

**The Mediating Effect of Coping on The Relationship Between Emotional
Intelligence and Compassion Fatigue Among Humanitarian Aid Workers in Lebanon**

Nirmeen S. Saassouh

Department of Psychology, Haigazian University

Beirut, Lebanon

May 2, 2023

A Thesis Submitted to the Faculty of Social and Behavioral Sciences in partial fulfillment of the requirements for the Master of Art in Psychology – Emphasis: Clinical Psychology at Haigazian University.

Thesis Release Form

I, Nirmeen Saassouh,

Authorize Haigazian University to supply copies of my thesis to libraries or individuals upon request.

Do not authorize Haigazian University to supply copies of my thesis to libraries or individuals for a period of two years starting with the date of the thesis defense.

Signature:

Date:



A Thesis

Entitled

The Mediating Effect of Coping on The Relationship Between Emotional Intelligence and
Compassion Fatigue Among Humanitarian Aid Workers in Lebanon

By Nirmeen Saassouh

is accepted by the Graduate Thesis Committee as satisfying the thesis requirements for

the degree Master of Arts/ Clinical Psychology

Date _____

Signature of Thesis Committee Chairperson

Date _____

Signature of Thesis Committee Member

Date _____

Signature of Thesis Committee Member

Haigazian University

May 2023

Acknowledgements

I am deeply thankful to the individuals and organizations who have provided me with guidance and support throughout my graduate studies.

Foremost, I express my gratitude to my thesis advisor, Dr. Hanine Hout, whose unwavering support, expertise, and patience have been invaluable throughout the research process. Her guidance has been instrumental in shaping my ideas and refining my skills.

I also extend my appreciation to the faculty members of the psychology department at Haigazian university, particularly Dr. Vartan Agopian and Dr. Ahlam Klailat, for their constructive feedback and insightful comments that have contributed to the quality of my work.

I am incredibly grateful for the persistent support and encouragement of my parents and siblings throughout my studies. Their love and guidance have been a constant source of inspiration, motivating me to strive for success and to never give up in the face of challenges. Their belief in my abilities has helped me to stay focused and to persevere throughout this journey. I am forever grateful for their love and support. Salim, Ghada, Roni, Rawad, Suzan and Dani, you are blessings in the form of people.

I would like to convey my genuine appreciation to Sheikh Khaled Ali Riza for granting me a scholarship to pursue my studies in university. Your benevolence and encouragement have enabled me to concentrate on my academic endeavors without further worries. This scholarship has not just furnished me with the resources to achieve my educational aspirations but has also instilled in me the confidence and motivation to strive for excellence in my area of expertise. I am honored and thankful to have been selected for this scholarship, and I am devoted to utilizing

the knowledge and competence I have obtained to create a constructive impact on the world. Once again, thank you for investing in my education and future.

I would like to express my heartfelt gratitude to my best friends for their tenacious support, faith, and laughter throughout my graduate studies. Their friendship has been a constant source of joy and comfort. They were present to hear my thoughts, uplift me during moments of dejection, and celebrate my successes with me. Their presence has made this venture less solitary and more gratifying. I am profoundly appreciative of their friendship and all the moments we have experienced together. Alain, Hussein, Noura, Sara, Sevana, Ralph, Dana and Joelle, I am lucky to have you.

Last but not least, I offer my regards to all the participants who participated in my research. Without their contribution, this study would not have been possible.

Abstract

This Master's thesis aims to study the mediating effect of coping on the relationship between emotional intelligence and compassion fatigue. To achieve this goal, a quantitative research approach was used. The study collected data through a self-report online survey that captured the emotional intelligence scale, the Coping Inventory for Stressful Situations (CISS) scale and the Professional Quality of Life Scale (ProQOL). The data were analyzed using SPSS namely correlation, regression and mediation analyses. The main findings indicate that there is a significant inverse relationship between emotional intelligence and compassion fatigue. Moreover, problem-focused coping significantly mediated the relationship between emotional intelligence and compassion fatigue but the same was not for avoidance and emotion focused coping. These findings suggest that emotional intelligence is crucial in preventing compassion fatigue among humanitarian workers. Overall, the study provides insights into the importance for humanitarian relief workers to recognize and address any mental health burdens that may impact their work and quality of life. These findings have implications for organizations and clinical settings. The study recommends that future research sheds the light on this topic while accounting for the current limitations.

Table of Contents

LIST OF TABLES	4
LIST OF FIGURES	5
THE MEDIATING EFFECT OF COPING ON THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND COMPASSION FATIGUE AMONG HUMANITARIAN AID WORKERS IN LEBANON	6
THEORETICAL FRAMEWORK	8
PURPOSE OF STUDY	13
RATIONALE OF STUDY.....	13
RESEARCH QUESTIONS.....	16
SIGNIFICANCE OF STUDY	17
LITERATURE REVIEW	19
EMOTIONAL INTELLIGENCE	19
COMPASSION FATIGUE AND THE LEBANESE CONTEXT.....	20
IMPORTANCE OF COPING STRATEGIES IN MENTAL HEALTH	21
COPING STRATEGIES AS MEDIATORS BETWEEN EI AND CF	23
HYPOTHESES	26
METHODOLOGY	27
PARTICIPANTS.....	27
ETHICAL CONSIDERATIONS.....	28
INSTRUMENTS.....	28
<i>Compassion Fatigue</i>	29
<i>The Professional Quality of Life Scale (ProQOL)</i>	29
<i>Emotional Intelligence</i>	30
DESIGN AND PROCEDURE	32

RESULTS	33
PRELIMINARY ANALYSIS	33
MISSING VALUE ANALYSIS.....	33
RELIABILITY ANALYSIS.....	33
UNIVARIATE AND MULTIVARIATE OUTLIERS.....	34
OUTLIERS IN THE SOLUTION AND INFLUENTIAL CASES.....	35
SAMPLE DESCRIPTIVES.....	35
SCALE DESCRIPTIVES	37
CORRELATION ANALYSIS.....	38
HYPOTHESES TESTING.....	40
MEDIATION ANALYSIS: PROBLEM-FOCUSED COPING MEDIATING THE RELATION BETWEEN EMOTIONAL INTELLIGENCE AND COMPASSION FATIGUE.....	44
MEDIATION ANALYSIS: AVOIDANCE AND EMOTION-FOCUSED COPING MEDIATING THE RELATION BETWEEN EMOTIONAL INTELLIGENCE AND COMPASSION FATIGUE.....	45
DISCUSSION	47
INTERPRETATION OF THE FINDINGS.....	47
<i>Emotional Intelligence and Compassion Fatigue</i>	47
<i>Emotional Intelligence, Coping Strategies and Compassion Fatigue</i>	47
IMPLICATIONS FOR HUMANITARIAN ORGANIZATIONS	51
CLINICAL IMPLICATIONS	52
LIMITATIONS.....	53
REFERENCES	55
APPENDIX A	71
APPENDIX C.....	76

List of Tables

Table 1: Reliability Analysis	34
Table 2: Sample Descriptives	36
Table 3: Sample Descriptives: Years of Experience.....	37
Table 4: Scale Descriptives.....	37
Table 5: Spearman's Rho Zero Order Correlation Matrix	40
Table 6:: Regression: Model Summary Table	43
Table 7: Bootstrapped Regression Coefficients.....	43

List of Figures

Figure 1: Histogram of the Distribution of Residuals.....	41
Figure 2: P-P Plot of the Distribution of Residuals	42
Figure 3: ZRESID versus ZPRED Scatterplot: Homoscedasticity Assumption.....	42

The Mediating Effect of Coping on The Relationship Between Emotional Intelligence and Compassion Fatigue Among Humanitarian Aid Workers in Lebanon

The purpose of this study was to understand the relationship between emotional intelligence, coping skills and compassion fatigue among humanitarian aid workers in Lebanon. Unfortunately, front liners in the humanitarian field are subjected to stressful environments in their day-to-day encounters. In particular, humanitarian aid workers deal with marginalized, vulnerable and victimized populations, those who experienced and/or witnessed injustice in all of its forms. There has been a growing concern in the past decade over the mental health of those who hold jobs that include constant contact with crimes, war and violence victims. On the global development professional network, 596 out of 754 aid workers reported that they are suffering from a mental health issue, 93% out of which were related to their job in the humanitarian industry (Young, 2015). When these workers are continuously dealing with highly stressful or traumatic experiences, they are at a risk of developing compassion fatigue, burnout and secondary traumatic stress (Stamm, 2010). To better understand each construct, separate definitions are provided.

Burnout refers to long-term involvement in emotionally taxing situations that results in a feeling of emotional, physical, and cognitive fatigue. (Maslach et al., 2001). Exhaustion, cynicism and inefficiency are the three classifications of burn-out. Any worker in any field can experience burnout. The experience of burn-out lies in the worker's negative feelings about an overwhelming workload coupled with a working environment that is not supportive (Stamm, 2009).

The term, compassion fatigue, was first mentioned in the nursing literature to represent the feelings of isolation and detachment by health workers in direct contact with distressed

patients. In other words, compassion fatigue is the negative aspect of helping others. It is defined as “a state of tension and preoccupation with the cumulative impact of caring” (Melvin, 2012, p. 1). Consequently, individuals with high levels of compassion fatigue start to exhibit lowered levels of empathy towards beneficiaries. In addition, workers who develop compassion fatigue experience diminished joy in life, dread going to work, exacerbation of physical ailments and irritability. Helplessness and confusion also emerge as a manifestation of compassion fatigue (McHolm, 2006). Compassion satisfaction is the opposite of compassion fatigue in that it encompasses the pleasure one feels towards their ability to carry out their work. In the case of humanitarian aid workers, it is the contentment for being able to help those who are in need. It is important to note that compassion fatigue is usually confused with burn-out (Udipi et al., 2008). However, the two terms are distinct constructs as compassion fatigue is related to the worker’s preoccupation with others’ problems while burn-out is associated with work environment. The main difference between compassion fatigue and burnout is that the former embodies a state of preoccupation and tension regarding others or their agonies; symptoms that surpass the chronic exhaustion in burn-out.

While searching existing literature to study the first emergence of the term “compassion fatigue” which was in 1992, there was another concept usually confused with compassion fatigue and burn-out which is secondary traumatic stress. This term is directly related to the vicarious traumatization of individuals caring for someone else who has been traumatized. That is, helpers become absorbed while empathizing with the suffering of others to an extent where they get traumatized (Figley, 1995). This traumatization can affect the humanitarian aid worker on physiological, behavioral and emotional levels. For instance, workers with secondary traumatic stress can have intrusive thoughts about the traumatic incident, interrupted sleep schedule and

avoidance of stimuli that remind them of the event (Stamm, 2009). The Diagnostic and Statistical Manual of mental disorders-5th edition specifies the mere witnessing of a traumatic event as one criterion of Post-Traumatic Stress Disorder (PTSD) (American Psychiatric Association, 2013). The “helping professions” require not only an exposure to stressful conditions but also a remarkable deal of feeling with the beneficiary which increases the likelihood of Secondary Traumatic Stress (STS) among staff members (Ratrou, & Hamdan-Mansour, 2020). Stated differently, there is evidence to support the development of PTSD symptoms in people with helping professions (Figley 1999, Gentry et al. 2002).

Nevertheless, certain symptoms reported by professionals are beyond and different from secondary traumatization, PTSD and burn-out. Their experience was more complex in that it is sudden, involves desensitization and depersonalization, embodies emotional and physical exhaustion and fosters feelings of apathy and helplessness. As evidenced in the concept analysis using Walker and Avant (2019)’s methodology, the aforementioned characteristics were the defining attributes of compassion fatigue, which is the main focus of our study (dependent variable). The following paragraphs provide the theoretical framework of this study.

Theoretical Framework

Interest in empathy-based stress had amplified over the past decade. While work related stress and well-being have always had their share in research, stress related to trauma at work is the recent extension in studies about occupational health. As the name suggests, empathy-based stress is the experience of empathy, an affective reaction, to a traumatic stressor that leads to negative work and health consequences to employees (Rauvola et al., 2019). It is categorized into three constructs: compassion fatigue, secondary traumatic stress and vicarious traumatization. Empathy based stress is not only influenced by secondary trauma and empathic

engagement but also, by contextual and individual factors that can act as predispositions for the development of empathy-based stress measured as compassion fatigue. Individual factors refer to the person's sociodemographic, personality, coping and empathy relevant experiences while contextual factors refer to the form and frequency of exposure to trauma, and support present. Adverse health and occupational consequences like burnout then emerge. This model is not a unidirectional cause and effect depiction. Rather, it is a simple outline of how traumatic work stress unfolds over time in a manner that states that individual and contextual factors along with a second-hand trauma and empathic engagement influence the development of empathy-based strain which in turn foster negative outcomes at work. More specifically, theoretical frameworks about work-related stress consider negative outcomes such as compassion fatigue as a result of context and available resources. Two such theories are the job demands-resources (JD-R) and conservation of resources (COR) perspectives (Demerouti et al. 2001; Hobfoll, 2001).

The job demands-resources perspective posits that job aspects, whether organizational, physical, social or psychological, constitute the resources that assists the individual to grow, develop and achieve work goals, and reduce job demands (mental or physical costs) and subsequent stress (Demerouti et al. 2001). The conservation of resources perspective considers resources as valuable personal characteristics because of their ability preserve precious assets in one's psyche (Hobfoll, 2001). It also adds that stress emerges after the loss of these resources, a perceived threat to them or insufficient benefits from their investment.

Moreover, the resources depletion and emotional contagion perspectives are two additional theoretical frameworks that put forth the emergence of compassion fatigue in professional helpers (Figley, & Kleber, 1995; Hatfield et al., 1993). The resource depletion theory states that upon their exposure to traumatic events, helpers become exhausted physically

and mentally. On the other hand, the emotional contagion theory refers to an affective mechanism where emotional experiences by the traumatized patient are felt by the helper through their observation and engagement. The literature informs us that these two theoretical perspectives on compassion fatigue share a common component, emotional intelligence. In other words, theories of resource depletion and emotional contagion are influenced by emotional intelligence, which is our independent variable in this study.

In order to clarify this more, it is important to start first by defining emotional intelligence. Emotional Intelligence (EI) refers to the awareness of and ability to manage emotions in oneself, as well as the awareness of emotions in others (Goleman, 1995; Mayer, DiPaolo, & Salovey, 1990; Salovey & Mayer, 1990). To better conceptualize EI, it is broken down to constructs of empathy, emotional regulation, reflective ability and self-awareness (Morrison, 2007; Zeidner et al., 2004). There are two measurable factors of EI particularly related to mental health: Emotional perception (EP) and Managing Of Emotions (MOE), (Ciarrochi et al, 2002). EP and MOE have opposite correlations to mental health. That is, participants who were more emotionally perceptive displayed high levels of hopelessness, depression and suicidal ideation, and hence, were more impacted by stress than their counterparts, whereas others with high scores on MOE showed lower levels of hopelessness, depression and suicidal ideation.

Based on the above, how is the role of EI related to the theories of resource depletion and emotional contagion? To preserve personal vitality and deliver professional care to beneficiaries, humanitarian aid workers are in need for high levels of emotional intelligence. In a study by Kabunga et al. (2020), higher levels of emotional intelligence predicted lower levels of compassion fatigue among psychotherapists. In particular, all constructs of emotional

intelligence correlated significantly in an inverse relationship with compassion fatigue. It was inferred in this study that these results might be explained by the susceptibility of a professional with high levels of emotional intelligence to seek out internal resources to cope with work-related stress which in turn buffers against compassion fatigue.

As evidenced in Hobfoll (2011), stress can deplete one's resources which in turn can affect their coping strategies in a negative manner. In other words, depletion of resources may lead to ineffective coping. Nevertheless, even when one's resources are scarce, the *choice* of coping strategies can still offer support for the person and here is when the component of emotional intelligence gains relevance. Particularly, those high in emotional intelligence may use coping mechanisms that foster energy and maintenance in demanding tasks like mood regulation strategies while those low in emotional intelligence may resort to coping skills that exacerbate resource depletion and in turn, compassion fatigue; like avoidance strategies (Matthews & Fellner, 2012; Samaha, Lal, Samaha, & Wyndham, 2007). In addition, emotional intelligence impacts the professionals' participation in implicit social comparisons or explicit conscious appraisal of the hardships of others; both known as emotional contagion, a theoretical perspective discussed above (Hatfield et al., 1993). As a result, compassion fatigue can be reduced by effective coping strategies originally stemming from high levels of emotional intelligence.

While the mechanism of resource depletion often leads to ineffective coping strategies and foster the development of compassion fatigue, emotional intelligence can assist in the husbanding of limited resources that cultivate effectiveness, efficiency and management of exhausting tasks through the choice of healthy coping styles like mood regulation (Hobfoll, 2011; Matthews & Fellner, 2012). On the other hand, professionals with lowered levels of

emotional intelligence are drawn to choose ineffective coping strategies that further exacerbate resource depletion and compassion fatigue (Samaha, Lal, Samaha, & Wyndham, 2007). Hence, through emotional intelligence, effective coping can buffer against compassion fatigue.

In a study by Zeidner et al. (2013) that analyzed the role of emotional intelligence, coping and negative affect on compassion fatigue in health care professionals, findings validated the inverse association between emotional intelligence and compassion fatigue just as it substantiated an inverse correlation between adaptive coping and compassion fatigue while negative affect was statistically controlled. Moreover, problem-focused coping was a mediator to the relationship between emotional intelligence and compassion fatigue with a p-value less than 0.01. The evidence in this study also supported the conclusions made in the studies of Mikolajczak et al. (2008) and Salovey et al. (1999) that emotional intelligence promotes healthier coping in professionals of the helping professions. In addition, the cross-sectional correlational study by Kabunga et al. (2020) concluded that emotional intelligence among psychotherapists is inversely related to their levels of compassion fatigue with a statistical significance of $p < 0.001$ and that psychotherapists at risk of compassion fatigue can benefit from programs that target their coping skills. This finding was supported by others as Keefer et al. (2009) also suggested that a professional's inability to regulate emotions, a factor of emotional intelligence, aggravate the impact of work-related stress via ineffective coping behaviors. In similar cross-sectional research by Görgens-Ekermans and Brand (2012), emotional intelligence had a significant negative correlation with compassion fatigue in a population of nurses. Emotional intelligence was also found to underpin healthy coping strategies like building emotional boundaries, avoiding over emotional involvement and resilience which is inversely related to empathy-based stress and improves psychological well-being (Grant, 2014).

While it is inevitable for workers in the humanitarian field to encounter stressful stories, their choice of coping mechanisms is in their realm of control especially if they are aware about an evidence-based mechanism that works on their emotional intelligence, improves their coping styles and eventually reduces their risk or buffers against their compassion fatigue.

Purpose of Study

Based on the above brief review of literature, the purpose of this study, was to examine the effect of Emotional Intelligence on compassion fatigue in workers in the humanitarian field in Lebanon, as well as the role of the mediating variable, namely, coping strategies.

Rationale of Study

PTSD is only one of the many other consequences of compassion fatigue which include: lower levels of sense of control, diminished sense of personal safety, poor judgement, faulty treatment planning and if remained unaddressed, compassion fatigue could lead to suicide (Portney, 2011; Van Mol et al., 2014; Joiner, 2005). Compassion Fatigue erodes optimal functioning of helping professionals through low self-worth, staff turnover, decreased productivity and poor morale (Showalter, 2010). In light of the debilitating consequences of compassion fatigue, it was essential to study its emergence and the mechanisms to deal with or prevent it.

Moreover, professionals are often in a position to make life changing decisions for children and families especially in settings where child welfare is involved which is the case for some social workers and clinical psychologists (Perry et al., 2020). As part of their work, people in the helping professions are highly likely to partner with multiple entities like judges and attorneys which requires self-awareness, empathy and emotional regulation, all of which are components of emotional intelligence. Therefore, emotional regulation, an element of EI, is a

necessity in an emotionally-charged working environment that more often than not exposes its workers to potentially traumatic experiences (Grant et al., 2014). The awareness of one's emotions and ability to regulate them informs professionals about their own strengths, limitations, and biases which in turn influence their engagement with beneficiaries and colleagues (Platt, 2012). If organizations and professionals were to strive against compassion fatigue, healthy coping styles are the possible route, a mechanism that mainly feeds on emotional intelligence (Armstrong et al., 2011).

In addition, it has been shown that culture plays a role in the emotional experiences of the individual such as emotional exhaustion, personal accomplishment, job burn-out and depersonalization (Hamid & Musa, 2017). Therefore, people belonging to different cultural groups might have different experiences of compassion fatigue than one another. Hence, professionals in Lebanon might display different patterns of compassion fatigue than others. While there is a number of reviews focusing on burn-out symptoms among health care professionals in western countries, there has been a dearth of studies in the Arab World that target compassion fatigue. So, future research must shed the light on this construct.

Although compassion fatigue and burnout are different constructs but more often than not, they show similar trends in correlations. While evidence on the difference in the levels of compassion fatigue across countries is absent, it has been shown that countries in the Arab world have differing levels of burnout within and between countries among health care workers. The reason for this difference remains unclear and thus, future studies need to examine individual and organizational differences that could be accountable. Two studies that compared social workers to other subdomains in the health profession in Gaza and West Bank concluded that social workers had the highest levels of burnout with those in Gaza significantly having higher than

West Bank social workers (Abdallah, 2009; Alhajjar et al., 2012). So, drawing on previous trends, it is expected that compassion fatigue might also have differing levels between countries in the Arab World. Future studies are encouraged to fulfill this gap there is a lack of such studies.

The focus of the work of humanitarian aid workers in Lebanon is targeted at vulnerable populations whether socially, physically or psychologically. These populations include but not limited to refugees, persons with specific needs, survivors of abuse, people struggling with mental or medical conditions, members of the LGBTQIA+ community and individuals with low socioeconomic status. It is often that more than one vulnerability are concomitant. The nature of their work entails counseling, case management, assessment, direct one-on-one or group service provision and follow-up. In other words, workers in Lebanon in the humanitarian field are not only managing issues arising from the current fragile socioeconomic state in Lebanon but also, receiving cases of individuals who seek refuge from neighboring countries like Iraq and more recently Syria, two countries with an ongoing history of instability, war and hardships. That is, the physical proximity of Lebanon to countries in a hostile state makes it a host to those who choose to flee. Consequently, these Arab refugees become yet another target group that Lebanese humanitarian aid workers deal have to deal with. On another note, the health status of health professionals residing in countries, such as, Palestine, Yemen or Syria is deteriorating as a result of the progressing civil conflicts in those areas (Elbarazi et al., 2017). Logically, we could assume that a similar physical and mental deterioration is happening to the Lebanese health professionals, and therefore, studying the predictors of compassion fatigue becomes an essential need of this study.

In light of the severe crises that the Lebanese have been facing in the past years, like wars in adjacent countries that lead to the refugee inflow (the Iraqi war started in 2003 and the Syrian

war in 2011), the economic inflation in 2019 and the Beirut blast in 2020, Lebanon has been a host for over a 90 NGOs. This inclines that the employees who manage and work in these NGOs are in direct and indirect contact with survivors of these many crises. Moreover, the frail and strained financing models and health care systems do not make their job any easier but instead overburden these professionals with added responsibilities. Consequently, their work as first responders leaves minimal attention to their own care due to the short recovery time they get between a case and the other. Unfortunately, staff care is an intervention that is lacking in most workplaces. As a result, these professionals are prone to compassion fatigue and other symptoms like depression, anxiety, absenteeism, burnout, compromised productivity, staff turnover, accidents, injury and organizational and personal conflicts. While literature on compassion fatigue prevention for these individuals is absent in the Lebanese context, it becomes essential to examine its predictors, mediating variables and the mechanisms to combat it.

Research Questions

Based on the above brief review of literature and rationale, the following were the research questions:

- 1: Is there a significant inverse relationship between emotional intelligence and compassion fatigue among Lebanese humanitarian aid workers?
- 2: Is there a significant positive correlation between emotional intelligence and healthy coping among Lebanese humanitarian aid workers?
- 3: Is there a significant inverse relationship between healthy coping and compassion fatigue among Lebanese humanitarian aid workers?
- 4: Is coping a mediating factor to the relationship between emotional intelligence and compassion fatigue among Lebanese humanitarian aid workers?

Significance of Study

In a field where empathy is a core value and predictor of proper patient care, there is a need to study any threat to its exhibition and thus, implications can stem out from its findings (Lelorain et al., 2012). These implications could range from staff training, monitoring, evaluation, supervision and policy making. In this way, addressing compassion fatigue in humanitarian workers does not only preserve their well-being but also ensures quality control over patient care. It also informs training personnel in designing the content of their workshops to target the variable that is most related to worker's quality of life and in turn, quality of patient care.

One important implication is the emergence of screening tools to new hires or existing staff that can detect levels of compassion fatigue, emotional intelligence, coping and other red flags that increase the worker's risk. It was evident in two cross-sectional studies in Kuwait and Qatar that health workers who were male, without a hobby, with working experience over 10 years, suffering from a chronic disease or holding a bachelor's degree only were at significant risk of emotional exhaustion (Abdulghafour et al., 2011; Abdulla et al., 2011). Such red flags could be incorporated in professionals' capacity building procedures, key performance indicators and the organizations policies and procedures. For example, the study by Hamaideh (2011) found that mental health nurses in Jordan had high levels of burnout which in turn, was associated with diminished social support from supervisors and colleagues, low psychosocial environment and difficulty managing challenging patients. Detecting such pitfalls in the health care system and subsequently preventing them is an added asset to a challenging work environment like the one of people in the helping profession. Although levels of burnout among

mental health professionals were similar between Arab countries, the associated factors remain distinct to every country (Jahrami & Thomas, 2013).

In addition, primary health workers in Lebanon with high burnout levels are 3 times more likely to quit their jobs (Alameddine et al., 2012). The prevention of staff turnover is an important implication of the present study as a person's job satisfaction is proven to influence their intention to quit their job or the whole healthcare profession (Al-Omar, 2003). In a situation where the mental health care system is already understaffed in comparison to the huge demand, it is essential that human resources are preserved through evidence-based techniques.

Putting theory and practice together and by applying the resource depletion theory, it is hypothesized that fostering emotional intelligence will enable workers to better choose their coping mechanisms from within their own resources and in turn decrease their levels or risks of compassion fatigue. There exists a plethora of literature supporting the incorporation of emotional intelligence competencies into the teachings and trainings of humanitarian aid workers (Berceli & Napoli, 2006; Caringi, Lawson, & Devlin, 2012; Davis, 2001; Morrison, 2007). However, such literature remains scarce in the Lebanese context. The limited literature in the Arab world that exists is on burnout, and not compassion fatigue, which does not propose a clear mechanism to work through these symptoms nor does it offer recommendations for improved professional practice on both, individual and organizational levels. Hence, the significance of this study lied within its diverse implications that have short- and long-term benefits.

It is important that humanitarian relief workers are aware of any burdens and difficulties risking their mental health as the psychological repercussions may have an impact on operations in and outside of work as well as on their general standard of living. The results of this study are therefore be useful to future humanitarian aid workers on personal, social and career levels.

Chapter 2

Literature Review

The aim of this chapter is to give context to my hypotheses by representing the importance of cultivating emotional intelligence among humanitarian aid workers. Most importantly, it sheds light on the study's relevance to the Lebanese context.

Emotional Intelligence

In reference to Zeidner et al. (2009), emotional intelligence is split into two constructs: trait emotional intelligence and ability emotional intelligence. Trait emotional intelligence was defined as a set of emotional self-perceptions found at the bottom of personality hierarchies that can be quantified through self-reports (Petrides, Pita, & Kokkinaki, 2007). Ability-based emotional intelligence, on the other hand, was characterized as a set of skills that enable an individual to perceive emotions, generate and access emotions to aid thought, comprehend emotions and emotional knowledge, and reflectively regulate emotions in order to encourage intellectual and emotional growth. This construct is measured by the Mayer-Salovey-Caruso emotional intelligence scale (2002). Trait and ability emotional intelligence are positively correlated with both, good mental health and effective use of coping strategies (Zeidner, Matthews, & Roberts, 2012). Moreover, these constructs are negatively correlated with stress and negative affect. Similarly, emotional intelligence is negatively correlated with burn-out among interns and nurses (Gerits, Derksen, Verbruggen, & Katzko, 2005; Weng et al., 2011).

In a systematic scoping review, Perry et al. (2020) examined interventions that targeted the promotion of emotional intelligence among workers in the helping profession. The inclusion criteria for the studies required that the research be peer reviewed, done between 2003 and 2018 and conducted in Europe, Australia or North America. References from the selected articles were

used as well. The aim of this systematic review was to develop or improve interventions about competencies of emotional intelligence. After an overview of the literature, 18 studies met the inclusion criteria. A standing outcome of this review was that emotional intelligence, reflective ability and emotion regulation, were all chief skills for anyone in the helping profession, a result also backed up by earlier findings (Grant et al., 2014; Kinman & Grant, 2011; Morrison, 2007). This review has revealed a gap in professionals who work in the domain of social work but do not have a relevant university degree stating that these individuals are more likely than others to suffer from mental health problems. These individuals are thus in special need for promoting their emotional intelligence in order to better manage the emotional labor required in their jobs.

Individuals in the helping professions are at a continuous risk of developing compassion fatigue through the excessive emotional taxation demanded in their jobs. Noting that Lebanon observed an increased number of NGOs and people holding such professions in light of the dire circumstances the country is facing, it is important that the mental health of these workers is preserved. By understanding their emotional intelligence levels and coping strategies, it can be informed how best to accommodate policies, trainings, workload and external support like counseling, supervision or therapy to the needs of humanitarian workers. After all, workers in the humanitarian field are Lebanon's resource for proper humanitarian action and thus, their well-being does not only serve their personal lives but also, the nation as a whole.

Compassion Fatigue and the Lebanese Context

Lebanon has not only been in a state where one crisis follows the other but also, it has been a host to refugees from countries either in conflict or where living conditions do not meet the minimum humanitarian standards. According to the United Nations, there are 2.2 million Lebanese, 1.2 million Syrian, 208,000 Palestinian and 78,000 migrants in need for humanitarian

assistance, needs responded to by humanitarian workers in the field (European Commission, n.d.). For this reason, Lebanon has witnessed an increased number of NGOs and unofficial humanitarian movements aimed at helping those individuals meet their needs.

While this drive to help, holds a humanitarian mission, it also has its risks on aid workers. As they hear the stories from survivors of torture, abuse, hunger and medical conditions, humanitarian aid workers are at great exposure to traumatic stories. Compassion fatigue emerges from knowing about these traumatizing events and comes in the forms of negative thoughts, behaviors and emotions that affect the worker's willingness and ability to help thus impeding their function. Unfortunately, statistics on the rate of compassion fatigue among humanitarian aid workers in Lebanon is none existent.

Importance of Coping Strategies in Mental Health

The concept of Coping was originally defined by Lazarus and Folkman (1984) as someone's continually changing cognition and behavior to manage their needs that are beyond their competence. Coping is conceptualized by dividing the construct into emotion-oriented coping, task-oriented coping and avoidance-oriented coping. This conceptualization was later used to develop the Coping Inventory for Stressful Situations (CISS), the tool used to measure coping strategies in this study (Christensen & Kessing, 2005).

It is evident that coping strategies are closely related to mental health. For instance, the decline in depressive symptoms was related to more use of task-oriented coping strategies and low use of emotion-oriented coping strategies. Moreover, coping plays its role in one's personality traits as task-oriented strategies were related to traits of conscientiousness while emotion-oriented strategies were associated with the less healthy traits like neuroticism (Shewchuk et al., 1999). Additionally, maladaptive coping styles like drinking alcohol to manage

stress mediate the relationship between inter-parent violence and episodic drinking thus add more layers to poor mental health (Jester et al., 2015) Furthermore, dysfunctional coping was a mediator to the effect of stressful life events on schizotypal personality traits and psychotic symptoms. These findings confirm the pivotal that coping plays in one's mental health.

In a more similar cultural context, Hamid and Musa (2017) conducted a cross-sectional study in the United Arab Emirates (UAE) to examine the mediating effect of coping strategies between secondary traumatic stress and burnout among professional caregivers. Although this study did not include emotional intelligence as a predictor, as is the case in our study, it is still worth including since it emphasizes the important role of coping strategies on the mental health of health professionals in the MENA region. The authors of this study hypothesized that the relationship between secondary traumatic stress and burnout could be partially or fully mediated by coping mechanisms that include; emotion-focused, task-focused, and avoidance strategies. A total of 502 professional caregivers, such as psychologists and social workers, residing in UAE participated in the study. Professionals come from different work settings such as schools, hospitals, social welfare centers, and charity organizations. Participants were selected from a list from the ministries of health, education social affairs and the Red Crescent. Three measures were used to assess variables under study. First, the professional quality of life questionnaire (ProQOL) was used to measure compassion satisfaction, secondary traumatic stress, and burnout. Second, the Maslach Burnout Inventory: Human Services Survey (MBI-HSS) was used to measure burnout specifically in workers in professional settings. Finally, coping strategies were measured using Endler and Parker (1994)'s Coping Inventory for Stressful Situations (CISS). From the regression analyses done, it was shown that coping strategies predicted 26% of the variance in secondary traumatic stress, whereas burnout predicted 13%. As a result, coping

strategies partially mediated the relationship between secondary traumatic stress and burnout. Finally, this study offered additional fundamental findings that examine the mental health of professional caregivers. It highlighted the need of focusing on the wellbeing of professionals to provide effective and useful services for the service users. In addition, it encouraged the development of healthier coping strategies among workers.

Coping Strategies as Mediators between EI and CF

In a study by Zeidner et al. (2013) that was based on the resource depletion and emotional contagion theories, the mediating effect of coping on the relationship between emotional intelligence and compassion fatigue was tested. Researches posed six hypotheses. These are 1) Trait emotional intelligence is inversely correlated with compassion fatigue, 2) emotional management, a pivotal indicator in emotional intelligence, is negatively associated with compassion fatigue, 3) problem-focus coping is inversely correlated with compassion fatigue, 4) emotion and avoidance focused coping, the less adaptive coping strategies, are positively related to compassion fatigue, 5) negative affect is positively correlated with compassion fatigue and 6) effective coping strategies like problem-focused coping have a mediating effect on the relationship between emotional intelligence and compassion fatigue. There were 93 medical professionals (37% females) and 89 mental health professionals (73% females) who took part in this study. There were 25 clinical psychologists, 55 clinical social workers, and 9 psychiatrists in the mental health care group and the doctors came from a variety of medical specialties (emergency medicine, general surgery, pediatrics, neurology, anesthesia, and so on). As compared to the mental health group, participants from the medical group had more years of experience, were older and reported more workload on average. Instruments used in this study were the Schutte self-report inventory, Emotion-management subscale of the

Mayer-Salovey-Caruso emotional intelligence test, Coping inventory for stressful situations situation, Mood subscales of the Dundee stress state questionnaire and Professional quality of life-compassion satisfaction/fatigue III. A multivariate analysis of covariance (MANCOVA) was used to examine the effects of main variables in the study which are emotional intelligence, negative affect emotion regulation, coping strategies, and compassion fatigue. After controlling for demographic variables, the hypotheses stating that emotional intelligence and emotional management were negatively correlated with compassion fatigue, were supported. In addition, the hypotheses that predicted that problem-focused coping is negatively correlated with compassion fatigue and less adaptive coping strategies are positively correlated with compassion fatigue, were also supported. Also, a significant effect to the positive correlation between negative affect and compassion fatigue was found. Finally, there was a statistical significance that attested the mediating effect of coping on the relationship between emotional intelligence and compassion fatigue. No significant differences in regards to gender between the mental health and physicians' groups were found in this study, which is consistent with previous findings, such as by Craig and Sprang (2010) and Hojat et al. (2002). The present study aimed to partially replicate the study by Zeidner et al. (2013) as they both shared the theoretical framework and were interested in the same population and administered some common scales.

Similarly, Espinosa et al. (2019), studied the mediating effect of coping to the relationship of emotional intelligence and work-related stress particularly secondary traumatic stress (also referred to as compassion fatigue) and burn-out. Researchers hypothesized that emotional intelligence and secondary traumatic stress are negatively correlated while controlling for demographic variables. In addition, researchers hypothesized that the negative correlation between emotional intelligence and secondary traumatic stress is fostered by the reduction of

unhealthy coping and increase of healthy coping. The sample consisted of resettlement workers (n=210) in the United States where 73.6% of the sample were females and 64.9% were white. All participants were employed in the same job position and had a mean age 32.96. They completed the Secondary Traumatic Stress Scale, Oldenburg Burnout Inventory, the Brief COPE instrument and the Trait Emotional Intelligence Questionnaire Short Form. Results of this study indicated that emotional intelligence was significantly negatively correlated with secondary traumatic stress and burn-out after controlling for age, gender, traumatic history and workload. Moreover, unhealthy coping strategies mediated the negative relationship between emotional intelligence and secondary traumatic stress and burn-out. In other words, people who had higher scores of emotional intelligence were less likely to engage in unhealthy coping styles. One particular importance of this result was the absence of significance of the mediating effect of healthy coping because the recent focus interventions that help professionals were targeted at the maintenance of healthy coping rather than the working through of unhealthy coping. Therefore, future interventions could utilize these findings in the generation of their training, coaching or counseling programs (Walter et al., 2013).

In a cross-sectional study and as a replication of the findings by Petrides et al. (2007), Mikolajczak et al. (2008) found that trait emotional intelligence is indeed associated with healthy rather unhealthy coping styles among a population of 203 students in a psychology class. It was also evident that individuals high on EI chose adaptive strategies to preserve positive emotions and down-regulate negative emotions. Thus, this clarified their tendency to experience positive emotions more and negative emotions less. This in turn substantiated the mediating effect of emotional regulation, a healthy coping mechanism, on the relationship between EI and the propensity to experience certain emotions. This finding inferred that people high on EI are less

likely to develop mental disorders noting that symptoms of anxiety, depression and other mood disorders are rendered as maladaptive trials to regulate one's undesirable emotions (Campbell-Sills & Barlow, 2007; Petrides et al., 2007).

A pivotal implication of this review of literature chapter was that interventions targeted at healthy coping of professionals should include a component of trait emotional intelligence which has substantial evidence in previous studies to promote long term trait emotional intelligence and consequently, better mental health of workers (Nelis et al., 2011; Schutte et al., 2013). Moreover, it can be concluded that coping acts as mediator to the relationship between emotional intelligence and compassion fatigue which makes it an area of intervention for mitigation measures against compassion fatigue. Hence, based on the above, the following hypotheses were investigated.

Hypotheses

Hypothesis 1: Higher scores of emotional intelligence predict lower scores of compassion fatigue among humanitarian aid workers in Lebanon.

Hypothesis 2: Problem-focused coping strategies mediate the relationship between emotional intelligence and compassion fatigue among humanitarian aid workers in Lebanon.

Hypothesis 3: Avoidance- and emotion- focused coping strategies mediate the relationship between emotional intelligence and compassion fatigue among humanitarian aid workers in Lebanon.

Chapter 3

Methodology

Participants

Humanitarian workers are staff members belonging to any public, private or free-lance organizations where their work involves “helping others” such as hotline operators, clinical social workers, physicians, psychiatrists, psychologists, emergency room nurses, ambulance crew and firefighters (Figley & Kleber, 1995; Injeyan et al., 2011). Whilst statistics on the prevalence of compassion fatigue is absent, it is known that 50% of professionals are at risk of developing compassion fatigue (Injeyan et al., 2011; Wee & Myers, 2002). Expected age group was 18 years old and more, the minimum age to work or volunteer in any organization as a first responder according to the Lebanese labor law of 23 September 1946 (International Labor Organization, 2010). According to G-power software version 3.1, the sample size for this study to yield a small effect size with statistical power of 0.8 was 602 while a medium effect with statistical power of 0.95 and 5% error probability was 129 participants. While the scope of an MA thesis cannot realistically attain 602 individuals but can exceed the 129, this study aimed to include as much more than 129 as possible.

Participants were workers in any of the helping professions stated above who were currently working in Lebanon. Therefore, this study employed a non-probability purposive sampling procedure with the inclusion criteria being: professionals holding any of the positions stated earlier who are 18 years old or more and currently practicing in Lebanon. Participants were found in non-governmental organizations, private or governmental institutions.

Ethical Considerations

This study received the approval of the SBS Ethics Committee at Haigazian University prior to any contact with participants. Participants were provided with an online consent form communicated on google docs. Their signature on this form was considered as their agreement to participate in the study. They were given the freedom of choice regarding the languages, English or Arabic, of the consent form and assessment tools. Provided that some demographic information like age, gender, educational background, job position, type of employment and years of experience, were relevant to our study, participants were asked to report these data as well. Otherwise, the total anonymity of participants was maintained thus preserving their confidentiality. The purpose of the study was communicated clearly in the informed consent so deception was not used in the proposed study. Incentives were not provided either. Upon debriefing at the end of their participation, participants were provided with the number of the National Lifeline for Emotional Support and Suicide Prevention (1564) in case they needed to share their experiences and seek professional help. They were informed that the lifeline can support them in the moment and offer them contacts of licensed mental health professionals if they wish a consistent treatment.

Instruments

The participants received an online link that included a small brief about the study, the consent form, the professional quality of life scale, the coping inventory for stressful situations and the emotional intelligence scale. The survey ended with the number of the national lifeline for emotional support and suicide prevention (1564) in case any of the participants wanted to vent or be oriented to mental health services.

Compassion Fatigue

Based on the systematic review and meta-analysis by Cavanagh (2020), the previously used tools to measure compassion fatigue were the compassion fatigue scale, the compassion fatigue/satisfaction Test (CFST) or what are now known as the Professional Quality of Life Scale (ProQOL).

The Professional Quality of Life Scale (ProQOL)

The ProQOL stemmed from the “Compassion Satisfaction and Fatigue Test” developed by Stamm in 1993. This tool or its previous versions have been used in all the literature that studied compassion fatigue. This scale aims to measure positive and negative experiences that workers in the helping professions encounter. The ProQOL is based on three subscales that measure compassion fatigue, compassion satisfaction and burn out (BO) with each subscale scored separately. There are 5 version of the ProQOL with the latest dating to 2009. In total, the scale includes 30 items each scored on a 5-point Likert scale with 1 being “Never” and 5 being “Very Often”. Within each subscale, a score of 22 or less is considered as low, 23-41 as average and 42 or more as high. Using a bifactor model, Geoffrion et al. (2019) reported that the ProQOL was moderately correlated with the posttraumatic checklist ($r=-.427, p<.001$) and highly correlated with psychological distress in the workplace ($r=-.666, p<.001$) and well-being scales at work ($r=.694, p<.001$). This in turn adds evidence to the convergent validity of the ProQOL. In support of the discriminant validity of ProQOL, there was not any correlation between ProQOL and Life Event Checklist. Analysis of the same bifactor model supported the theoretical underpinnings and construct validity of the ProQOL. The ProQOL was originally developed in English but it has been translated to German, Hebrew, Italian, Finnish, Japanese, Croat and Portuguese (Stamm, 2010).

There also existed a shorter version of the ProQOL which included 9 items only. The shorter version was tested in three different countries (Spain, Argentina and Brazil) using two studies whose members speak two different languages (Galiana et al., 2020). Using the ProQOL-IV, this version was then proven to have good construct validity, reliability, factorial structure and scalar invariance across the three different countries as per the confirmatory factorial analysis.

The completion of the longer version took around 15 minutes while that of the shorter version did not exceed 5-6 minutes. For the purpose of this study, the 10 items corresponding to compassion fatigue from the longer version of the ProQOL were used which took around 5 minutes to fill.

Emotional Intelligence

Multifactorial Emotional Intelligence Scale. The MEIS is the most commonly used scale to measure emotional intelligence. It is sometimes referred to as the Mayer-Salovey-Caruso Emotional Intelligence Scale (MSCEI) (2002). The scale measures the three branches of emotional intelligence: perception and appraisal of emotion, understanding and reasoning about emotions and management and regulation of emotions among oneself and others. However, it was not accessible on several library databases. The scale was requested from the author but was not reachable in any way, the second-best option was the Emotional Intelligence Scale presented below.

The Emotional Intelligence Scale. The Emotional Intelligence Scale is based on Salovey and Mayer's theory of Emotional Intelligence. It was developed by Schutte et al. (1998), the same scholar who developed the MSCEI scale mentioned above. The scale consists of 33-items scored on a 5-point Likert scale with 5 being "Strongly agree" and 1 being "Strongly

disagree”. Following a confirmatory factorial analysis, the emotional intelligence scale has shown good construct validity and reliability. Further evidence suggests that scores on the emotional intelligence scale correlated with 8 out of 9 theoretically related constructs. This instrument was also shown to have good test-retest reliability (Cronbach’s alpha: 0.78), internal reliability (Cronbach’s alpha: 0.90), predictive validity ($r = 0.32, p < 0.01$) and discriminant validity against the Big Five Personality Test. Group differences were also significant when variability in the levels of emotional intelligence is expected for example in groups of psychotherapists versus prisoners or substance use clients. No other version than the English one was obtained at the moment.

Based on practices in the existing literature, a total score for emotional intelligence was used in the data analysis of this study. The expected time to fill this scale was around 10 minutes.

Coping

Coping Inventory for Stressful Situations (CISS)

The CISS assesses coping in three dimensions: task-oriented, emotion-oriented and avoidance specific strategies (Endler & Parker, 1999; Rafnsson et al., 2006). This commonly used instrument offers identification and comparison of coping strategies between different people across different stressful situations. The task-oriented sub-scale is used to measure effective coping strategies while the emotion and avoidance-oriented subscales are used to measure ineffective coping strategies. The CISS consists of 48 items with 16 items to assess each domain of coping. Items are scored on a 5-point Likert scale with 1 being “Not at All” and 5 being “Very much”. Domains are divided to T-subscale, E-subscale and A-subscale that were shown to correspond to different factors by an exploratory factor analysis. Unlike other instruments that measure coping which are bound by psychometric limitations, the CISS has

more psychometric soundness. More specifically, CISS's internal reliability scores are good with values between .72 and .92 (Brands et al., 2014). Convergent and discriminant validity were assessed against the Beck Depression Inventory and the depression subscale of the Hospital Anxiety. Results showed significant negative correlations with T-subscale in CISS and significant positive correlations with the E-subscale in CISS. The E-subscale correlated significantly with several instruments that measure anxiety hence adding to the construct validity of the scale. The administration time of this scale was 30 minutes.

There was a shorter form for this scale which is composed of 21 items; after eliminating items with the lowest correlations. It was substantiated that the shorter version showed confirmatory factor analysis and internal consistency. The shorter version of the scale took around 13 minutes. Following the existing literature, all subscales of coping were measured in the present study using the shorter version.

Design and Procedure

The study adopted a quantitative design of a correlational research. Instruments were communicated online in a survey format via google docs. Data were be retrieved from the website and stored in an encrypted folder. Afterwards, variables and scores from the instruments were run on SPSS for statistical analysis.

The questionnaires administered in this study were presented in a counterbalanced order. Provided that most humanitarian workers are Arabic native speakers, the questionnaires were translated to Arabic.

Chapter 4

Results

Preliminary Analysis

Before proceeding with main data analysis, preliminary analysis was conducted to investigate the percentage of missing values, the reliability of scales and subscales, the presence of univariate outliers, multivariate outliers, outliers in the solution, and influential cases.

Missing Value Analysis.

The initial sample of the study was $N = 104$ participants. $N = 13$ cases didn't meet the inclusion criteria for age (they were less than 18 years old); those cases were excluded from the sample of the study. As such, the final sample of the study was $N = 91$ participants. Missing value analysis was performed to check for the percentage of missing values on the items of the questionnaire. The missing value analysis revealed that all items had less than 5% missing values, which is the acceptable percentage of missing values in statistical analysis (Tabbachnick & Fidel, 2007). In addition, the little's MCAR test was not significant, which indicated that the missing data in this study was missing completely at random (without any pattern); $X^2(64) = 72.09, p = .228$.

Reliability Analysis.

Reliability analysis was conducted using Cronbach's alpha (α) with the criterion that any scale/subscale is reliable if the Cronbach's alpha $> .60$. The results of the reliability analysis revealed that the emotional intelligence scale, the avoidance and emotion-focused coping subscale, and the compassion fatigue scale were reliable ($\alpha > .60$). The results of the reliability

analysis, however, revealed that the problem-focused coping subscale was not reliable ($\alpha < .60$; Table 1).

Table 1: Reliability Analysis

	Cronbach's Alpha in previous studies	Cronbach's Alpha in the current study	N of items
Emotional Intelligence ¹	0.78	0.88	33
Problem Focused Coping	0.81	0.52	7
Avoidance and Emotion Focused Coping ²	0.86	0.69	14
Compassion Fatigue	0.83	0.90	10

Univariate and Multivariate Outliers.

Univariate outliers were checked using z-scores on the scale variables (emotional intelligence, problem-focused coping, avoidance and emotion-focused coping, and compassion fatigue). Any case with z-score $> |3.29|$ is considered to be a univariate outlier. The analysis of z-scores revealed that there were no cases of univariate outliers on all the indicated variables (all z-scores $< |3.29|$). Multivariate outliers were checked using Mahalanobis distances. Any case with Mahalanobis distance > 10.83 is considered to be a multivariate outlier. The analysis of Mahalanobis distances revealed that there were no cases of multivariate outliers; $X^2(1) = 5.36, p > .05$.

¹ Items 16 and 26 were reverse coded.

Outliers in the Solution and Influential Cases.

Outliers in the solution were checked using standardized residuals. Any case with standardized residual $> |3.29|$ is considered to be an outlier in the solution. The analysis of standardized residuals revealed that these residuals ranged between -1.94 and 2.70, with no cases of outliers in the solution. Influential cases were checked using influential cases. Any case with Cook's distance > 1.00 is considered to be an influential case. The analysis of Cook's distances revealed that these distances ranged between 0.00 and 0.15, with no influential cases.

Sample Descriptives

The final sample of the study was composed of $N = 91$ participants. Around two-third of participants (67%) were females, while 31.9% were males, and one participant was non-binary. In addition, the years of experience of participants ranged between 1 and 32 years with mean ($M = 6.41$, $SD = 4.89$). Regarding the education of participants, 26.4% had a Bachelor's degree and 71.4% had a Master's degree, while one participant didn't have a degree, and another participant had a PhD degree. There were no responses to the Arabic version of the questionnaire. Regarding the sector of employment, the majority of participants (82.4%) were employed at an NGO, 5.5% were freelancers, 2.3% were employed at international organization, 5.5% were employed at a private institution, and 3.3% were employed at a UN agency. Finally, regarding the employment status of participants, the majority of participants (87.9%) were full-timers, 5.5% were part-timers, 4.4% were trainees/interns, and 2.2% were volunteers (Tables 2 & 3).

Table 2: Sample Descriptives

		N	%
Gender	Male	29	31.9%
	Female	61	67.0%
	Non-Binary	1	1.1%
Education	No Degree	1	1.1%
	Bachelor's Degree	24	26.4%
	Master's Degree	65	71.4%
	PhD	1	1.1%
Employment Sector	NGO	75	82.4%
	Freelancer	5	5.5%
	International Organization	2	2.3%
	Private Institution	5	5.5%
	UN Agency	3	3.3%
Employment Status	Full-timer	80	87.9%
	Part-timer	5	5.5%
	Trainee/Intern	4	4.4%
	Volunteer	2	2.2%

Table 3: Sample Descriptives: Years of Experience

Demographics	N	M	Me	SD
	in.	ax.	an	
Years of Experience	91	3	6.	4.
	0	.00	2.00	41
Valid N (listwise)	0			89

Scale Descriptives

The descriptives of the scales and the subscales are presented in Table 4. On average, participants had high levels of emotional intelligence ($M = 3.63^3$, $SD = 0.43$), problem-focused coping ($M = 3.40$, $SD = 0.49$), and avoidance and emotional-focused coping ($M = 3.33$, $SD = 0.49$). However, on average, participants had low levels of compassion fatigue ($M = 2.34$, $SD = 0.86$).

Table 4: Scale Descriptives

Demographic	N	Min.	Max.	Mean	SD
s					
Emotional Intelligence	91	2.64	4.55	3.63	0.43

³ Midpoint of the scales = $(1+5)/2 = 3$

Problem-Focused Coping	91	2.29	4.71	3.40	0.49
Avoidance and Emotional-Focused Coping	91	2.00	4.50	3.33	0.49
Compassion Fatigue	91	1.00	4.60	2.34	0.86

Correlation Analysis

Since the sample of the study was $N = 91$ ($N < 100$), then Shapiro-Wilk test was conducted to check for the normality of the scale variables (emotional intelligence, problem-focused coping, avoidance and emotional-focused coping, and compassion fatigue). Shapiro-Wilk test revealed that the normality of emotional intelligence and avoidance and emotion-focused coping was met; $W(91) = 0.99, p = .538$ and $W(91) = 0.99, p = .689$, respectively. The Shapiro-Wilk test revealed, however, that the normality of problem-focused coping and compassion fatigue was not met; $W(91) = 0.97, p = .028$ and $W(91) = 0.96, p = .004$, respectively (Field, 2018).

Since the normality of problem-focused coping and compassion fatigue was not met, then Spearman's rho correlation test was used to study the correlations between the variables. Spearman's rho correlation test revealed that there was a significant, negative, and small to medium correlation between emotional intelligence and compassion fatigue; $r_s = -.21, p = .024$. This indicated that participants who had higher levels of emotional intelligence were

more likely to have lower levels of compassion fatigue. As such, we concluded that higher scores on emotional intelligence correlate with lower scores of compassion fatigue.

Spearman's rho correlation test also revealed that there was a significant, positive, and small to medium correlation between problem-focused coping and compassion fatigue; $r_s = .24, p = .001$. As such, participants who had higher levels of problem-focused coping were more likely to have higher levels of compassion fatigue. The Spearman's rho correlation test, however, revealed that there was no significant correlation between avoidance and emotional-focused coping and compassion fatigue; $r_s = -.02, p = .425$.

Spearman's rho correlation test revealed that there was a significant, positive, and medium to large correlation between emotional intelligence and the problem-focused coping, $r_s = .34, p < .001$. Spearman's rho correlation test also revealed that there was a significant, positive, and large correlation between emotional intelligence and avoidance and emotion-focused coping, $r_s = .49, p < .001$. As such, participants who had higher levels of emotional intelligence were more likely to use problem-focused and avoidance and emotion-focused coping. Finally, Spearman's rho correlation test revealed that there was a significant, positive, and medium to large correlation between problem-focused coping and avoidance and emotion-focused coping; $r_s = .44, p < .001$ (Table 6). As such, participants who had higher levels of problem-focused coping were more likely to have higher levels of avoidance and emotion-focused coping (Table 5).

Table 5: Spearman's Rho Zero Order Correlation Matrix

	Problem- Focused	Avoidance and Emotion Focused	Compassion Fatigue
Emotional Intelligence	.34***	.49***	-.21*
Problem-Focused		.44***	.24*
Avoidance and Emotional			-.02

*. Correlation is significant at the 0.05 level (one-tailed).

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

***. Correlation is significant at the 0.001 level (one-tailed).

Hypotheses Testing

The following three Hypotheses were investigated:

Hypothesis 1: Higher scores of emotional intelligence predict lower scores of compassion fatigue among humanitarian aid workers in Lebanon.

Hypothesis 2: Problem-focused coping strategies mediate the relationship between emotional intelligence and compassion fatigue among humanitarian aid workers in Lebanon.

Hypothesis 3: Avoidance- and emotion- focused coping strategies mediate the relationship between emotional intelligence and compassion fatigue among humanitarian aid workers in Lebanon.

Simple Regression Analysis: Emotional Intelligence Predicting Compassion Fatigue

A simple regression analysis was conducted to investigate the impact of the predictor emotional intelligence on the outcome variable compassion fatigue, using the forced entry method.

Assumptions of the Regression. The assumption of independence of errors was met, as evident by the Durbin Watson score = 1.90 ($1 < \text{Durbin-Watson} < 3$). In addition, the assumption of no-multicollinearity was met, as evident by the VIF scores ($\text{VIF} < 10$). The assumption of normality of residuals was not met; the histogram revealed that the residuals were positively skewed (Figure 1) and the P-P plot revealed that the observed probability of residuals don't coincide with the expected probability of residuals (forming an S-shape; Figure 2). Finally, the assumption of homoscedasticity was not met, as evident by the un-even scatter of residuals in the ZRESID versus ZPRED scatterplot (a funnel shape; Figure 3).

Figure 1: Histogram of the Distribution of Residuals

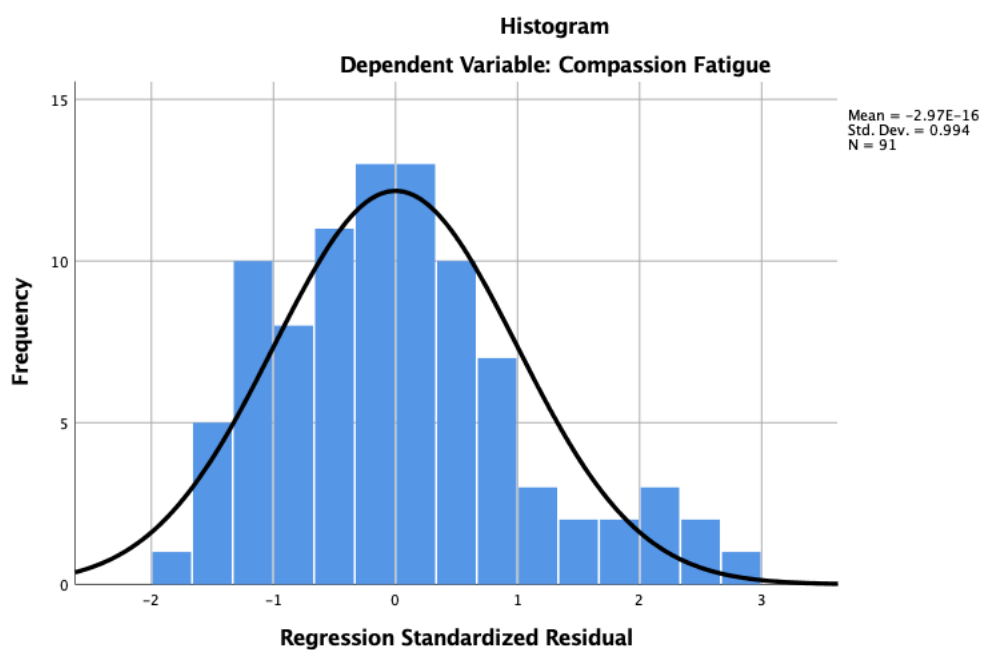


Figure 2: P-P Plot of the Distribution of Residuals

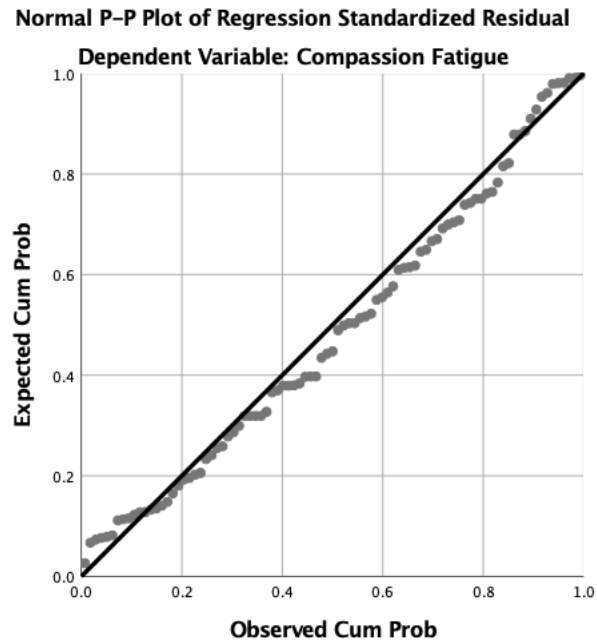
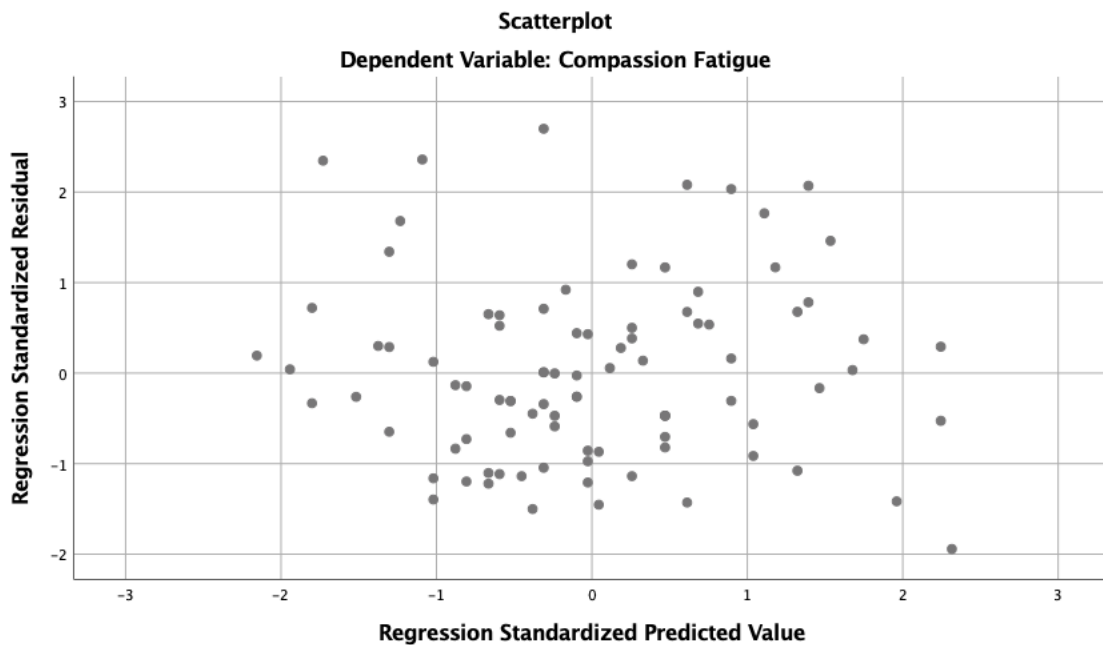


Figure 3: ZRESID versus ZPRED Scatterplot: Homoscedasticity Assumption



The ANOVA F-test revealed that the regression model that includes the predictor emotional intelligence was not a significant model in predicting the outcome variable

compassion fatigue; $F(1, 89) = 2.41, p = .124$. Although this regression model is not significant, it explained 2.6% ($R^2 = .026$) of the variance in compassion fatigue at the sample level and 1.5% ($R^2_{adjusted} = .015$) at the population level (Table 6).

Since the normality of residuals and homoscedasticity assumptions were not met, then the bootstrapped coefficients were reported. The bootstrapped coefficients revealed that emotional intelligence was not a significant predictor of compassion fatigue (Table 7). As such, hypothesis one, which stated that higher scores on emotional intelligence will predict lower scores of compassion fatigue, was not supported.

Table 6.: Regression: Model Summary Table

Model	Multiple R	Adjusted R-Square	Delta R-Square	Delta F	df1	df2	Significance	Cohen's f	Durbin-Watson
1	.16	.026	.015	2.41	2	1	.124	.09	1.90

Table 7: Bootstrapped Regression Coefficients

	b	SE	95% CI	
			Lower	Higher
Constant	3.52	0.77	1.99	5.06
Emotional Intelligence	-0.33	0.21	-0.75	0.09

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

Mediation Analysis: Problem-Focused Coping Mediating the Relation between Emotional Intelligence and Compassion Fatigue

The PROCESS add-on macro in SPSS, using model four (Hayes, 2018) was utilized for mediation analysis. A bootstrap approach based on 10,000 (re)samples was implemented, with the criterion that an effect was significant if the 95% confidence intervals did not include zero (Hayes, 2018).

Regarding the total effect of emotional intelligence on compassion fatigue, the process model revealed that the regression model including emotional intelligence was not a significant model in predicting compassion fatigue; $F(1, 89) = 2.41, p = .124 (R^2 = 2.64\%)$. The bootstrapped coefficient revealed that emotional intelligence was not a significant predictor of compassion fatigue (no significant total effect); $b = -0.33, SE = 0.21, 95\%CI [-0.75, 0.09]$.

Regarding the impact of emotional intelligence on the mediator ‘problem-focused coping’, the process model revealed that the regression model including emotional intelligence was a significant model in predicting problem-focused coping; $F(1, 89) = 18.00, p < .001 (R^2 = 16.8\%)$. The bootstrapped coefficient revealed that emotional intelligence was a significant positive predictor of problem-focused coping; $b = 0.47, SE = 0.11, 95\%CI [0.25, 0.69]$.

Regarding the direct and indirect effects of emotional intelligence on compassion fatigue, the process model revealed that the regression model, that included emotional intelligence and problem-focused coping, was a significant model in predicting compassion fatigue; $F(2, 88) = 8.23, p < .001 (R^2 = 15.8\%)$. Based on the bootstrapped coefficient, the direct effect of emotional intelligence was significant and negative; $b = -0.66, SE = 0.22, 95\%CI [-1.09, -0.23]$. Moreover, the indirect effect of emotional intelligence on compassion fatigue (the effect of emotional intelligence on compassion fatigue through the mediator problem-focused coping) was

significant; *Indirect Effect* = 0.33, *SE* = 0.14, *95%CI* [0.09, 0.63]. A partial mediating effect necessitates that there should be a significant total effect, significant direct effect, and significant indirect effect of emotional intelligence on compassion fatigue. Based on this analysis, the total effect was not significant probably due to the fact that the study is underpowered ‘the sample size is small’ (Gallucci, 2001). As such, despite the absence of total effect, we can assume that problem-focused coping significantly mediated the relation between emotional intelligence and compassion fatigue. As such, hypothesis two, which stated that problem-focused coping strategies mediates the relationship between emotional intelligence and compassion fatigue, was supported.

Mediation Analysis: Avoidance and Emotion-Focused Coping Mediating the Relation between Emotional Intelligence and Compassion Fatigue

The PROCESS add-on macro in SPSS, using model four (Hayes, 2018) was utilized for mediation analysis. A bootstrap approach based on 10,000 (re)samples was implemented, with the criterion that an effect was significant if the 95% confidence intervals did not include zero (Hayes, 2018).

Regarding the total effect of emotional intelligence on compassion fatigue, the process model revealed that the regression model including emotional intelligence was not a significant model in predicting compassion fatigue; $F(1, 89) = 2.41, p = .124 (R^2 = 2.64\%)$. The bootstrapped coefficient revealed that emotional intelligence was not a significant predictor of compassion fatigue (no significant total effect); $b = -0.33, SE = 0.21, 95\%CI [-0.75, 0.09]$.

Regarding the impact of emotional intelligence on the mediator ‘avoidance and emotion-focused coping’, the process model revealed that the regression model including emotional intelligence was a significant model in predicting avoidance and emotion-focused coping; $F(1,$

89) = 36.70, $p < .001$ ($R^2 = 29.2\%$). The bootstrapped coefficient revealed that emotional intelligence was a significant positive predictor of avoidance and emotion-focused coping; $b = 0.62$, $SE = 0.10$, $95\%CI [0.42, 0.82]$.

Regarding the direct and indirect effects of emotional intelligence on compassion fatigue, the process model revealed that the regression model, that included emotional intelligence and avoidance and emotion-focused coping, was not a significant model in predicting compassion fatigue; $F(2, 88) = 1.27$, $p = .285$ ($R^2 = 2.8\%$). Based on the bootstrapped coefficient, the direct effect of emotional intelligence was not significant; $b = -0.44$, $SE = 0.25$, $95\%CI [-0.94, 0.06]$. Moreover, the indirect effect of emotional intelligence on compassion fatigue (the effect of emotional intelligence on compassion fatigue through the mediator avoidance and emotion-focused coping) was not significant; *Indirect Effect* = 0.11, $SE = 0.16$, $95\%CI [-0.20, 0.45]$. Based on this analysis, there were no significant total effect and indirect effect of emotional intelligence on compassion fatigue. As such, hypothesis three, which stated that avoidance and emotion-focused coping strategies mediate the relationship between emotional intelligence and compassion fatigue, was not supported.

Chapter 5

Discussion

The aim of this study was to investigate the mediating effect of coping on the relationship between emotional intelligence and compassion fatigue, using a sample of 104 humanitarian aid workers. The purpose of this chapter is to interpret the study's findings and to explain their significance in relation to existing literature. This section also presents the implications and limitations of the findings and serves as a contribution to the advancement of knowledge in the field of psychology as it contextualizes the results within its area of study.

Interpretation of the Findings

Emotional Intelligence and Compassion Fatigue

The results of this study provided important insights into the correlation between emotional intelligence and compassion fatigue. One key finding was the significant negative correlation between emotional intelligence and compassion fatigue which inclined that the more emotionally intelligent humanitarian workers were, the more likely they were to have low levels of compassion fatigue. This was consistent with previous findings by Kabunga et al. (2020) on the inverse relationship between emotional intelligence and compassion fatigue. As a result, hypothesis 1 of the current study was supported at the correlation level.

However, hypothesis 1 was not supported at the regression level, as emotional intelligence was not a significant predictor to compassion fatigue. **Correlation is a statistical measure of the relationship between two variables, indicating the degree to which they are related. Regression, on the other hand, is a statistical technique used to determine the relationship between a dependent variable and one or more independent variables, allowing for the prediction of the dependent variable based on the values of the independent variables.** One might argue that

the reason behind this discrepancy **in hypothesis 1** lied with the sample's small size. The sample size used in a regression analysis forms the basis for the results obtained. As such, the accuracy and dependability of the outcomes are largely influenced by the size of the sample. In regression analysis, when the sample size is small, the estimated regression coefficients can be unstable and not very precise (Kreft & de Leeuw, 1998). This can lead to inaccurate conclusions regarding the association between the independent and dependent variables. As a result, this can result in Type II errors, which occur when a significant relationship between variables is not identified.

Moreover, humanitarian aid workers often consider their work as a mission rather than just a job task. According to a study by the International Committee of the Red Cross, humanitarian workers view their work as a "calling" and feel a strong sense of responsibility to help those in need (ICRC, 2017). This dedication to their work can also be attributed to the personal values and beliefs of many aid workers, who see their work as a way to make a positive impact in the world (Beigbeder, 2018). Additionally, the difficult and often emotionally taxing nature of humanitarian work can reinforce the sense of mission among aid workers, as they must rely on their personal sense of purpose to continue their work in challenging circumstances (Mills, 2017). Overall, the mission-driven approach of humanitarian aid workers underscores the importance of their work in addressing global crises and helping those in need.

The sense of mission that many humanitarian aid workers feel can have both positive and negative effects on their coping mechanisms. On the one hand, a strong sense of purpose can provide aid workers with a source of motivation and resilience when faced with challenging situations (Baines, 2017). This can help aid workers maintain their focus and drive, even in the face of stressful or traumatic experiences. Additionally, the sense of fulfillment that comes from

working towards a meaningful goal can contribute to aid workers' overall wellbeing (Baines, 2017).

On the other hand, the intense emotional investment that many aid workers have in their work can also put them at risk of burnout and emotional exhaustion (Mills, 2017). Aid workers may feel overwhelmed by the scale of the problems they are working to address or by the emotional toll of witnessing suffering and trauma. The sense of mission that motivates aid workers can also create pressure to succeed and feelings of guilt or frustration when progress is slow or difficult to achieve (Beigbeder, 2018).

Overall, the mission-driven approach of many aid workers can both support and challenge their coping mechanisms, highlighting the importance of effective self-care strategies and organizational support for aid workers' mental health and wellbeing.

Emotional Intelligence, Coping Strategies and Compassion Fatigue

The mediation analysis utilized in this study yielded results in favor of hypothesis 2 as problem-focused coping significantly mediated the relationship between emotional intelligence and compassion fatigue. This finding is congruent with the existing literature which signified the mediating effect of healthy coping styles on emotional intelligence and compassion fatigue. (Zeidner et al., 2013; Petrides et al., 2007, & Mikolajczak et al., 2008).

The same was not true regarding hypothesis 3, which stated that avoidance- and emotion-focused coping strategies mediate the relationship between emotional intelligence and compassion fatigue among humanitarian aid workers in Lebanon. However, before discussing why hypothesis 3 was not supported, it is important to note here that the present study yielded an unexpected finding which stated that emotional intelligence is positively correlated with

emotion-focused and avoidance focused coping. This finding is in contrast to the existing literature (Petrides et al., 2007; Mikolajczak et al., 2008). This may be due to the small sample size as it might lead to an overestimation or underestimation of the effects being studied, making it difficult to draw conclusions about the larger population. A study by Sullivan and Feinn (2012) found that studies with smaller sample sizes had larger standard errors and lower statistical power, leading to an increased likelihood of false negative results. Another reason for this conflicting finding might be due to social desirability effect. Crowne and Marlowe (1964) explained that the social desirability effect as participants' tendency to present themselves in a positive manner, leading to responses that are influenced by the social norms, expectations, or values of the context. This effect can have different implications for research studies, including the underreporting or concealment of socially undesirable behaviors or attitudes such as unhealthy coping styles, which can distort their actual prevalence or effect. Moreover, the validity of self-report measures can be affected by the social desirability effect, as participants may provide responses that align with what they perceive as desirable or expected, rather than being truthful and accurate, leading to measurement bias and incorrect estimates of the constructs under investigation.

As we stated earlier, hypothesis 3 was not supported, i.e., emotion and avoidance focused coping did not mediate the relationship between emotional intelligence and compassion fatigue. This result is in contrast to existing evidence by Espinosa et al. (2019) which proved that there was in indeed a significant mediation of unhealthy coping styles on the relationship between EI and CF. Social desirability is a possible cause of bias in the responses provided by participants on the coping scale as they might have provided more socially favorable answers instead of representing their actual coping behavior (Fisher, 1993). Apart from social desirability, other

factors such as response bias might also have affected the accuracy of responses because participants may not have had a complete comprehension of the questions, leading to inaccurate or inconsistent responses. They might have faced trouble in recollecting specific instances of coping behavior or may have guessed the answers, which in turn impacts the reliability of the data (Compas et al., 2001; Matud, 2004). Moreover, participants may have had limited awareness of their coping strategies or may not have been able to evaluate the effectiveness of these strategies accurately. Furthermore, participants may have had limited insight into their own emotions, behaviors, or thought processes, making it challenging to provide accurate responses about their coping style. Nonetheless, this finding, even if not supported, reinforces some important implications of the current study.

Implications for Humanitarian Organizations

This study's discovery of a significant inverse relationship between emotional intelligence and compassion fatigue emphasized the importance of emotional intelligence in mitigating and preventing compassion fatigue. This finding could be advantageous for organizations that collaborate with humanitarian workers since they can utilize emotional intelligence in trainings to enhance workers' emotional regulation and coping abilities. To take this implication a step further and as the mediation analysis suggested, the current study informs trainers that it is more useful to focus on developing healthy coping styles rather than preventing the use of unhealthy coping styles. In this way, the content of trainings and workshops is not only precise but also accurate and well-targeted to the issue at hand. In addition, preventing staff turnover is an important implication as there exists a mechanism to detect and solve the problem. Staff turnover in humanitarian settings can have serious negative consequences for patients as it disturbs care continuity and quality (Smyrnakis et al., 2019; MacIntyre et al., 2018). Moreover, it

risks the trust and satisfaction of patients and adds cost to the organization (Rajput & Liaqat, 2019; MacIntyre et al., 2018). To address these consequences, it is important for organizations to give priority to tactics and plans that aim at retaining their employees by cultivating their emotional intelligence to protect them against compassion fatigue. This can later aid in the development of screening tools that can detect red flags in staff at risk of compassion fatigue.

Clinical Implications

This study offered short- and long-term benefits to individuals and organizations, and its results could be useful to future humanitarian aid workers and the populations they work with. An additional implication of this study is that it can be of use in clinical settings whereby therapists are encouraged to explore worker's emotional intelligence, healthy coping and compassion fatigue all in one pattern. This in turn will inform them not only to better understand their patients but also on designing suitable treatment plans.

Evaluating a patient's level of emotional intelligence (EI) can be helpful in creating a treatment plan that is customized to meet their individual needs (Brackett et al., 2011). The therapist can utilize the results of the assessment to recognize any areas of improvement in the patient's EI, such as difficulty in regulating emotions or effectively communicating with others. Based on these results, the therapist can devise strategies and interventions that target these particular areas such as teaching emotional regulation techniques, enhancing social skills, or building resilience to stress.

A personalized treatment plan can be more effective in assisting the patient in dealing with the unique obstacles they encounter in their job as a humanitarian aid worker. For example, if the patient is not able to control their emotions, they may be more susceptible to compassion fatigue. By focusing on this challenge through targeted interventions, the therapist can help the

patient gain the skills they require to manage their emotions and cope in a healthier manner which in turn buffers against the development of compassion fatigue.

Overall, gauging a patient's level of EI can be a valuable resource in creating a treatment plan that caters to their specific needs and challenges, and can improve their ability to cope with the requirements of their work as a humanitarian aid worker.

Limitations

Despite the strengths of this study, there were several limitations that should be acknowledged. Firstly, the study employed a relatively small sample size, which may have influenced the results of the study. Although the questionnaire was advertised widely on several social media platforms and the data collection phase spanned over a period of 5 weeks, the sample still did not reach its optimal range. The limitations of a study with a small sample size can compromise the reliability and generalizability of the results in several ways. One of the most significant drawbacks is the diminished statistical power, which can pose challenges in detecting significant differences or correlations between variables. Consequently, the findings may not accurately reflect the population, leading to inaccurate or biased conclusions. Besides, a small sample size increases the likelihood of sampling error or chance variability, undermining the precision and validity of the outcomes. Therefore, future researchers must consider the sample size, ensuring it is adequate enough to provide sufficient power and precision because several limitations and biases may stem from a small sample size.

Moreover, the sample used in this study may not be fully representative of the broader population of interest. For example, the majority of the sample were females, full-timers, people holding a master's degree, individuals fluent in English and those working in NGOs. While a portion of humanitarian workers fit this profile, it is definitely not the full picture and thus the

sample is not representative to the whole population. For this reason, this limitation needs to be considered when inferring conclusion from these results as they cannot be generalized.

Additionally, excluding a qualitative component in this study restricted the depth of understanding that can be gained. Quantitative data can only provide information about the frequency of an occurrence, but it may not reveal the reasons behind it. On the other hand, qualitative research can offer a more detailed understanding of the experiences, opinions, and motivations of the participants, which is essential for comprehending complex phenomena. Therefore, excluding a qualitative component in a research study may limit the researcher's ability to fully understand the research topic which might lead to incomplete conclusions.

Overall, this study made important contributions to our understanding of how emotional intelligence, coping and compassion fatigue are related among humanitarian aid workers in Lebanon. All in all, emotional intelligence was negatively correlated to compassion fatigue and problem-focus coping mediated the relationship between EI and CF. The limitations of the study must be taken into consideration when interpreting the findings. Future research should aim to address these limitations in order to build upon the findings of this study and further advance its understanding.

References

- Abdallah, T. (2009). Prevalence and predictors of burnout among Palestinian social workers. *International Social Work*, 52(2), 223-233. <https://doi.org/10.1177/0020872808099732>
- Abdulghafour, Y., Bo-hamra, A., Al-Randi, M., Kamel, M., & El-Shazly, M. (2011). Burnout syndrome among physicians working in primary health care centers in Kuwait. *Alexandria Journal of Medicine*, 47(4), 351-357. <https://doi.org/10.1016/j.ajme.2011.08.004>
- Abdulla, L., Al-Qahtani, D., & Al-Kuwari, M. (2011). Prevalence and determinants of burnout syndrome among primary healthcare physicians in Qatar. *South African Family Practice*, 53(4), 380-383. <https://doi.org/10.1080/20786204.2011.10874118>
- Ager, A., Pasha, E., Yu, G., Duke, T., Eriksson, C., & Cardozo, B. L. (2012). Stress, mental health, and burnout in national humanitarian aid workers in Gulu, northern Uganda. *Journal of Traumatic Stress*, 25(6), 713–720. <http://dx.doi.org/10.1002/jts.21764>
- Alameddine, M., Saleh, S., El-Jardali, F., Dimassi, H., & Mourad, Y. (2012). The retention of health human resources in primary healthcare centers in Lebanon: a national survey. *BMC Health Services Research*, 12(1), 1-11. <https://doi.org/10.1186/1472-6963-12-419>
- Alhajjar B., Alhajjar M., & Alhajjar, E. (2012). Burnout and Self Esteem among Social Workers in Gaza - Palestine. *Journal of Alazhar University-Gaza: Human Science*, 14(1), 21–34.
- Al-Omar, B. (2003). Sources of Work-Stress among Hospital-Staff at the Saudi MOH. *Journal Of King Abdulaziz University-Economics and Administration*, 17(1), 3-16. <https://doi.org/10.4197/eco.17-1.1>
- American Psychiatric Association (2013). *Diagnostic and Statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>

- Armando, M., Sandini, C., Chambaz, M., Schaer, M., Schneider, M., & Eliez, S. (2018). Coping strategies mediate the effect of stressful life events on schizotypal traits and psychotic symptoms in 22q11.2 deletion syndrome. *Schizophrenia Bulletin*, 44(2), 525–535. <https://doi.org/10.1093/schbul/sby025>
- Armstrong, A., Galligan, R., & Critchley, C. (2011). Emotional intelligence and psychological resilience to negative life events. *Personality And Individual Differences*, 51(3), 331-336. <https://doi.org/10.1016/j.paid.2011.03.025>
- Barsade, S. G., & Gibson, D. E. (2007). Why does affect matter in organizations? *The Academy of Management Perspectives*, 21(1), 36–59. <https://doi.org/10.5465/AMP.2007.24286163>
- Baines, E. (2017). The role of motivation in the resilience and well-being of humanitarian aid workers. *Frontiers in Psychology*, 8, 1244.
- Beigbeder, Y. (2018). Humanitarianism and the refugee crisis: A comparative analysis of different actors' missions. *Journal of Refugee Studies*, 31(3), 422-440.
- Berceli, D., & Napoli, M. (2006). A Proposal for a Mindfulness-Based Trauma Prevention Program for Social Work Professionals. *Complementary Health Practice Review*, 11(3), 153-165. <https://doi.org/10.1177/1533210106297989>
- Brackett, M., Rivers, S., & Salovey, P. (2011). Emotional Intelligence: Implications for Personal, Social, Academic, and Workplace Success. *Social And Personality Psychology Compass*, 5(1), 88-103. <https://doi.org/10.1111/j.1751-9004.2010.00334.x>
- Brands, I., Köhler, S., Stapert, S., Wade, D., & van Heugten, C. (2014). Psychometric properties of the Coping Inventory for Stressful Situations (CISS) in patients with acquired brain injury. *Psychological Assessment*, 26(3), 848-856. <https://doi.org/10.1037/a0036275>

- Brannick, M., Wahi, M., & Goldin, S. (2011). Psychometrics of Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) Scores. *Psychological Reports, 109*(1), 327-337. <https://doi.org/10.2466/03.04.pr0.109.4.327-337>
- Campbell-Sills, L., & Barlow, D. H. (2007). Incorporating Emotion Regulation into Conceptualizations and Treatments of Anxiety and Mood Disorders. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 542–559). The Guilford Press.
- Caringi, J. C., Lawson, H. A., & Devlin, M. (2012). Planning for emotional labor and secondary traumatic stress in child welfare organizations. *Journal of Family Strengths, 12*(1), 1–31. <https://digitalcommons.library.tmc.edu/jfs/vol12/iss1/11>
- Cavanagh, N., Cockett, G., Heinrich, C., Doig, L., Fiest, K., Guichon, J. R., Page, S., Mitchell, I., & Doig, C. J. (2020). Compassion fatigue in healthcare providers: A systematic review and meta-analysis. *Nursing Ethics, 27*(3), 639–665. <https://doi.org/10.1177/0969733019889400>
- Christensen, M., & Kessing, L. (2005). Clinical use of coping in affective disorder, a critical review of the literature. *Clinical Practice and Epidemiology in Mental Health, 1*(1), 20. <https://doi.org/10.1186/1745-0179-1-20>
- Ciarrochi, J., Deane, F., & Anderson, S. (2002). Emotional intelligence moderates the relationship between stress and mental health. *Personality And Individual Differences, 32*(2), 197-209. [https://doi.org/10.1016/s0191-8869\(01\)00012-5](https://doi.org/10.1016/s0191-8869(01)00012-5)

- Circenis, K., Millere, I., & Deklava, L. (2013). Measuring the Professional Quality of Life among Latvian Nurses. *Procedia - Social and Behavioral Sciences*, 84, 1625–1629.
<https://doi.org/10.1016/j.sbspro.2013.07.003>
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, 127(1), 87-127.
- Cordes, C., & Dougherty, T. (1993). A Review and an Integration of Research on Job Burnout. *The Academy of Management Review*, 18(4), 621-656.
<https://doi.org/10.2307/258593>
- Craig, C. D., & Sprang, G. (2010). Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety, Stress & Coping*, 23(3), 319–339. <https://doi.org/10.1080/10615800903085818>
- Crowne, D. P., & Marlowe, D. (1964). The approval motive: Studies in evaluative dependence. *Wiley*.
- Daus, C., & Ashkanasy, N. (2005). The case for the ability-based model of emotional intelligence in organizational behavior. *Journal Of Organizational Behavior*, 26(4), 453-466. <https://doi.org/10.1002/job.321>
- Davis, B. (2001). The restorative power of emotions in child protection services. *Child and Adolescent Social Work Journal*, 18(6), 437–454.
<https://doi.org/10.1023/A:1012940132672>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
<https://doi.org/10.1037/0021-9010.86.3.499>

- Elbarazi, I., Loney, T., Yousef, S., & Elias, A. (2017). Prevalence of and factors associated with burnout among health care professionals in Arab countries: a systematic review. *BMC Health Services Research*, *17*(1), 1-10. <https://doi.org/10.1186/s12913-017-2319-8>
- Endler, N. S., & Parker, J. D. (1999). Coping Inventory for Stressful Situations (CISS): Manual. Multi Health System.
- Espinosa, A., Akinsulure-Smith, A., & Chu, T. (2019). Trait emotional intelligence, coping, and occupational distress among resettlement workers. *Psychological Trauma: Theory, Research, Practice, And Policy*, *11*(1), 28-34. <https://doi.org/10.1037/tra0000377>
- European Commission. (n.d.). *Lebanon*. European Civil Protection and Humanitarian Aid Operations. Retrieved November 2, 2022, from https://civil-protection-humanitarian-aid.ec.europa.eu/where/middle-east/lebanon_en
- Faul, F., Erdfelder, E., Buchner, A., and Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: tests for correlation and regression analyses. *Behav. Res. Methods* *41*, 1149–1160. doi: 10.3758/BRM.41.4.1149
- Field, A. P. (2018). *Discovering statistics using IBM SPSS statistics*. London: SAGE.
- Figley, C. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. (pp. 1-20). Brunner-Routledge.
- Figley, C. R. (1999). Police compassion fatigue (PCF): Theory, research, assessment, treatment, and prevention. In J. M. Violanti & D. Paton (Eds.), *Police trauma: Psychological aftermath of civilian combat*. (pp. 37–53). Charles C Thomas Publisher, Ltd..

- Figley, C. R., & Kleber, R. J. (1995). Beyond the “victim”: Secondary traumatic stress. In R. J. Kleber, C.R. Figley, & B.P.R. Gersons (Eds.), *Beyond trauma: Cultural and societal dynamics* (pp. 75-98). Plenum Press. https://doi.org/10.1007/978-1-4757-9421-2_5
- Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research*, 20(2), 303-315.
- Galiana, L., Oliver, A., Arena, F., De Simone, G., Tomás, J., & Vidal-Blanco, G., Muñoz-Martínez, I., & Sansó, N. (2020). Development and validation of the Short Professional Quality of Life Scale based on versions IV and V of the Professional Quality of Life Scale. *Health And Quality of Life Outcomes*, 18(1), 1-13. <https://doi.org/10.1186/s12955-020-01618-3>
- Gallucci, M. (2021). Seemingly odd results in mediation analysis. Retrieved from https://jamovi-amm.github.io/notes_inference.html
- Gentry, J., Baranowsky, A., Dunning, K., & Figley, C. (2002). ARP: The accelerated recovery program (ARP) for compassion fatigue. In C. Figley (Ed.), *Treating compassion fatigue* (pp. 123–137). Brunner-Routledge.
- Geoffrion, S., Lamothe, J., Morizot, J., & Giguère, C. (2019). Construct Validity of the Professional Quality of Life (ProQoL) Scale in a Sample of Child Protection Workers. *Journal Of Traumatic Stress*, 32(4), 566-576. <https://doi.org/10.1002/jts.22410>
- Gerits, L., Derksen, J., Verbruggen, A., & Katzko, M. (2005). Emotional intelligence profiles of nurses caring for people with severe behaviour problems. *Personality And Individual Differences*, 38(1), 33-43. <https://doi.org/10.1016/j.paid.2004.03.019>
- Goleman, D. (1995). *Emotional intelligence*. Bantam Books, Inc.

- Görgens-Ekermans, G., & Brand, T. (2012). Emotional intelligence as a moderator in the stress-burnout relationship: a questionnaire study on nurses. *Journal Of Clinical Nursing*, 21(15-16), 2275-2285. <https://doi.org/10.1111/j.1365-2702.2012.04171.x>
- Grant, L. (2014). Hearts and Minds: Aspects of Empathy and Wellbeing in Social Work Students. *Social Work Education*, 33(3), 338-352. <https://doi.org/10.1080/02615479.2013.805191>
- Grant, L., Kinman, G., & Alexander, K. (2014). What's all this talk about emotion? Developing emotional intelligence in social work students. *Social Work in Education*, 33(7), 874-889. <https://doi.org/10.1080/02615479.2014.891012>
- Hamaideh, S. (2011). Burnout, Social Support, and Job Satisfaction among Jordanian Mental Health Nurses. *Issues In Mental Health Nursing*, 32(4), 234-242. <https://doi.org/10.3109/01612840.2010.546494>
- Hamid, A., & Musa, S. (2017). The mediating effects of coping strategies on the relationship between secondary traumatic stress and burnout in professional caregivers in the UAE. *Journal Of Mental Health*, 26(1), 28-35. <https://doi.org/10.1080/09638237.2016.1244714>
- Hatfield, E., Cacioppo, J., & Rapson, R. (1993). Emotional Contagion. *Current Directions in Psychological Science*, 2(3), 96-100. <https://doi.org/10.1111/1467-8721.ep10770953>
- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis a regression-based approach. New York: The Guilford Press.
- Henson, J. S. (2020). Burnout or Compassion Fatigue: A Comparison of Concepts. *MedSurg Nursing*, 29(2), 77-95.

- Hobfoll, S. E. (2001). The Influence of Culture, Community, and the Nested-Self in the Stress Process: Advancing Conservation of Resources Theory. *Applied Psychology, 50*(3), 337-421. <https://doi.org/10.1111/1464-0597.00062>
- Hobfoll, S. E. (2011). Conservation of resources theory: Its implication for stress, health, and resilience. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 127-147). Oxford University Press.
- Hojat, M., Gonnella, J., Nasca, T., Mangione, S., Vergare, M., & Magee, M. (2002). Physician Empathy: Definition, Components, Measurement, and Relationship to Gender and Specialty. *American Journal of Psychiatry, 159*(9), 1563-1569. <https://doi.org/10.1176/appi.ajp.159.9.1563>
- Injeyan, M., Shuman, C., Shugar, A., Chitayat, D., Atenafu, E., & Kaiser, A. (2011). Personality Traits Associated with Genetic Counselor Compassion Fatigue: The Roles of Dispositional Optimism and Locus of Control. *Journal Of Genetic Counseling, 20*(5), 526-540. <https://doi.org/10.1007/s10897-011-9379-4>
- International Labor Organization. (2010). *Lebanese Labour Code of 23 September 1946 as amended* (pp. 1-23). Beirut: Bureau De Documentation Libanaise Et Arabe. <https://www.ilo.org/dyn/travail/docs/710/Labour%20Code%20of%2023%20September%201946%20as%20amended.Publication%202010.pdf>
- International Committee of the Red Cross (ICRC). (2017). Humanitarian workers and the challenges of the 21st century: A report on the findings of the ICRC's global consultation on the future of humanitarian action. Retrieved from <https://www.icrc.org/en/document/humanitarian-workers-and-challenges-21st-century>

- Jahrami, H., & Thomas, A. (2013). The Relationship between Burnout and Job Satisfaction among Mental Health Workers in the Psychiatric Hospital, Bahrain. *The Arab Journal of Psychiatry*, 24(1), 69-76. <https://doi.org/10.12816/0000101>
- Jester, J. M., Steinberg, D. B., Heitzeg, M. M., & Zucker, R. A. (2015). Coping expectancies, not enhancement expectancies, mediate trauma experience effects on problem alcohol use: A prospective study from early childhood to adolescence. *Journal of Studies on Alcohol and Drugs*, 76(5), 781–789. <https://doi.org/10.15288/jsad.2015.76.781>
- Joiner, T. E. (2005). *Why people die by suicide*. Harvard University Press.
- Kabungu, A., Anyolitho, M., & Betty, A. (2020). Emotional intelligence and compassion fatigue among psychotherapists in selected districts of Northern Uganda. *South African Journal of Psychology*, 50(3), 359-370. <https://doi.org/10.1177/0081246319889174>
- Keefer, K. V., Parker, J. D., & Saklofske, D. H. (2009). Emotional intelligence and physical health. In C. Stough, D. H. Saklofske, & J. D. Parker (Eds.), *Assessing emotional intelligence: Theory, research, and applications* (pp. 191–218). https://doi.org/10.1007/978-0-387-88370-0_11.
- Kinman, G., & Grant, L. (2010). Exploring Stress Resilience in Trainee Social Workers: The Role of Emotional and Social Competencies. *British Journal of Social Work*, 41(2), 261-275. <https://doi.org/10.1093/bjsw/bcq088>
- Kreft, I., & de Leeuw, J. (1998). *Introducing Multilevel Modeling*. Sage.
- Lazarus, R. S. & Folkman, S. (1984). *Stress, Appraisal, and Coping*. Springer.
- Lelorain, S., Brédart, A., Dolbeault, S., & Sultan, S. (2012). A systematic review of the associations between empathy measures and patient outcomes in cancer care. *Psycho-Oncology*, 21(12), 1255-1264. <https://doi.org/10.1002/pon.2115>

- MacIntyre, C. R., Chughtai, A. A., Barnes, M., Ridda, I., Seale, H., Toms, R., ... & Heywood, A. (2018). The role of pneumonia and secondary bacterial infection in fatal and serious outcomes of pandemic influenza a (H1N1) pdm09. *BMC Infectious Diseases*, *18*(1), 1-9. <https://doi.org/10.1186/s12879-018-2958-5>
- Mackinnon, D. P. (2008). Introduction to statistical mediation analysis. *Taylor & Francis Group/Lawrence Erlbaum Associates*.
- Maslach, C., Schaufeli, W., & Leiter, M. (2001). Job Burnout. *Annual Review of Psychology*, *52*(1), 397-422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- Matthews, G., & Fellner, A. (2012). The energetics of emotional intelligence. In M. Eysenck, M. Fajkowska & T. Maruszewski (Eds.), *Warsaw Lectures in Personality and Social Psychology: Personality, Cognition, and Emotion* (2nd ed., pp. 25-45). Eliot Werner Publications.
- Matthews, G., Zeidner, M., & Roberts, R. D. (2012). *Emotional intelligence 101*. Springer Publishing.
- Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, *37*(7), 1401-1415.
- Mayer, J., DiPaolo, M., & Salovey, P. (1990). Perceiving Affective Content in Ambiguous Visual Stimuli: A Component of Emotional Intelligence. *Journal Of Personality Assessment*, *54*(3-4), 772-781. <https://doi.org/10.1080/00223891.1990.9674037>
- Mayer, J., Salovey, P., & Caruso, D. R. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) Item Booklet*. Multi-health Systems. https://scholars.unh.edu/personality_lab/26

- McHolm, F. (2006). Rx for Compassion Fatigue. *Journal Of Christian Nursing*, 23(4), 12-19.
<https://doi.org/10.1097/00005217-200611000-00003>
- Melvin, C. S. (2012). Professional compassion fatigue: what is the true cost of nurses caring for the dying? *International Journal of Palliative Nursing*, 18(12), 606–611. <https://doi-org.ezproxy.aub.edu.lb/10.12968/ijpn.2012.18.12.606>
- Mills, K. (2017). The emotional labor of humanitarian work. *Health & Social Work*, 42(3), e127-e135.
- Mikolajczak, M., Menil, C., & Luminet, O. (2007). Explaining the protective effect of trait emotional intelligence regarding occupational stress: Exploration of emotional labour processes. *Journal Of Research In Personality*, 41(5), 1107-1117.
<https://doi.org/10.1016/j.jrp.2007.01.003>
- Mikolajczak, M., Nelis, D., Hansenne, M., & Quoidbach, J. (2008). If you can regulate sadness, you can probably regulate shame: Associations between trait emotional intelligence, emotion regulation and coping efficiency across discrete emotions. *Personality And Individual Differences*, 44(6), 1356-1368. <https://doi.org/10.1016/j.paid.2007.12.004>
- Morrison, T. (2007). Emotional Intelligence, Emotion and Social Work: Context, Characteristics, Complications and Contribution. *British Journal of Social Work*, 37(2), 245-263.
<https://doi.org/10.1093/bjsw/bcl016>
- Nelis, D., Kotsou, I., Quoidbach, J., Hansenne, M., Weytens, F., Dupuis, P., & Mikolajczak, M. (2011). Increasing emotional competence improves psychological and physical well-being, social relationships, and employability. *Emotion*, 11(2), 354-366.
<https://doi.org/10.1037/a0021554>

- Pehlivan, T., & Güner, P. (2020). Effect of a compassion fatigue resiliency program on nurses' professional quality of life, perceived stress, resilience: A randomized controlled trial. *Journal Of Advanced Nursing*, 76(12), 3584-3596.
<https://doi.org/10.1111/jan.14568>
- Perry, M., Creavey, K., Arthur, E., Chance Humer, J., Lundgren, P., & Rivera, I. (2020). Cultivating emotional intelligence in child welfare professionals: A systematic scoping review. *Child Abuse & Neglect*, 110, 1-12. <https://doi.org/10.1016/j.chiabu.2020.104438>
- Petrides, K. V., Pérez-González, J. C., & Furnham, A. (2007). On the criterion and incremental validity of trait emotional intelligence. *Cognition and Emotion*, 21, 26–55.
- Petrides, K., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98(2), 273-289.
<https://doi.org/10.1348/000712606x120618>
- Platt, D. (2012). Understanding parental engagement with child welfare services: an integrated model. *Child & Family Social Work*, 17(2), 138-148. <https://doi.org/10.1111/j.1365-2206.2012.00828.x>
- Portney, D. (2011). Burnout and compassion fatigue: Watch for the signs. *Health Progress*, 92(4), 46-50.
- Rafnsson, F., Smari, J., Windle, M., Mears, S., & Endler, N. (2006). Factor structure and psychometric characteristics of the Icelandic version of the Coping Inventory for Stressful Situations (CISS). *Personality And Individual Differences*, 40(6), 1247-1258.
<https://doi.org/10.1016/j.paid.2005.11.011>

- Rajput, Z. H., & Liaqat, S. (2019). Exploring factors affecting the employee retention in humanitarian organizations. *Journal of Humanitarian Logistics and Supply Chain Management*, 9(3), 351-367. <https://doi.org/10.1108/JHLSCM-08-2018-0051>
- Ratrout, H., & Hamdan-Mansour, A. (2020). Secondary traumatic stress among emergency nurses: Prevalence, predictors, and consequences. *International Journal of Nursing Practice*, 26(1), 1-9. <https://doi.org/10.1111/ijn.12767>
- Rauvola, R., Vega, D., & Lavigne, K. (2019). Compassion Fatigue, Secondary Traumatic Stress, and Vicarious Traumatization: A Qualitative Review and Research Agenda. *Occupational Health Science*, 3(3), 297-336. <https://doi.org/10.1007/s41542-019-00045-1>
- Rosete, D., & Ciarrochi, J. (2005). Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership & Organization Development Journal*, 26(5), 388–399. <https://doi.org/10.1108/01437730510607871>
- Salovey, P., & Mayer, J. (1990). Emotional Intelligence. *Imagination, Cognition And Personality*, 9(3), 185-211. <https://doi.org/10.2190/dugg-p24e-52wk-6cdg>
- Salovey, P., Bedell, B.T., Detweiler, J.B., & Mayer, J.D. (1999). Coping intelligently: Emotional intelligence and the coping process. In C.R. Snyder (Ed.), *Coping: The psychology of what works* (pp. 141-164). Oxford University Press.
- Samaha, E., Lal, S., Samaha, N., & Wyndham, J. (2007). Psychological, lifestyle and coping contributors to chronic fatigue in shift-worker nurses. *Journal Of Advanced Nursing*, 59(3), 221-232. <https://doi.org/10.1111/j.1365-2648.2007.04338.x>

- Schutte, N. S., Malouff, J. M., & Thorsteinsson, E. B. (2013). Increasing emotional intelligence through training: Current status and future directions. *The International Journal of Emotional Education*, 5, 56–72.
- Schutte, N. S., Malouff, J. M., Hall, L., Haggerty, D., Cooper, J., Golden, C., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality And Individual Differences*, 25(2), 167-177. [https://doi.org/10.1016/s0191-8869\(98\)00001-4](https://doi.org/10.1016/s0191-8869(98)00001-4)
- Shewchuk, R. M., Elliott, T. R., MacNair-Semands, R. R., & Harkins, S. (1999). Trait influences on stress appraisal and Coping: An evaluation of alternative frameworks. *Journal of Applied Social Psychology*, 29(4), 685–704. <https://doi.org/10.1111/j.1559-1816.1999.tb02019.x>
- Showalter, S. E. (2010). Compassion fatigue: What is it? Why does it matter? Recognizing the symptoms, acknowledging the impact, developing the tools to prevent compassion fatigue, and strengthen the professional already suffering from the effects. *American Journal of Hospice & Palliative Medicine*, 27(4), 239–242. <https://doi.org/10.1177/1049909109354096>
- Smyrnakis, M., Karakitsiou, O., Katostaras, T., & Mantas, J. (2019). Healthcare professionals' turnover: causes, consequences and managing strategies. *Health Science Journal*, 13(1), 1-10. <https://doi.org/10.1097/01.HXJ.0000559346.13521.08>
- Stamm, B. H. (2010). *The concise ProQOL manual: The concise manual for the Professional Quality of Life Scale (2 ed)*. Eastwoods, LLC.

- Stamm, H. B. (2009). *Professional Quality of Life: Compassion Satisfaction and Fatigue Version 5 (ProQOL)*. <https://proqol.org/proqol-measure>
- Sullivan, G. M., & Feinn, R. (2012). Using effect size - or why the P value is not enough. *Journal of Graduate Medical Education*, 4(3), 279-282.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston: Pearson Education.
- Udipi, S., Veach, P., Kao, J., & LeRoy, B. (2008). The Psychic Costs of Empathic Engagement: Personal and Demographic Predictors of Genetic Counselor Compassion Fatigue. *Journal Of Genetic Counseling*, 17(5), 459-471. <https://doi.org/10.1007/s10897-008-9162-3>
- Van Mol, M., Bakker, E., Nijkamp, M., Kompanje, E., Bakker, J., & Verharen, L. (2014). Relatives' perspectives on the quality of care in an Intensive Care Unit: The theoretical concept of a new tool. *Patient Education and Counseling*, 95(3), 406-413. <https://doi.org/10.1016/j.pec.2014.03.019>
- Walker, L. O., & Avant, K. C. (2019). *Strategies for Theory Construction in Nursing* (6th ed.). Pearson Education.
- Walter, U., Plaumann, M., & Krugmann, C. (2013). Burnout Interventions. In S. Bährer-Kohler (Ed.), *Burnout for Experts: Prevention in the Context of Living and Working* (pp. 223–246). Springer Publishing.
- Wee, D. F., & Myers, D. (2002). Stress responses of mental health workers following disaster: The Oklahoma City bombing. In C. R. Figley (Ed.), *Treating compassion fatigue* (pp. 57–83). Brunner-Routledge.
- Weng, H., Hung, C., Liu, Y., Cheng, Y., Yen, C., Chang, C., & Huang, C. (2011). Associations between emotional intelligence and doctor burnout, job satisfaction and patient

satisfaction. *Medical Education*, 45(8), 835-842. <https://doi.org/10.1111/j.1365-2923.2011.03985.x>

Young, H. (2015, November 23). *Guardian research suggests mental health crisis among aid workers*. The Guardian. <https://www.theguardian.com/global-development-professionals-network/2015/nov/23/guardian-research-suggests-mental-health-crisis-among-aid-workers>

Zeidner, M., Hadar, D., Matthews, G., & Roberts, R. D. (2013). Personal factors related to compassion fatigue in health professionals. *Anxiety, Stress & Coping: An International Journal*, 26(6), 595–609. <https://doi.org/10.1080/10615806.2013.777045>

Zeidner, M., Matthews, G., & Roberts, R. (2004). Emotional Intelligence in the Workplace: A Critical Review. *Applied Psychology*, 53(3), 371-399. <https://doi.org/10.1111/j.1464-0597.2004.00176.x>

Zeidner, M., Matthews, G., & Roberts, R. (2012). The Emotional Intelligence, Health, and Well-Being Nexus: What Have We Learned and What Have We Missed?. *Applied Psychology: Health and Well-Being*, 4(1), 1-30. <https://doi.org/10.1111/j.1758-0854.2011.01062.x>

Zeidner, M., Matthews, G., & Roberts, R. D. (2009). *What we know about emotional intelligence: How it affects learning, work, relationships, and our mental health*. MIT Press.

Appendix A

Shortened version (21-items) Coping Inventory for Stressful Situations

(CISS-21)

The following sentences describe different people's reactions to difficult, unpleasant, stress situations. Select one of the numbers from 1 to 5 next to each statement. In this way, determine how much you engage in these activities when you find yourself in a difficult, unpleasant, stressful situation.

1 – Never

2 – Rarely

3 – Sometimes

4 – Often

5 - Very often

1. Take some time off and get away from the situation (A) *

2. Focus on the problem and see how I can solve it (T)

3. Blame myself for having gotten into this situation (E)

4. Treat myself to a favorite food or snack (A)

5. Feel anxious about not being able to cope (E)

6. Think about how I solved similar problems (T)

7. Visit a friend (A)

8. Determine a course of action and follow it (T)

9. Buy myself something (A)
10. Blame myself for being too emotional about the situation (E)
11. Work to understand the situation (T)
12. Become very upset (E)
13. Take corrective action immediately (T)
14. Blame myself for not knowing what to do (E)
15. Spend time with a special person (A)
16. Think about the event and learn from my mistakes (T)
17. Wish that I could change what had happened or how I felt (E)
18. Go out for a snack or meal (A)
19. Analyze my problem before reacting (T)
20. Focus on my general inadequacies (E)
21. Phone a friend (A)

T = Task-oriented coping

E = Emotion-oriented coping

A = Avoidance coping

Appendix B

The 33-item emotional intelligence scale

Indicate the extent to which each statement applies to you, using the following scale:

1 – Never

2 – Rarely

3 – Sometimes

4 – Often

5 - Very often

1. I know when to speak about my personal problems to others
2. When I am faced with obstacles, I remember times I faced similar obstacles and overcame them
3. I expect that I will do well on most things I try
4. Other people find it easy to confide in me
5. I find it hard to understand the non-verbal messages of other people*
6. Some of the major events of my life have led me to re-evaluate what is important and not important
7. When my mood changes, I see new possibilities
8. Emotions are one of the things that make my life worth living
9. I am aware of my emotions as I experience them
10. I expect good things to happen

11. I like to share my emotions with others
12. When I experience a positive emotion, I know how to make it last
13. I arrange events others enjoy
14. I seek out activities that make me happy
15. I am aware of the non-verbal messages I send to others
16. I present myself in a way that makes a good impression on others
17. When I am in a positive mood, solving problems is easy for me
18. By looking at their facial expressions, I recognize the emotions people are experiencing
19. I know why my emotions change
20. When I am in a positive mood, I am able to come up with new ideas
21. I have control over my emotions
22. I easily recognize my emotions as I experience them
23. I motivate myself by imagining a good outcome to tasks I take on
24. I compliment others when they have done something well
25. I am aware of the non-verbal messages other people send
26. When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself
27. When I feel a change in emotions, I tend to come up with new ideas
28. When I am faced with a challenge, I give up because I believe I will fail*
29. I know what other people are feeling just by looking at them
30. I help other people feel better when they are down
31. I use good moods to help myself keep trying in the face of obstacles

32. I can tell how people are feeling by listening to the tone of their voice
33. It is difficult for me to understand why people feel the way they do*

Note: The authors permit free use of the scale for research and clinical purposes.

*These items are reverse scored.

Appendix C

Professional Quality of Life Scale (PROQOL), CF Subscale

When you [help] people you have direct contact with their lives. As you may have found, your compassion for those you [help] can affect you in positive and negative ways.

Below are some questions about your experiences, both positive and negative, as a [helper]. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the last 30 days.

1 – Never

2 – Rarely

3 – Sometimes

4 – Often

5 - Very often

1. I am preoccupied with more than one person I [help].
2. I jump or am startled by unexpected sounds.
3. I find it difficult to separate my personal life from my life as a [helper].
4. I think that I might have been affected by the traumatic stress of those I [help].
5. Because of my [helping], I have felt "on edge" about various things.
6. I feel depressed because of the traumatic experiences of the people I [help].
7. I feel as though I am experiencing the trauma of someone I have [helped].

8. I avoid certain activities or situations because they remind me of frightening experiences of the people I [help].
9. As a result of my [helping], I have intrusive, frightening thoughts.
10. I can't recall important parts of my work with trauma victims.