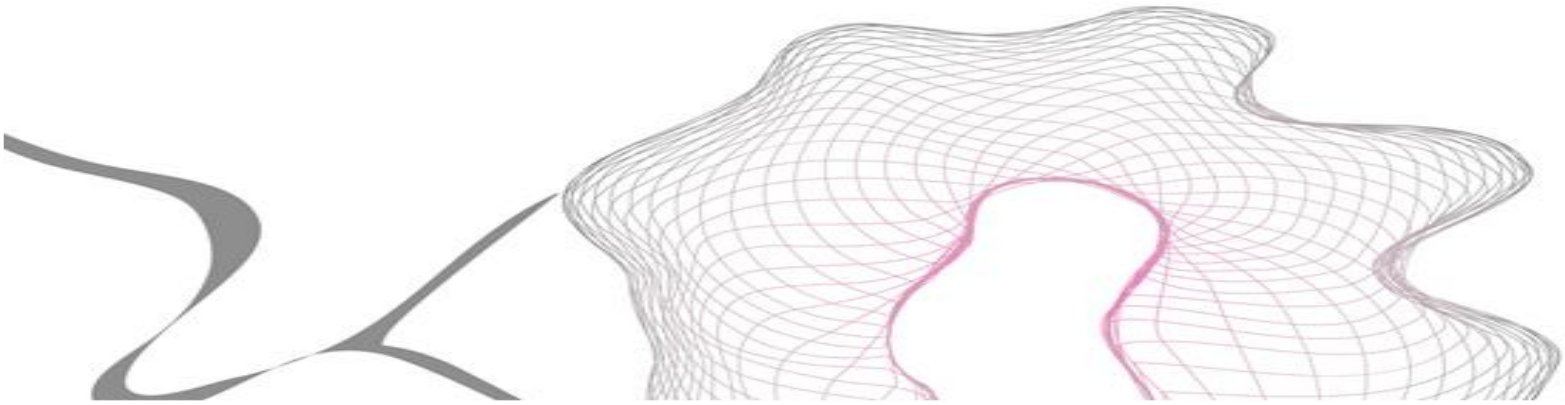


UNIVERSITY OF TWENTE.



Master Thesis

The Moderating Effect of Gratitude on the Relationship between Work Stressors and Mental Health among Crisis Line Volunteers

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Abstract

Background: Crisis Line Volunteers have been shown to be at an increased risk of being exposed to several work stressors, which can have a negative effect on their mental health.

Objective: This study aims at investigating the effect of two work stressors, emotional strain and secondary stress, on (positive) mental well-being and on distress in Dutch crisis line volunteers. Moreover, it is studied whether gratitude, as a personal resource is moderating these effects.

Method: 563 crisis line volunteers of the three crisis lines in the Netherlands participated in this online survey study. The questionnaires used were the “Mental Health Continuum Short-Form” for measuring well-being, “The four-dimensional symptom questionnaire” (4DKL) for distress, the subscale “Secondary Stress” of the “ProQol”, “Questionnaire Experience and Work Evaluation” (VBBA) for measuring emotional strain, and the GQ6-NL as a measure of gratitude. Correlation and moderation analyses were conducted with well-being and distress as the dependent variable, emotional strain and secondary stress as the independent variable and the moderator variable gratitude.

Results: 82.1% of crisis line volunteers were shown to experience low levels of distress and an increased positive well-being ($M=3.7$, $SD=.6$). Emotional strain was not at an increased level in contrast to secondary stress. Gratitude was shown to moderate the effect of secondary stress on positive well-being ($R^2=.16$; $p<.001$). A significant moderation effect of gratitude was also found on the relation of secondary stress and distress ($R^2=.14$; $p<.001$).

Conclusion: The study showed that Dutch crisis line volunteers are not at risk of higher levels of distress and even experience high levels of positive well-being. Gratitude does not act as a buffer in the moderation effect, but rather enhances the negative effects on well-being and distress from secondary stress as gratitude levels increase.

Introduction

Despite the large amount of research studying the relation between work stress and mental health throughout various work organisations, research testing this relation at crisis lines is rare. Crisis lines are mostly telephone hotlines, where people can call in psychological crises. The callers are mostly in need for a non-judgmental listener. The reason for calls can range from loneliness to suicidal thoughts. . In some cases, they also offer online chats or messaging. These helplines are often favoured as a first support due to its wide accessibility, low costs, and the possibility to get direct help (O'Sullivan & Whelan, 2011; Kalafat, Gould, Manfalah & Kleinman, 2007). At Dutch crisis lines, most workers are volunteers. Generally, the job of crisis line volunteers includes different activities, such as answering phone calls, listening to, and caring about the callers. Being exposed to the potentially severe events experienced by help seekers. Caring for and helping these people in difficult situations increases the risk of work-related stress, which can also affect their mental health.

In recent years, it has become clear that mental health cannot only be defined by the absence of psychopathological symptoms According to the Two Continua Model mental health, the well-being of a person, and mental illness, such as depression, distress or anxiety are related but distinctive aspects (Westerhof & Keyes, 2009). Thus, both dimensions, well-being and distress, are considered in this study.

Distress

Work-related stress is a major threat to our mental health. Most research shows that higher risks of depression and burnout result from work-related stress (Balayssac et al., 2017; Lee, Joo, & Choi, 2012). Most often, work-related stress is also associated with a high level of distress (Weinberg & Creed, 2000). In the Netherlands, distress, together with burnout, have been found to be the second most prevalent occupational diseases (Van der Molen, Hulshof, & Kuijer, 2018). Distress is characterised by several symptoms such as fatigue, decreased concentration, and fears (Terluin et al., 2006). The levels of distress indicate the impact on our functioning. While mild levels are not associated with impairments in social functioning, severe levels of distress, on the opposite, are associated with impairments in social functioning and can lead to stop working (Terluin et al., 2006). It is believed that the association between work stress and distress or burnout is even stronger in the health care sector compared to other work fields (Weinberg & Creed, 2000). Therefore, crisis line volunteers are at risk of experiencing work stress and suffering their negative consequences, especially on distress.

Positive Effects of Crisis Line Volunteering Well Being

Despite the challenges and stress experiences that volunteers encounter, research has also shown that working at crisis lines has several positive effects. It was found that experiences of satisfaction and commitment correlate with the intent to remain (Hellman & House, 2006). Crisis line volunteers have also been found to experience posttraumatic growth, which was enhanced by compassion fatigue (O'Sullivan & Whelan, 2011). Next to posttraumatic growth, working at a crisis line was shown to also elicit other positive experiences, such as self-growth, skill development, and role satisfaction (Sundram, Corattur, Dong, & Zhong, 2018). Moreover, working at the crisis line has been shown to be gratifying (Aguirre & Bolton, 2013; Praetorius & Machtmes, 2005). In the past, no research has addressed how work stressors affect the positive mental health in crisis line volunteers. This study will investigate the effect of work stressors on two characteristics of personal outcome, on the one hand, distress and, on the other hand, mental well-being.

Also, two work stressors are considered in this study. The first is emotional strain, which is a type of reaction to circumstances at work (Chang, Johnson, & Yang, 2007). It is also referred to as being the foundation to the other types of strain, e.g. physiological strain (Chang, Johnson, & Yang, 2007). In some models, this is referred to as a job demand, yet, in this study, emotional strain will be considered as a work stressor. The second stressor is secondary (traumatic) stress. The term is often used interchangeably with vicarious traumatisation and compassion fatigue (Jenkins & Baird, 2002). In this study, secondary stress is defined as the "work-related, secondary exposure to extremely stressful events" (Stamm, 2005). It is viewed as a type of compassion fatigue, related to vicarious traumatisation, and includes elements of burnout, but is still distinguished as an own concept (Stamm, 2010). Crisis line volunteers are working with people who may have experienced traumatic or stressful events and are, thus, naturally exposed to the risk of secondary stress. Research has shown that people working with traumatised clients are at an increased risk of experiencing secondary traumatic stress (Dunkley & Whelan, 2006). Therefore, it is important to investigate the experiences of emotional strain and secondary stress among crisis line volunteers.

One model that is widely used in the context of mental health at the workplace is the Job Demands and Resources Model (JD-R). It is based on the theory that work stressors, which involve strain and efforts can lead to negative effects on oneself and on the organisation (Bakker et al., 2003; Hakanen et al., 2006). Studies have shown that job demands and work stressors, such as emotional strain and time pressure negatively affect our mental health. Job demands

have been found to deplete the employees' mental resources which results in a decrease in levels of energy and health issues, resulting in occupational burnout (Demerouti, Bakker, Nachreiner, & Schaufeli, 2000). This model has been widely applied and studied. Recently, studies have also started investigating the role of personal resources in this model. Yet, the role of personal resources and its relation to the other components of the JD-R remains unclear. Different pathways have been tested. Some studies have presumed a mediating role of personal resources in the JD-R model. One study distinguished personal resources on the cognitive and behavioural levels and found that both mediated the relationship between job resources and work engagement (Mastenbroek, Jaarsma, Scherpbier, van Beukelen, & Demerouti, 2012). Another study found that mindfulness as a personal resource acts as a moderator in the relationship between job demands and stress reactions (Grover, Teo, Pick, & Roche, 2016). Nevertheless, none of these studies investigated the role of personal resources in the relation of work stressors and personal outcome. Moreover, the model was not applied in the context of crisis line volunteers. Hence, in this study, a personal resource is considered, which is gratitude.

Gratitude

Gratitude has been widely studied and is generally accepted as enhancing well-being. Gratitude can be defined by different concepts. In this study it is referred to gratitude as a state of thankfulness and appreciation, which can relate to social contacts, family, situations, events, etc. (Sansone & Sansone, 2010). Many studies have shown that gratitude promotes well-being (Bono & Sender, 2018, Roberts, 2004; Sansone & Sansone, 2010). However, the effects of gratitude at the workplace are rarely studied. Research shows that gratitude is not only positively related to well-being, it is also negatively related with depression and anxiety (Petrocchi & Couyoumdjian, 2015). A study that was conducted among breast cancer patients found that gratitude had a significant positive correlation with post traumatic growth, positive emotions, but not psychological well-being, and was negatively correlated with distress (Ruini & Vescovelli, 2012, p. 265). Gratitude is also related to satisfaction with life (Wood, Joseph, & Maltby, 2008). Prior research indicates that crisis line volunteers experience work-related gratefulness (Praetorius & Machtmes, 2005). According to the Two Continua Model, and other theories in positive psychology, it is believed that positive emotions can also protect from negative effects, such as distress. The two continua model explains beyond distinguishing the positive mental health, mental well-being, and mental illness that the higher the well-being, the less is the functioning inhibited by periods of mental illness (Westerhof & Keyes, 2009). The broaden-and-build theory by Fredrickson (2001) suggests that positive emotions broaden our

attention, which shows an increase in thoughts and actions. This increase in the thought-action repertoire is believed to build permanent, long-term resources and enhance positive well-being (Fredrickson, 2001). Therefore, it is suggested that higher levels of gratitude help crisis line volunteers to further build resources and increase their positive well-being, while buffering the negative effects of work stressors on well-being and distress.

Problem Statement

Crisis line volunteers are exposed to several work stressors, which can negatively affect their positive well-being and increase their levels of distress. Research studying these effects and the levels of well-being and distress among Dutch crisis line volunteers does not exist. In this study, a model that is based on the JDR-Model is tested, see Figure 1.

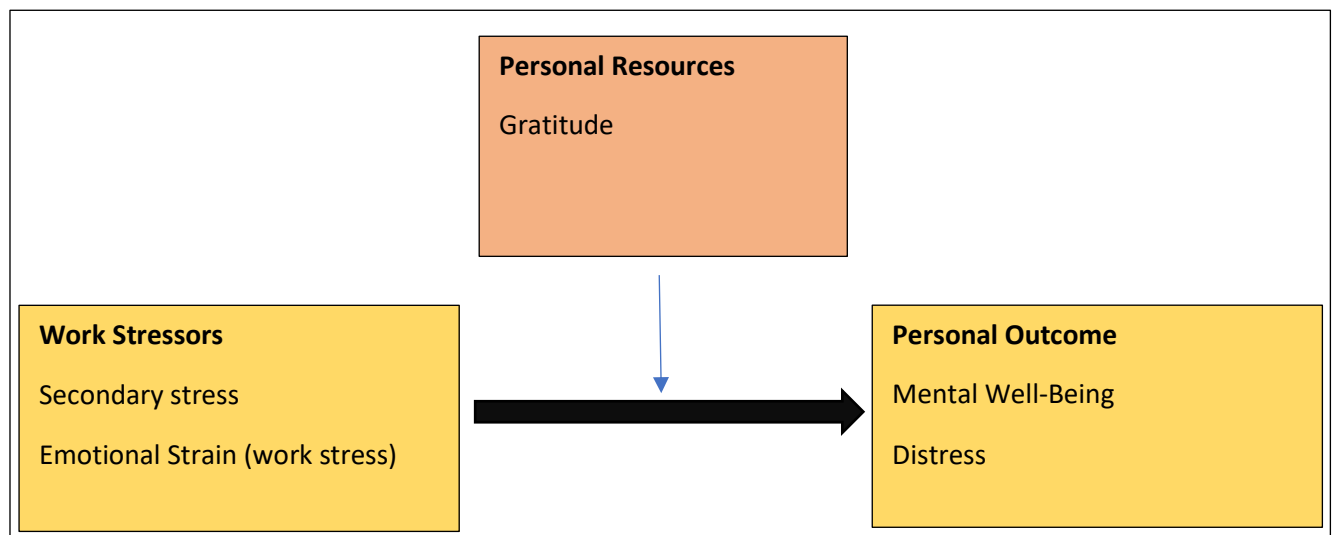


Figure 1. Moderator Model. *It is tested whether personal resources moderate the relationship between work stressors and personal outcome. Gratitude, as a personal resource, is tested as a moderator of four relations, secondary stress and mental well-being, emotional strain and mental well-being, secondary stress and distress, and emotional strain and distress.*

It is believed that work stressors influence the personal outcome (distress and positive well-being). Moreover, it will be analysed whether personal resources might moderate this effect, as supposed by positive psychological theories. It is expected that the effect of work stressors on personal outcome is weaker when the levels of personal resources increase. In this study, the focus is only on gratitude as a personal resource. To investigate whether crisis line volunteers are at risk for lower mental well-being and higher levels of distress, factors that cause, and resources which can prevent the risk of lower well-being and higher levels of distress, are explored. The following research questions have been formulated:

1. To what extent do crisis line volunteers experience well-being and distress?

2. To what extent do crisis line volunteers experience emotional strain, secondary stress, and gratitude?
3. How are well-being, distress, emotional strain, secondary stress, and gratitude related to each other?
4. Does gratitude moderate the relation between work stressors (emotional strain and secondary stress) and personal outcome (well-being and distress)?
 - 4.1 Is there a difference in the moderating effects when regarding the three different dimensions of well-being (emotional, social, psychological)?

Methods

Design

This study was part of a larger PhD study by Renate Willems which was aimed at describing the state of (positive and negative) mental wellbeing in Dutch crisis line volunteers, which stressors they have to deal with, which resources they have and to which extent they have self-compassion and feel gratitude. For this, a cross-sectional design was applied among crisis line organizations by using an online survey, carried out between November and December 2019.

Participants and Procedure

Three different crisis lines from the Netherlands participated in this study. Two general crisis lines “De Luisterlijn” and “MIND Korrelatie”, and one that is a foundation for suicide prevention “Stichting 113”. After the ethical approval for this study was obtained from the Ethical Board of the Faculty of Behavioural and Management studies from the University of Twente, in November 2019, workers of three Dutch crisis lines received an email from their organisation inviting them to participate in this study. The emails that the workers received contained a link to the questionnaire. First, they were introduced to the study by explaining the relevance and aim of the study. Participants were also informed about the anonymity, confidential handling and secure storage of the data of the study. After the text explanation, participants could click to continue and view the informed consent. If the informed consent was agreed on, participants were able fill in the questionnaire. Reminder emails to participate in the study were sent out, after two and four weeks. Participants had time to fill in the questionnaire until the end of December, after that, the online survey was closed. A total of 593 crisis line workers, of which 563 were volunteers, completed the questionnaire out of 1575 possible participants (37,65%). An inclusion criterion for data collection was that respondents exercised executive work at the crisis line, such as answering phone calls, replying to emails, or having chat conversations.

Instruments

As part of a larger study, the online survey that was used contained various instruments. In the following only the instruments to measure the relevant variables for the current study are explained.

Emotional Strain. The first independent variable, emotional strain, was measured by using a subscale of the Dutch scale “De Vragenlijst Beleving en Beoordeling van de Arbeid”

(VBBA), which translates to “Questionnaire Experience and Work Evaluation” (Van Veldhoven, Meijman, Broersen, & Fortuin, 2002). The subscale of the VBBA that was used is “Emotional Strain”. An example item is: “Is your work emotionally demanding?”. This subscale consists of seven items and can be scored on a four-point scale (0=never, 1=sometimes, 2=often, 3=always). The total scores are coded on a standardized scale score between 0 and 100. The sum of the scores is divided by the maximum score (number of items X three) and is then multiplied by 100 (Van Veldhoven, Meijman, Broersen, & Fortuin, 2002). A higher score indicates a greater perceived emotional work strain. The Cronbach’s alpha in this study was $\alpha=.64$.

Secondary Stress. The second independent variable, secondary stress, was measured by the subscale “Compassion Fatigue/Secondary Trauma” of the ProQol questionnaire (Stamm, 2010). As this questionnaire was not available in Dutch it was translated by three independent translators and a consensus was reached afterwards. A native speaker translated the questionnaire into Dutch and some further adjustments were made on some of the items. An example item is: “I think I may have been affected by the traumatic stress of the people I help / speak to”. The subscale consists of ten negatively formulated items which are scored on a five-point scale: (1) never; (2) rarely; (3) sometimes; (4) often; (5) very often. The sum scores are computed and can be compared to the cut off scores suggested by Stamm (2010) in the ProQol Manual. Thus, a score between 10-22 would be considered as a low level, 23-41 as average level and 42-50 as a high level of secondary (traumatic) stress. The Cronbach’s alpha of this scale in this study was $\alpha=.71$.

Distress. The dependent variable, distress, was measured with a subscale of the Dutch version of the “The four-dimensional symptom questionnaire” (4DSQ), “De vier dimensionale Klachtenlijst” (4DKL). The subscale “Distress” consists of 16 items that are scored on a five-point scale: 1 = never; 2 = sometimes; 3 = regularly; 4 = often; 5 = very often or continuously. An example item is “Have you had trouble falling asleep in the past week?”. Each question of the 4DKL yields 0, 1 or 2 points: 0 points for a complaint that is absent, 1 point for a complaint that is 'sometimes' present and 2 points for a complaint that is 'regularly' or more frequently present. This means that answers 3, 4 and 5 in the plotted questionnaire all score 2 points. The sum scores of these points from 0 to 2 can be added up to a score between 0 and 32. This score can be classified in three levels of distress, low, moderate, and high.(0-10= low, 11-20 = moderately increased, 21-32= strongly increased). The Cronbach’s alpha of this subscale was $\alpha=.90$.

Well-Being. The dependent variable, well-being, is measured by the Mental Health

Continuum Short Form (MHC-SF). This scale consists of 14 items and measures three subfactors, emotional (3 items), social (5 items), and psychological well-being (6 items). Participants needed to indicate how often they experienced different feelings measuring well-being. The emotional well-being dimension is measured by three items ($\alpha=.76$). An example item is: “During the past month, how often did you feel interested in life?”. An example of the social well-being dimension which is measured with five items is: “During the past month, how often did you feel that you had something important to contribute to society?” ($\alpha=.71$). Psychological well-being is measured with six items ($\alpha=.83$). An example item of the psychological well-being dimension is: “During the past month, how often did you feel confident to think or express your own ideas and opinions?” All items are scored on a five-point Likert scale: never=1, once or twice a month=2, about once a week=3, almost every day=4, every day=5. Compared to the original MHC-SF, the version used in this study is missing the answer option “two or three times a week” and the answer options are coded from 1-5 (5-point Likert scale), whereas the original codes the items from 0-5 (6-point Likert scale). The total score is the average score of all items, which is computed by dividing the sum of all items by fourteen. For computing scores on the three different dimensions (emotional, social, and psychological) also the average score of these items is computed. The Cronbach’s alpha for this scale was $\alpha=.88$.

Gratitude. The independent moderator variable gratitude is measured with the 6-item gratitude questionnaire developed by McCullough, Emmons, and Tsang (2002). The Dutch version, the GQ6-NL was used in this study to measure gratitude (Jans-Beken, Lataster, Leontjevas en Jacobs, 2015). An example item is: “I have so much in life to be thankful for”. Responses are given on a 7-point Likert scale ranging from 1, strongly disagree, to 7, strongly agree. After reverse coding of the negatively worded questions, the scores on the items are added up to a sum score. Higher sum scores indicate a greater sense of gratefulness. The Cronbach’s alpha for this scale was $\alpha=.64$. It was decided to take out one of the reverse items (Item 3) to improve the Cronbach’s alpha significantly ($\alpha=.73$).

Data Analysis

All analyses were conducted by using the statistical programme IBM SPSS 23. Data of paid crisis line workers was excluded so that the data set was limited to volunteers. First, the descriptive statistics of participant characteristics were calculated. Then, all dependent variables, well-being and distress, and independent variables, emotional strain, secondary stress, and gratitude, were analysed by computing the means and standard deviations. Those

were then categorised and compared to norm scores. The correlation between variables was assessed to detect possible differences. To test whether gratitude is a moderating variable between work stress and well-being, emotional strain and well-being, work stress and distress, or emotional strain and distress, four moderation analyses were performed using the PROCESSv3.4.1 tool by Hayes (released in August 2019). When gratitude was found to significantly moderate the relationship between secondary stress and well-being, three further moderation analyses were conducted to identify possible differences between the three types of well-being, emotional, social, and psychological well-being. For the moderator analyses, the 16th, 50th and 84th percentiles were taken as the conditioning values.

Results

Participant Characteristics

The participant characteristics in Table 1 show that, in this study, most participants were female and did not follow or complete an education in the field of human services. The table also displays that most volunteers work 4-6 hours a week at a crisis line. The age of the crisis line volunteers ranged from 20 to 87 years, with an average age of 62 (SD=11.15).

Table 1.

Frequencies of sample characteristics (N=563).

	N	%
Gender		
Female	400	71.0
Male	162	28.8
Other	1	0.2
Education in Human Services (e.g. psychology or social work)		
Yes	208	36.9
No	355	63.1
Work experience in the current organisation		
Less than a year	115	20.4
1-3 years	197	35.0
3-6 years	91	16.2
6-10 years	61	10.8
More than 10 years	99	17.6
Work hours (h) per week		
Less than 4h	102	18.2
4-6h	413	73.4
6-8h	35	6.2
8-10h	9	1.2
More than 10h	4	0.7
Workplace		
Always at the office	147	26.1
Mostly at the office, sometimes from home	93	16.5
Sometimes at the office, sometimes from home	55	9.8
Mostly from home, sometimes at the office	126	22.4
Always from home	142	25.2

The Level of Well-Being and Distress in Crisis Line Volunteers

The descriptive statistics of the main variables in this study are summarised in Table 2. First, it was explored to what extent crisis line volunteers experience well-being and distress. The table shows that the participants' mean score on general well-being is high, considering that the scale goes from one to five. Considering the subscales, crisis line volunteers experience on

average greater emotional and psychological well-being compared to social well-being. The highest levels of well-being are on the psychological dimension.

Table 2

Descriptive Statistics of the Main Variables (N=563).

Variables	Min	Max	M	SD	N	%
<u>Dependent</u>						
(General) Well-Being [1-5]	1.9	5.0	3.7	0.6		
Emotional Well-Being (EWB) [1-5]	1.0	5.0	4.0	0.6		
Social Well-Being (SWB) [1-5]	1.4	5.0	3.3	0.7		
Psychological Well-being (PWB) [1-5]	1.7	5.0	3.9	0.7		
Distress [0-32]	0.0	32.0	6.3	5.5		
Low [0-10]					462	82.1
Moderate [11-20]					84	14.9
High [21-32]					17	3.0
<u>Independent</u>						
Secondary Stress [1-50]	10.0	45.0	16.4	3.8		
Low [10-22]					531	94.3
Moderate [23-41]					31	5.5
High [42-50]					1	0.2
Emotional Strain [1-3]	1.0	3.0	1.8	0.3		
<u>Moderator</u>						
Gratitude [1-7]	2.0	7.0	5.7	0.8		

Then, the degree to which crisis line volunteers experience distress was explored. The table shows that 82.1% (N=462) of the participants experience low levels of distress. Moderate levels of distress are experienced by 14.9% (N=84) and high levels of distress by 3% (N=17). This means that most crisis line volunteers do not experience an increased level of distress, yet, there are 17.9% who do experience moderate or high levels.

The Levels of Emotional Strain, Secondary Stress and Gratitude

Further, it was investigated how the two work stressors, secondary stress and emotional strain are perceived. When investigating the scores on secondary stress, low levels were found for 94.2% (N=531), moderate levels for 5.5% (N=31). High levels of secondary stress were only found for 0.2% (N=1) of the participants. For emotional strain, the test scores were calculated to categorize them. The test score in this population is 61.3%, which is in the average

range (10-90%) (Van Veldhoven, Meijman, Broersen, & Fortuin, 2002). After that, it was explored to what extent crisis line volunteers experience gratitude. It is visible that the volunteers experience gratitude to a large extent, as the mean score is very high ($M=5.7$).

The Moderating Effect of Gratitude

Association between Work Stressors, Personal Outcome and Gratitude. In this study, it was analysed whether the work stressors, emotional strain, and secondary stress, are related to the personal outcome, namely, well-being, and distress. First, the correlations with well-being were tested. There was no significant correlation between emotional strain and well-being, but a significant negative correlation between secondary stress and well-being was found. The correlation between secondary stress and emotional, social, and psychological well-being was also found to be significantly negative. Gratitude also correlated significantly with well-being, and its three dimensions. When the correlations with distress were assessed, a significant positive correlation with emotional strain and secondary stress, and a significant negative correlation with gratitude, was found. The intercorrelation between the two dependent variables, distress and well-being, is significantly negative. Most notable is a strong, significant negative correlation between distress and emotional well-being. Next to this, there was also a significant correlation between the two independent variables, secondary stress, and emotional strain. No significant correlation was found between the moderator variable gratitude and emotional strain. However, gratitude significantly correlated with secondary stress.

Table 4

Correlation Matrix (N=563)

Variable	1.	1a.	1b.	1c.	2.	3.	4.	5.
1. General Well-Being	-							
1a. Emotional Well-Being	.76*	-						
1b. Social Well-Being	.88*	.51*	-					
1c. Psychological Well-Being	.92*	.63*	.68*	-				
2. Distress	-.38*	-.44*	-.24*	-.38*	-			
3. Emotional Strain	-.04	-.06	.02	-.07	.28*	-		
4. Secondary Stress	-.16*	-.14*	-.08*	-.19*	.28*	.28*	-	
5. Gratitude	.38*	.41*	.26*	.36*	-.27*	-.01	-.16*	-

*Pearsons r, two-sided significance on a level of $\alpha < .01$

Moderating Effects of Gratitude on Well-Being. The study aimed at finding out whether gratitude is moderating the effect of work stressors on personal outcome. In the first moderation it was found that gratitude is moderating the effect of secondary stress on well-being and that

this moderation is significant. The regression model is summarised in Table 5. There is a 16% variance ($R^2=.16$), which means that the variation on the dependent variable well-being can be explained by this model to 16%. The interaction effect is significantly negative. The combined effect, of gratitude and secondary stress on well-being is less strong than the sum of the direct effect of gratitude on well-being and secondary stress on well-being. Contrary to the expectations of this study, it can be seen that the negative effect of secondary stress on well-being is stronger the higher the levels of gratitude, see Figure 2. Still, the levels of gratitude show that people with high levels of gratitude also have higher levels of well-being despite an increase in secondary stress compared to participants with average or low levels of gratitude.

Then it was analysed if gratitude has a moderating role in the relationship between emotional strain and well-being. It was shown that the model is overall significant, but that the interaction effect was not, see Table 5. Also, the effect of well-being and emotional strain on gratitude is not significant. This indicates that gratitude does not influence the effect of emotional strain on well-being.

Table 5

Moderating Effect of Gratitude on the relation between Work Stressors (Secondary stress and Emotional strain) and Well-Being (N=563)

	B	t (559)	P
<u>Secondary Stress x</u>			
<u>Gratitude</u>			
Intercept	.93	1.99	.048
Secondary Stress	.72	2.93	.004
Gratitude	.54	6.52	<.001
Interaction Effect	-.16	-3.62	<.001
<u>Emotional Strain x</u>			
<u>Gratitude</u>			
Intercept	2.80	2.87	.004
Emotional Strain	-.36	-.70	.486
Gratitude	.19	1.11	.269
Interaction Effect	.05	.51	.610

Notes: Secondary Stress: $R=.40$, $R^2=.16$, $F(3,559)=36.22$, $p<.001$; Emotional Strain: $R=.37$, $R^2=.14$, $F(3,559)=29.59$, $p<.001$

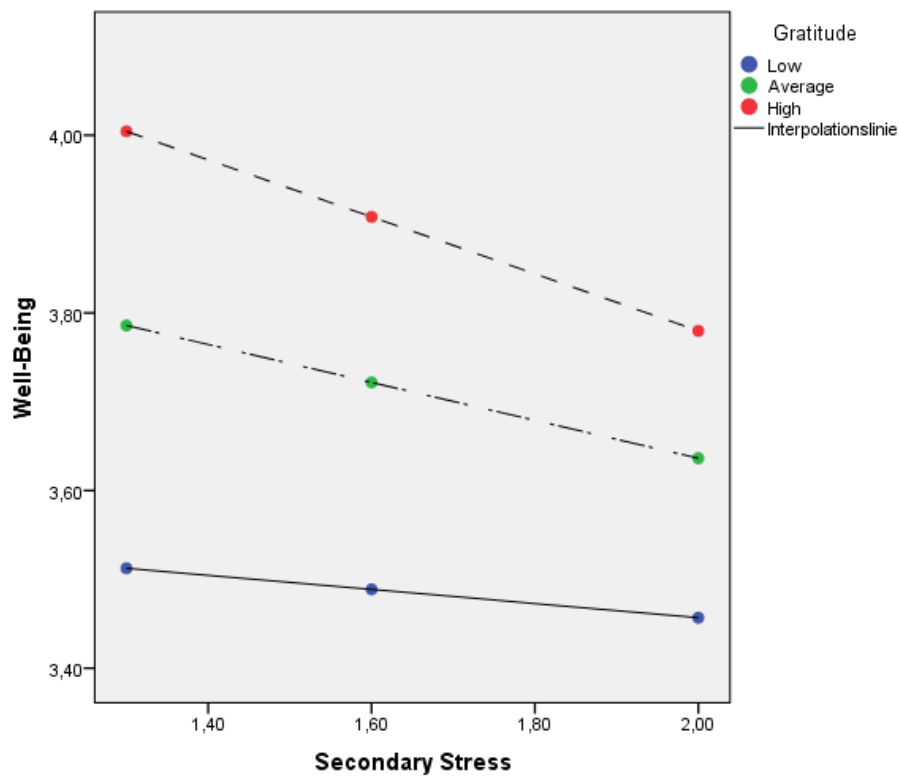


Figure 2. Visualisation of the moderating effect of Gratitude in the relationship between Secondary Stress and Well-Being.

As it was found that gratitude significantly moderates the effect between secondary stress and well-being, the differences in the moderation effects when taking the different subscales of well-being, emotional, social, and psychological well-being as the dependent variables were also explored. It was found that the moderation effect of gratitude on the relation between secondary stress and the two dimensions, social and psychological well-being is significant. There is no significant moderation effect of gratitude on the relation of secondary stress and emotional well-being. The interaction effects, on the other hand, are negative and show that the higher the gratitude, the stronger the negative impact of secondary stress on well-being.

Table 6

Moderating Effect of Gratitude on the relationship between Secondary Stress and Emotional, Social and Psychological Well-being.

	B	T	P
<u>Emotional Well-Being</u>			
<u>(EWB)</u>			
Intercept	1.90	3.75	<.001
Secondary Stress	.22	.83	.408
Gratitude	.40	4.55	<.001
Interaction Effect	-.06	-1.26	.207
<u>Social Well-Being (SWB)</u>			
Intercept	.47	.80	.42
Secondary Stress	.91	2.95	.003
Gratitude	.53	5.19	<.001
Interaction Effect	-.18	-3.26	.001
<u>Psychological Well-Being</u>			
<u>(PWB)</u>			
Intercept	.83	1.54	.124
Secondary Stress	.82	2.91	.004
Gratitude	.61	6.43	<.001
Interaction Effect	-.19	-3.82	<.001

Notes: EWB: $R=.40$, $R^2=.16$, $F(3,559)=34.76$, $p<.001$; SWB: $R=.29$, $R^2=.08$, $F(3,559)=17.14$, $p<.001$; PWB: $R=.40$, $R^2=.16$, $F(3,559)=34.55$, $p<.001$

Moderating effects of Gratitude on Distress. Furthermore, it was investigated if gratitude is moderating the effect of work stressors on distress. In the moderation analysis, it was found that gratitude is moderating the effect of secondary stress on distress and that this moderation is significant. The regression model is summarised in Table 7. There is a 14% variance in the experience of distress that can be explained by this model.

Table 7

Moderating Effect of Gratitude on the relation between Work Stressors (Secondary Stress and Emotional Strain) and Distress

	B	T	P
<u>Secondary Stress x</u>			
<u>Gratitude</u>			
Intercept	1.62	5.72	<.001
Secondary Stress	-.38	-2.56	.011
Gratitude	-.29	-5.72	<.001
Interaction Effect	.11	4.10	<.001
<u>Emotional Strain x</u>			
<u>Gratitude</u>			
Intercept	.43	.74	.458
Emotional Strain	.33	1.11	.266
Gratitude	-.11	-1.14	.257
Interaction Effect	<.001	-.01	.991

Notes: Secondary Stress: $R=.38$, $R^2=.14$, $F(3,559)=31.24$, $p<.001$; Emotional Strain: $R=.38$, $R^2=.14$, $F(3,559)=31.53$, $p<.001$

The interaction effect is significantly negative. As gratitude levels increase, the effect of secondary stress on distress becomes stronger, see Figure 3. Therefore, the increase in distress is stronger for crisis line volunteers the higher the levels of gratitude. However, it can also be noted that the lower the levels of secondary stress the greater is the difference in well-being between participants with low, average and high gratitude. Participants with high gratitude levels also have a higher well-being, despite the greater negative effect of secondary stress on well-being.

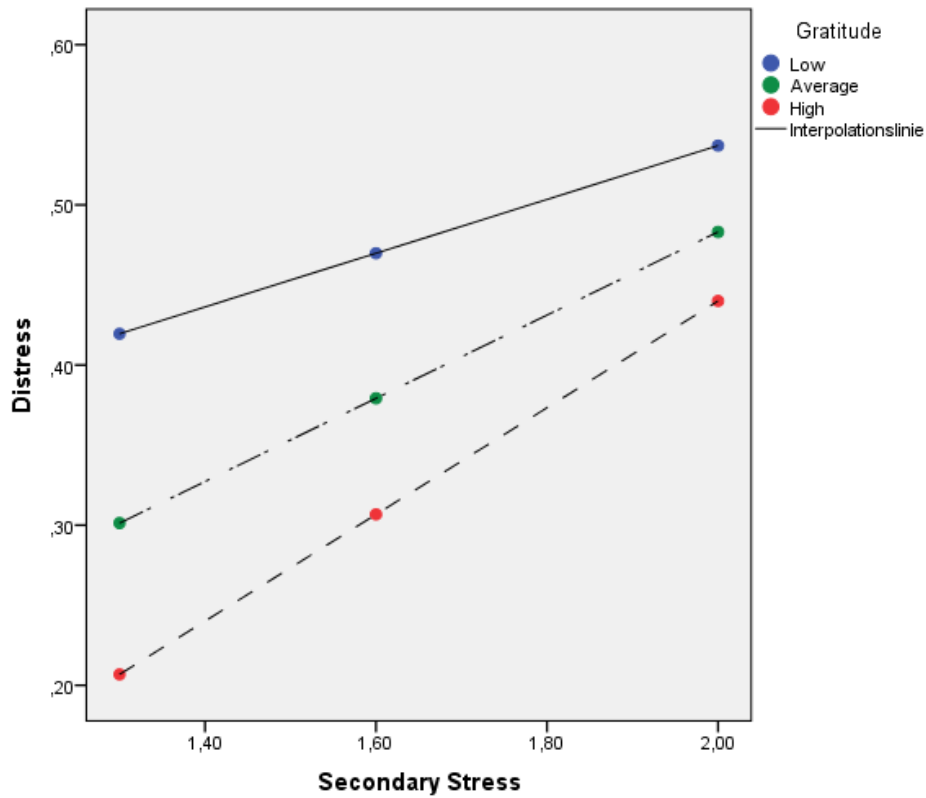


Figure 3. Visualisation of the moderating effect of Gratitude between the relationship of Secondary Stress and Distress.

For assessing the second work stressor in this study, it was explored if gratitude has a moderating role in the relationship between emotional strain and distress. The model was overall significant, but the interaction effect was not, see Table 7.

Discussion

In this study, the effect of work stressors on personal outcome was investigated in crisis line volunteers. As no prior research was conducted on the positive well-being in crisis line volunteers, this study explored the levels of positive well-being in Dutch crisis line volunteers. The results of this study showed that the volunteers' positive well-being is generally high. Psychological and emotional well-being were found to be higher than social well-being. The finding of a high general well-being is in line with the expectations and can be explained by positive experiences that volunteers encounter. It could be explained by that crisis line volunteers generally feel satisfied and committed to their work which in turn increases their positive well-being (Hellman & House, 2006). Satisfaction of work and commitment to work in volunteers has been shown to be associated with the intent to remain. It can be presumed that a positive well-being could strengthen this association. Another explanation for the high positive well-being among Dutch crisis line volunteers is that personal developments such as self-growth, posttraumatic growth and the development of professional skills can be experienced (O'Sullivan & Whelan, 2011; Sundram, Corattur, Dong, & Zhong, 2018). Future research can investigate what kind of positive experiences are specifically related to an increased well-being. However, it should also be considered that crisis line volunteers might generally have a higher positive well-being at the point of application, compared to other workers, this could also be related to a specific pattern of personality that is common in volunteers.

Further, the levels of distress in Dutch crisis line volunteers were explored. Crisis line volunteers in this study mostly had low levels of distress according to the cut off scores of the scale. Yet, some crisis volunteers do experience moderate levels of distress and a few even high levels. The crisis line volunteers with moderate and high levels of distress are at a greater risk to suffer from functional impairment or symptoms of mental illness as a result of their levels of distress. However, contrary to findings of prior research in human service organisations, increased levels of distress among the volunteers were only partly found (Balayssac et al., 2017; Lee, Joo, & Choi, 2012). As most research shows that distress levels in health care workers are increased, the finding of this study is divergent (Weinberg & Creed, 2000). One possible explanation could be that in this study only volunteers have participated whereas the above-mentioned studies focused on paid workers. Also, most participants only work four to six hours a week. Often, more work hours are also related to negative consequences. A study that was conducted among students who did voluntary work found that increased work hours negatively affected their sleep, physical activity and increased the feelings

of being overwhelmed (Lederer, Autry, Day, & Oswald, 2015). Another study found that more work hours related significantly with secondary traumatic stress in nurses (Wang et al., 2020). Therefore, future research could compare paid and voluntary workers and, also, investigate whether more working hours of crisis line volunteers are related to higher levels of stress and distress.

Then, the extent to which the crisis line volunteers experience work stressors was assessed in this study. The findings show how the two work stressors, emotional strain, and secondary stress, were experienced. Results on emotional strain did not indicate increased or critical levels. Another study investigated emotional strain among employees of ten Dutch mental health organisations and compared the scores of employees with low and high patient interaction (Van Daalen, Willemsen, Sanders, & van Veldhoven, 2008). It was found that the employees with high patient interaction also reported higher levels of emotional strain. Compared to the scores on emotional strain found in that study, participants in this study scored on average lower than employees in Dutch mental health organisations, even when compared to the average scores of employees with low patient interaction (Van Daalen et al. 2008).

The results on secondary stress show that Dutch 94.3% of crisis line volunteers experience low levels of secondary stress, 5.5% moderate levels and 0.2% high levels. It was found that people who work with traumatised clients experience higher secondary stress (Dunkley & Whelan, 2006). This can be explained due to the possible natural exposure of crisis line volunteers to severe or traumatic events by callers. When comparing the scores in this study ($M=16.4$, $SD=3.8$) to the scores of another study that was conducted in American health care workers ($M=22.6$, $SD=6.1$), who were also mostly female, it is visible that the scores of the crisis line volunteers are substantially lower (Okoli et al., 2019). However, longitudinal, or experimental studies are needed to investigate the work stressors and its effects on crisis line volunteers. Moreover, it would be interesting to investigate why crisis line volunteers do not experience increased levels of secondary traumatic stress compared to other health care workers and what factors might influence this.

Further, it was found that the emotional state of gratitude is high among crisis line volunteers. Also, compared to the Dutch general population ($M=5.5$, $SD=0.8$), the scores of the crisis line volunteers are slightly higher ($M=5.7$, $SD=0.8$) (Jans-Beken et al., 2018). High levels of gratitude are widely shown to be related to higher well-being (Bono & Sender, 2018, Roberts, 2004; Sansone & Sansone, 2010). This is in line with the high levels of gratitude and high positive well-being found in this study. It was also indicated by prior research that crisis line volunteers experience work-related gratitude (Praetorius & Machtmes, 2005). Future research

should distinguish gratitude in different contexts and might consider testing work-related gratitude in specific.

In addition, possible effects of gratitude in different relationships were investigated. Only one of the work stressors, secondary stress, was significantly associated by gratitude. Emotional strain was not found to be significantly associated with gratitude. Contrary, it was found that gratitude is a significant predictor of well-being and distress. This is in line with previous research. One study showed that there was a significant effect of gratitude on well-being in Swiss adults (Hill & Allemand, 2011). Moreover, a positive link between gratitude and eudemonic well-being was found (Barrett-Cheetham, Williams, & Bednall, 2016). Prior research also indicated that gratitude is associated with higher levels of well-being and lower levels of stress and depression (Wood, Joseph, & Linley, 2007; Wood, Maltby, Gillett, Linley, & Joseph, 2008). This association is also supported by the findings in this study. Future research is needed to assess the causal relationship in this association.

Further, it was looked at gratitude as a moderating variable. The findings show that gratitude did not moderate the effect of emotional strain on well-being. However, emotional strain also did not correlate significantly with well-being. On the other hand, gratitude was found to moderate the effect of secondary stress on well-being. Contrary to the expectations of this study, increased levels of gratitude strengthened the negative effect of secondary stress on well-being. Therefore, gratitude does not seem to buffer the effects of secondary stress on well-being. Despite this finding, volunteers who had higher levels of gratitude also had higher levels of well-being. Taking into consideration the three different subscales of well-being, only social and psychological well-being were moderated by gratitude. The moderation of gratitude in the relationship of secondary stress and emotional well-being was not found to be significant. It can be assumed that emotional well-being can fluctuate or is stable despite changes in the levels of experience of gratitude. However, more research on the dimensions of well-being is needed in order to interpret this finding. This study was the first to investigate this effect on the three subscales.

A correlation was found between emotional strain and distress. Gratitude did not moderate the effect. A prior study showed that gratitude supports a positive coping with traumatic or adverse events, which in turn enhance growth (Bono & Sender, 2018). This was not found in the current study. A moderating effect of gratitude was found in the relation between secondary stress and distress however, it meant that the higher the gratitude of the volunteers, the stronger is the negative effect of secondary stress on distress. This means that volunteers with high levels of gratitude experience a higher increase in their levels of distress

as a consequence of secondary stress. This is not in line with prior research, which revealed that gratitude protects from stress and depression, and, in addition, enhances the mental well-being (Bono & Sender, 2018). Next to this, research has also shown that gratitude supports coping with challenges and buffers stress (Wood, Joseph, & Linley, 2007). All in all, gratitude moderates the effect of secondary stress on distress, but not the effect of emotional strain on distress. Moreover, the direction of the moderation effect is not as expected. Gratitude is found not to buffer the effects of secondary stress on distress. Therefore, it can be assumed that gratitude is related to lower levels of distress, but gratitude as a personal resource does not decrease the negative effect on distress resulting from secondary stress.

In conclusion, gratitude was found to moderate the effect of work stressors on the two personal outcomes, well-being, and distress, only partly. In this study, gratitude was investigated as a moderating variable in four relationships. The first relationship was between secondary stress and well-being, the second was emotional strain and well-being, the third was secondary stress and distress, and the fourth relationship was emotional strain and distress. Here it was found that gratitude only influenced two of those four relationships, namely, secondary stress on well-being, and secondary stress on distress. Contrary to the expectations in this study and prior research, it was not found that gratitude buffers the effect of the work stressor secondary stress on personal outcome, well-being and distress, in crisis line volunteers.

Strengths and Limitations

Overall, this study addressed one recent and new topic in research, namely, the effect of personal resources on mental health, and investigated this on two continua, well-being, and distress. Research on the mental health of crisis line volunteers is rare, but relevant literature shows the risk of decreased negative well-being in this group of workers (Willems, Drossaert, Vuijk, & Bohlmeijer, 2020). No prior research has investigated to what extent crisis line volunteers experience positive well-being. Thus, this study can add to existing literature and support future studies, specifically due to the consideration of gratitude as a personal resource, which can buffer the effect of work stressors. Another strength of this study is that an organisational bias could be reduced by having participants from three different Dutch crisis lines and, thus, having, in total, a large sample size, which increases the reliability of this study and allowed for increased significance levels.

Nevertheless, there are also some limitations to this study. One of the main limitations is that this study was a correlational study and, therefore, causality between the measured variables cannot be ascertained. In addition, one of the items in the gratitude self-report scale

was removed due to a low internal consistency. Thus, after removal of this item, scores on the other five items were included in the analysis. The removal might have biased the analysis. Another limitation is that the gratitude scale did not include the description for all the numbers on which the participants had to indicate how strongly they agree with the respective item. Next to this, the Mental Health Continuum Short-Form was translated into a Dutch version with a five-point Likert scale, whereas the original one is scored on a six-point Likert scale. Therefore, the scores, and adjusted scores used for the comparison to the norm groups should be regarded with caution.

Conclusion

All in all, this study showed that crisis line volunteers have high levels of positive well-being and low levels of distress. It was found that gratitude was partly moderating effects between work stressors and personal outcome. The higher the experienced gratitude by crisis line volunteers the more does secondary stress decrease their well-being. Similarly, higher levels of gratitude were shown to strengthen the effect of secondary stress on distress. Emotional strain was not significantly related to well-being or gratitude, but it did relate to distress. However, emotional strain was generally not considered to be a critical work stressor based on the descriptive results. In summary, gratitude plays an important role for an increase in positive well-being and distress, but gratitude does not buffer the effect of secondary stress on either of the two tested personal outcomes. The strength of the negative effects of secondary stress on the levels of distress and well-being becomes greater with an increase in gratitude. Future research also needs to investigate the causality in these relationships and find suitable interventions to increase the well-being and decrease the levels of distress in crisis line volunteers. The factors that lead to the differences in the scores of secondary stress, emotional strain, well-being and distress should be investigated and, based on this, the risks of having an absent mental health and suffering from a mental illness can be decreased by adapted interventions. The relations with gratitude should be further investigated, as this study showed that gratitude is related to higher levels of well-being and lower levels of distress.

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