous variable, engagement as endogenous variable, and self-compassion as mediating variable. Second, the same model, but with supervision as an exogenous variable. Third, the same model, but with co-worker support as an exogenous variable.

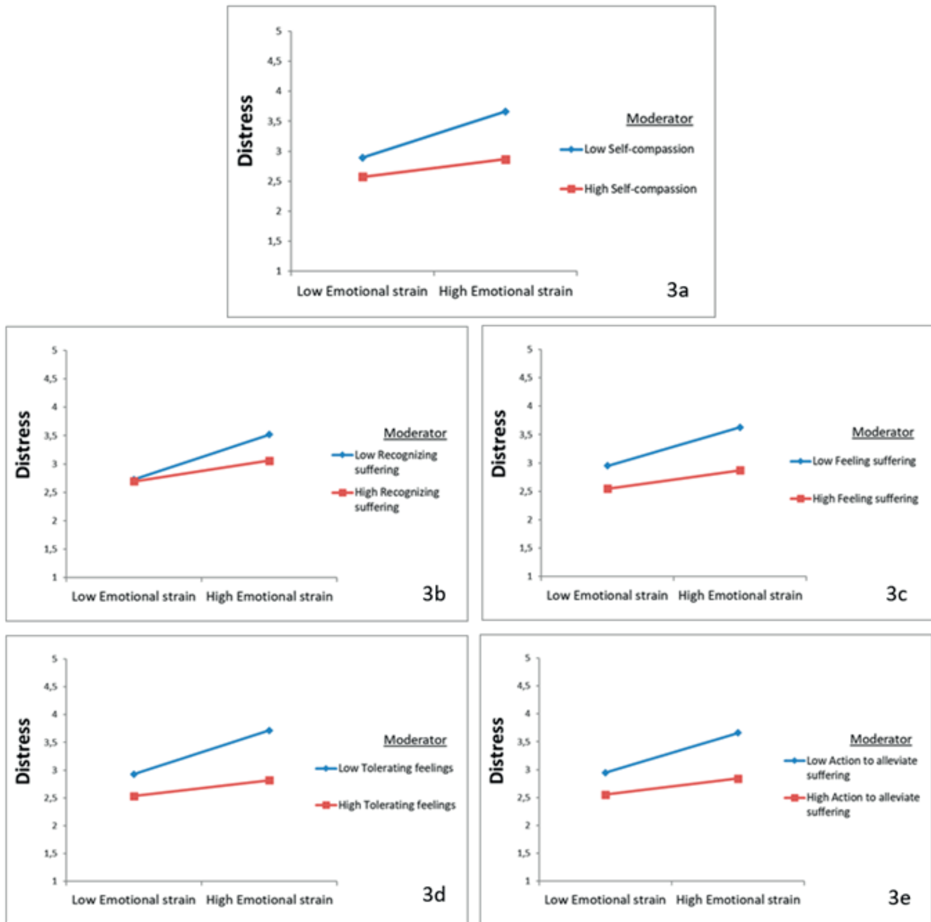

Figure 5: Plots of the interaction between emotional strain and self-compassion (and subscales) in predicting distress.

Table 3 shows the results of the mediation analyses for each model. Because self-compassion is a significant mediator in all three models, each subscale was separately tested as mediator in each model. Self-compassion and all the subscales, except 'acting/being motivated to act to alleviate suffering' mediated the relationship between all job resources and engagement. 'Acting or being motivated to act to alleviate suffering' only mediated the relationship between training and engagement.

Table 3: Results of mediation models with self-compassion and subscales mediating the relationship between job resources and engagement.

Model	Job resources	Mediator	Path A[a]	Path B[b]	Direct effect[c]	Indirect effect[d]	Total effect[e]	95% CI [LB-UB]
1	Training	Self-compassion	.18***	.16***	.21***	.03	.24**	[.011 – .057]
		Self-compassion RS	.11*	.13**	.23***	.01	.24*	[.003 – .033]
		Self-compassion UU	.12**	.17***	.22***	.02	.24**	[.004 – .047]
		Self-compassion FS	.17***	.12**	.22***	.02	.24**	[.006 – .045]
		Self-compassion TF	.16***	.15***	.22***	.02	.24**	[.008 – .050]
		Self-compassion AA	.15***	.08	.23***	.01	.34**	[.000 - .034]
2	Supervision	Self-compassion	.15***	.15***	.32***	.02	.34**	[.007 – .047]
		Self-compassion RS[f]	.08	.13***	.33***	.01	.34**	[001 - .028]
		Self-compassion UU[g]	.15***	.15***	.32***	.02	.34**	[.007 – .051]
		Self-compassion FS[h]	.12**	.12**	.32***	.01	.33**	[.002 – .037]
		Self-compassion TF[i]	.13**	.14***	.32***	.02	.34**	[.005 – .043]
		Self-compassion AA[j]	.13**	.07	.32***	.01	-	[-.001 - .029]
3	Co-worker support	Self-compassion	.17***	.15**	.32***	.02	.35**	[.008 – .049]
		Self-compassion RS[f]	.10*	.13**	.34***	.01	.35**	[.002 – .031]
		Self-compassion UU[g]	.21***	.13**	.32***	.03	.35**	[.009 – .056]
		Self-compassion FS[h]	.12**	.12**	.34***	.01	.35**	[.002 – .034]
		Self-compassion TF[i]	.13**	.14*	.33***	.02	.35**	[.005 – .042]
		Self-compassion AA[j]	.13**	.07	.34***	.01	-	[-.000 - .028]

[a] Path a = regression weights relationship independent variable and mediator. [b] Path B = regression weights relationship mediator and engagement. [c] Direct effect = regression weight relationship independent variable and engagement. [d] Indirect effect = increase in direct effect through mediator. [e] Total effect = sum of direct and indirect effect. [f] RS = Recognizing suffering, [g]UU = Understanding universality, [h]FS = Feeling one's own suffering, [i]TF = Tolerating uncomfortable feelings, [j]AA = being motivated to act, or action to alleviate suffering. ***$p < 0.001$, **$p < 0.01$, *$p < 0,05$.

The added value of self-compassion in predicting compassion towards others

A summary of the multiple regression analysis of the added value of self-compassion for explaining compassion towards others in the exhaustion process and the motivational process of the JDR model is shown in Table 4.

Demographics and work-related variables did not significantly explain the variance of compassion towards others. When job demands were added to the model, the explained variance of compassion towards others increased significantly to 3%. The addition of distress did not significantly increase the total explained variance of compassion towards others. When self-compassion was added, the total explained variance of compassion towards others in the exhaustion process increased to 10% (F_{change} = 39.8, p < .001).

The addition of job resources to demographics and work-related variables account for 9% of the total explained variance of compassion towards others. This increases to 14% when engagement is added. When self-compassion was added as well, the total explained variance of compassion towards others within the motivational process increased to 17% (F_{change} = 15.5, p < .001).

Table 4: Summary of multiple regression analysis of the added value of self-compassion on compassion towards others.

	Exhaustion process					Motivational process				
	Predictor	*B*	*SE B*	*β*	R^2, *F*	Predictor	*B*	*SE B*	*β*	R^2, *F*
1[a]	Demographics and work-related variables	ns	ns	ns	R^2 = .01, F(6, 536) = .72	Demographics and work-related variables	ns	ns	ns	R^2 = .01, F(6, 536) = .72
2[b]	Emotional strain	5.61	1.66	.17	R^2 = .03, F(2, 534) = 2.01**	Supervision	3.18	.80	.20	R^2 = .09, F(3, 533) = 5.64***
3[c]	Work-related demands	-.83	.40	-.10	R^2 = .03, F(1, 533) = 1.88	Supervision	2.22	.80	.14	R^2 = .14, F(1, 532) = 8.67***
	Emotional strain	5.37	1.68	.16		Engagement	2.54	.45	.25	
4[d]	Emotional strain	5.06	1.62	.15	R^2 = .10, F(1, 532) = 5.80***	Supervision	2.24	?		R^2 = .17, F(1, 531) = 9.52***
	Distress	.21	.08	.12		Engagement	2.28	.45	.23	
	Self-compassion	.28	.04	.28		Self-compassion	.17	.04	.16	

a. Predictors: Age, Gender, Professional training in health, Years of experience at the CLS, Hours per week working at the CLS, Location of work. b. Predictors: Age, Gender, Professional training in health, Years of experience at the CLS, Hours per week working at the CLS, Location of work, job demands (work-related demands and emotional strain) (only at exhaustion process), job resources (training, supervision, and co-worker support) (only at motivational process). c. Predictors: : Age, Gender, Professional training in health, Years of experience at the CLS, Hours per week working at the CLS, Location of work, job demands (only at exhaustion process), distress (only at exhaustion process), job resources (only at motivational process), and engagement (only at motivational process). d. Predictors: : Age, Gender, Professional training in health, Years of experience at the CLS, Hours per week working at the CLS, Location of work, job demands (only at exhaustion process), distress (only at exhaustion process), job resources (only at motivational process), and engagement (only at motivational process), Self-compassion. ***p < .001, **p < .01, *p < .05

DISCUSSION

The aim of the current study was to examine the applicability of the JD-R model to a volunteer organization, and to explore the added value of self-compassion as a personal resource to the JD-R model.

The applicability of the JD-R model on volunteers

The findings of this study demonstrated an acceptable fit of the JD-R model in a sample of 543 crisis line volunteers. The findings also support the central assumption of the JD-R model that there are two independent but related processes, exhaustion and motivation, that influence the organizational outcome [1,3]. We found evidence for the relationship between job demands and distress and job resources and engagement. This is in line with results from research conducted with paid workers [50-52] and studies with volunteers [53,54]. The relationship between engagement and 'compassion towards others' as an organizational outcome was found to be significant. This finding was expected, as altruism and the desire to help others are important motivations for crisis line volunteers [55-57]. In this study no significant relationship was found between distress and the organizational outcome 'compassion towards others'. This finding is against expectation as the literature describes that distress caused by exposure to the suffering of others can lead to compassion fatigue, i.e. 'empathic strain and general exhaustion resulting from dealing with people in distress over time' [58,59]. The low mean score on distress in this sample (M = 6.3, SD = 5.5, range = 0 - 32) may have suppressed a relationship between distress and compassion towards others. Another possible explanation lies in the choice of the outcome measure 'compassion towards others'. Previous studies on the application of the JD-R model to volunteers, have focused on using 'turnover intention' [53,54] as an organizational outcome measure and found significant relationships with this outcome variable in the exhaustion process. Volunteers who experience distress and reduced job satisfaction may have the intention to stop volunteering, but may still be able to suppress their own feelings of stress in order to be compassionate towards others. Previous research has shown that there is a close correlation between stress and compassion towards others [47]. Further research could focus on personal outcome measures, such as depression or mental wellbeing and other organizational outcome measures, such as turnover intention.

We found no moderating influence of job demands on the motivational process and job resources on the exhaustion process. A possible explanation is the combination of very low mean scores on job demands and distress and very high mean scores on job resources and engagement. It is important to note that crisis line volunteers at the Dutch 'Listen Line' are carefully selected. In this selection process, attention is paid to the

task requirements they are going to face [60]. Volunteers who find out beforehand that they cannot cope with the challenges of the job may decide in time not to volunteer.

It can be concluded that the JD-R model is applicable to volunteer organizations. Specifically, the motivational process was found to play an important role in explaining the organizational outcome measure 'compassion towards others'.

Self-compassion as an added value to the JD-R model

The second aim of the current study was to explore the added value of self-compassion as a personal resource to the JD-R model.

We found that self-compassion buffers the relationship between job demands and distress. The crisis line volunteers in our sample also scored higher (*M* = 78.1, *SD* = 9.4) than a comparable group (M = 70.8, SD = 11.7) on self-compassion [48]. Self-compassion supports facing feelings of inadequacy and stressors with kindness and self-reassurance [61]. The awareness that suffering happens to everyone and the ability to see this suffering in the right perspective, without overreacting [26,27], helps to reduce feelings of distress [29,30]. This explains why self-compassion has a moderating effect on the exhaustion process.

We also found that self-compassion has a mediating effect on the relationship between job resources and engagement. This is in line with similar research showing the mediating role of self-compassion on the relationship between social support and psychological wellbeing / subjective happiness [62]. Previous research has shown that social support leads to increased self-compassion [29] and self-kindness [63]. Volunteers receive this social support through training, supervision and co-worker support. This explains why job resources increase self-compassion. The mediating influence of self-compassion on the relationship between job resources and engagement confirms previous studies demonstrating that self-compassion increases engagement [35,36].

Self-compassion is a complex concept that contains multiple facets and skills: recognizing suffering, understanding the universality of suffering, feeling for one's own suffering, tolerating uncomfortable feelings, and acting or being motivated to act to alleviate suffering [27]. Since both the moderating influence of self-compassion on the exhaustion process and its mediating role in the motivational process have been demonstrated, we examined which specific facets of self-compassion contribute to these effects. In the exhaustion process, all facets of self-compassion except understanding the universality of suffering showed a moderating effect. Earlier research among health care staff into correlations between the facets of self-compassion and distress shows that

understanding the universality of suffering had the lowest correlation with distress of all facets (r = -.15) [27]. In the relationship between training and engagement, all facets of self-compassion showed a mediating effect. However, acting or being motivated to act to alleviate suffering, such as taking timely breaks or seeking support from colleagues, had no mediating effect on the relationship between supervision/co-worker support and engagement. It may be that the supervision and co-worker support is more focused on promoting adequate emotion regulation skills and not so much on motivating volunteers to improve self-care.

Lastly, we looked at the added value of self-compassion on compassion towards others. Self-compassion contributed to the total explained variance of compassion towards others in both the exhaustion and motivational processes. The contribution within the exhaustion process (7%) was slightly larger than the motivational process (3%). The correlation between compassion towards others and self-compassion was weak (r = .24) but significant. This is in line with previous research [47]. Gilbert (2020) discusses that compassion towards oneself and towards others are related but different concepts. Self-compassion can be fostered by compassion towards others through awareness of how to be sensitive and empathetic and to find out what is helpful for others and for oneself [64].

It can be concluded that self-compassion appears a valuable addition in the JD-R model, both in the exhaustion and the motivational process. Although the effect of self-compassion should be further examined in longitudinal and/or experimental studies, our results suggest that it can be important for (volunteering) organizations to focus on developing self-compassion skills during supervision and training. A positive mental state is important for these volunteers so they can continue to support the crisis line organizations, which have been proven to be effective in decreasing feelings of hopelessness and psychological pain [65,66] and even in preventing suicides [65]. Further longitudinal research could demonstrate the effect of a self-compassion intervention within the framework of the JD-R model.

Strengths and limitations

This is one of the first studies to evaluate the JD-R model in a volunteer organization and was conducted in a relatively large sample. However, this study also has important limitations. First, the study was cross-sectional in design, which prevents drawing conclusions about the causality or temporal nature of the relationships. Second, the questionnaire was only completed by active volunteers. Volunteers who experience more distress and less engagement may be more likely to stop volunteering. If former volunteers had completed this questionnaire, the relationships in the JD-R model might be stronger.

Third, we measured the organizational outcome compassion towards others with a self-report scale which is suboptimal. An alternative would be to ask service-users to assess the level of compassion and quality of received help. However, out of respect of the highly valued anonymity of the callers, this was not possible. Fourth, because this study addresses a specific group of volunteers, with specific job demands and job resources, this study is not fully representative of other groups of volunteers.

Conclusion

The findings of this study suggest that the JD-R model is applicable to volunteer organizations. Partial evidence was found for the exhaustion process and full evidence was found for the motivational process. The findings also suggest that self-compassion is a relevant personal resource for volunteers, impacting the exhaustion and motivation processes as well as compassion towards others as an organizational outcome. The findings also underscore the relevance of focusing on self-compassion during supervision and training in volunteer organizations so as to develop self-compassion skills. Further longitudinal research in various types of volunteer organizations is warranted.

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Summary and general discussion

INTRODUCTION

Volunteering as a complement to formal care is important in shaping a participation society and is necessary due to increasing healthcare costs and the reduced availability of healthcare personnel. However, little is known about the mental health and factors that influence the mental health of a specific group of volunteers: crisis line volunteers. Crisis line volunteers offer a listening ear 24/7 and are effective in decreasing feelings of hopelessness and psychological pain [1,2], and even in preventing suicide [1] for anyone who cannot or does not want to make use of formal care. Although working at crisis line service is rewarding for many volunteers, a number of studies have shown that volunteers can experience distress and compassion fatigue. This thesis therefore examined the mental health of these volunteers and the work-characteristics that influence this, with a focus on the role of self-compassion.

This final chapter starts with a brief summary of the results of the five studies that were conducted. Then we discuss the main questions posed in the introduction of this dissertation, followed by the limitations and recommendations for future practice and research. At the end of this chapter, the overall conclusions will be highlighted.

SUMMARY OF THE STUDIES

Chapter 2

Chapter 2 focused on the question of what is known in the scientific literature about the mental health of crisis line volunteers and its associated factors, by conducting a systematic review. Despite an extensive search strategy and broad inclusion criteria, this review yielded only thirteen articles covering the period 1973–2018. Moreover, the retrieved studies varied widely in methodological quality, used a wide variety of outcome measures, and most did not use validated instruments. The negative effects of working at the crisis line on mental health were described in different ways, such as symptoms of burnout, compassion fatigue, distress, and feelings of frustration. The prevalence rates of mental health issues ranged widely from 3% to 77%. There are, therefore, indications that volunteering at the crisis line service has a negative impact on mental health of the volunteers. The positive effects of working at the crisis line on mental health were described less often than the negative effects. Only five (mostly qualitative) studies reported that most volunteers experience some kind of satisfaction or gratification as a result of their work at the crisis line. The qualitative studies mainly described the motivations of crisis line volunteers comprising both other-orientated motivations (e.g.

wanting to help others and contribute to society) as well as self-orientated motivations (e.g. finding a purpose in life and the learning experience).

The factors that influence the mental health of crisis line volunteers could be divided into three categories: (a) factors related to the nature of the work (such as anonymity, philosophy of non-intervention, inappropriate calls, complexity of the topics of conversation), (b) factors related to the organization of the work (such as supervision and training, organizational support, and support of co-workers), and (c) factors related to the volunteer (coping-mechanisms: productive coping and non-productive coping). It should be noted that none of the studies included all these categories.

Chapter 3

In Chapter 3, we examined in a qualitative study among crisis line volunteers, their own perspective of the emotional impact of the work, the challenges, and the resources that help them cope with these challenges. Four focus groups with twenty-two active volunteers and eight interviews with former volunteers were conducted. The results showed that crisis line volunteers experience a wide range of positive emotions (e.g. satisfaction, joy, gratitude, enrichment) and negative emotions (e.g. frustration, anger, powerlessness, and sadness) during their work. The positive emotions were often linked to the motivation for doing this work, which is to 'be meaningful'. The negative emotions mentioned by the volunteers are often linked to the challenges they face, such as the topics of conversation (e. g. suicidality or abuse), and the sometimes difficult behaviour of callers (e.g. negativity, taking the victim role, frequent callers). Volunteers also reported organizational (e.g. training, supervision, and support) and personal (e.g. self-compassionate thinking and behaviour) resources that help them cope with these challenges and negative emotions.

Chapter 4

Based on the systematic review and the qualitative study, the identified demands were translated into a questionnaire that was completed by 543 volunteers. In chapter 4, we examined how frequently the different demands occur and how stressful they are perceived to be. We also examined the relationship between these demands and distress of the volunteers and their intention to leave the crisis line service within one year. The results showed that some demands were experienced as very stressful, but do not occur often (such as callers who are suicidal and callers who tell stories in which children or animals are the victims). Other demands were perceived as less stressful but do occur frequently (such as clients with psychiatric problems and frequent callers). The work-related demands with the highest impact (combined frequency and perceived stressfulness) were callers with psychiatric problems, followed by callers who are sui-

cidal. The demands most strongly associated with volunteer distress were callers who do not listen and think in extremes, callers who complain and whine, and callers who are doing other things during the call. In terms of organizational demands, having little time for a break had the greatest impact. This demand, together with the adoption of the philosophy of non-intervention, was most strongly associated with distress. A lack of contact with fellow volunteers was most strongly related to the intention to leave the crisis line service. Most work- and organization-related demands were positively associated with volunteers' distress and intention to leave the organization. Against our expectation, results showed that volunteers' distress was not high: in total, 82% of volunteers had low, 15% moderate and 3% high levels of distress. Of all volunteers, the vast majority (81%) indicated that it was (very) unlikely that they would leave the crisis line service within a year, 16% might leave the crisis line service within a year and 4% would probably leave the crisis line service within a year. Volunteers who were older and spent more hours per week volunteering experienced fewer work-related demands than younger volunteers and volunteers working fewer hours. The total explained variance of all work- and organization related demands for distress was 16% and for intention to leave 13%.

Chapter 5

Chapter 5 describes the further validation of the recently developed Sussex Oxford Compassion for the Self Scale (SOCS-S) [3] in three samples: crisis line volunteers, soldiers and nursing students. This questionnaire consists of 20 questions divided into five subscales (factors), namely: a) recognizing suffering, b) understanding the universality of suffering in human experience, c) feeling empathy for one's own suffering, d) tolerating uncomfortable feelings, and e) motivation to act/acting to alleviate suffering [4]. Results showed that the five-factor model had the best fit with the data from all three samples. The factor loadings were strong and significant in all samples. There was good internal consistency on the total scale and the subscales. The correlations of the SOCS-S and a commonly used self-compassion scale, the SCS-SF, were strong and significant. The SOCS-S was found to have good construct validity. Measurement invariance was demonstrated for gender, but not for the different samples and age-classes. The SOCS-S had added value to the SCS-SF in explaining the variance of mental health, but no added value in explaining the variance of distress. The SOCS-S was found to be a reliable and valid questionnaire that can be used to measure all five elements of self-compassion.

Chapter 6

The Job Demands-Resources model (JD-R model) is a well-studied model that provides insight into the factors potentially influencing the wellbeing of employees. In recent years, there has been increasing interest in examining the influence of personal resourc-

es on employees' mental health and productivity in addition to work-characteristics, but self-compassion has rarely been studied. Chapter 6 describes the research into the applicability of the JD-R model among crisis line volunteers, and the additional value of self-compassion as the personal resource to this model. The results of this study demonstrated an acceptable fit of the JD-R model in the sample of crisis line volunteers and supported the central assumption of the JD-R model that there are two independent but related processes, exhaustion and motivation, that influence the organizational outcome. Evidence was found for the relationship between job demands and distress and job resources and engagement, as well as the relationship between engagement and 'compassion towards others' as an organizational outcome. In this study no significant relationship was found between distress and the organizational outcome 'compassion towards others'. The study confirmed our expectation that self-compassion buffers the relationship between job demands and distress and that self-compassion mediates the relationship between job resources and engagement. Since both the moderating influence of self-compassion on the exhaustion process and its mediating role in the motivational process were confirmed, the specific facets of self-compassion which contribute to these effects were examined. In the exhaustion process, all subscales of self-compassion except 'understanding the universality of suffering' showed a moderating effect. In the relationship between training and engagement, all facets of self-compassion showed a mediating effect. However, 'acting or being motivated to act to alleviate suffering' had no mediating effect on the relationship between supervision/co-worker support and engagement. Self-compassion contributed to the total explained variance of compassion towards others in both the exhaustion and motivational processes. The contribution within the exhaustion process (7%) was slightly larger than within the motivational process (3%).

THE OVERARCHING RESEARCH QUESTIONS

In this section, we discuss the three overarching research questions that were introduced in the first chapter of this dissertation.

To what extent do crisis line volunteers experience distress and wellbeing?

A review of Kitchingman et al. [5] found that some volunteers experience symptoms of vicarious trauma, stress, burnout, and psychiatric disorders, and that this subgroup may not respond optimally to callers when they experience increased symptoms of distress. In our review described in chapter two, we found that prevalence rates of decreased mental health ranged widely from 3% to 77%, showing that crisis line volunteers are

at increased risk of declined mental health. However, in our own studies the largest group (82%) of crisis line volunteers scored low on distress. Our studies suggest that volunteering at the crisis line service contributes to the mental health of the volunteers. Volunteers mentioned a wide range of positive emotions such as satisfaction, gratitude and enrichment (Chapter 3) that contribute to their wellbeing. The survey also showed that crisis line volunteers scored higher on engagement than professionals in mental healthcare work [6-8] (Chapter 6). Overall, the results suggest that most volunteers are motivated to work at the crisis line service. Important reasons are the wish to help others, to contribute to society, and the experience that it helps them to grow as a person, to gain deeper understanding of human nature, and to learn meaningful skills (Chapter 2).

In addition, we found that most 'Listen Line' volunteers did not intend to leave the crisis line service within a year (Chapter 4). The interviews we conducted with former volunteers also showed that volunteers had other reasons to leave the service than experiencing distress, such as the wish for spending more time with family and friends, babysitting grandchildren, starting a new education, or no longer wanting to do night shifts.

There are a number of potential explanations for the discrepancy between the results of the earlier systematic reviews and our own studies of the mental health of crisis line volunteers. First, the nature of the volunteer work: in contrast to paid workers, volunteers always have the choice to stop volunteering without any financial impact. Volunteers usually work limited hours, and therefore, have enough time to recover after work and reflect on the question of whether volunteering is still fulfilling [9]. Second, the volunteers of the 'Listen Line' indicated they experience a wide range of positive emotions (such as satisfaction, joy, gratitude, and enrichment) during their work at the crisis line (Chapter 3). Positive emotions play an important role in bouncing back from negative emotions [10-13], such as secondary stress. Experimental research has shown that positive emotions suppress the arousal elicited by negative emotions [14,15]. Positive emotions broaden people's thought-action repertoire, producing patterns of thought and action that are unusual, creative, and flexible. This allows people to develop new coping mechanisms to deal with adversity [10,16,17]. In addition, the volunteers of the 'Listen Line' have other-oriented motives (e.g., they want to be meaningful to others) and self-oriented motives (e.g., they want to learn skills) for doing this work (Chapter 3). Previous research on the positive effects of volunteering on mental health shows that other-oriented motivation leads to increases in mental health [18,19]. Other-oriented volunteering is more altruistic and humanitarian oriented than self-oriented volunteering, which is more self-reinforcing and self-actualizing. Interpersonal relationships, a

supporting network, a sense of belonging, and meaning to life created by other-oriented volunteering contribute to the increase of mental health [19,20]. A third explanation may be the way the volunteering at the Dutch 'Listen Line' is organized (e.g., effective selection, training, and coaching). The resources from the organization and personal resources are discussed when answering research question 2. Finally, the volunteers who participated in the survey are active volunteers. Volunteers with higher levels of distress may have left the organization and this may have biased the results.

Despite the fact that the largest group of 'Listen Line' volunteers score low on distress and high on engagement, there is still a group (about 18%) that scores moderate to high on distress and low on engagement. Therefore, we recommend that trainers monitor the mental health of volunteers, and that volunteers may be offered a tailored intervention to increase their mental health.

What challenges do volunteers encounter while working at the crisis line service, and what resources do they have to cope with these challenges?

Despite the average low scores on distress, we identified a number of challenges and demands from the literature review, interviews and survey (chapters 2, 3 and 4). Below, we will discuss the challenges that had the largest impact, or were most associated with distress or intention to leave the crisis line service within a year. We also describe the most important resources reported by volunteers to cope with these challenges.

Callers with suicidal ideations

Of all work-related demands, callers with suicidal ideations were perceived by volunteers as one of the most stressful demands of their work (Chapter 4). Volunteers who participated in the interviews (Chapter 3) reported that calls from people with suicidal ideations evoke many negative emotions, such as shock, stress, powerlessness, or grief because they cannot do anything for the caller. Uncertainty about the consequences of their own actions was also mentioned, since -because of the anonymity- volunteers will never know how the callers are doing after a call: did they really commit suicide or not (Chapter 3)? About one in five (18%) of 'Listen Line' volunteers indicated that they receive regularly/often calls from callers with suicidal ideations. An explanation for this relatively low perceived frequency is that in the Netherlands a separate telephone helpline for this target group exists: 113-suicide prevention [21].

Callers with psychiatric problems

A second work related challenge for crisis line volunteers is having to deal with callers with psychiatric problems. Although this is perceived on average as moderately stress-

ful, it is a challenge that volunteers are often confronted with. Callers with psychiatric problems have a high impact on volunteers; they indicated that these callers evoked feelings of powerlessness because they felt they were unable to reach the person or to alleviate the suffering of these callers. Yet, it should be noted that some volunteers did experience feelings of gratitude and satisfaction when they were able to provide a listening ear to people with psychiatric problems (Chapter 3). A large majority of the participants in our survey (86%) reported being called regularly or often by people with psychiatric problems. There are two potential explanations for this high frequency. First, due to cutbacks, waiting lists have increased and some people with psychiatric problems do not receive (or receive less) treatment from professional therapists [22]. Second, the partnership between the GGZ (mental healthcare in the Netherlands) and the 'Listen Line': therapists refer their clients to the 'Listen Line', when they have a difficult moment and can be helped with a listening ear [23]. Of all work-related demands, callers with psychiatric problems were most strongly associated with intention to leave the organization.

Callers who are not open to support and are difficult to reach

A third important work-related challenge is having to deal with callers who are not responding to support and are difficult to reach. According to the interviewed crisis line volunteers these callers are often negative, take on a victim role, complain and whine, often think in extremes, and sometimes do not seem to be consciously engaged in the conversation (Chapter 3). Although these types of 'difficult' callers were not identified as a challenge in previous literature (Chapter 2) our survey revealed that having to deal with these callers occurs quite often, is considered stressful and -all in all- was the challenge that was most strongly associated with distress (Chapter 4). An explanation for the relatively high association with distress is that volunteers may think that these conversations are time wasting, and thus may experience these conversations as less rewarding, because this is not consistent with their motivation to provide meaningful support to others [24-27].

Frequent callers

A small group of volunteers of the 'Listen Line' who filled in the questionnaire (14%) indicated being (very) often confronted with frequent callers: people who call several times a day and tell the same story (Chapter 4). The low perceived occurrence of frequent callers was unexpected, because in the scientific literature it is described that frequent callers represent about 3% of callers, but 60% of calls [28,29]. An explanation for the difference between our findings and the literature may be that different definitions for 'frequent callers' were used. The Australian lifeline speaks of a frequent caller if a caller calls more than 20 times a month [28,29], the Canadian 'Suicide-Action Montréal (SAM)'

uses the definition of 'calling more than 10 times a month' [30], whereas in our survey (Chapter 4) the frequent caller was described as someone who calls several times a day, often with the same story. Volunteers who participated in our qualitative study reported that they often find conversations with frequent callers to be meaningless and they get irritated by these callers (Chapter 3). Frequent callers are also described in the literature as time wasters who cause less time to be available for other callers [2,31]. However, research among frequent Lifeline callers in Australia showed that the needs of frequent callers are often underestimated. This group has significant mental health problems and a high suicide risk level, and they are more likely to experience child abuse or domestic violence [29]. It is therefore important not to ignore these frequent callers, as they may be dealing with complex issues.

The philosophy of non-intervention and the principle of non-disclosure

The first challenge that is more embedded in the organization is the philosophy of non-intervention, which is a principle of many crisis lines including the Dutch 'Listen Line'. It means that volunteers are supposed to only offer a listening ear, without any therapeutic or practical intervention [32]. Of all assessed organizational demands in our study, this philosophy of non-intervention was considered as most stressful and most strongly associated with volunteers' distress (Chapter 4). Volunteers who participated in the interviews reported that the philosophy of non-intervention makes them feel powerless, especially when they feel that they could prevent further suffering by intervening (Chapter 3). Previous research has shown that the philosophy of non-intervention confuses some volunteers and can make them vulnerable, because these volunteers started doing this work in order to help others [32]. The philosophy of non-intervention is related to the principle of non-disclosure which implies that both the caller and the volunteer remain anonymous to each other, and that volunteers do not disclose any information about themselves [33]. A number of volunteers who participated in the interviews indicated that they sometimes find it difficult to guard their own boundaries regarding (non-)disclosure (Chapter 3). Also some studies in our review (chapter 2) showed that the principle of non-disclosure can be challenging, because it inhibits the development of trust between the caller and the volunteer, and that volunteers may feel discomfort, because they cannot 'be themselves' (Chapter 2). Sharing personal experiences can actually be helpful in connecting with the caller: by telling something about themselves the volunteer can actually show that they understand the caller's situation [34].

Lack of contact with co-workers

A second organization-related challenge is lack of contact with co-workers. Consistent with our systematic review, about half of the 'Listen Line' volunteers who filled in the

questionnaire experienced lack of contact with co-workers (Chapter 4). This is concerning because lack of contact with co-workers of all organization-related demands, has the strongest association with intention to leave the crisis line service (Chapter 4). Volunteers derive part of their motivation to do volunteer work from social connectedness and meeting others (Chapter 2). If this contact with co-workers is not experienced, then motivation might decrease. Previous studies have described contact with co-workers as an important factor related to mental health, because volunteers experience a lot of support from each other by discussing stress and coping strategies [35,36]. Our survey demonstrated that lack of contact with co-workers is perceived as stressful because volunteers can feel isolated and difficult cases cannot be discussed with co-workers (Chapter 3 and 4). Research has shown that peer support among workers can protect against depression, buffer the effect of task demands on stress [37], and induce a sense of belonging to a group with a common goal, which contributes to satisfaction and has a positive impact on mental health [38].

Training, intervision, coaching, and co-worker support as organizational resources

Our studies also revealed a number of organization-related resources that may help volunteers to cope with the aforementioned challenges. The volunteers who participated in the interviews and the survey were generally very positive about the training, supervision, guidance and support they receive from professional trainers. After a telephone conversation, volunteers make a short report. Trainers read these reports and proactively contact the volunteer if they think that a conversation may have had a great impact on a volunteer. The trainer asks how the volunteer is doing and explores the volunteers needs. The volunteers in the interviews reported that they appreciate this way of support (Chapter 3). Guided intervision in particular is seen as an important resource, because volunteers can exchange experiences about impactful conversations. Volunteers help each other with reflection and learning new strategies that can be applied in the volunteer work (Chapter 3). Research has shown that through training and supervision volunteers learn to accept and understand their role, develop good relationships with co-volunteers, and feel more connected to the organization [39]. This leads to better integration in the organization which contributes to the prevention of burnout symptoms [39]. Other research shows that co-worker support and training are predictors of commitment to the work, to co-workers, to the organization, and to the client. This commitment is in turn a predictor of mental wellbeing, job satisfaction, and intention to continue volunteering [18]. We expected volunteers to be satisfied with the training and supervision because, as described in the introduction, volunteers receive extensive training after careful selection.

Is self-compassion a valuable personal resource for crisis line volunteers?

The third overarching question in this dissertation is whether self-compassion is a valuable personal resource for crisis line volunteers. Several steps were taken to explore the role of self-compassion. First, we identified self-compassionate thoughts and behaviours in the focus group interviews. Then we translated and validated a recently developed self-compassion questionnaire. Next, we surveyed how crisis line volunteers scored on self-compassion. Finally, we added self-compassion as a personal resource to the job demands-resources (JD-R) model.

Our interviews (described in chapter 3) showed that volunteers perceived self-compassion as an important personal resource. Distinctions were made between being self-compassionate in thinking (e.g., being aware of a mutual responsibility for the course of a conversation, being allowed to make mistakes) and being self-compassionate in behaviour (e.g., taking timely breaks, seeking support from others, setting boundaries in a conversation, performing rituals to let go of the content of a conversation). Some volunteers indicated that they experienced difficulties with this kind of compassion. They reported being ashamed of their reaction in a conversation, being self-critical, being angry at themselves for making mistakes, and ruminating on a conversation. In addition, some volunteers reported that they often took a break too late, exposed too much of themselves, and had difficulty maintaining their boundaries during a conversation (Chapter 3).

As a next step we translated and validated a recently developed questionnaire, the Sussex Oxford Compassion for the Self Scale (SOCS-S), [3] in samples of crisis line volunteers, military personnel and nursing students. The Dutch version of the SOCS-S proved to be a reliable and valid instrument for measuring self-compassion (Chapter 5). We found that scores on the SOCS-S added to the Self Compassion Scale-Short Form (SCS-SF) in accurately predicting the level of mental wellbeing in crisis line volunteers and soldiers. In the sample of crisis line volunteers, it was found that specifically the subscales 'recognizing suffering' and 'acting to alleviate suffering' added to the explained variance of mental health. These positive findings allowed us to use the SOCS-S in a survey among crisis line volunteers that explored the degree of self-compassion and the role of self-compassion in the JD-R model.

The survey demonstrated that volunteers of the 'Listen Line' score high on self-compassion (*M(SD)* = 78.1 (9.4), possible range = 20-100) compared to other groups, such as soldiers, nursing students and healthcare professionals (Chapter 5 and 6). There are some possible explanations for the high score on self-compassion among the

volunteers of the 'Listen Line'. First, the support provided by the organization and the training encourages the development of self-compassion. In the trainings, 'taking care of yourself' is an important topic [40]. In addition, during the supervision/intervision meetings there is awareness of and kind attention to current events and experiences of difficult emotions and cognitions. This application of mindfulness has been described as an important component of self-compassion [41]. The climate at the 'Listen Line' has been described as safe and warm (Chapter 3). Through social safety at the group level, members of the group are not only collectively mindful, but also develop calming and caring attitudes toward themselves. This provokes positive social affective experiences, which in turn contributes to compassionate group functioning [42]. Second, the overall conditions within the 'Listen Line' are compassionate. Above we already described that the volunteers are very satisfied with the supervision and the support they receive after having had a difficult conversation. Trainers proactively contact the volunteer after a difficult conversation to ask about the wellbeing of the volunteer and to explore the volunteers' needs. In this way, the trainer shows compassion. Compassion from others is important for preventing or reducing compassion fatigue if one routinely deals with the suffering of clients [43]. Receiving compassion from others leads to feelings of connection and appreciation, which in turn leads to increased self-compassion [44]. Receiving compassion from colleagues and supervisors changes the recipient's self-image (e.g., seeing oneself as more capable), the image of colleagues (e.g., perceiving colleagues as more humane), and of the organization (e.g., a caring organization) [43,45]. Third, it could be that only those volunteers who have sufficient self-compassion can sustain the work. This means that there may be a bias in the results because we did not include former volunteers in the survey.

As a final step we examined the added value of self-compassion in the work of the 'Listen Line' in the context of the Job Demands-Resources (JD-R) model using structural equation modelling. The JD-R model consists of two underlying psychological processes: exhaustion (predicts that high work demands in the absence of job resources causes a decrease in mental health, such as distress) and motivation (predicts that the presence of job resources will contribute to increased mental health, such as engagement and productivity) [46-48]. We added self-compassion as a personal resource to the JD-R model, by examining its moderating influence on the exhaustion process and its mediating influence on the motivational process.

Our findings showed that self-compassion has a moderating influence on the exhaustion process, which means that self-compassion weakens the relationship between job demands and distress (Chapter 6). An explanation is that self-compassion supports coping with feelings of inadequacy and stressors with kindness and self-assurance [49].

The realization that suffering happens to everyone and the ability to see this suffering in the right perspective, without judgment, and without overreacting [4,50], helps to reduce feelings of distress [51,52]. At the core of being able to adapt (flexibly) to one's environment is the ability to face negative emotions, which is one of the elements of self-compassion. This allows people with self-compassion to acquire the resources and skills needed to adapt effectively to a situation and explains why self-compassion buffers the relationship between job demands and distress. We also found that self-compassion has a mediating (strengthening) effect on the relationship between job resources and engagement. These findings are in line with our expectations. As described earlier, training, supervision, and co-worker support have a positive effect on developing self-compassion. Previous research has shown that self-compassion leads to higher engagement and lower exhaustion [53,54]. Therefore, we expected the mediating effect of self-compassion on the motivational process.

Our multiple regression analysis also demonstrated that self-compassion contributed to the explained variance of compassion toward others through both the exhaustion process and the motivational process (Chapter 6). The contribution within the exhaustion process (7%) was slightly larger than the motivational process (3%). An explanation for the predictive value of self-compassion on compassion toward others can be found in the theory of the three flows of compassion. Gilbert [55] describes that compassion is a dynamic process and takes place in social-interactional contact. Compassion can be guided by three flows: (a) compassion toward the other, (b) compassion from the other, and (c) compassion for the self. These flows can be independent of each other (a person can feel compassion for the other, but not for the self) [56]. However, self-compassion can also influence the other flows of compassion. If a person receives compassion from another, it can spill over to the other flows of compassion [55,57]. Self-compassion and perceived compassion from others among 'Listen Line' volunteers, can flow out to compassion toward callers. Based on the compassionate guidance the organization provides to its volunteers, we can tentatively conclude that the 'Listen Line' is a compassionate organization. In recent years, there has been an increasing interest in the scientific literature on compassion in organizations. This scientific literature focuses primarily on the benefits of compassion in organizations for employees. Employees in compassionate organizations experience less stress and fewer dropouts [58], more engagement and happiness, more connectedness [59], and better physical health [60]. From the business world, there is some evidence that compassion leads to better organizational performance [61,62], higher profits [63], and higher productivity [64,65]. This provides an explanation for why self-compassion has a positive impact on the most important service that the 'Listen Line' provides: compassion towards others.

RECOMMENDATIONS FOR FUTURE PRACTICE AND RESEARCH BASED ON LIMITATIONS

Recommendations for practice:

During selection, prepare the potential volunteer for the principles of the organization and the specific work-related challenges.

We recommend that the principles (non-intervention and anonymity) of the 'Listen Line' be clearly discussed during the selection process. In addition, it is important to prepare the potential volunteer on the topics of conversation and the behaviour of the callers.

During training, pay attention to specific work-related demands.

We recommend that during the training, where volunteers learn basic communication skills, attention will be paid to dealing with difficult conversation topics (e.g., suicidality and psychiatric problems) and the sometimes difficult behaviour of callers (not being open to support and frequent callers). We recommend inviting people with psychiatric problems to a training session to increase understanding of these people and knowledge of their specific needs. Research shows the importance of learning to understand people with psychiatric disorders because these people face persistent prejudices. Talking to people with psychiatric problems can help to reduce these prejudices [66,67].

Attention to self-compassion during training and supervision.

Because self-compassion weakens the relationship between job demands and distress, and strengthens the relationship between job resources and engagement, it is important to make self-compassion a topic during training. Self-compassion can help 'Listen Line' volunteers to deal with negative feelings, such as anger and powerlessness when a caller shows inappropriate behaviour. The volunteers learn to manage feelings of shame and guilt and to look at the other person's suffering with compassion, without letting that suffering transfer to them. In a study of ways that counsellors are compassionate toward themselves during conversations, useful suggestions were given that can be translated well to the conversations that crisis line volunteers have [68]. First, accepting being human, with all its limitations, as well as accepting difficult situations, can help to recognize the limits of helping and to moderate any high expectations of a conversation. Second, it also helps to be curious about the caller's underlying question, allowing the caller to reflect and find an answer themselves, rather than the volunteer having to have all the answers themselves. Third, when thoughts that come from inner dialogue, such as self-criticism, shame, and doubt take over, techniques can be used to control this self-talk, such as use of the breath and positive affirmations (texts that strengthen one's beliefs, such as, "I am proud of the work I do"). Fourth, self-compassionate behaviour can be encouraged by making clear the importance of taking time for yourself. It is impor-

tant to take time after each conversation to reflect on the feelings that a conversation has evoked, before the volunteer immediately engages in the next conversation. Taking breaks on time is also self-compassionate behaviour. Fifth, another form of compassionate behaviour is discussing one's own fallibility, during supervision. Sharing experiences in which volunteers make mistakes raises awareness that making mistakes is part of being human.

During (guided) intervision, promote the sharing of experiences.

We recommend regular (guided) intervision meetings to share experiences related to difficult conversation topics, difficult caller behaviour and to give mutual advice. Topics of supervision meetings could be: protecting personal boundaries to prevent exposure of information about themselves to callers, dealing with the negativity of a caller, and responding to a caller who is suicidal. These meetings should be instructive and ensure mutual contact between volunteers.

Care for the volunteers.

We recommend that in addition to monitoring the mental health of volunteers, trainers also proactively and compassionately care for a volunteer when they have had a difficult conversation. To stimulate contact with fellow volunteers, it is important to organize regular relaxing activities, such as an annual dinner or online coffee moments, in addition to supervision.

Add self-compassion as a skill to education and training for people facing suffering.

The introduction stated that volunteers are becoming increasingly important for the success of the participation society. This participation society is partly needed because of the grey pressure (ratio of people over 60 years old to people between 20 and 65 years old). This grey pressure cannot possibly be met by volunteers alone. In the future we will need more people in caregiving professions. It is precisely in these professions that many students drop out during their studies or in the first years after their studies [69,70]. This thesis shows that self-compassion has a positive influence on mental health. Therefore, we recommend examining how the cultivation of self-compassion can be added to a curriculum of healthcare worker training programs. It would be interesting to examine whether self-compassion affects the dropout of these healthcare workers.

Promote volunteering.

Volunteers are necessary for the success of a participation society. In addition, volunteers providing supplementary care are especially important in the current times as the pressure on care has been greatly increased by Covid-19. Therefore, volunteering

(especially as a supplement to care) should be promoted as a socially relevant activity that also contributes to a healthy lifestyle. Volunteering has a positive impact on the mental wellbeing of volunteers [19]. Because research has shown that other-oriented volunteers are more engaged, satisfied, and persistent in their volunteering than self-oriented volunteers [19,20,71,72], it is important that potential volunteers' motives for influencing sustainability and service delivery be taken into account when promoting volunteering as a healthy lifestyle. The health benefits of serving others through an altruistic attitude and humanitarian care should be emphasized [19]. In addition, the benefits to the volunteer themselves can also be emphasized, such as learning new skills and gaining new social contacts.

Future research

Examine "compassion toward others" by observations rather than by self-report.

The questionnaire we used to measure 'compassion toward others' is a retrospective self-report questionnaire. The use of self-report questionnaires to measure compassion toward others has limitations [4]. For example, many questionnaires used are retrospective in nature (they ask participants to recall whether they have felt compassion, e.g., in the last few days). The measurements tend to reflect the respondent's beliefs, rather than actual behaviour [73]. Other questionnaires ask respondents to imagine how compassionately they would respond in a hypothetical situation. Answers are likely driven by generalizations about themselves (e.g., I am a compassionate person). People often underestimate or overestimate how they might feel in a hypothetical circumstance, which is known as a limitation in affective prediction [74]. Moreover, a self-reported experience of an emotion does not always match the view of that emotional experience (e.g., fear is a negative emotion, except when watching a scary movie). This mismatch appears to be particularly true for compassion, where research respondents report that compassion feels pleasant, yet they describe both pleasant and unpleasant experiences of compassion [75].

In an integrated theoretical review, Mascaro et al. [76] discuss three ways to measure compassion: (a) First-person perspective, these are the self-report questionnaires (e.g., the SOCS-S [3] and the TCEAS [77], (b) Second-person perspective, here the recipients of compassion qualitatively or quantitatively assess how compassionate the giver was (e.g., the Compassionate Care Assessment Tool [78]), and (c) Third-order perspective, such as using observation lists (e.g., Collaborative Behaviours Observational Assessment Tool 'CBOAT' [79]) or physiological measurement methods (e.g., Electronically Activated Recorder 'EAR' [80]). This review can be used to choose the most appropriate instrument to measure compassion in a given context [76].

Examine the effect of self-compassion in an experimental study.

This thesis found clear evidence that self-compassion has a significant impact on the exhaustion and motivational process of the JD-R model. However, this was demonstrated with cross-sectional research. To make valid statements about causal relationships, experimental research should be conducted using a tailored self-compassion intervention. It can be examined whether cultivating self-compassion has a positive influence on work-related stress and engagement.

When designing an intervention focused on self-compassion, it is important to involve the target group. A target group is generally well aware of what they need and what be less desirable among volunteers of the 'Listen Line', due to the advanced age of many of these volunteers. A large number will feel resistance to an app on their smartphone. Attention to self-compassion during a training, or a life workshop is more preferable for this specific group.

Examine compassion in health care workers.

It may be worthwhile to examine the role of self-compassion in the mental health of other (paid) health care professionals. For example nurses are known to be at high risk for distress and burnout and high turnover rates are reported (this has become even more relevant in the recent pandemic) [81]. Another example, nursing students face many challenges (such as, violence, bullying, gossip and slander) during their internship and are therefore vulnerable to distress and dropout [69]. Yet studies on the role of compassion in these groups are limited.

Examine role of all three flows of compassion.

This thesis primarily examined the role of self-compassion on mental health and the organizational outcome 'compassion toward others'. We recommend that future research include all three flows of compassion: compassion from the other, compassion towards the other, and compassion for the self [57]. Research has shown that compassion from colleagues and supervisors increases employee confidence, pride, commitment, connectedness, and motivation [45,82]. In addition, compassion from others increases organizational performance [83] and improves perceptions of leadership effectiveness [84-87]. When the JD-R model is used to examine the influence of work characteristics in context, compassionate support from colleagues and supervisors as a job resource should not be missed.

Examine self-compassion using the SOCS-S.

The SOCS-S has been shown to be valid and reliable in several samples. It measures all elements of self-compassion identified by Strauss et al. [4] and is therefore very com-

prehensive in measuring self-compassion. It is interesting to explore which elements of self-compassion contribute most to mental health, as this will help determine where the focus of self-compassion interventions should be. Further research into the comparability of self-compassion measured with the SOCS-S between different groups is needed. Chapter 5 describes an initial exploration of measurement invariance, it would be of interest to further examine whether measurement invariance between similar groups is also unequal, for example between groups who volunteer to supplement care, or different student groups.

Examine the effectiveness of interventions to reduce frequent callers.

Middleton et al. [88] found suggestions in the literature for dealing with frequent callers (e.g., limit the number and duration of authorized calls, assign a specific counsellor, have the crisis line service initiate contact with the caller rather than waiting for the caller to contact the service). However, these suggestions have been not examined for effectiveness or were examined in very small respondent groups [88]. For future research it is recommended to examine these interventions for effectiveness with larger samples and validated measurements.

Involve former volunteers in mental health research.

This thesis shows that crisis line volunteers score low on distress and high on engagement. However, these results may be biased because volunteers who score high on distress and low on engagement may have quit volunteering. Future research on the mental health of volunteers should include former volunteers to put the results of research into perspective.

OVERALL CONCLUSION

This dissertation shows that most volunteers at the crisis line service experience high levels of wellbeing and are engaged in their volunteer work. About one in five volunteers experience mild or moderate levels of distress. Important challenges experienced by crisis line volunteers are work-related (e.g., complex issues and difficult caller behaviour) and organization-related (e.g., non-intervention and anonymity). Important resources for wellbeing are the presence of a good selection policy, social networks and adequate training, supervision and intervision facilities. This dissertation is the first to examine self-compassion as a personal resource in the context of job resources and job demands. The findings suggest that self-compassion is an important resource for experiencing wellbeing and engagement and reducing distress. Especially the ability to recognize suffering, feeling one's own suffering, tolerating uncomfortable feelings, and the ability

to act to relieve suffering were found to be important facets of compassion in relation to mental health. Importantly, self-compassion was shown to be related to compassion to others which can be seen as a vital outcome of a crisis line organization. It is likely that training, supervision and intervision contribute to fostering a caring and warm job climate as well as self-compassion of the volunteers. However, we also found that some important challenges remained: the complex topics of the calls and the behaviour of callers. Some volunteers may find it especially difficult to cope with these challenges resulting in moderate levels of distress. Further longitudinal research into the role of self-compassion as a personal resource is warranted to explore the causal relationships between job demands, job resources, self-compassion and mental health, compassion to others and job satisfaction.

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Dutch summary

SAMENVATTING

Telefonische hulplijnen, zoals de Nederlandse 'Luisterlijn', bieden anonieme emotionele steun via de telefoon of de chat aan iedereen die geen gebruik kan of wil maken van formele hulpverlening. Bij de 'Luisterlijn' voeren 1.400 getrainde vrijwilligers jaarlijks ongeveer 360.000 telefoon-, e-mail- of chatgesprekken [1]. De 'Luisterlijn' hanteert de filosofie van non-interventie: er wordt een luisterend oor geboden, maar er wordt geen therapeutische interventie toegepast [2]. Onderzoek heeft bewijs geleverd voor de effectiviteit van telefonische hulplijnen. Zo rapporteerden bellers lagere niveaus van onrust en distress (ongezonde stress) tijdens en na het gesprek [3,4] en daarnaast zijn de telefonische hulpdiensten effectief gebleken in het voorkomen van suïcidaliteit [3,5]. Daarom zijn telefonische hulplijnen een belangrijke aanvulling op de bestaande zorg. Naast de soms complexe onderwerpen, zoals suïcidaliteit en mishandeling worden vrijwilligers geconfronteerd met ongepast gedrag. Voorbeelden hiervan zijn bellers die schelden of manipuleren, mensen die bellen voor seksuele bevrediging, en mensen die voor de lol bellen [6,7]. Hoewel veel vrijwilligers het werk bij een telefonische hulplijn als zeer bevredigend ervaren, vergt het voortdurend moeten schakelen tussen complexe onderwerpen en tegelijkertijd omgaan met ongepast gedrag van bellers een grote mentale flexibiliteit van vrijwilligers. Dit kan uiteindelijk een negatieve invloed hebben op hun mentale gezondheid.

Het doel van dit proefschrift is een bijdrage te leveren aan de kennis over de mentale gezondheid van vrijwilligers van de 'Luisterlijn' en de beïnvloedende factoren (werkeisen en hulpbronnen). Daarnaast beoogt dit proefschrift de rol van zelfcompassie als persoonlijke hulpbron voor vrijwilligers van de 'Luisterlijn' te onderzoeken in de context van het job demands-resources (JD-R) model.

SAMENVATTING PER HOOFDSTUK

Hoofdstuk 2

In hoofdstuk 2 wordt een systematische review beschreven die als doel had te onderzoeken wat er in de wetenschappelijke literatuur bekend is over de mentale gezondheid van vrijwilligers van een telefonische hulplijn en de daarmee samenhangende factoren. Ondanks een uitgebreide zoekstrategie en brede inclusiecriteria leverde deze review slechts dertien artikelen op die betrekking hadden op de periode 1973-2018. Bovendien varieerden de gevonden studies sterk in methodologische kwaliteit, gebruikten ze een grote verscheidenheid aan uitkomstmaten, en gebruikten de meeste studies geen gevalideerde meetinstrumenten. De negatieve effecten van het werken bij de telefonische

hulplijn op de mentale gezondheid werd op verschillende manieren onderzocht; zo werd bijvoorbeeld gekeken naar symptomen van burn-out, compassiemoeheid, distress (ongezonde stress), of naar gevoelens van frustratie. De prevalentie van problemen met betrekking tot de mentale gezondheid liep sterk uiteen, van 3% tot 77%. Er zijn dus aanwijzingen dat vrijwilligerswerk bij de telefonische hulplijn een negatieve invloed heeft op de geestelijke gezondheid.

De positieve effecten van het werken bij de telefonische hulplijn op de geestelijke gezondheid werden minder vaak onderzocht dan de negatieve effecten; slechts vijf (meestal kwalitatieve) studies meldden dat de meeste vrijwilligers enige vorm van tevredenheid of voldoening ervaarden als gevolg van hun werk bij de crisislijn. De kwalitatieve studies beschreven hoofdzakelijk de motivatie van vrijwilligers van de telefonische hulplijn; deze motivatie kan zowel gericht zijn op anderen (bv. anderen willen helpen en bijdragen aan de samenleving) als meer gericht zijn op zichzelf (bv. een doel in het leven vinden en de leerervaring).

De factoren die van invloed zijn op de mentale gezondheid van vrijwilligers van de telefonische hulpdienst kunnen in drie categorieën worden onderverdeeld: (a) factoren die verband houden met de aard van het werk (zoals anonimiteit, filosofie van non-interventie, ongepaste gedrag, complexiteit van de gespreksonderwerpen), (b) factoren die verband houden met de organisatie van het werk (zoals toezicht en opleiding, organisatorische ondersteuning, en ondersteuning van collega's), en (c) factoren die verband houden met de vrijwilliger (coping-mechanismen). Geen van de geïncludeerde studies omvatte al deze categorieën.

Hoofdstuk 3

In hoofdstuk 3 doen we verslag van een kwalitatief onderzoek onder (oud-) vrijwilligers van de Nederlandse telefonische hulplijn, de 'Luisterlijn', waarin de vrijwilligers vanuit hun eigen perspectief de emotionele impact van het werk, de uitdagingen, en de hulpbronnen die hen helpen met deze uitdagingen om te gaan, beschrijven. Er werden vier focusgroepen gehouden met tweeëntwintig actieve vrijwilligers en acht interviews met voormalige vrijwilligers. Uit de resultaten blijkt dat vrijwilligers van de telefonische hulpdienst tijdens hun werk een breed scala aan positieve emoties (bv. tevredenheid, vreugde, dankbaarheid, verrijking) en negatieve emoties (bv. frustratie, woede, machteloosheid en verdriet) ervaren. De positieve emoties worden vaak in verband gebracht met de motivatie om dit werk te doen, namelijk 'van betekenis zijn'. De negatieve emoties die door de vrijwilligers worden vermeld, houden vaak verband met de uitdagingen waarmee ze worden geconfronteerd, zoals de gespreksonderwerpen (bv. suïcidaliteit of misbruik), en het soms moeilijke gedrag van de bellers (bv. negativiteit, slachtofferrol,

veel-bellers). Vrijwilligers melden ook organisatorische hulpbronnen (b.v. training, supervisie en ondersteuning) en persoonlijke hulpbronnen (b.v. zelfcompassie in denken en gedrag) die hen helpen om te gaan met deze uitdagingen en negatieve emoties.

Hoofdstuk 4

Op basis van het systematische literatuuronderzoek en de kwalitatieve studie werden de geïdentificeerde werkeisen vertaald naar een vragenlijst, die door 543 vrijwilligers werd ingevuld. In hoofdstuk 4 hebben we onderzocht hoe vaak de verschillende werkeisen voorkomen en als hoe stressvol ze worden ervaren. We onderzochten ook de relatie tussen deze werkeisen en de distress van de vrijwilligers en hun intentie om de telefonische hulplijn binnen een jaar te verlaten. Uit de resultaten blijkt dat sommige eisen als zeer stressvol worden ervaren, maar niet vaak voorkomen (zoals bellers die suïcidaal zijn en bellers die verhalen vertellen waarin kinderen of dieren het slachtoffer zijn). Andere eisen worden als minder stressvol ervaren, maar komen wel vaak voor (zoals cliënten met psychiatrische problemen en veel-bellers). De werk-gerelateerde eisen met de grootste impact (het product van frequentie en waargenomen stress) zijn bellers met psychiatrische problemen, gevolgd door bellers die suïcidaal zijn. De eisen die het sterkst geassocieerd worden met distress zijn bellers die niet luisteren of die in extremen denken, bellers die klagen en zeuren, en bellers die andere dingen aan het doen zijn tijdens het gesprek. Wat de organisatie-gerelateerde werkeisen betreft, heeft het hebben van weinig tijd voor een pauze de grootste impact. Deze eis is, samen met de filosofie van non-interventie, het sterkst geassocieerd met distress. Het gebrek aan contact met collega-vrijwilligers is het sterkst gerelateerd aan de intentie om de telefonische hulpdienst te verlaten. De meeste werk- en organisatie-gerelateerde werkeisen zijn positief geassocieerd met de distress van vrijwilligers en de intentie om de organisatie te verlaten. Dat wil zeggen dat hoe meer werk- en organisatie-gerelateerde werkeisen ervaren worden, hoe hoger de vrijwilligers scoren op distress en de intentie om de organisatie te verlaten. Tegen onze verwachting in, tonen de resultaten aan dat de distress van de vrijwilligers niet groot is: in totaal 82% van de vrijwilligers scoren laag, 15% matig en 3% een hoog op distress. Van alle vrijwilligers geeft de overgrote meerderheid (81%) aan dat het (zeer) onwaarschijnlijk is dat zij de telefonische hulplijn binnen een jaar gaan verlaten, 16% verlaat de telefonische hulplijn mogelijk binnen een jaar en 4% verlaat de telefonische hulplijn waarschijnlijk binnen een jaar. Vrijwilligers die ouder zijn en meer uren per week vrijwilligerswerk doen, ervaren minder werk-gerelateerde eisen dan jongere vrijwilligers en vrijwilligers die weinig uren werken. De totale verklaarde variantie van alle werk- en organisatie-gerelateerde werkeisen is voor distress 16%, en voor de intentie om de telefonische hulplijn te verlaten 13%.

Hoofdstuk 5

Hoofdstuk 5 beschrijft de verdere validatie van de recent ontwikkelde vragenlijst die zelfcompassie meet, de Sussex Oxford Compassion for the Self Scale (SOCS-S), in drie steekproeven: vrijwilligers van de telefonische hulplijn, militairen en studenten verpleegkunde. Deze vragenlijst bestaat uit 20 vragen verdeeld over vijf subschalen (factoren), namelijk: a) het herkennen van lijden, b) het begrijpen van de universaliteit van lijden in de menselijke ervaring, c) empathie voelen voor het eigen lijden, d) het tolereren van ongemakkelijke gevoelens, en e) motivatie om te handelen om het lijden te verlichten [8]. De resultaten tonen aan dat het vijf-factoren model het beste paste bij de gegevens van alle drie de steekproeven. De factorladingen zijn sterk en significant in alle steekproeven. Er is een goede interne consistentie op de totale schaal en de subschalen. De correlaties van de SOCS-S met een veelgebruikte zelf-compassie schaal, de SCS-SF, zijn sterk en significant. De SOCS-S blijkt een goede construct validiteit te hebben. Meetinvariantie is aangetoond voor geslacht, maar niet voor de verschillende steekproeven en leeftijdsklassen. De SOCS-S heeft toegevoegde waarde aan de SCS-SF in het verklaren van de variantie van mentale gezondheid, maar er is geen toegevoegde waarde aangetoond in het verklaren van de variantie van distress. Geconcludeerd kan worden dat de SOCS-S een betrouwbaar en valide instrument is om de vijf elementen van zelfcompassie te meten.

Hoofdstuk 6

Het Job Demands-Resources model (JD-R model) is een goed bestudeerd model dat inzicht geeft in de factoren die mogelijk van invloed zijn op het welbevinden van werknemers. De laatste jaren is er steeds meer belangstelling om naast werkkenmerken ook de invloed van persoonlijke hulpbronnen op de mentale gezondheid en de productiviteit van werknemers te onderzoeken. Echter, zelfcompassie als persoonlijke hulpbron is in deze context nog maar zelden onderzocht. En ook is het JD-R model nog niet vaak onderzocht in de context van vrijwilligers. Hoofdstuk 6 beschrijft een onderzoek naar de toepasbaarheid van het JD-R model op vrijwilligers van de telefonische hulplijn, en de toegevoegde waarde van de persoonlijke hulpbron zelfcompassie aan dit model. De resultaten van dit onderzoek tonen een acceptabele fit van het JD-R model in de steekproef van vrijwilligers van de telefonische hulplijn en ondersteunen de centrale aanname van het JD-R model dat, ook bij vrijwilligers, er twee onafhankelijke maar gerelateerde processen zijn, uitputting en motivatie, die de organisatorische uitkomst beïnvloeden. Er is bewijs gevonden voor de relatie tussen werkeisen en distress, en hulpbronnen en bevlogenheid, evenals voor de relatie tussen bevlogenheid en 'compassie voor anderen' als organisatorische uitkomst. In deze studie is geen significante relatie gevonden tussen distress en de organisatorische uitkomst 'compassie voor anderen'.

Het onderzoek toont ook aan dat zelfcompassie -zoals verwacht- de relatie tussen werkeisen en distress afzwakt (modereert) en een mediërende rol speelt in de relatie tussen hulpbronnen en bevlogenheid. Nadat zowel de modererende invloed van zelfcompassie op het uitputtingsproces als de mediërende rol ervan in het motivatieproces zijn aangetoond, is onderzocht welke specifieke facetten van zelfcompassie bijdragen aan deze effecten. In het uitputtingsproces vertonen alle subschalen van zelfcompassie, behalve 'begrip voor de universaliteit van lijden', een modererend effect. In de relatie tussen training en steun van collega vrijwilligers vertonen alle facetten van zelfcompassie een mediërend effect. Echter, 'handelen of gemotiveerd zijn om te handelen om lijden te verlichten' heeft geen mediërend effect op de relatie tussen supervisie/co-worker support en bevlogenheid. Zelfcompassie draagt bij aan de totale verklaarde variantie van compassie naar anderen via zowel het uitputtingsproces als het motivatieproces. De bijdrage binnen het uitputtingsproces (7%) is iets groter dan binnen het motivationele proces (3%).

Hoofdstuk 7

In hoofdstuk 7, de algemene discussie, worden de belangrijkste uitkomsten en suggesties voor vervolgonderzoek besproken. Dit proefschrift toont aan dat de meeste vrijwilligers van de telefonische hulplijn een hoog niveau van welzijn ervaren en betrokken zijn bij hun vrijwilligerswerk. Ongeveer één op de vijf vrijwilligers ervaart een matig of hoog niveau van distress. De vrijwilligers hebben te maken met werk- en organisatiegerelateerde uitdagingen, en met hulpbronnen. Dit proefschrift is het eerste dat zelfcompassie onderzoekt als een persoonlijke hulpbron in de context van hulpbronnen en werkeisen. De bevindingen suggereren dat zelfcompassie een belangrijke hulpbron is voor het ervaren van welbevinden en bevlogenheid en het verminderen van distress. Belangrijk is dat zelfcompassie gerelateerd bleek te zijn aan compassie met anderen, wat gezien kan worden als een vitaal resultaat van een telefonische hulplijn.

Uit dit onderzoek volgen een aantal suggesties voor toekomstig onderzoek. Wij bevelen aan om in een onderzoek naar 'compassie naar anderen' een observatielijst te gebruiken, in plaats van een zelfrapportage vragenlijst. Een zelfrapportage vragenlijst is vaak retrospectief (respondenten moeten zich herinneren wanneer en hoeveel compassie zij voelden) en reflecteren vaak het idee dat respondenten over zichzelf hebben. Met een observatielijst voorkom je deze vertekening in de uitkomst.

In dit proefschrift werd duidelijk bewijs gevonden dat zelfcompassie een significante invloed heeft op het uitputtings- en motivatieproces van het JD-R model. Dit werd echter aangetoond met cross-sectioneel onderzoek. Om valide uitspraken te kunnen doen over causale verbanden, zou experimenteel onderzoek moeten worden uitgevoerd

met een op maat gesneden zelfcompassie-interventie. Onderzocht kan worden of het cultiveren van zelfcompassie een positieve invloed heeft op werk-gerelateerde stress en bevlogenheid.

Een andere suggestie voor toekomstig onderzoek is: onderzoek het belang van compassie in andere doelgroepen die te maken krijgen met mensen die lijden, zoals gezondheidswerkers. Het zou interessant zijn om alle drie de stromen van compassie (compassie van de ander, compassie naar de ander en compassie naar jezelf) in dit onderzoek te betrekken, omdat deze elkaar beïnvloeden. Om te onderzoeken welke elementen van zelfcompassie het meeste invloed hebben op de mentale gezondheid, kan de SOCS-S gebruikt worden.

In het verleden zijn er interventies ontworpen gericht op het reduceren van veelbellers. Deze interventies zijn echter in te kleine respondentgroepen of niet onderzocht op effectiviteit. Het is interessant om deze interventies in grotere groepen te onderzoeken, met valide meetinstrumenten.

In onderzoek naar de mentale gezondheid van vrijwilligers, is het belangrijk om vrijwilligers die gestopt zijn met het werk mee te nemen, om een realistischer beeld te krijgen van de impact van het vrijwilligerswerk op de mentale gezondheid van vrijwilligers.

Naast suggesties voor toekomstig onderzoek hebben we ook belangrijke aanbevelingen voor de praktijk: Als voorbereiding op het werken bij de 'Luisterlijn' is het van belang dat potentiële vrijwilligers zich bewust zijn van de uitgangspunten van de 'Luisterlijn' en wat deze kunnen betekenen voor de vrijwilliger. Daarnaast is aandacht voor het omgaan met uitdagingen die niet te veranderen zijn, zoals de complexe onderwerpen en het gedrag van de beller, tijdens training en supervisie erg belangrijk. Tijdens supervisie kunnen ervaringen uitgewisseld worden, vrijwilligers geven zelf aan dat dit als waardevol ervaren wordt. Wij adviseren trainers om naast het monitoren van de mentale gezondheid van vrijwilligers, ook proactief en met compassie zorg te dragen voor een vrijwilliger wanneer deze een moeilijk gesprek heeft gehad. Om het contact met collega-vrijwilligers te stimuleren, is het belangrijk om naast begeleiding ook regelmatig ontspannende activiteiten te organiseren, zoals een jaarlijks etentje of online koffiemomenten.

Omdat zelfcompassie de relatie tussen taakeisen en distress verzwakt, en de relatie tussen taakeisen en bevlogenheid versterkt, is het belangrijk om van zelfcompassie een thema te maken tijdens de training. Zelfcompassie kan vrijwilligers van de 'Luisterlijn' helpen om te gaan met negatieve gevoelens, zoals boosheid en machteloosheid wanneer een beller ongepast gedrag vertoont. Ook kunnen zij leren om te gaan met

gevoelens van schaamte en schuld en om met compassie naar het lijden van de ander te kijken, zonder dat lijden op henzelf te laten overslaan.

Hoewel dit onderzoek zich heeft gericht op vrijwilligers van de 'Luisterlijn', denken wij dat de aandacht voor zelfcompassie als persoonlijke hulpbron ook waardevol is in (opleidingen voor) beroepen waar mensen geconfronteerd worden met het lijden van anderen, zoals verpleegkunde. Veel studenten verpleegkunde stoppen in de eerste jaren van hun opleiding, of vlak nadat zij hun opleiding hebben afgerond. Daarom is het interessant om te onderzoeken hoe het cultiveren van zelfcompassie toegevoegd kan worden aan het curriculum van de opleiding tot verpleegkundige.

Vrijwilligers zijn noodzakelijk voor het welslagen van een participatiesamenleving. Daarnaast zijn vrijwilligers die aanvullende zorg verlenen juist in de huidige tijd van groot belang, nu de druk op de zorg door Covid-19 sterk is toegenomen. Daarom bevelen wij aan om vrijwilligerswerk (vooral als aanvulling op de zorg) te promoten als een maatschappelijk relevante activiteit die ook bijdraagt aan een gezonde leefstijl. Vrijwilligerswerk heeft namelijk een positieve invloed op het mentale welbevinden van vrijwilligers [9].

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Curriculum vitae of the author

CURRICULUM VITAE

Renate Willems was born in Amsterdam, on February 7, 1969. In 1988 she received her HAVO diploma from the Fioretti college in Lisse. In 1992 Renate completed the training for higher vocational education nurse at the Hogeschool Nijmegen. After working in various institutions for forensic and psychiatric patients, Renate completed the nursing teacher training at Rotterdam University of Applied Sciences in 2000.

While working as a lecturer at the nursing program at the Albeda College in Rotterdam and later as a lecturer at Rotterdam University of Applied Sciences at the Bachelor of Nursing program, she studied health psychology at the Open University. She obtained her master's degree in 2014.

Renate started her PhD project at the University of Twente at the Faculty of Behavioural, Management and Social Sciences (BMS) in 2016. This project was carried out in cooperation with Rotterdam University of Applied Sciences and the 'Listen Line'. Supervisors in the study were Dr. C. H. C. Drossaert (daily supervisor), dr. H. S. Miedema, and prof. dr. E. T. Bohlmeijer (supervisor).

During her PhD program, Renate continued working on the bachelor of nursing program at Rotterdam University of Applied Sciences and supervised several bachelor and master psychology students at the University of Twente.

Renate continues her work at the bachelor of nursing program at Rotterdam University of Applied Sciences and will participate in a study of work-related complaints in Long-Covid patients.

Renate lives in Barendrecht. In her free time she enjoys walking (with partner and dog), going to the theatre, eating out (with family), and reading.

LIST OF PUBLICATIONS

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Published papers

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"After a difficult conversation, it is nice to leav
if only to make a cup of tea, something like th
gry. Especially on people who scolded me or
called for sexual gratification. Well that's my
with someone who didn't speak easily. And I
mistakes were made, but maybe someone w
had a little more to offer." "And then I realize
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I don't irritate myself with this anymore." "I c
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I pick up the phone immediately. That's why I