ISTANBUL BILGI UNIVERSITY INSTITUTE OF SOCIAL SCIENCES CLINICAL PSYCHOLOGY MASTER'S DEGREE PROGRAM

SECONDARY TRAUMATIC STRESS AMONG MENTAL HEALTH WORKERS IN TURKEY: MODERATING ROLE OF EMOTION REGULATION ON THE RELATIONSHIP BETWEEN EMPATHY AND SECONDARY TRAUMATIC STRESS

Aslı Çiğdem CEMGİL

115649004

Asst. Prof. Ümit AKIRMAK

İSTANBUL

Secondary Traumatic Stress Among Mental Health Workers In Turkey: Moderating Role of Emotion Regulation on The Relationship Between Empathy and Secondary Traumatic Stress

Türkiye'deki Ruh Sağlığı Çalışanlarında İkincil Travmatik Stres: Moderatör Olarak Duygu Düzenlemenin Empati ve İkincil Travmatik Stres Arasındaki İlişkiye Etkisi

Aslı Çiğdem Cemgil

115649004

	- 1
Tez Danışmanı:	11/1
Dr. Öğr. Üyesi Ümit AKIRMAK	
İstanbul Bilgi Üniversitesi	The same of the sa
Jüri Üyeleri:	111 -
Dr. Öğr. Üyesi Yudum AKYIL	:
İstanbul Bilgi Üniversitesi	
Dr. Öğr. Üyesi Ayşegül Metindoğan	· (MMA/A/S)
Boğaziçi Üniversitesi	Tro-Oro-
Tezin Onaylandığı Tarih	13.06.2019
Toplam Sayfa Sayısı	112
Anahtar Kelimeler (Türkçe)	Keywords (English)
1) İkincil travmatik stres	1) Secondary traumatic stress
2) Dolaylı (üstlenilmiş) travma	2) Vicarious traumatisation
 Dolaylı (üstlenilmiş) travma Empati 	
	2) Vicarious traumatisation
3) Empati	Vicarious traumatisation Empathy

ACKNOWLEDGEMENTS

First and foremost, I would like to express my deepest gratitude to my thesis advisor Asst. Prof. Ümit Akırmak for all his support. He always encouraged me to explore my own path to finish this work, but also led me in the right direction whenever I needed it. Without his guidance and persistent help, this thesis would not be completed.

I also would like to thank my second advisor Asst. Prof. Yudum Akyıl for her valuable comments and critiques. She inspired me to pursue my thesis subject in the first place. I owe many thanks to my committee member Asst. Prof. Ayşegül Metindoğan for her constructive recommendations and contribution for enhancing my work and Prof. Erkcan Özcan for his invaluable help in the statistical analysis of data collected during the study.

I would like to express my sincere thanks to Asst. Prof. Alev Çavdar Sideris and Asst. Prof. Elif Göçek for all their guidance and support during my training in the clinical program. I also would like to express my special thanks to my friend Prof. Özlem Sertel Berk for encouraging me from the beginning of my clinical program. I am also grateful especially to my friends Feyza Özcan, Duygu Başak Gürtekin, Ezgi Merdan, Aysu Hazar, and Elif Özkırımlı for their support and assistance during the writing process of my thesis.

I am very thankful to my mother Nihal Özsoy, my father Cafer Özsoy, my sister Ayşe Elif Özsoy and my brother Ali Emre Özsoy for encouraging and helping me in this challenging journey.

Finally, I am eternally grateful to my husband Ali Taylan Cemgil and my children Defne Cemgil and Ali Sinan Cemgil for their support and patience in this difficult journey. My dear husband, without your encouragement this thesis could not be accomplished.

TABLE OF CONTENTS

Title Pagei
Approvalii
Acknowledgementsiii
Table of Contentsiv
List of Tablesviii
List of Figuresix
Abstractx
Özetxii
CHAPTER 1: INTRODUCTION
1.1. Secondary Traumatic Stress and Related Concepts7
1.1.1. The Definition of Secondary Traumatic Stress
1.1.2. The Symptoms of Secondary Traumatic Stress
1.1.3. Related Concepts: Vicarious Traumatisation, Burnout, Compassion
Fatigue, Compassion Satisfaction and Countertransference9
1.1.4. Risk Factors
1.1.5. Protective Factors14
1.1.6. Theoretical Background16
1.1.6.1. Systems Theory

1.1.6.2. Model of Secondary Traumatic Stress and Compassion Fatigue
Resilience19
1.2. Empathy and Its Relation to Secondary Traumatic Stress24
1.3. Emotion Regulation and Its Moderating Role on the Relationship
Between Empathy and Secondary Traumatic Stress27
1.4. The Current Study30
1.4.1. Predictions
CHAPTER 2: METHOD34
2.1. PARTICIPANTS34
2.2. MEASURES39
2.2.1. The Demographic Information Form39
2.2.2. Professional Quality of Life Scale (ProQOL IV)39
2.2.3. Interpersonal Reactivity Index (IRI)40
2.2.4. Turkish Version of Difficulties in Emotion Regulation Scale-Brief Form
(DERS-16)41
2.3. PROCEDURE
2.4. DATA ANALYSIS
CHAPTER 3: RESULTS45
3.1. Preliminary Analysis45
3.1.1 Reliability Analysis of the Measures

3.1.2. Descriptive Statistics for the Measures46
3.1.3. Gender Differences in the Measures47
3.1.4. Differences Based on Supervision
3.1.5. The Role of the Trauma Exposure
3.1.6. The Role of the Personal Traumatic Background49
3.2. Correlations50
3.3. Hierarchical Regression Analysis of the Study52
3.4. Moderation Analysis56
CHAPTER 4: DISCUSSION59
4.1. The Findings Related to the Preliminary Analysis59
4.2. The Findings related to the Correlational Analysis62
4.3. Findings Related to the Hierarchical Analysis66
4.4. The Findings Related to the Moderation Analysis69
4.5. The Strengths of the Study71
4.6. Limitations and Future Research Suggestions72
4.7. Clinical Implications74
CHAPTER 5: CONCLUSION76
References

Appendix A: The Informed Consent Form	99
Appendix B: The Demographic Information Form	101
Appendix C: Professional Quality of Life Scale (ProQOL IV)	105
Appendix D: Interpersonal Reactivity Index (IRI)	108
Appendix E: Turkish Version of Difficulties in Emotion Regulation	Scale-
Brief Form (DERS-16)	111

LIST OF TABLES

Table 1. Secondary Traumatic Stress and Related Concept11
Table 2. Demographic Characteristics of Participants36
Table 3. The Reliability Coefficients of the Measures of The Study45
Table 4. Descriptive Characteristics of the Instruments in The Current Study
Table 5. Exposed Traumatic Events of The Participants48
Table 6. Traumatic Background of the Participants49
Table 7. Pearson Correlation Matrix Among The Variables51
Table 8. The Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Traumatic Stress
Table 9. The Summary of Hierarchical Regression Analysis for Variables Predicting Burnout
Table 10. The Summary of Hierarchical Regression Analysis for Variables Predicting Compassion Satisfaction
Table 11. Summary of Hierarchical Regression Model that Examining
Moderator Role of Difficulties in Emotion Regulation on the Relationship
Between Emphatic Concern and Secondary Traumatic Stress57

LIST OF FIGURES

Figure 1. Model of Secondary Traumatic Stress and Compassion Fatigue
Resilience
Figure 2. The Model Tested in Hypothesis 3: Moderation Effect of Difficulties in Emotion Regulation
Figure 3. Graph for Interaction Between Empathic Concern and Difficulties in Emotion Regulation

ABSTRACT

The main purpose of this quantitative study was to examine the role of difficulties in emotion regulation on the association between empathy and secondary traumatic stress among the mental health workers who work with trauma victims with varying intensity in Turkey. The research was conducted with an online survey using a snowball sampling with a total of 214 mental health workers from non-governmental, governmental organizations and mental health clinics located in different cities of Turkey. The online questionnaire included the informed consent form, demographic information form, Professional Quality of Life Scale (ProQOL IV), Interpersonal Reactivity Index (IRI) and Turkish version of Difficulties in Emotion Regulation Scale-Brief Form (DERS-16). In this study, it was first aimed to examine the relationship between difficulties in emotion regulation and secondary traumatic stress, burnout, and compassion satisfaction. Moreover, it was also aimed to investigate the effect of the dimensions of empathy, perspective taking, fantasy, empathic concern, and personal distress on secondary traumatic stress, burnout and compassion satisfaction. Finally, moderation effect of difficulties in emotion regulation on the association between empathy and STS was examined. The results revealed that there was a significant medium, positive correlation between secondary traumatic stress and difficulties in emotion regulation. Similarly, a significant medium positive correlation between burnout and difficulties in emotion regulation was also found. A significant, medium negative correlation was found between compassion satisfaction and difficulties in emotion regulation. While fantasy and personal distress as dimensions of empathy significantly predicted traumatic stress, the other two dimensions of empathy that were perspective taking and empathic concern did not. Personal distress as an empathy dimension was found to be significant predictor for burnout. Also, perspective taking as an empathy

dimensions significantly predicted compassion satisfaction. The moderating effect of difficulties in emotion regulation was not found on the relationship between empathy and secondary traumatic stress. There was a tendency towards moderating effect of difficulties in emotion regulation on the relationship between empathic concern and secondary traumatic stress, although the results did not reach the conventional levels of significance. Lastly, limitations, strengths, clinical implications and future research suggestions of this study were discussed.

Keywords: Secondary traumatic stress, vicarious traumatization, empathy, emotional regulation, mental health workers

ÖZET

Bu niceliksel araştırmanın temel amacı, moderatör olarak duygu düzenleme güçlüğünün empati ve ikincil travmatik stres arasındaki ilişkiye etkisini Türkiye'de değişik seviyelerde travma geçmişleri olan danışanlara hizmet eden ruh sağlığı çalışanları üzerinde araştırmaktır. Araştırma internet üzerinden bir anket çalışması ile yapılmıştır. Türkiye'nin çeşitli şehirlerindeki kamu, kamu olmayan ve özel kliniklerde çalışan 214 kişinin dahil edildiği çalışmada katılımcılara kartopu yöntemi ile ulaşılmıştır. Anket paketinde onam formu, demografik bilgi formu, Çalışanlar İçin Yaşam Kalitesi Ölçeği (ProQOL IV), Kişiler Arası Tepkisellik Ölçeği (IRI), Duygu Düzenleme Güçlüğü Ölçeği-Kısa Formu (DERS-16) yer almıştır. Bu çalışmanın ilk hedefi duygu düzenleme güçlüğü ile ikincil travmatik stres, tükenmişlik ve eşduyum tatmini arasında ilişkiyi incelemektir. İkinci olarak, empati değişkeninin perspektif alma, fantezi, empatik düşünce, kişisel rahatsızlık alt boyutlarının ikincil travmatik stres, tükenmişlik ve eşduyum tatmini üzerindeki yordayıcı etkisi incelenmiştir. Son olarak, duygu düzenleme güçlüğünün, empati ve ikincil travmatik stres arasındaki ilişkiye moderatör olarak etkisinin incelenmesi hedeflenmiştir. Öncelikle sonuçlar ikincil travmatik stres ve duygu düzenleme güçlüğü arasında anlamlı ve orta düzeyde pozitif bir ilişki olduğunu göstermiştir. Ayrıca tükenmişlik ve duygu düzenleme güçlüğü arasında da anlamlı ve orta düzeyde pozitif bir ilişki bulunmuştur. Eşduyum tatmini ve duygu düzenleme güçlüğü arasında da anlamlı ve orta düzeyde negatif bir ilişki bulunmuştur. İkinci olarak fantezi ve kişisel rahatsızlık değişkenlerinin ikincil travmatik stres değişkenini anlamlı bir şekilde yordadığı, perspektif alma ve empatik düşüncenin ise ikincil travmatik stresi yordamadığı gözlenmiştir. Empatinin kişisel rahatsızlık boyutunun tükenmişliği yordadığı gözlenmiştir. Ayrıca, perspektif alma boyutunun eşduyum tatminini anlamlı düzeyde yordadığı gözlenmiştir. Üçüncü olarak, duygu düzenleme

güçlüğünün, empati ve ikincil travmatik stres arasındaki ilişkiye anlamlı bir düzeyde moderatör olarak etki etmediği gözlenmiştir. Ancak istatistiksel açıdan kabul edilebilir düzeyde olmasada bir eğilim olduğu gözlenmiştir. Son olarak, bu araştırmanın güçlü yönleri, kısıtlılıkları, klinik uygulamalara ve gelecek araştırmalara yönelik öneriler tartışılmıştır.

Anahtar kelimeler: İkincil travmatik stres, dolaylı (üstlenilmiş) travma, empati, duygu düzenleme, ruh sağlığı çalışanları

CHAPTER 1

INTRODUCTION

The word 'trauma' has its roots from Greek and it literally means wound. Besides its medical use indicating a physical injury, it also refers to a psychological injury and the events causing it (Courtois & Ford, 2009). A widely recognized definition of trauma is presented by the American Psychological Association as "any disturbing experience that results in significant fear, helplessness, dissociation, confusion, or other disruptive feelings intense enough to have a long-lasting negative effect on a person's attitudes, behavior, and other aspects of functioning. Traumatic events include those caused by human behavior (e.g., rape, war, industrial accidents) as well as by nature (e.g., earthquakes) and often challenge an individual's view of the world as a just, safe, and predictable place" (VandenBos, 2007; https://dictionary.apa.org/trauma). As it is clearly stated in this definition, traumatic events may have serious impacts on the well-being of people. While the effects of trauma may not be visible on the outside, people with the experience of trauma often experience serious physical and emotional reactions (Courtois & Ford, 2009). Kessler and his colleagues (2017) revealed that over 70% of respondents from 24 countries from six continents reported a traumatic event at least once in a lifetime. This is a very striking result that shows us the impact of psychological trauma on the mental health of the general human population all over the world. This is one side of the coin.

On the other side of the coin, there are indirect sufferers of a traumatic event. Trauma does not affect only those who directly experience it but also individuals who are in close proximity to the trauma survivor such as their children, spouses, other family members and even the mental health workers who provide help to the trauma victims (Horesh & Brown, 2018). Posttraumatic stress disorder (PTSD) is one of the psychiatric disorders that can be diagnosed in

people who experienced or witnessed a traumatic incident. The fifth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-5) has introduced a broader definition of PTSD to include indirect exposure: "Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways: directly experiencing the traumatic event(s); witnessing, in person, the traumatic event(s) as it occurred to others; learning that the traumatic event(s) occurred to a close family member or close friend (in case of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental); or experiencing repeated or extreme exposure to aversive details of the traumatic event(s)" (American Psychiatric Association, 2013, p.271). Mental health professionals who work with trauma victims such as clinical psychologists, psychologists, psychiatrists, psychiatry nurses, social workers, trauma workers and even the translator of mental health workers are at risk of experiencing emotional, mental, and physical exhaustion as a result of engaging empathically with traumatised children and adults (Figley,1995; McCann & Pearlman, 1990; McCann & Saakvitne, 1995; Pearlman & MacIan, 1995). Many studies have investigated both positive and negative impacts of being exposed to trauma of others (Bell, Kulkarni & Dalton, 2003; Salston & Figley, 2003; Bride, 2007;). In particular, the impacts of being exposed to others trauma has been conceptualised and examined as compassion satisfaction, compassion fatigue, burnout, and secondary traumatic stress (Ludick & Figley, 2016). These concepts have been established since the seminal and leading work of Figley (1995). Since then, his influential work inspired many scholars to understand and explore further negative and positive effects on professionals who dedicate their time and energy to help suffering people. In the beginning, most of the researches were mainly focused on clarifying the prevalence of compassion satisfaction and compassion fatigue in various caregiving settings (Salston & Figley, 2003; Boscarino, Figley & Adams, 2004; Bride, 2007). Empirical studies were also conducted to understand the vicarious traumatization as a psychological difficulty

of trauma therapists and its relation to personal trauma history, exposure to trauma, type of traumatic events (Pearlman & Mac Ian, 1995; Salston & Figley, 2003). Empirical, theoretical and review studies in the last decade include other intra-psychic concepts such as empathy, detachment, emotion separation, mindfulness, emotion/affect regulation in order to have a better understanding of secondary traumatic stress and to reach a substantial theoretical background (Sabin-Farrell & Turpin, 2003; Robins, Meltzer & Zelikovsky, 2009; MacRitchie & Leibowitz, 2010; Thomas & Otis, 2010; Ludick & Figley, 2017).

This study mainly focuses on the psychological experiences of mental health professionals who are exposed to trauma indirectly which is often defined as secondary trauma, compassion fatigue or vicarious traumatization (Simpson & Starrkey, 2006). Specifically, this thesis aims to investigate a possible relationship between emotion regulation difficulty, secondary traumatic stress, burnout and compassion satisfaction level of mental health workers. There are significant amount of studies suggesting a relationship between emotion regulation difficulties and PTSD (Cloitre, Miranda, Stovall-McClough, & Han, 2005; Tull, Barrett, McMillan, & Roemer, 2007; Ehring & Quack, 2010; Bonn-Miller, Vujanovic, Boden, & Gross, 2011). Negative emotions such as guilt, shame, outrage, hatred, and disgust has been associated with PTSD as well as disability to effectively regulate these emotional states (McLean & Foa, 2017). Symptom similarities between PTSD and STS directed the researchers attention into a possible association between difficulties in emotion regulation and STS (Măirean, 2016; Lockwood, Seara-Cardoso & Viding, 2014; Gleichgerricht & Decety, 2013). Although there are limited empirical studies examining the relationship between difficulties in emotion regulation and STS, existing ones indicate that they are related constructs (Măirean, 2016). For instance, cognitive reappraisal as positive emotion regulation skill was found negatively correlated with STS and expressive suppression as a negative emotion regulation skill was found positively correlated

with STS (Măirean, 2016). These findings hint us the importance of developing helpful emotion regulation skills in preventing and healing STS in mental health workers who work with traumatized clients. Certainly, this is an area that requires more empirical research in order to reveal more robust associations.

In this study, it was also aimed to explore the relationship between emphatic response level and secondary traumatic stress level of trauma workers. As a common factor in the psychotherapy field, emphatic understanding ability of a mental health worker is highly related to the positive outcome of the healing process of clients regardless of the therapeutic approach of the treatment (Lambert & Barley, 2001). Even though empathy is one of the most important characteristics for a mental health provider in order to build a better relationship with clients, some argue that high levels of empathy places mental health providers at risk for secondary traumatization (Figley, 1995; Saakvitne & Pearlman, 1996).

The last focus of this study is to explore the effect of the difficulties in emotion regulation on the relationship between the empathic approach of mental health professionals and their secondary traumatic stress level. We argue in this thesis that difficulties in regulating ones emotions may have a substantial effect on the complex relationship between empathy and secondary traumatic stress. In the literature there are two apparently contradictory views. In the first view, empathy was considered to be an initial and triggering mental state for STS (Figley, 1995; Saakvitne & Pearlman, 1996; Lambert & Barley, 2001), hence is considered to be a negative factor. In the second view, however, empathy was claimed to be a protective factor for STS rather than a risk factor (Wagaman, Geiger, Shockley & Segal, 2015; Irving & Dickson, 2004). According to the second view, the sense of satisfaction and feelings of worth which are drawn as a consequence of emphatizing others and understanding their sufferings may support the mental and physical well-being of trauma workers (Hansen et. al., 2018). In our opinion,

these apparently contradictory findings may hint at the presence of a latent factor that seems to determine if a trauma worker is susceptible to STS. We will refer to this latent factor as difficulties in emotion regulation. Our opinion in this thesis is that difficulties in emotion regulation accompany empathy and contribute to the development of STS as a consequence of working with traumatized patients. Emotions provide information from the outside world to motivate our behavior in order to be adaptive to the demands of various situations (Izard & Ackerman, 2000). They seem to come and go unexpectedly, but people still have control over their emotions. Emotion regulation generally refers to internal and external processes associated with monitoring, evaluating and modulating the emotional responses in order to reach to a certain goal (Thompson, 1994). Being able to regulate ones emotions can be accepted as an ability as well as a process of initiating an emotional state, identifying the emotion, accepting and maintaining that particular emotional state, processing and finally modulating or changing by down-regulating the arousal (Tull, Barrett, McMillan, & Roemer, 2007; Eisenberg, Fabes, Guthrie, Reiser, 2000). The lack of any or all of these skills would point out to difficulties in emotion regulation, also called emotion dysregulation (Gratz & Roemer, 2004). Having difficulties in emotion regulation may play a role to adjust the level of empathy during stressful inter-relational situations in order to maintain self-other distinction (Decety & Jackson, 2004).

Significant amount of literature that supported the predictions of the current study were accumulated from both international and Turkish sources. Mental health professionals especially trauma workers have been playing a crucial role for the public mental health especially after The Great Marmara Earthquake (1999) probably more than ever (Altekin, 2014). Unfortunately, it may not be possible to claim that there is a period without any traumatic event such as a natural disaster, major loss, war or explosion in Turkey's recent history. Today, Turkey hosts more than 3 million Syrian refugees suffering from disastrous effects

of war (Republic of Turkey Ministry of Interior, 2019). Trauma workers, psychotherapists, social workers, child protection officers, rescue team members are more involved in the trauma intervention processes both in refugee camps and community centers. There is an unavoidable and growing interest in studies investigating the possible effects of helping trauma victims on mental health caregivers in Turkey. Yılmaz (2006) examined the post-traumatic stress symptoms and post-traumatic growth in search and rescue teams and found that education, marital status, and past trauma history were related to post-traumatic stress symptoms of the participants. Additionally, marital status, previous traumatic background and effective coping style were identified as predictors of posttraumatic growth in search and rescue teams. Altekin (2014) investigated the risk and protective factors of vicarious traumatization of trauma workers in Turkey. The results revealed that the level of education, profession, emotional burnout, and active coping ways were statistically significant predictors of vicarious traumatization. Zara and İçöz (2015) also found a high level of secondary traumatic stress in mental health professionals who work especially in Eastern and South-Eastern parts of Turkey. Trauma workers with personal traumatic background presented higher secondary traumatic stress level (Zara and İçöz, 2015). In a more recent study, Kahil (2016) found that mental health workers report a higher level of secondary traumatic stress than volunteers. Additionally, it was found that trauma workers with 11 to 15 years of work experience presented higher levels of secondary traumatization than less experienced trauma workers. Personal traumatic history was also found to be associated with a high level of secondary traumatic stress symptoms in Kahil's (2016) study.

What makes this present research different than the ones in Turkish literature is its scope. Most of the studies conducted on Turkish samples aimed to discover the prevalence of secondary traumatic stress and to clarify the role of past trauma history, trauma exposure, perceived social support, year of experience

in the field, age, gender and other demographics (Yılmaz, 2006; Altekin, 2014; Zara & İçöz, 2015; Kahil, 2016). The claim of these studies is that all of these factors could be instrumental for the emergence of STS. This study is targeted to fill a gap in understanding the association between secondary traumatic stress, empathy, and difficulties in emotion regulation and to provide a contribution supported with an empirical analysis to this field for better understanding the secondary traumatic stress process. In studies carried out in Turkey (Yılmaz, 2006; Altekin, 2014; Zara & İçöz, 2015; Kahil, 2016), empathy has been accepted as an essential ingredient in the emergence and the development of STS, however this assumption seems to have never been systematically studied and tested. Our first contribution in this study is considering empathy as a multidimensional construct and systematically investigating its role in the development of STS. Our second contribution is to examine the relationship between emotion regulation difficulties and STS of mental health workers. To our knowledge, this relationship has also not been studied directly in the national and international literature before.

1.1. Secondary Traumatic Stress and Related Concepts

1.1.1. The Definition of Secondary Traumatic Stress

Mental health professionals including clinical psychologists, counsellors, psychiatrists, trauma workers, child protection workers or social workers often find themselves listening to very graphic details and traumatic stories of their patients. These patients could be a victim of domestic violence, a refugee who has been forced to escape from his own country or a sexual abuse victim. In order to help their patients and provide a better healing process, mental health professionals open up their heart and soul, consciously and intentionally listen, care and engage emphatically with their clients. According to Figley (1999, p.10), STS is "the natural consequent behaviors and emotions resulting from knowledge

about a traumatizing event experienced by a significant other- it is the stress resulting from helping or wanting to help a traumatized or suffering person." In other words, STS is a result of being exposed to traumatic tales. Close family members and mental health caregivers of trauma survivors are the most well-known populations who are exposed and negatively affected by the traumatic events by witnessing and listening to the details of traumatic stories of others (Bell, Kulkarni & Dalton, 2003). STS impacts the social functioning and work performance of a caregiver negatively and leads to mental and somatic disorders, such as depression, insomnia, anxiety, substance, and alcohol abuse (Pearlman & Saakvitne, 1995).

1.1.2. The Symptoms of Secondary Traumatic Stress

Before examining the possible associations between empathy, difficulties in emotion regulation and STS, it is crucial first to understand the symptoms that define STS. Secondary traumatic stress is a mental health condition most alike to PTSD among all the other mental health disorders although it is not an independent diagnostic disorder in DSM-5 (American Psychiatric Association, 2013). STS may have physical, emotional, cognitive and social impacts on the overall mental health of caregivers. These impacts represent themselves as cluster of the symptoms that can be listed under the categories of re-experiencing, avoidance, and negative thoughts and beliefs as identical to signs of PTSD (American Psychiatric Association, 2013). Having know these symptoms would be beneficial to diagnose whether a mental health carer experiences STS or not. Re-experiencing refers to spontaneous thoughts and memories of a traumatic event, having recurrent dreams, flashbacks and thoughts as if the event is happening again, having increased heart rate, intense feelings about the event, shallow breathing or sweating when recalled of a event (Newell & MacNeil, 2010). Avoiding distressing thoughts, memories, feelings, conversations and reminders of traumatic event can be listed as the symptoms of avoidance (Newell & MacNeil, 2010). Hyperarousal symptoms represent themselves as presenting outburst of anger and feelings of irritable, having sleep disturbances, lack of concentration, feeling easily startled, showing aggressive, careless and self-destructive behaviour (Newell & MacNeil, 2010). Finally, symptoms related to negative thoughts and beliefs can be listed as persistent self blame and feeling distant from people, difficulty to remember parts of the traumatic event, diminished interest in important and once positive activities (Newell & MacNeil, 2010).

1.1.3. Related Concepts: Vicarious Traumatisation, Burnout, Compassion Fatigue, Compassion Satisfaction and Countertransference

The reactions of therapists and more generally of trauma workers to the traumatic materials of their clients were described by using several different terms in history. These reactions are named in roughly chronological order as countertransference, burnout, vicarious traumatization, compassion fatigue, secondary traumatic stress or secondary traumatic stress disorder in the literature (Altekin, 2014). Although these concepts include overlapping symptoms, it is important to present the differences in order to understand the nature of the STS. Table 2 summarises the meanings of these concepts.

Vicarious traumatization (VT) is a term first introduced by McCann and Pearlman (1990). Later on, its definition was refined by Perlman and Saakvitne (1996) as "as a process that occurs when the worker's sense of self and world view is negatively transformed through the worker's empathetic engagement with traumatic disclosures from clients". What makes VT different from STS is that the impact of VT on mental health professional is cumulative, long-lasting and irreversible if neglected (Devilly, Wright & Varker, 2009). Moreover, trauma workers' cognitive constructs such as their self-belief system and world view are

transformed as if they have experienced a traumatic event (Saakvitne and Perlman, 1996). For instance, a social worker who works in a domestic violence shelter may start to believe that there is no healthy relationship. On the other hand, STS emerge all of a sudden after experiencing a single incident of listening a traumatic story but do not have an cumulative impact as same as VT (Devilly, Wright & Varker, 2009).

Burnout (BO), another condition related to STS, was first defined by Freudenberger (1974) as " a set of symptoms that includes exhaustion resulting from work's excessive demands as well as physical symptoms such as headaches and sleeplessness, "quickness to anger" and closed thinking". Maslach and Leiter (2016) also define burnout as a 'syndrome of emotional exhaustion and cynicism' that usually appears among professionals who spend time with people as a part of their job, have a close encounter with them and feel chronic tension and stress. Maslach (1993) later on conceptualized burnout as a three dimensional process rather than a single syndrome: "(a) emotional exhaustion; (b) depersonalization, defined as a negative attitude towards clients, a personal detachment, or loss of ideals; and (c) reduced personal accomplishment and commitment to the profession" (Bell, Kulkarni & Dalton, 2003). Recent studies indicate that burnout and STS are highly correlated conditions and have overlapping symptoms (Adams, Boscarino & Figley, 2006). However, while STS is a consequence of over-identification with trauma victim's PTSD syndrome, burnout represents overwhelming psychological and physical exhaustion (Everal & Paulson, 2004). Perceived lack of professional support, work overload, role conflict and role ambiguity in professional settings have been considered to be essential antecedents of burnout (Devilly, Wright & Varker, 2009).

The term compassion fatigue (CF) was first introduced by Johnson (1992) to discuss burnout in nurses who were exposed to traumatic work-related experiences (Salston & Figley, 2003, p.169). It is based more on a passionate

connection between a help-giver and a client. Later on, compassion fatigue was defined by Figley (1995) as the result of working with a significant number of traumatized people in combination with a strong empathic orientation. CF is conceptualized by Salston and Figley (2003) as a combination term indicates both burnout and secondary traumatic level of caregivers.

Compassion satisfaction (CS) is about feeling positive and pleasant as a result of helping people who suffer from traumatic experiences or need care. The positive approach of the caregivers may be related to their colleagues, to their ability to be helpful in a work environment or even to contribute to a better society (Salston and Figley, 2003).

Originally invented by Freud in 1910, the concept of countertransference (C) has been defined in various ways. Some writers described it as all sorts of psychological response of analyst to the analysand (Racker, 1957). The more recent perspectives accept countertransference as spontaneous or evoked reactions of mental health workers towards the information, and emotions of clients who experienced psychological trauma (Salston & Figley, 2003).

In this study, STS will be the main focus among all of the concepts listed in Table 1. However it is important to be able to differentiate between all these concepts related to the mental and physical well-being of trauma workers.

Table 1
Secondary Traumatic Stress and Related Concepts

STS	" work-related, secondary exposure to people who have experienced extremely or traumatically stressful events (Stamm, 2010, p.13)
VT	"worker'sense of self and world view is negatively transformed through the worker's empathetic engagement with traumatic disclosures from clients" (Pack, 2016, p.52).

ВО	" psychological exhaustion, over-involvement with clients and overwork, emotional distress, and potential exploitation of clients." (Everal & Paulson, 2004, p.26).
CF	"a state of exhaustion and dysfunction – biologically, psychologically, and socially – as a result of prolonged exposure to compassion stress" (Figley, 1995, p. 253).
CS	"the sense of fulfillment or pleasure that therapists derive from doing their work well" (Larsen and Stamm, 2008, p. 282).
С	"positive or negative, conscious or unconscious response of a therapist and it effects the therapeutic relationship between client and therapist" (Neuman & Gamble, 1995, p.341)

Note. STS = Secondary Traumatic Stress, VT = Vicarious Traumatisation, BO = Burnout, CF = Compassion Fatigue, CS = Compassion Satisfaction, C = Countertransference.

1.1.4. Risk Factors

Mental health professionals such as therapists and psychiatrists who are working in trauma field are especially at risk for developing secondary traumatic stress (Altekin, 2014; Sodeke-Gregson, Holttum & Billings, 2013). However growing amount of research indicates that mental health workers are not the only risk groups. Secondary traumatic stress was also reported in social workers (Newell & MacNeil, 2010), forensic interviewers, emergency department, oncology, pediatric and hospice nurses (Beck, 2011), first responders such as firefighters, police officers, search and rescue personnel, emergency and paramedic teams (Greinacher, Derezza-Greeven, Herzog & Nikendei, 2019), domestic violence advocates (Slattery & Goodman, 2009), child welfare workers (Sprang, Craig & Clark, 2012) and even school personnel (Borntrager, Caringi, van den Pol, Crosby, O'Connell, Trautman, & McDonald, 2012). Bride (2007) mentioned that 70% of social workers present at least one STS symptom. Another research reported that 42% of social workers suffered from STS (Adams,

Boscarino, & Figley, 2006). Also, Conrad and Kellar-Guenther (2006) found that approximately 50% of child protection workers severely suffered compassion fatigue. Finally, 19% of substance abuse counselors (Bride, Smith Hatcher & Humble 2009) and 39% of juvenile justice education workers reported STS symptoms (Cieslak et al., 2013). In light of this information, it could be accepted that STS is becoming an occupational hazard of caregiving to traumatized people (Bride, 2007). Looking at a broad range of professional group that suffers from STS draws attention to a question: What could be the common potential risk factors of STS?

Risk factors of STS came to the forefront can be listed under two categories such as organizational and personal factors. While work overload of the caregiver, the degree of exposure to traumatic material and the type of traumatic events exposed are accepted as some of the organizational risk factors, personal traumatic history of the therapist, emphatic approach of the professional, being inexperienced as a trauma worker, gender and age are accepted as personal risk factors (Hensel, Ruiz, Finney & Dewa, 2015). A meta-analysis of 231 studies shows that factors related to burnout such as higher work demands, lower autonomy, and job control and lower job satisfaction are highly associated with STS (Alarcon, 2011).

Several studies have also mentioned that the type of traumatic event also appears to be a predictor for STS. Zara and İçöz (2015) stated that human-made traumatic events are more likely to contribute to STS in caregivers than natural disasters. Ben-Porat and Itzhaky (2009) indicated that professionals who help victims of domestic violence demonstrated moderate signs of STS compare to exposure to other types of trauma.

Personal traumatic history of the therapist as a personal risk factor for STS was a topic of several studies. Although the results of recent studies testing the

link between STS and personal traumatic background of the caregiver are still under debate, there are findings that show it as a contributing risk factor (Baird & Kracen, 2006; Jenkins & Baird, 2002; Zara & İçöz, 2015). For instance, lifetime personal background of trauma, but not recently experienced trauma exposure was positively associated with STS in child welfare workers (Bride et al., 2007).

Finally, emphatic engagement as an important characteristic for caregivers contributes to STS in mental health personnel. While empathy in the form of 'perspective taking' and 'empathic concern' is helpful and essential, it becomes unhealthy and responsible for stress and burnout in the form of 'personal distress' (Abendroth & Figley, 2013). Although there are several supporting studies found for the link between empathy and STS, some found no significant association (Crumpei & Dafinoiu, 2012; Kilpatrick, 2016).

1.1.5. Protective Factors

In the STS literature of compassion satisfaction, social support, professional supervision and consultation, self care of mental health caregiver, continuous training related to the profession, limiting caseload, balancing empathy and distance to clients, and caregiver' awareness of the impacts of STS appear to be the main preventing factors for STS (Salston & Figley, 2003). The literature on STS emphasize social support as a significant protective factor for STS (MacRitchie & Leibowitz, 2010; Galek, Flannelly, Greene & Kudler, 2011). However, the findings are inconsistent about the predictive power of social support on STS (Cieslak et al., 2013). Source of social support can be from the organization, family and friends. Organizational support such as informational and clinical supervision seems to be an essential preventing factor for STS (Creamer and Liddle, 2005). Interestingly, Michalopoulos and Aparicio, (2012) found that low levels of perceived social support were not significantly predictive for vicarious traumatization. However, the interaction effect of social support and

personal traumatic history of the trauma worker reported being significant (Michalopoulos & Aparicio, 2012).

Self-care appears to be an important protective factor for secondary traumatic stress, vicarious traumatization and compassion fatigue of mental health professionals. Self-care is defined as the use of the abilities and methods by the caregivers to manage their own individual, familial and emotional needs and rights while paying attention to the needs of their patients (Figley, 2002a). Köverová and Ráczová (2017) investigated compassion satisfaction, burnout, secondary traumatic stress as well as emotional well-being and performed self-care among the mental health professionals who work with orphans in East Slovakia. Emotional well-being and physical self-care activities were appeared to be predictors for the levels of compassion satisfaction, burnout, and secondary traumatic stress. Setting realistic professional goals related to client care and workload, giving different types of breaks as much as possible, having enough rest and relaxation and moreover staying connected with friends and families are suggested to prevent burnout and secondary traumatic stress (Maslach, 2003).

In the contemporary psychotherapy training process, supervision is considered fundamental to therapeutic effectiveness regardless of the theoretical framework of the therapy. Either the caregiver is a trained psychotherapist or a social worker, supervision influences the therapist's competence to be effective (Barrett & Barber, 2005). In addition, responsible, sensitive, supportive and respectful supervision provides emotional support for the mental health professionals who are at risk of STS (Bell, Kulkarni & Dalton, 2003). Among the social workers who work with traumatized, peer supervision was found to be a significant predictor of STS (Kanno, Kim & Constance-Huggins, 2016). Creamer and Liddle, (2005) also provided evidence that supervision as a form of professional support reduces STS symptoms (Cieslak et al., 2013).

1.1.6. Theoretical Background

In this section, our main goal will be discussing the background theory and a model of secondary traumatic stress and compassion fatigue resilience. As both concepts were initially introduced to the psychological literature from the systems theory, we will first provide an overview of the systems theory and then the closely related bioecological systems theory.

1.1.6.1. Systems Theory

General Systems Theory (GST) was originally proposed by biologist Bertalanffy (1968) in order to examine the biological organisms as a whole rather than a single entity. Bertalanffy suggested that the organisations and their interactive relationships made the living organisms unique. He considered an organism as a system open to its environment and that interacts with its surroundings. Their interactive nature allows organisms to evolve and to organize their relationships with others continuously rather than as an entity. An organism as a system is never in a steady, balanced state. By its constant dynamic process of movement from equilibrium to non-equilibrium, a system is always in an energetic state (Hammond, 2010). In summary, he proposed that all systems share similar characteristics that regulate the relationship between parts of the system in order to maintain stability. GTS approach soon became a key concept for researchers from not just biology but also, mathematics, physics, philosophy, cybernetics, and behavioural and social sciences (Hammond, 2010).

Cybernetics as a view at the heart of systemic family therapy was first introduced by diverse group of thinkers and researchers in 1940s and 1950s including mathematicians, physicians, psychologists and anthropologists such as Gregory Bateson and Margaret Mead (Winek, 2009). Instead of linear causation and effect view, cyberneticists use circular causality of feedback loops to explain

how families operate. Cybernetics focused on (1) family rules as the families' homeostatic range, (2) negative feedback process to implement those rules such as punishment or guilt, (3) chain of family interaction as feedback loop, and (4) alternative response when the adapted feedback is ineffective (Nichols, 2013). Originated from cybernetics, systemic family therapy perspective can be applied to any kind of psychological problem. For instance, an individual with depression can be understood with a systemic family approach that views age, gender, genetic background, family of origin, socioeconomic status, substance or alcohol use, social support system, nutrition, exercise, physical and psychological trauma history as contributing factors all together interactively. Making any change in one or more of the factors may trigger a change in the whole system. (Winek, 2009)

Secondary traumatic stress, burnout, compassion satisfaction of mental health workers and their associations with empathy and difficulties in emotion regulation can also be understood with Bronfenbrenner's Ecological Systems Theory (EST). This theory views the development of a child within the context of the systems that constitute his/her environment (Pack, 2013). Recently, this theory renamed "bioecological systems theory" in order to emphasize the child's own biological environment that nourish his/her development (George & Engel, 1980). According to EST, a child interacts with five environment systems during his/her developmental process. These five layers of environment are named as microsystem, mesosystem, exosystem, macrosystem, and choronosystem (Paquette & Ryan, 2011). Microsystem refers to the institutions closest to the child and it contains structures such as family, school, neighbourhood, childcare service, and peers. Mesosystem refers to the interactions between the structures of the microsystem of the child such as relationships between family and teachers or parents and peers (Berk, 2000). Ecosystem involves institutions like social services, neighbours, local politics, mass media and it links the child's immediate surrounding to a social context which child does not have an active role.

Macrosystem describes the cultural context in which a child live and it includes socioeconomic status, poverty, ethnicity, and attitude and ideology of culture. Choronosystem contains the dimension of time and its connection to the environment of the child (Paquette & Ryan, 2011).

This conceptual framework can be adopted to understand the development of STS in the mental health workers who help to traumatized people and to consider interventions needed on the layers of micro, meso, exo and macro systems (Pack, 2013). This perspective allows us to focus on the mental health professionals simultaneously as individuals, their environment, and their mutual interactions in the systems that they are in (Mizrahi & Davis, 2012). The relationship between mental health worker and client takes place in the microsystem level that refers to their therapeutical alignment, individual wellbeing of therapist and the traumatized client, therapists awareness as a practitioner in terms of STS (Pack, 2013). The mesosystem indicates to relations with the microsystems and the groups surrounding the trauma worker such as training programmes, mentoring and clinical supervision that could determine the severity of STS, burnout and compassion satisfaction of the trauma worker (Berscheit, 2013). The exosystem, in other words organisational level refers to the culture of institution that the mental health professional works (Pack, 2013). If the workplace normalizes STS by introducing crises debriefings, peer supervisions, teamworks and non-hierarchical joint decision making processes, the interaction of these components may act as a "safeguard" to STS and burnout (Sexton, 1999). Finally, the macrosystem in this study refers to the supervisors of the trauma worker, the professional associations that they are member of, educational institutions, conferences they attend to, legal and ethical boards and in some case court orders (Berscheit, 2013). Perhaps reforming the language of the policies and procedures in terms of STS at the macro level would help to maintain the

psychological and physical well-being of mental health workers and reduce the impact of STS.

In the current study, the effects of empathy and difficulties in emotion regulation on secondary traumatic stress was investigated. From the perspective of ecological systems theory, empathy and difficulties in emotion regulation is considered as individual, and internal psychological processes related to the development of STS and burnout on mental health professionals.

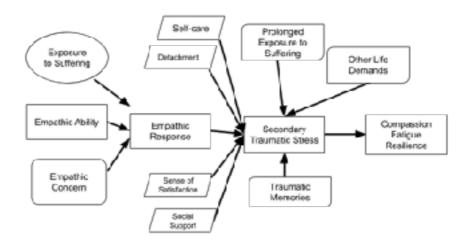
1.1.6.2. Model of Secondary Traumatic Stress and Compassion Fatigue Resilience

The term secondary traumatic stress was first introduced to the literature by Figley (1982) from the systems theory. Initially, Figley (1982) defined secondary traumatization as secondary victimization and later on as secondary traumatic stress and compassion fatigue. Although STS and CF have some distinctive features, they both indicate the same type of symptoms which are very similar to PTSD symptoms. Since 1995, Figley has been working to establish a model that comprised the possible components contributing to the development of secondary traumatic stress in trauma therapists (Figley, 1995). However, it was crucial to include professionals other than therapists such as search and rescue workers, child protection workers, court workers, victim advocates, funeral directors, journalists, researchers, physicians, nurses, firefighters, police officers, and trauma students as risk groups for secondary traumatization. What makes them comparable is that they all listen to or read traumatic material and are influenced by the trauma of others directly or indirectly (Figley, 2003). Expanding the research population has undoubtedly contributed to clarifying the working mechanism of secondary traumatization, in general terms compassion fatigue.

Ludick and Figley (2016), set nine theoretical stipulations before proposing a theory in order to understand the mechanism of trauma induction and

reduction process for secondary traumatic stress. First, STS is a complex and unavoidable condition while working with traumatized people. Second, STS emerges when a certain level of exposure to traumatic material exists. This exposure could be direct contact with a trauma victim or videotapes, photographs or recordings of traumatic materials. Third, STS increases as soon as the empathic reactions of caregiver emerge for the necessity of their job. Moreover, prolonged exposure to materials remindful of the original trauma elevates STS. STS also rises when the personal traumatic experiences are remembered by the caregiver. Furthermore, increased level of compassion satisfaction and perceived social support from fellow workers, management of the institution reduces the level of STS. Finally, STS is directly related to other life demands outside of work such as financial difficulties, changes in social status and illness (Ludick & Figley, 2016). Figure 1 is adapted from Ludick and Figley's (2016) refined Model of Secondary Traumatic Stress and Compassion Fatigue Resilience (CFR). In this model, each of the 13 variables predicts CFR level collectively. These variables also interact with each other as a part of a system and determine the risk level of STS and desirable level of CFR.

Figure 1. Model of Secondary Traumatic Stress and Compassion Fatigue Resilience (Adapted from Ludick & Figley, 2016).



Empathic Stance as a first sector includes the variables of exposure to suffering, empathic concern, and empathic ability which are crucial for explaining the quality and quantity of the empathic response level of the trauma worker. Exposure to suffering is the initial pathway for developing STS and degree of exposure the determines the effect size. However, some studies indicated that workers with less exposure to traumatic material such as attorneys were more vulnerable to STS due to less supervision, no trauma education and counseling (Levin & Greisberg, 2003). Empathic concern, another crucial condition for STS, represents the interest and level of compassion to help people. While emphatic concern, capacity and motivation increase the level of personal distress also increases. On the other hand without emphatic interest, the risk of STS diminishes, but also emotional connection with patient and effective therapeutic service decrease in working with trauma victims (Figley, 2002a). Empathic ability refers to a trauma worker's capability and predisposition to notice discomfort and suffering in others. (Figley, 2002a). Trauma workers deliver an empathic response to their clients with an emotional and empathic concern and this process places them in a vulnerable position for STS. However, paradoxically, emphatic concern, ability, and response can be protective for trauma workers by improving their sense of satisfaction, gratification and compassion fatigue resilience (Lamothe, Boujut, Zenasni, & Sultan, 2014).

Secondary Traumatic Stress (STS) as the second sector in the model contributed by the traumatic memories and other life demands of the mental health workers. Traumatic memories attribute to both caregiver's own traumatic memories and accumulated traumatic memories of clients (Figley, 2002a). Although the researches were varied, MacRitchie (2006) stated that caregivers with unresolved traumas have found to be more vulnerable to STS. Trauma workers were also reported that they felt more distressed if the traumatic experiences of their clients resembled their own traumatic memories (Ludick,

2013). Other life demands such as unexpected events, financial difficulties, health problems may also induce STS especially in exhausted workers (Ludick & Figley, 2016).

Finally, Compassion Fatigue Resilience Sector is accepted as the opposite position of STS and allows the trauma worker to be confident, coping, satisfied and competent professional and person. Self-care, detachment, sense of satisfaction and social support are the crucial variables which empower the trauma-exposed worker to be more resilient and less vulnerable for developing STS (Ludick & Figley, 2016). Self-care refers to learned activities and practices to improve the psychical and psychological well-being of people (Nelson-McEvers, 1995). It was found that more self-care activities reduce the risk of STS (Kulkarni, Bell, Hartman, and Herman-Smith, 2013). Detachment as a second resilience improver was found positively correlated with wellbeing, positive emotions and low fatigue (Sonnentag and Bayer, 2005). It can also be defined as the ability to disengage, to let go of the client and leave the clients traumas behind effectively (Figley, 2002a; Ludick, 2013). Detachment provides relief in the short-term. However, it is very important for trauma workers to process the traumatic events consciously and regularly in order to prevent denial and temporary disengagement (Held, Owens, Schumm, Chard & Hansel, 2011). Sense of satisfaction, in general terms compassion satisfaction was also found highly remedial for trauma caregivers no matter how challenging their work was. Finally, social support plays a crucial role to elevate STS and boost CFR if trauma workers engage with supportive, caring and understanding relationships with friends, co-workers, administrators and family members (Michalopoulos & Aparicio, 2012; Ludick, 2013).

From systemic family therapy perspective, Figley and Figley (2009) argued trauma as an interpersonal and a systemic entity. Trauma as a sudden and life risking experience affects not just the victim himself/herself but also close

friends, family members, colleagues, including definitely their psychotherapists. Traumatic memories are often co-constructed by the interaction with close members of surroundings. This is a part of the healing process. Figley and Figley (2009) accepted systemic meaning-making as a crucial element for treatment of trauma. Accordingly, the meaning-making process for a primary trauma victim arises through sharing, reflecting and reassessing traumatic memories within a relational and intimate environment such as family or psychotherapy settings. Psychotherapists get involved with the life of their patient by listening to their most traumatic stories. They empathize with their clients to understand better and heal their wounds. In some cases the trauma of the victim becomes the trauma of the therapist. This very attuned relationship between therapist and patient transforms both therapist and the patient. In short, the psychotherapist becomes a part of the trauma victim's support system. Of course there is a cost of emphatic concern of a therapist and that cost is the secondary traumatic stress. Every individual therapist is affected by being exposed to trauma at some level. Ludick and Figley (2016) included various ingredients that trigger the emergence of secondary traumatic stress reactions of a caregiver. From a systemic point of view, interaction of these elements determines the degree of a secondary traumatic stress level of mental health worker. As it was broadly discussed before, some of these elements tend to increase the compassion fatigue resilience level of a mental health worker which is a protective state for STS. These factors are self-care, detachment, sense of satisfaction and social support. The other factors such as exposure to traumatic material, empathic stance and response, prolonged exposure to suffering, traumatic background of therapist and other life demands appear to have an escalating effect on STS. These factors interact with each other in systemic patterns. Understanding the nature of STS can be possible by discovering those patterns. Therefore, systems theory was accepted as the main perspective of this study in order to understand the cognitive, emotional and interrelational dynamics of secondary traumatic stress of mental health professionals.

1.2. Empathy and Its Relation to Secondary Traumatic Stress

What makes us unique as a human being is the ability to understand the mental and emotional states of our species. As social beings, we communicate and interact with each other, but also predict the behaviors, motives, and emotions of others. But mostly, our ability to empathize with others becomes salient when we are disappointed as a result of being misunderstood (Singer & Lamm, 2009). Our emotional feedbacks facilitate the awareness of other people about the misunderstanding. As a consequence of sharing our emotions with each other, we develop a realization of present and future mental states and behaviors of others. (Singer & Lamm, 2009).

Empathy could be one of the most popular and commonly used concepts in psychology regardless of any theoretical approach or study fields of psychology. However, most of the theoretical and empirical studies were conducted by developmental and social psychologists (Feshbach, 1975; Batson, 2009; Hoffman, 2000; Eisenberg & Strayer 1987; Davis, 1980; Davis, 1983). It would not be wrong to claim that there are as many definitions of empathy as the number of researchers (Singer & Lamm, 2009). Sullivan views empathy as a "form of communion" (Feshbach, 1975). From a psychoanalytic-self psychology perspective Kohut (1971, p.82) defined empathy as "the capacity to think and feel oneself into the inner life of another person" in his book, The Analysis of the Self (Wilson & Thomas, 2004). Hoffman defined empathy from a developmental perspective as "the involvement of psychological processes that make a person have feelings that are more congruent with another's situation than with his own situation" (Hoffman, 2000, p.30). Rogers also defined empathy as "accurate understanding of the client's world as seen from the inside to sense the client's private world as if it were your own, but without ever losing the 'as if' quality" is studied as one of the factors associated with STS (Rogers, 1961, p.284).

Researchers were focused on possible associations between empathy and altruism (Batson, Ahmad, Lishner & Tsang, 2016), prosocial behavior (Decety, Bartal, Uzefovsky, & Knafo-Noam, 2016), criminal behaviors (Mariano et. al., 2017). Empathy has also attracted the attention of social neuroscience more than a decade ago. Consistent findings were reported that the neural structures were activated both during the original experience of a feeling as well as in the condition of sharing the emotions (Singer & Lamm, 2009).

From the perspective of social psychology, Davis (1983) argued empathy as a multidimensional construct rather than a single personality trait or a set of skills. He categorized emphatic reactions of individuals as cognitive and emotional empathy. As a cognitive empathy process perspective taking evaluates the tendency to accept the psychological standpoint of others; fantasy, another cognitive empathy process, represents the people's identification with the emotions and behaviors of fictitious characters from books or films. Empathic concern, as an emotional empathy process represents interests, concerns, and sympathy for help-seeking people, Finally personal distress as an emotional empathy process includes self-oriented distress and anxiety in stressful interpersonal settings (Davis, 1983). A substantial amount of study focused on the relationship between empathy and secondary traumatic stress (Figley, 1995), vicarious traumatization (Saakvitne & Pearlman, 1996). Ludick and Figley, (2017) placed empathic concern, empathic ability, and empathic response into their secondary traumatic stress model as a crucial triggering condition. Without emphatic concern and empathic approach, it is hard to imagine to create a therapeutical alliance between a therapist and his/her clients and an effective healing process in the clinical settings (Figley, 1995; Saakvitne & Pearlman, 1996). Gleichgerrcht and Decety (2013) studied to understand the role of clinical empathy care-giving behavior of 7584 practicing physicians. They found a strong relationship between compassion satisfaction and empathic concern, perspective

taking and altruism. Also, they have indicated that burnout and secondary traumatic stress was more closely associated with personal distress and alexithymia. Interestingly, participants with higher compassion fatigue and low or no compassion satisfaction showed the highest level of personal distress scale of empathy and alexithymia.

It was also found by Robins, Meltzer, and Zelikovsky (2009) that various components of empathy were associated with compassion fatigue and burnout level of caregivers at a children's hospital. These findings showed that caregivers other than mental health professionals were also at risk of burnout and compassion fatigue due to the high level of exposure to traumatic events. MacRitchie and Leibowitz (2010) investigated the relationship between the level of secondary traumatic stress and empathy, traumatic exposure and level of perceived social support in trauma workers in South Africa. The findings indicated that perceived social support and empathy are highly associated with secondary traumatic stress. Moreover, empathy appeared to have a moderating effect on the relationship between secondary traumatic stress and personal traumatic history of trauma workers. What this finding means that being a victim of a violent crime in their past leads the trauma workers more empathetic towards their clients. As a result of increased level of empathy in trauma workers, their level of STS increases (MacRitchie & Leibowitz, 2010).

However, studies that do not support the claims of the above conclusions also exist (Crumpei & Dafinoiu, 2012; Wagaman, Geiger, Shockley & Segal, 2015; Kilpatrick, 2016). Wagaman et. al., (2015) suggested that higher levels of empathy components may prevent or decrease burnout or STS and empathy should be included in trauma trainings for trauma workers. Additionally, Kilpatrick (2016) could not present a significant correlation between cognitive empathy (perspective taking) and STS but a weak positive correlation between emotional empathy (personal distress) and STS. There seems to be some

indication that empathy has two faces. Cognitive empathy may play a preventing and protecting role on the development of STS among trauma workers. On the other side, emotional empathy, especially personal distress may be harmful to the well-being of mental health professionals.

In this study, Davis's (1983) empathy measure, Interpersonal Reactivity Index (IRI) was used to investigate the probable associations between the empathy and secondary traumatic stress level of mental health professionals who work with suffering people. Multidimensional nature of Davis's empathy index allowed this study to clarify those apparently differentiated findings. In the literature, there is an ongoing discussion about whether empathy was a protecting factor or a harmful risk element for the development of secondary traumatic stress. In this research, it was aimed to examine the relationship between the cognitive and emotional components of empathy and STS. Additionally, in Turkey, the literature is lacking studies that directly focus on the role of empathy as a risk factor for STS. Therefore, this study aims to fill this gap and to provide empirical support for the possible associations between empathy, secondary traumatic stress and emotion regulation in a Turkish sample.

1.3. Emotion Regulation and Its Moderating Role on the Relationship Between Empathy and Secondary Traumatic Stress

Emotions seem to appear and disappear whenever and however they want. But people have control over which emotions to have, how to experience and how to express (Gross, 2001). Emotion regulation is generally described as the ability to determine, evaluate and adapt the experience and interpretation of affect (Gratz & Roemer, 2004). Various terms were used and studied similar to emotion regulation such as affect regulation, emotion regulation difficulty, self-control, mood dysregulation, or hyperarousal (Reyes, 2013). It is accepted that the skills such as "identifying, accepting, processing and down-regulating arousal" are

efficient controlling mechanisms when emotional reactivity level of trauma victims rises (Tull et al., 2007). However, the most well-accepted definition of emotion regulation or affect regulation was 'the process of initiating, maintaining, modulating, or changing the occurrence, intensity, or duration of internal feeling states and emotion-related physiological processes, often in the service of accomplishing one's goals' (Eisenberg et al., 2000, p. 137). In the development of ER, both parental caregiving attitudes and biologic factors play an important role. Parental caregiving practices may heighten or reduce the temperamental situations and emotion-related behaviors in the early childhood periods (Turliuc & Bujor, 2013). However, it was also reported that early temperamental characteristics such as personality traits, increased reactivity, and hypersensitivity were considered to be the elements associated with the emotional process (Turliuc & Bujor, 2013). Fonagy (2018) also emphasized the important role of affect-mirroring for the development of the capacity of affect regulation. Accordingly, infants calm down and feel less agitated through attuned facial and vocal interactions with their parents (Fonagy, 2018).

While emotion regulation refers to monitoring, understanding, and accepting emotions and engaging in goal oriented behaviours when emotionally active state of mind (Gratz & Roemer, 2004), emotion regulation difficulty represents emotional intensity, lack of understanding of emotions, negative reactivity to emotional situation and difficulty managing emotional states (Mennin, Heimberg, Turk & Fresco, 2005). There are limited studies examining the link between emotion regulation difficulties, empathy, and STS. However existing ones indicated promising findings that emotion regulation may be a contributing variable for explaining the STS process. Măirean's (2016) research found that cognitive reappraisal as a positive emotion regulation strategy was negatively related to STS. Another study showed that self-compassion as a protecting factor for STS negatively predicted emotion regulation difficulties and

moreover, moderating effect of emotion regulation was found on the relationship between self-compassion and job-related stress symptoms for psychologists (Finlay-Jones, Rees & Kane, 2015). In a parallel line of research revealed that physicians who report difficulties to identify and regulate their negative feelings showed a tendency for exhaustion, detachment and a low sense of achievement (Gleichgerricht & Decety, 2013). Finally, a research with a very similar scope with the present study revealed that cognitive reappraisal as an emotion regulation strategy moderated the relationship between affective empathy and prosocial tendencies (Lockwood, Seara-Cardoso & Viding, 2014).

In the light of the findings mentioned earlier in this study, we can claim that trauma workers are particularly at risk of presenting secondary traumatic stress and vicarious traumatization similar to PTSD symptoms as a result of trauma exposure and their emphatic stance (Perlman & Saakvitne, 1995; Figley, 2003). Re-experiencing intrusive and undesirable memories of a traumatic experience, flashbacks, nightmares and emotional and physiological reactivity to reminders of the original traumatic event have been accepted as the main symptoms of PTSD (American Psychiatric Association, 2013). Badour and Feldner (2013) suggested that two emotion regulation strategies, in particular, may be related to the maintenance of PTSD symptoms: non-acceptance of negative emotions and avoidant regulation strategies. Non-acceptance of negative emotions such as shame and guilt which are related to the original trauma usually accompany each other (Badour & Feldner, 2013). Ehring and Quack (2010) also found a strong relationship between the variables of emotion regulation and PTSD syndrome severity.

Therefore, investigating difficulties in emotion regulation would provide a significant contribution to the efforts to understand secondary traumatic stress. Moreover, empathy is claimed to have a paradoxical effect on the process of secondary traumatization in the literature. While high empathy helps the therapist

to be optimally attuned, responsive and sensitive to the patient, also puts the therapist in a vulnerable state for STS (Figley, 1995; Ludick & Figley, 2016). On the other hand, a therapist with low empathic approach can be characterized as minimally attuned, distant and dissociated (Wilson & Thomas, 2004). As it was argued earlier cognitive empathy may play a positive role in the aftermath of a traumatic event, but affective empathy may potentially contribute STS negatively (Dekel, Siegel, Fridkin & Svetlitzky, 2018). Emphaty has already earned a name of "double-edge sword" because of its both positive and negative contribution on STS of mental health workers (Russell & Brickell, 2015). This apparently conflicting nature of empathy naturally leads us to conjecture that a hidden factor may be also present that effects the relationship between empathy and STS. In this study, we suspect that this hidden variable is the difficulties in emotion regulation. Mental health workers with higher empathic ability who can not facilitate appropriate emotion regulation strategies such as identifying, accepting, processing and down-regulating their arousal may be inevitably more vulnerable to STS. Examining the moderating effect of difficulties in emotion regulation on the association between empathy and secondary traumatic stress may provide a clarification on that matter.

1.4. The Current Study

In this study, it was first aimed to investigate and understand the relationship between the level of secondary traumatic stress and the level of difficulties in emotion regulation in the mental health workers in Turkey from a systemic perspective. This one of the unique contributions of the current study to the literature. We assumed that mental health workers who lacks or could not employ useful emotion regulation strategies under stressful conditions requiring human relationship and helping behaviour are highly likely to develop STS. Burnout and difficulties in emotion regulation were also considered to be positively related in this study. On the other hand, compassion satisfaction as a

protective and very positive emotional condition that contributes to the psychological well-being of mental health workers in a good way, we suspected that they would be negatively related to each other.

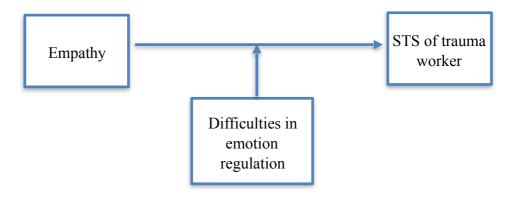
The second purpose of this thesis was to investigate the role of empathy as a predictive variable for secondary traumatic stress level of mental health professionals. Since empathy was considered as a multidimensional cognitive and emotional states of self rather than a simple and single personality trait in this study, four differentiated sub-dimensions of empathy (perspective taking, fantasy, empathic concern, and personal distress) were used as predictive variables for secondary traumatic stress. The effect of empathy on burnout and compassion satisfaction was also explored in this study. Exploring the possible role of the empathy as predictor of STS, burnout and compassion satisfaction is another original contribution to this field especially in Turkish.

The last purpose of this thesis was to examine whether the difficulties in emotion regulation played a moderating role on the relationship between the sub-dimensions of empathy and secondary traumatic stress. The model tested in hypothesis 3 was demonstrated in Figure 2. Various demographic variables such as age, gender, marital status, profession, year of experience, city of work, supervision, traumatic exposure level and personal traumatic history of the trauma workers were also examined regarding their association with secondary traumatic stress, burnout and compassion satisfaction. From a systemic perspective, all these factors refer to individual, environmental, familial and organisational characteristics of the mental health carer. We assume that all of these factors interact with each other and determine the conditions that lead to the development of STS. Again, adopting the systemic view in this study, provides us the liberty to question these characteristics of trauma worker as a collaborating units in a system rather than independent variables. Empathy and difficulties in emotion regulation variables represent two different individual and intra-psychic

characteristics which are considered to be influential interactively in the process of STS.

Figure 2.

The Model Tested in Hypothesis 3: Moderation Effect of Difficulties in Emotion Regulation.



1.4.1. Predictions

Hypothesis 1a. Higher secondary traumatic stress is correlated with higher difficulties in emotion regulation.

Hypothesis 1b. Higher burnout is related to higher difficulties in emotion regulation.

Hypothesis 1c. Higher compassion satisfaction is correlated with lower difficulties in emotion regulation.

Hypothesis 2. The dimensions of empathy, perspective taking, fantasy, empathic concern, and personal distress predict secondary traumatic stress, burnout and compassion satisfaction of mental health workers.

Hypothesis 3. Difficulties in emotion regulation moderates the association between the empathy and secondary traumatic stress.

CHAPTER 2

METHOD

2.1. PARTICIPANTS

The participants of this study were mental health professionals with various professional backgrounds practicing in Turkey with no other restrictions. A total number of 363 individuals attempted to take the online survey. After removing the participants who either did not complete or left the survey without responding to any of the items, 236 individuals remained in the sample. Two other participants were excluded since they were detected as outliers (See section Data Analyses). Out of 234 participants, only 214 participants were included in the correlation analysis due to unanswered items of the main scales of the study Professional Quality of Life Scale (ProQOL IV), Interpersonal Reactivity Index (IRI) The Turkish version of Difficulties in Emotion Regulation Scale-Brief Form (DERS-16). Of the 214 participants, 212 indicated their gender with 184 (86.8%) of them being women and 28 (13.2%) being men. The age of the participants ranged from 22 to 66 (M = 31.93 SD =7.294). When the participants' marital status was examined, it was found that 86 (40.6%) were single, 82 (38.7%) were married, 30 (14.2%) were in a relationship, 14 (6.6%) were divorced and only 2 of them left the question unanswered.

Regarding the title of profession, of 214 participants, 54 (25.2%) named themselves a psychologist, 92 (43%) as clinical psychologists, 21 (9.8%) as counsellor,15 (7%) as psychiatrist, 10 (4.7%) as social worker, 2 (0.9%) as volunteer and 3 (1.4%) as translators. One hundred eighty-nine of them (88.3%) reported that they had additional professions as couples and family therapist, child

psychiatrist, a graduate student of clinical psychology, psychoanalyst, art therapist, and sociologist.

The years of work experience as a mental health profession ranged from less than a year to $40 \ (M=6.82, SD=6.35)$ years. Both governmental and non-governmental organisations were reported as workplaces with 81 (37.85%) participants working in private practice clinics, 37 (17.289%) of them in hospitals, 26 (12.149%) of them in governmental organizations, 24 (11.22%) of them in various universities, 20 (9.34%) of them at schools and 19 (8.87%) of them in varying civil society organisations. Participants with no response were only 7 (3.27%).

Out of 214, 48 participants reported their current job as psychologists, 21 of them as psychotherapist, 11 of them as social worker,10 of them as doctors, 10 of them as school counsellor, 8 of them as academics, 6 of them as child and adolescent therapist, 3 of them as couples and family therapist and 2 of them as translator.

Reports of the participants showed that they had varying levels of experience with 207 (88.5%) indicating 5 years of experience in their current job. Seventy people (32.7%) reported that they had been working in their current jobs between 1 and 3 years; 56 (26.2%) between 3 and 6 years; 25 (11.7%) between 6 and 12 months; 19 (8.9%) between 6 and 10 years; 16 (7.5%) between 3 and 6 months and 11 (5.3%) of them reporting fewer than 3 months, and finally 10 participants (4.7%) reported that they had more than 10 years of experience.

The results suggested that participants were 19 different cities of Turkey with the majority of them coming from Istanbul (N=145; 67.75%). The remaining participants were from Antalya (N=11; 5.14%), Ankara (N=4; 1.86%), Bursa (N=4; 1.86%), Mersin (N=4; 1.86%), Balıkesir (N=3; 1.4%) and Kocaeli (N=3; 1.4%). There were 21 participants who reported being from

urban or rural areas instead of what city they were from. The participants who reported living in urban areas were 18 (8.4%) and 3 (1.4%) of them were from rural areas. The remaining 13 participants (6.07%) were from various cities in Turkey including Samsun, Urfa, Aydın, Bayburt, Bolu, Diyarbakır, İskenderun, Muğla, Tunceli, Adıyaman, and Lüleburgaz. There were only 2 (0.9%) participants who did not report what city they lived in.

Out of 214 participants, 133 (62.1%) reported having supervision and 80 of them (37.4%) as not having supervision. In terms of hours of supervision received, 68 (31.8%) participants reported having supervision between 1 and 2 hour per week, 54 (25.2%) as less than an hour, 12 (5.6%) as between 2 and 3 hours per week and 9 (4.2%) more than 3 hours per week. Of the 214 participants, 71 (33.2%) individuals had no response for the hours of supervision.

Of 214 participants, 202 (94.4%) of them reported that they were exposed to traumatic materials in their job and 11 (5.1%) of them said that they were not exposed to traumatic materials. Remaining 1 individual did not respond to this question. When the participants were asked about their personal trauma histories, 153 (71.5%) reported that they experienced at least one traumatic event once in their lifetime. Participants with no personal traumatic experience were 60 (28%). Only 1 (0.5%) participant did not provide an answer to this question.

Table 2 Demographic Characteristics of Participants

Variables		N	%	M	SD
Gender					
	Female	184	86.8		
	Male	28	13.2		
	Total	214	100		
Age				31.93	7.29

Marital Status					
	Single	86	40.6		
	Married,	82	38.7		
	In relation	14	6.6		
	Divorced	14	6.6		
Profession					
	Psychologist	54	25.2		
	Clinical Psychologist	92	43		
	Counselor	21	9.8		
	Psychiatrist	5	7		
	Social worker	10	4.7		
	Volunteer	2	0.9		
	Translator	3	1.4		
Years of work experience				6.82	6.35
Workplace					
	Private Practice	81	37.85		
	Hospitals,	37	17.28		
	Governmental	26	12.14		
	Universities	24	11.22		
	Schools	20	9.34		
	Civil society	19	8.87		
Years in current job					
	Less than 3 months	11	5.1		
	3-6 months	16	7.5		
	6-12 months	25	11.7		

	1-3 years	70	32.7	
	3-6 years	56	26.2	
	6-10 years	19	8.9	
	More than 10 years	10	4.7	
City of work				
	İstanbul	145	67.75	
	Antalya	11	5.14	
	Bursa	4	1.86	
	İzmir	4	1.86	
	Mersin	4	1.86	
	Ankara	4	1.86	
	Balıkesir	3	1.4	
	Kocaeli	3	1.4	
	City Center	18	8.4	
	County	3	1.4	
	Other	13	6.07	
Supervision				
	Yes	133	62.1	
	No	80	37.4	
Trauma exposure				
	Yes	202	94.4	
	No	11	5.1	
Personal trauma				
	Yes	153	71.5	
	No	60	28	

2.2. MEASURES

The participants were presented an online survey package including The Demographic Information Form to gather the background information about them, Professional Quality of Life Scale (ProQOL IV) in order to measure their secondary traumatic stress level, Interpersonal Reactivity Index (IRI) to measure the dimensions of empathy and finally Difficulties in Emotion Regulation Scale-Brief Form (DERS-16) in order to measure the level of difficulties in emotion regulation.

2.2.1. The Demographic Information Form

The Demographic Information Form (see Appendix B) was produced by the researcher and includes questions about the participants' gender, age, marital status, profession, years of experience in this profession, current workplace, job title in the current workplace, the years of employment in the current work place, supervision hours, traumatic exposure level, and personal traumatic history.

2.2.2. Professional Quality of Life Scale (ProQOL IV)

Professional Quality of Life Scale (ProQOL IV), as presented in Appendix C, was originally developed by Stamm (2010) to measure the positive and negative impacts of working with individuals who have survived traumatic and stressful life experiences. In this study, the Turkish version of ProQOL IV adapted by Yeşil and his colleagues (2010) was used to measure the secondary traumatic stress level of trauma caregivers next to burnout, compassion fatigue, and compassion satisfaction. ProQOL IV is a 30-item, self-administered 5-point Likert- type questionnaire raging from "Never" to "Very Often". Every 3 subscales of ProQOL IV consist of 10 questions. The first sub-scale, Compassion satisfaction (CS) is related to feel pleasure and satisfaction to professionally help people who needed. Burnout is one aspect of Compassion Fatigue (CF) which is

also accepted as the negative effects of care giving to others. The second sub-scale Burnout is also related to feelings of hopelessness and complications while dealing with work or effective job performance. Burnout is usually associated with a non-supportive work environment with high workload. Finally, the third sub-scale, Secondary Traumatic Stress (STS) is also a part of Compassion Fatigue (CF). STS measures the level of work-associated, secondary exposure to traumatic and extremely stressful life events of caregivers of trauma survivors. (Stamm, 2010). The Cronbach's alpha values of the subscales of the Turkish version of ProQOL IV are .87 for CS, .72 for BO and .80 for STS (Yeşim et al., 2010). The Cronbach's alpha value is calculated 0.85 for CS, 0.67 for BO and 0.84 for STS in the current study. Item 3 "I get satisfaction from being able to [help] people" is an example for CS. Item 8 "I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help]" is an example for burnout. Finally, item 5 "I jump or am startled by unexpected sounds" is an example for STS. The higher scores imply having higher level of CS, BO, and STS in this questionnaire.

2.2.3. Interpersonal Reactivity Index (IRI)

In this study, empathy was measured by the Turkish version of Davis's (1980) Interpersonal Reactivity Index (IRI) (see Appendix D) which was adapted by Engeler and Yargıç (2007). The IRI is a self-administered, 5-point Likert-type questionnaire with 28-item ranging from "Does not describe me well" to "Describes me very well". It measures cognitive and emotional empathy and consists of four separate subscales measuring different dimensions of empathy. The sub scale scores vary from 0 to 28. Each subscale containing 7 items are named: perspective taking (PT), fantasy scale (FS), empathic concern (EC), and personal distress (PD). Due to an error in the online survey 3 items were missing from the survey. These were one item from FS, one item from PD and item from PT. Internal consistencies of all four subscales of the Turkish version of IRI were

satisfactory [.60-.76]. The Turkish adaptation of the IRI index had a test-retest correlation in the acceptable range [.66-.80] (Engeler & Yargıç, 2007). The Cronbach's alpha value is calculated 0.69 for PT, 0.80 for FS, 0.72 for EC and 0.74 for PD in the present study. The perspective taking (PT) scale is used to determine the tendency to spontaneously take the psychological point of view of other people. The fantasy scale (FS) assesses the tendency of the responders to transpose themselves in fictional stories and imagine themselves in the same situations as fictional characters. The empathic concern (EC) scale assesses sympathy and concern for other people. Finally, the personal distress (PD) scale assesses the "self-oriented" feelings such as anxiety and uneasiness which prevents helping others (Davis, 1983). The higher scores imply having higher level of empathy for perspective taking, fantasy, emphatic concern, and personal distress scales in this measure.

2.2.4. Turkish Version of Difficulties in Emotion Regulation Scale-Brief Form (DERS-16)

DERS-16 was originally developed by Bjureberg et al. (2016) as a brief form of DERS (Gratz and Roemer 2004). The Turkish version of Difficulties in Emotion Regulation Scale-Brief Form (DERS-16), as presented in Appendix E, was adapted by Yiğit and Yiğit (2017) and was administered to measure the emotion regulation difficulties of the participants in this study. The Turkish version of DERS-16 is a five-factor-structured scale which measures Clarity (e.g., "I am confused about how I feel"), Goals (e.g., "When I am upset, I have difficulty focusing on other things"), Impulse (e.g., "When I am upset, I become out of control"), Strategies (e.g., "When I am upset, I believe that I will remain that way for a long time"), and Non-acceptance (e.g., "When I am upset, I feel ashamed with myself for feeling that way"). Self-report questionnaire DERS-16 consists of 16 items and it is a 5-point Likert scale ranging from 1 (almost never) to 5 (almost always). Higher scores show greater emotion dysregulation. The

internal consistency of The Turkish version of DERS-16 is excellent (α = .92) (Yiğit and Yiğit, 2017). The Cronbach's alpha of the scale of DERS-16 is found 0.92. The higher scores imply experiencing higher level of difficulties in emotion regulation in this measure.

2.3. PROCEDURE

Data collection process began after receiving the approval from the Ethics Committee Board of Istanbul Bilgi University. All the data were gathered using an online data collection platform (www.surveymonkey.com). The online data collection link was shared via e-mail and social media posts. After receiving permissions from the organizations to access their mental health personnel, the participants were contacted based on the procedure organizations require such as list-serves, e-mail groups, and in-person meetings. First, participants were introduced to the study with an Informed Consent Form (Appendix A) in order to explain the main purpose and the subject of the study. The participants were also informed about the confidentiality of the data, voluntary nature of the study, expected completion time and their right to withdraw from the survey at any time. The Informed Consent Form also included contact information of the researcher in case the participants wanted to consult about any questions and/or concerns related to the survey. Second, The Demographic Information Form was presented to the participants. Finally, the Professional Quality of Life Scale (ProQOL IV) Interpersonal Reactivity Index (IRI) and Difficulties in Emotion Regulation Scale-Brief Form (DERS-16) were introduced to the participants. The last three questionnaires were introduced randomly by the survey software for each participant. Approximately 15 minutes were needed to complete the whole survey.

2.4. DATA ANALYSES

Before conducting any statistical analysis, all the data were downloaded from the online survey software into an SPSS program. Participants who participated in the study yet did not complete the measures were removed from the data. Additionally, after calculating Mahalanobis distance, 2 multivariate outliers were excluded from the sample of the study ($\alpha = 0.001$, df = 8, $\chi 2 =$ 32.88, χ^2 = 28.92). After all the necessary eliminations, the data included 214 participants and the results were analyzed using IBM Statistical Package for Social Sciences (SPSS) and PROCESS v 3.3 (Hayes, 2019). The data analysis consisted of several steps. First, reliability analyses, descriptive and frequency analysis of the measures and demographic variables were conducted. Moreover, independent t-tests were conducted in order to examine gender differences based on all the measures of this study including secondary traumatic stress, burnout, compassion satisfaction, perspective taking, fantasy, empathic concern, personal distress, and difficulties in emotion regulation. The independent t-test analyses were conducted in order to compare the means of the measures based on supervision, trauma exposure, and personal traumatic background levels of the participants. Second, Pearson Correlations were used to calculate intercorrelations between all of the variables including empathy (perspective taking, fantasy, empathic concern and, personal distress), secondary traumatic stress (compassion satisfaction, burnout and secondary traumatic stress) and difficulties in emotion regulation. Third, a hierarchical regression analysis was conducted to analyze if the subdimensions of empathy (perspective taking, fantasy, empathic concern and personal distress) predict secondary traumatic stress, burnout, and compassion satisfaction. The demographic factors such as gender, age, traumatic exposure, and personal traumatic background were also tested in the model. Finally, moderation analysis was conducted by using PROCESS v3.3 in order to calculate

if emotion regulation difficulties moderated the relationship between empathy and secondary traumatic stress.

CHAPTER 3

RESULTS

3.1. Preliminary Analysis

In this section, reliability analysis, descriptive statistics of the measures, independent t-tests for gender differences, supervision, trauma exposure, and personal traumatic background levels of the participants based on all the measures of this study including secondary traumatic stress, burnout, compassion satisfaction, perspective taking, fantasy, empathic concern, personal distress, and difficulties in emotion regulation were presented.

3.1.1. Reliability Analysis of the Measures

Initially, the internal consistency scores of each of the measures were calculated. All measures of this study showed moderate to high reliability coefficients. Only the Cronbach's alpha level of burnout (BO) and perspective taking were low. The reliability coefficients are listed in Table 3.

Table 3

The Reliability Coefficients of the Measures of the Study

Measures	Cronbach's alpha (original)	Cronbach's alphas of the study
ProQOL IV		
CS	0.87	0.85
ВО	0.72	0.67
STS	0.80	0.84
IRI		
PT	0.73	0.69
FS	0.76	0.80

EC	0.66	0.72
PD	0.60	0.74
DERS-16	0.92	0.92

Note. $ProQOL\ IV$ = Professional Quality of Life IV. CS = Compassion Satisfaction. BO = Burnout. STS =Secondary Traumatic Stress. IRI = Interpersonal Reactivity Index. PT =Perspective Taking. FS = Fantasy. EC = Empathic Concern. PD = Personal Distress. DERS-16 = Difficulties in Emotion Regulation Scale-16.

3.1.2. Descriptive Statistics for the Measures

Findings of the descriptive statistics of Compassion Satisfaction (ProQOL IV), Burnout (ProQOL IV), Secondary Traumatic Stress (ProQOL IV), Perspective Taking (IRI), Fantasy (IRI), Empathic Concern (IRI), Personal Distress (IRI) and Emotion Regulation (DERS-16) were presented in Table 4.

Table 4

Descriptive Characteristics of the Measures in the Current Study

Measures	N	M	SD	Min	Max
ProQOL IV					
CS	211	3.97	0.53	2.4	5
ВО	211	2.35	0.51	1.2	3.6
STS	214	2.11	0.63	1.0	4.2
IRI					
PT	202	2.75	0.63	0.5	4
FS	202	2.41	0.81	0.16	4
EC	202	2.92	0.60	0.85	4
PD	202	1.58	0.73	0	3.3
DERS-16	197	1.98	0.62	1	4.18

Note. ProQOL IV = Professional Quality of Life IV. CS = Compassion Satisfaction. BO

= Burnout. *STS* =Secondary Traumatic Stress. *IRI* = Interpersonal Reactivity Index. *PT* =Perspective Taking. *FS* = Fantasy. *EC* = Empathic Concern. *PD* = Personal Distress. *DERS-16* = Difficulties in Emotion Regulation Scale-16.

3.1.3. Gender Differences for the Measures

In order to examine gender differences on the measures of secondary traumatic stress, burnout, compassion satisfaction, perspective taking, fantasy, empathic concern, personal distress and difficulties in emotion regulation, eight independent samples t-tests were conducted. First, results of this analysis show significant differences in terms of secondary traumatic stress scores between female (M = 2.16, SD = .64) and male (M = 1.79, SD = .45) participants t(210) = 2.90, p = .004. According to the results, female participants have higher level of secondary traumatic stress than male participants. Another results of this analysis show significant differences in terms of personal distress scores between female (M = 1.63, SD = .72) and male (M = 1.11, SD = .62) participants t(210) = p < .001. These results mean that female participants have a higher personal distress level than male participants. Men and women were not significantly different on the scales of burnout, compassion satisfaction, perspective taking, fantasy, empathic concern and difficulties in emotion regulation.

3.1.4. Differences Based on Supervision

In order to examine the differences based on supervision on the measures of secondary traumatic stress, burnout, compassion satisfaction, perspective taking, fantasy, empathic concern, personal distress and difficulties in emotion regulation, eight independent samples t-tests were conducted. There were no significant differences between the means of the participants in terms of having supervision and not having supervision.

3.1.5. The Role of the Trauma Exposure

One section of the demographic information form was presented to the mental health workers in order to determine the level of traumatic exposure they had based on their experiences within the last 3 months. The questions about exposure to traumatic exposure were administered as 10-item, 4-point Likert -type scale ranging from "Never" to "Often". The scale provided information on how often the participants listened to traumatic events from their clients. The traumatic event types were listed included a serious accident, sudden loss of a close one, natural disaster, domestic violence, sexual abuse, rape, serious health problems, torture, captivity, war. Participants were also asked to report if they have experienced exposure to other traumatic events other than the ones listed. Table 5 summarizes the exposed traumatic events of the participants of this study.

Table 5.

Exposed Traumatic Events of The Participants

Traumatic Events	N	M	SD	Min-Max Score
Sexual Abuse	206	2.32	.90	0 - 3
Domestic Violence	202	2.19	.94	0 - 3
Sudden Loss	201	1.85	.85	0 - 3
Torture	204	1.66	.93	0 - 3
Rape	204	1.34	1.05	0 - 3
Serious Accident	196	1.30	.94	0 - 3
Health Problems	201	.77	.90	0 - 3
Natural Disaster	198	.71	.78	0 - 3
Other	205	.55	.91	0 - 3
Captivity	201	.43	.75	0 - 3
War	201	.34	.66	0 - 3

3.1.6. The Role of the Personal Traumatic Background

Personal traumatic history was also asked the participants with a list of traumatic events. The participants were able to choose more than 1 traumatic event. Table 6 presents the percentages of the personal traumatic events that were reported by the participants of this study.

Table 6
Traumatic Background of the Participants (N=214)

Traumatic Events	N	%
Sudden Loss	82	38.3
Physical and Emotional Abuse	64	29.9
Domestic Violence	42	19.6
Natural Disaster	42	19.6
Sexual Abuse	35	16.4
Serious Accident	27	12.6
Surgery	27	12.6
Health Problems	25	11.7
Rape	7	3.3
War	4	1.9
Torture	3	1.4
Captivity	1	.5

Eight independent samples t-tests were conducted in order to see the differences in terms of the traumatic background of the participants on the measures of secondary traumatic stress, burnout, compassion satisfaction, perspective taking, fantasy, empathic concern, personal distress and difficulties in emotion regulation. There were no significant differences observed between the

means of participants who experienced personal traumatic event and participants who did not experience a personal traumatic event.

3.2. Correlations

In order to test the hypotheses 1a, 1b, and 1c Pearson Correlations were conducted. The hypothesis 1a was confirmed. A significant positive, medium correlation between secondary traumatic stress and emotion regulation difficulty was found. The hypothesis 1b was also confirmed. A significant positive, medium correlation between burnout and difficulties in emotion regulation was observed. Furthermore, the hypothesis 1c was also confirmed. A medium, significant negative correlation was found between compassion satisfaction and difficulties in emotion regulation is found (See Table 7).

For exploratory purposes, Pearson Correlations between all 8 variables compassion satisfaction, burnout, secondary traumatic stress, perspective taking, fantasy, empathic concern, personal distress and difficulties in emotion regulation were calculated. Table 8 presents all of the correlation coefficients. Correlations among compassion satisfaction, burnout and secondary traumatic stress were found consistent with the literature (Conrad, & Kellar-Guenther, 2006; Sodeke-Gregson, Holttum, & Billings, 2013). A large, negative correlation between compassion satisfaction and burnout was found. A small, negative correlation between compassion satisfaction and secondary traumatic stress was also found. Also, Aa large, positive correlation between secondary traumatic stress and burnout was found (See Table 7).

It also was observed that there was a positive medium correlation between secondary traumatic stress and fantasy variable of empathy. Although small, secondary traumatic stress was also found positively correlated with empathic concern. At last, a positive medium correlation was found between secondary traumatic stress and personal distress. There was however, not found a significant

correlation between secondary traumatic stress and perspective taking. Furthermore, a positive medium relationship between burnout and personal distress measure of empathy was observed whereas the relationship between burnout and perspective taking, fantasy and empathic concern were not significant (See Table 7).

While a medium, positive correlation was observed between compassion satisfaction and perspective taking measure of empathy, no significant correlations were found between compassion satisfaction and fantasy as well as between compassion satisfaction and empathic concern. On the other hand, a negative significant medium correlation was found between personal distress and compassion satisfaction. Another significant negative medium relationship was observed between compassion satisfaction and difficulties in emotion regulation. Finally, a significant positive large correlation was found between difficulties in emotion regulation and personal distress (See Table 7).

Table 7
Pearson Correlation Matrix Among The Variables

Variables	1	2	3	4	5	6	7	8
1. CS	-							
2. BO	59**	-						
3.STS	22**	.63**	-					
4. PT	.23**	01	.07	-				
5. FS	.003	.12	.34**	.17*	-			
6. EC	.11	.03	.27**	.38**	.44**	-		
7. PD	22**	.25**	.39**	27**	.20**	.10	-	
8.DERS-16	23**	.42**	.49**	07	.14*	.13	.47**	-

Note 1. *p < 0.05. **p < 0.01.

Note 2. CS = Compassion Satisfaction. BO = Burnout. STS = Secondary Traumatic Stress. PT = Perspective Taking. FS = Fantasy. EC = Empathic Concern. PD = Personal Distress. DERS-16 = Difficulties in Emotion Regulation Scale-16

3.3. Hierarchical Regression Analysis of the Study

In order to test the second hypothesis of this study, a two-step hierarchical regression analysis was conducted to examine whether the dimensions of empathy predict STS of mental health workers in Turkey. Control variables (age, gender, trauma exposure and personal trauma) were entered at step one and empathy variables (perspective taking, fantasy, empathic concern and personal distress) were entered at stage two of the hierarchical regression analysis. In step one, control variables of age, gender, trauma exposure and personal trauma were significant predictors of secondary traumatic stress, F(4, 192) = 3.175, p = .015, explaining 6% of the variation in STS. At step two, introducing perspective taking (PT), fantasy scale (FS), empathic concern (EC), and personal distress (PD) increased the model's strength and explained 26% of the variation in secondary traumatic stress, F(4, 188) = 12.242 p < .001.

Particularly, fantasy (FS) as an empathy variable significantly predicted secondary traumatic stress, $\beta = .16$, t = 2.83, p < .05. Also personal distress (PD) as an empathy variable predicted secondary traumatic stress, $\beta = .29$, t = 4.61, p < .001. On the other hand, perspective taking and empathic concern did not make a significant contribution to the hierarchical regression model. Gender was no longer a significant predictor in step 2. Table 8 presents the summary of hierarchical regression analysis for variables predicting secondary traumatic stress.

Table 8

The Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Traumatic Stress

Variable	β	SE	Beta	t	R	\mathbb{R}^2	ΔR^2
Step 1					.25a	.06	.06
Age	007	.006	08	-1.07			
Gender	34	.13	18	-2.58*			
Trauma exposure	.15	.20	.05	.73			
Personal trauma	18	.09	13	-1.83			
Step 2					.506b	.26	.19
Age	001	.006	01	18			
Gender	18	.12	01	-1.44			
Trauma Exposure	.06	.19	.02	.31			
Personal Trauma	16	.09	11	-0.79			
Perspective Taking	.08	.07	.08	1.13			
Fantasy	.16	.06	.20	2.83*			
Empathic Concern	.09	.08	.09	1.13			
Personal Distress	.29	.06	.33	4.61**			

Note. a. Predictors: (Constant), Age, gender, trauma exposure, personal trauma b. Predictors: (Constant), Age, gender, trauma exposure, personal trauma, perspective taking, fantasy, empathic concern, personal distress.

A two-step hierarchical regression analysis was also conducted to evaluate whether the empathy variables, perspective taking, fantasy scale, empathic concern, and personal distress predict burnout level of mental health workers as a dependent variable. In step one, the model was not significant F(4, 190) = .857, p

= .491, suggesting that the control variables of age, gender, trauma exposure and personal trauma were not significant predictors of burnout. When perspective taking, fantasy scale, empathic concern and personal distress were included in the second step of the hierarchical regression analysis, the model's strength increased and explained 26% of the variation in F(4, 186) = .857 p = .044 (See Table 9). Particularly, personal distress as an empathy variable significantly predicted burnout, $\beta = .16$, t = 2.78, p = 0.006.

Table 9

The Summary of Hierarchical Regression Analysis for Variables Predicting Burnout

Variable	β	SE	Beta	t	R	R ²	ΔR^2
Step 1					.13ª	.02	.02
Age	006	.005	08	-1.11			
Gender	14	.11	10	-1.30			
Trauma exposure	01	.16	01	07			
Personal trauma	02	.08	01	19			
Step 2					.26 ^b	.07	.03
Age	002	.005	03	46			
Gender	08	.11	05	70			
Trauma Exposure	02	.16	01	11			
Personal Trauma	-0.02	0.08	-0.02	-0.30			
Perspective Taking	0.05	0.07	0.06	.75			
Fantasy	0.05	0.05	.08	1.03			
Empathic Concern	-0.05	.07	06	69			
Personal Distress	.16	.06	.22	2.78*			

Note. a. Predictors: (Constant), Age, gender, trauma exposure, personal trauma b. Predictors: (Constant), Age, gender, trauma exposure, personal trauma, perspective taking, fantasy, empathic concern, personal distress. c. *p < .05

A two-step hierarchical regression analysis was also conducted to evaluate whether the empathy variables, perspective taking, fantasy scale, empathic concern, and personal distress predict compassion satisfaction level of mental health workers as a dependent variable. In step one, the model was not significant F(4, 190) = 1.36, p = .25, with an $R^2 = .028$ suggesting that the control variables of age, gender, trauma exposure and personal trauma were not significant predictors of compassion satisfaction. At step two, introducing perspective taking, fantasy scale, empathic concern, and personal distress increased the model's strength and explained 11% of the variation in secondary traumatic stress, F(4, 186) = 4.07, p = .003 (See Table 10).

Particularly, perspective taking (PT) as an empathy variable significantly predicted compassion satisfaction, $\beta = .17$, t = 2.5, p = 014.

Table 10

The Summary of Hierarchical Regression Analysis for Variables Predicting

Compassion Satisfaction

Variable	β	SE	Beta	t	R	R ²	ΔR^2
Step 1					.17ª	.03	.007
Age	004	.005	.05	.75			
Gender	.16	.115	.10	1.36			
Trauma exposure	.28	.17	.12	1.71			
Personal trauma	04	.08	03	48			
Step 2					.33 ^b	.11	.07
Age	.001	.005	.02	.20			
Gender	.13	.11	.08	1.15			
Trauma Exposure	.32	.16	.14	1.99			
Personal Trauma	-0.01	0.08	-0.01	-0.15			

Perspective Taking	.17	.07	.20	2.5*
Fantasy	04	.05	.06	72
Empathic Concern	.07	.075	.076	.89
Personal Distress	09	.06	12	-1.6

Note. a. Predictors: (Constant), Age, gender, trauma exposure, personal trauma b. Predictors: (Constant), Age, gender, trauma exposure, personal trauma, perspective taking, fantasy, empathic concern, personal distress.

3.4. Moderation Analysis

In order to test the hypothesis 3, moderation analysis using PROCESS method was conducted to investigate whether the level of emotion regulation difficulties had a moderating role on the relationship between empathy and secondary traumatic stress. The variables of empathy (perspective taking, fantasy, empathic concern and personal distress) were placed as an independent variable one by one in the moderation analysis. STS was the dependent variable and DERS-16 was the moderator in this model. The hypothesis 3 was not confirmed. Although the results did not reach the conventional levels of accepted significance, the results indicated that there was a tendency towards moderating effect of difficulties in emotion regulation on the relationship between empathic concern and secondary traumatic stress (See Table 11). This suggests that when difficulties in emotion regulation was low, relationship between emphatic concern and secondary traumatic stress seemed to disappear. When difficulties in emotion regulation was high, on the other hand, there seems to be a tendency towards a stronger relationship between emphatic concern and secondary traumatic stress.

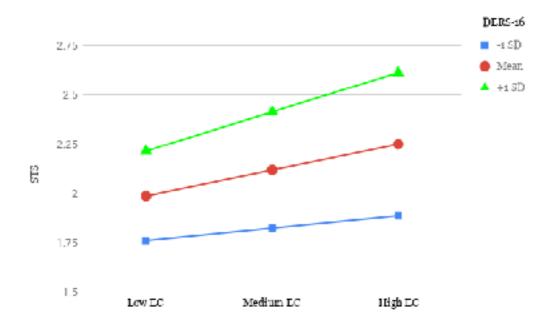
Table 11
Summary of Hierarchical Regression Model that Examining Moderator Role of Difficulties in Emotion Regulation on the Relationship Between Emphatic Concern and Secondary Traumatic Stress

Predictor	β	SE	t	p	95% CI		R	R ²	ΔR^2
Model 1							.54	.29	.29
EC	.22	.07	3.51	.0006	.10,	.37			
DERS-16	.46	.07	7.42	< .001	.35,	.61			
Model 2							.55	.30	.01
EC	.21	.07	3.21	.0016	.08,	.35			
DERS-16	.47	.06	7.30	< .001	.34,	.60			
EC × DERS-16	.18	.09	1.83	.07	01,	.37			

Note. EC = Empathic Concern. *DERS-16* = Difficulties in Emotion Regulation Scale-16

A graph for interaction between empathic concern and difficulties in emotion regulation can be seen in Figure 3.

Figure 3. Graph for Interaction Between Empathic Concern and Difficulties in Emotion Regulation



CHAPTER 4

DISCUSSION

The main purpose of this study was to investigate the role of the emotion regulation on the association between empathy and secondary traumatic stress among the mental health workers who work with trauma survivors in Turkey. First of all, it was expected to find a positive relationship between secondary traumatic stress and difficulties in emotion regulation. It was also hypothesized that higher burnout was related to higher difficulties in emotion regulation. Moreover, it was expected to see a negative relationship between compassion satisfaction and difficulties in emotion regulation. Second of all, it was proposed that perspective taking, fantasy, empathic concern, and personal distress as the sub-dimensions of empathy predicted secondary traumatic stress of mental health workers. Finally, it was proposed that difficulties in emotion regulation moderated the relationship between empathy and secondary traumatic stress. In this chapter, the findings related to preliminary analyses, correlational, hierarchical regression, and moderation analyses will be presented and discussed in terms of their consequences and in relation to relevant literature. Later, the strengths, limitations, and clinical implications of this study will be presented. Finally, future research possibilities will be suggested.

4.1. The Findings Related to Preliminary Analysis

In general, as we examine the means, standard deviations, minimum and maximum scores of this sample, it seems that the level of secondary traumatic stress is not very high. The mean of STS is rather closer to the minimum scores of the measure. Additionally, this sample did not represent a high level of burnout. The mean of burnout is closer to the minimum levels of burnout. We can conclude from that secondary traumatic stress and burnout as the negative components

which consist compassion fatigue is low in this study's sample. On the other hand, the level of compassion satisfaction observed to be high in this sample. This means that the sense of fulfilment or satisfaction of therapists derived from working with traumatized is high.

A robust body of research showed that the mental health workers reported moderate to high levels of secondary traumatic stress and burnout relative to the general population (Richardson et. al., 2016; MacRitchie & Leibowitz, 2010; Marmaras, 2001; Altekin, 2014; Sodeke-Gregson, Holttum & Billings, 2013). One explanation for the low levels of STS and burnout in our sample can be related to the characteristics of the sample. In the beginning of the study, it was aimed to reach a group of trauma workers who worked with severely traumatized clients in refugee centers located in several regions of Turkey. However, the sample of this study consists of mostly psychologists and clinical psychologists who work in private clinics in Istanbul. Also, 62% of the participants of this study reported that they have access to professional supervision which can be considered as a proactive factor for STS. Being able to have supervision support may have a reducing effect on the levels of secondary traumatic stress and burnout.

One of the theoretical stipulations of Ludick and Figley's (2016) theoretical approach is related to the association between secondary traumatic stress and compassion satisfaction. They stated that when the worker experiences incidents of compassion satisfaction that increases sense of worth and purpose, STS is lowered. This statement was supported by various research findings. Conrad and Kellar-Guenther (2006) indicated that a sense of fulfilment from helping others undoubtedly alleviated STS in child protection workers. Ludick (2013) reported that workers who presented higher compassion satisfaction as a protective factor exhibited fewer negative symptoms. Similarly, compassion satisfaction found to be highly ameliorative in hospice palliative care workers, trauma workers, and front-line mental health care professionals (Burnett and

Wahl, 2015; Slocum-Gori, Hemsworth, Chan, Carson & Kazanjian, 2013; Ray, Wong, White & Heaslip, 2013). These concurrent findings highlights the protective power of compassion satisfaction. Low levels of STS and burnout in this study can be explained by the high levels of compassion satisfaction.

As we examined the levels of empathy in this study, we observed that the means of cognitive empathy components, perspective taking and fantasy seemed closer to the maximum score of the measures. It could be concluded that the cognitive empathy level of this sample is medium to high. Davis and his colleagues (1987), stated that there were two main differences between cognitive and emotional empathy. While emotional empathy (empathic concern and personal distress) was consistently related to negative feelings, cognitive empathy (perspective taking and fantasy) showed a strong relation to positive feelings (Davis, Hull, Young & Warren, 1987). The effect of having high levels of perspective taking and fantasy may also contribute as a protective factor for mental health workers against secondary traumatization (Davis et. al., 1987).

Differences in the measures in this study based on gender, supervision, traumatic exposure, and traumatic background of the sample were investigated. Among all the other variables, only secondary traumatic stress and personal distress dimension of empathy showed difference based on gender. Female participants presented higher level of secondary traumatisation and personal distress. Gender is an issue mostly ignored in the studies of STS even though it is one of the most common information gathered. Baum (2015) systematically reviewed very limited amounts of published studies in order to see a clear picture of the issue of gender differences in STS. It was found that there was a great tendency to have higher STS among female clinicians who treat traumatized clients (Baum, 2015). Apparently, this finding does not mean that male clinicians are not affected by their traumatized patients. At this point, we can turn our focus into PTSD literature in terms of gender differences in order to develop and

understanding why female are more prone to develop STS. Findings in general stress literature showed that gender differences in primary appraisal existed, with females more likely to present threat and loss appraisals than males (Olff, Langeland, Draijer, & Gersons, 2007). In other words, women are more likely to evaluate events as stressful and to report higher loss of control and lack of coping strategies under stressful conditions (Olff et. al., 2007). Also, women seem to report more acute emotional responses than men including intense fear, helplessness, horror, intrusive thoughts, avoidance, panic, and anxiety (Brunet et al., 2001). Moreover, among women and men reporting peri-traumatic dissociation, women were over seven times more likely to develop PTSD (Olff et. al., 2007).

4.2. The Findings related to the Correlational Analysis

The first hypothesis focused on the relationship between secondary traumatic stress and difficulties in emotion regulation. It was hypothesized that secondary traumatic stress would be positively correlated to difficulties in emotion regulation. As it was hypothesized, a medium level of positive correlation was found between secondary traumatic stress and difficulties in emotion regulation.

Imagine a clinical psychologist who works with refugee Syrian families in a community center in a remote neighbourhood of Istanbul. The responsibilities of this psychotherapist as part of her job are very diverse: Getting know every single member of the Syrian families in that neighbourhood, discovering their economic, physical, educational and psychological needs, providing support for their communication with governmental institutions such as schools, hospitals and child protection agencies, designing and running group therapy sessions both for refugees and workers of the community centre and on top of all, giving individual psychotherapy help for those in need and report all of these activities regularly to

the organisation. Force your imagination further and think of this therapist in a group session with a group of Syrian woman. Suddenly one of them starts to scream and cry because her brother is killed in a bombing back in her country right at that moment. All the other members of the group coin the sorrow and mourn all together. The therapist transforms the group therapy session into a crisis intervention session with the help of other trauma workers in the refugee center all of a sudden. What would be the feelings and reactions of that psychologist in this scenario from the beginning until the end? Shocked, overwhelmed, sadness, rage, helplessness, confusion, numbness or wishing to empathize, understand and help? As a witness to this real story, I would say all of them.

Helping the traumatized requires a willingness to listen, understand, identify with the sufferings of others. This is the way to reach out the suffering people, create an attuned relationship with them and present them an effective therapeutical help. Psychotherapy, especially with traumatized people, is a transformation for the therapist emotionally and mentally. We, therapists, find ourself listening to the very detail of our client's trauma, we feel their pain, we carry their traumata, we dream about them and sometimes we remember our own traumatic memories resembling those we listen. As a result of encountering the traumata of others, trauma workers are particularly at risk of secondary traumatic stress. What distinguishes the trauma workers who are more vulnerable than the more resilient ones in terms of secondary traumatic stress?

Emotion regulation strategies can be effective tools for trauma workers for coping the negative psychological effects of indirect traumatisation. Gratz and Roemer (2004) proposed an assessment for emotion dysregulation in six domains: "nonacceptance of negative emotions, inability to engage in goal-directed behaviors when distressed, difficulties controlling impulsive behaviors when distressed, limited access to emotion regulation strategies perceived as effective,

lack of emotional awareness, and lack of emotional clarity" (Bjureberg et. al., 2016).

In the literature there is a limited number of studies that focuses on the direct relationship between secondary traumatic stress and difficulties in emotion regulation (Măirean, 2016). However, it is possible to find ones linking PTSD and difficulties in emotion regulation (Badour & Feldner, 2013). Since secondary traumatic stress shares the similar categories of symptoms such as reexperiencing, avoidance, hyperarousal and negative thoughts and beliefs, it would be reasonable to be inspired by the PTSD literature to understand the link between secondary traumatic stress and difficulties in emotion regulation. (American Psychiatric Association, 2013). Badour and Feldner's (2013) study provided us valuable support that two emotion regulation strategies named non-acceptance of negative emotions and avoidant regulation strategies were related to the PTSD related emotions like shame and guilt. Ehring and Quack (2010) were also found that PTSD symptom severity was significantly related to all variables assessing emotion regulation difficulties, particularly the variable "lack of clarity of emotions". Măirean's (2016) research also presented supporting findings for the first hypothesis of this study. Cognitive reappraisal as a positive emotion regulation strategy found to be negatively related to secondary traumatic stress (Măirean, 2016).

Another focus of the first hypothesis was the relationship between burnout and difficulties in emotion regulation. As it was expected in this study, a medium effect level positive correlation between burnout and difficulties in emotion regulation was observed.

Burnout is a continuous condition that is not just related to psychotherapists but also other professional settings such as emergency workers, rescue team members, nurses and social workers. Although there are limited studies examining the direct link between burnout and emotion regulation difficulties in the field of STS, existing ones from different fields present findings that support our study. In their study with teachers, Mearns and Cain (2010) indicated that negative mood regulation expectancies of teachers predicted their burnout level. Burnout could be provoked by the overload of work related responsibilities, the conflict between colleagues, a sense of losing control over the work demands, feelings of not being rewarded emotionally and financially, feelings of disconnected within the work environment and feelings of not being respected in professional settings (Salston & Figley, 2003). Consequences of burnout can be devastating. Burnout manifests itself as physical, emotional and behavioral responses. While physical responses include hypertension, exhaustion and headaches, emotional reactions include depression and anxiety (Salston & Figley, 2003). Burnout also has occupational consequences such as job dissatisfaction, long term and short term sickness absenteeism and even some severe cases disability pensions (Salvagioni et al., 2017). In this study, it was also found that burnout and secondary traumatic stress were highly correlated. In the literature, it was reported several times that burnout and STS contribute to compassion fatigue hand in hand. The current study result gives us the opportunity to emphasize the role of emotion regulation strategies in order to prevent burnout in mental health professionals.

The relationship between compassion satisfaction and difficulties in emotion regulation was also examined in this study. It was found that increased level of compassion satisfaction was related to decreased level of difficulties in emotion regulation. As we discussed earlier, compassion satisfaction was related to positive emotional states such as high sense of fulfilment, high job satisfaction, and feelings of worth (Ludick & Figley, 2016). On the other hand, experiencing difficulties in emotion regulation indicates failure to control negative feelings and to cope with the emotions under stressful relational settings. Although there are

few studies investigating the relationship between compassion satisfaction and difficulties in emotion regulation, the existing ones supported that there is a negative correlation between them. For instance, Măirean (2016) investigated the associations between emotion regulation strategies, secondary traumatic stress, and compassion satisfaction among healthcare providers. The results suggested that cognitive reappraisal as an emotional regulation strategy was positively related to compassion satisfaction (Măirean, 2016).

4.3. Findings Related to the Hierarchical Regression Analysis

The second aim of this study was to investigate whether the dimensions of empathy, perspective taking, fantasy, empathic concern, and personal distress predicted secondary traumatic stress of mental health workers. According to the results of this study, fantasy and personal distress variable of empathy significantly predicted the secondary traumatic stress level of mental health workers. On the other hand, perspective taking and empathic concern did not predict the secondary traumatic stress in this study.

In this study, empathy was considered as a multidimensional construct rather than a single personality trait or a set of skills. Empathy was defined in two categories: cognitive and emotional empathy (Davis, 1983). While perspective taking and fantasy refer to cognitive part of empathy, emphatic concern and personal distress represent emotional face of empathy. As a cognitive empathy process fantasy refers to the people's identification with the emotions and behaviours of characters from books or films. Personal distress on the other hand as an emotional empathy involves self-oriented distress and anxiety under stressful relational situations. Personal distress refers to a tendency to feel pain when the therapist exposed to the suffering of others. It can be concluded that both cognitive and emotional empathy dimensions contributed to the process of developing secondary traumatic stress in mental health workers in this study.

There are also studies in the literature that support our findings. For instance, the study of Marmara's (2001) showed that personal distress was strongly predictive for disruptions of cognitive schemas of trauma therapists as a symptom for vicarious traumatization. Another study also detected an association between STS and perspective taking, fantasy and personal distress levels of clinical and nonclinical workers in a public health clinic (Barrett, 2016). However, there are doubts whether personal distress measures other-oriented empathic tendencies or an aversive self-oriented attribute (Kim & Han, 2018). In their study, Kim and Han (2018) found that personal distress is highly positively correlated with selffocused ruminative coping, dysfunctional self-focus, neuroticism, depression, self-criticism, and negative self-concept, and that negatively related to extroversion, agreeableness, conscientiousness, and openness to experience. These findings suggests that personal distress indicates the negative side of emotional empathy and could block empathic interaction rather than enhancing it (Kim & Han, 2018). In the current study, personal distress was also found to be significantly positively correlated with STS and difficulties in emotion regulation. These connections, all together support the role of personal distress as a predictor for secondary traumatic stress.

In the current study, empathy was also examined as a possible predictor for burnout. Our model first tested age, gender, trauma exposure and personal traumatic background as predictors of burnout. Perspective taking as an empathy dimension was found to be significant predictor for burnout.

Zenasni, Boujut, Woerner & Sultan, (2012) proposed and discussed three hypotheses about the relationship between burnout and empathy. They approached burnout as an empathy killer, empathy as a creator of burnout, and empathy as a preventing factor for burnout. They have suggested that when burnout defined as depersonalisation, it decreased the level of empathy in a group of physicians. It was also suggested that when emotional empathy is high, burnout could be high

too. It was also stated that emotional engagement may create better therapeutic efficacy and higher sense of work satisfaction and self-accomplishment (Zenasni, Boujut, Woerner & Sultan, 2012). Finally, Wagaman et. al., (2015), emphasized that empathy may reduce or increase burnout depending on the empathy dimensions and that compassion satisfaction should be considered as a protective factor for burnout. In the light of these findings, we could claim that the relationship between empathy and burnout dependent upon other factors such as compassion satisfaction or the type of empathy. Thomas (2013) was found personal distress as a significant predictor of burnout. Research findings reveal that some people react to suffering of others with a prosocial concern and tend to help them, others have avoidant, aversive and self-focused response and aim to relief their own negative feelings rather than helping sufferers (Thomas, 3013). It was also found that personal distress and burnout were both highly related to a personality trait of neuroticism in Dutch anaesthesiologists (van der Wal, Bucx, Hendriks, Scheffer & Prins, 2016). Burnout was also found closely related to personal distress in Gleichgerrcht and Decety's (2013) study. These findings support the observations of the current study related to the effect of personal distress on burnout as a predictor.

In summary, the findings related to the predictions and correlations of this study introduces us an interesting picture. As we discussed earlier, STS and burnout were found related to difficulties in emotion regulation. Moreover, personal distress appeared to be significantly related to STS and burnout. Furthermore difficulties in emotion regulation was found positively correlated to personal distress. More interestingly, personal distress was found to be a predictor for both STS and burnout. Finally, perspective taking was also found to be significant predictor for compassion satisfaction and negatively correlated with personal distress. All these intercorrelations hint us that empathy may follow two paths. The first path may leads to adopt the perspective of others in order to help

them with compassion satisfaction and self fulfilment. Identifying with others psychological states is necessary to understand and evaluate the needs of others, and response them in caring manner. Also compassionate people may approach other's pain and needs with warmth and love and at the same time they may regulate their negative emotions (Klimecki & Singer, 2012). The second path may lead to personal distress which refers to self-related emotions, negative emotions such as stress, burnout, poor health, withdrawal from people, and less compassion satisfaction from their caring work (Klimecki & Singer, 2012). This sort of empathy is not helpful to understand, identify and help people who are in need of psychological care. Trauma worker with a high personal distress may experience overwhelming negative emotions as a result of listening trauma of others and may no longer observe the trauma victim. Personal distress may lead to blurred selfother distinction for trauma worker and he/she would most likely attempt to reduce these negative feelings and may escape from the difficult situation in order to regulate his/her emotions (Klimecki & Singer, 2012). The most important findings in terms of the predictions are that while fantasy and personal distress predict STS, only personal distress predicts burnout. These findings tell us that STS and burnout should be approached differently in terms of their assessment, understanding and prevention in order to protect trauma workers against the STS and burnout. Mental health workers can be trained about the difference between STS and burnout and interventions for both may differ in order to reduce the negative impacts resulting from working with traumatized people. Promoting perspective taking and compassion satisfaction, reducing personal distress level of trauma workers and gaining more adaptive emotion regulation skills instead of withdrawal may be preventive for secondary traumatic stress and burnout.

4.4. The Findings Related to the Moderation Analysis

The third aim of this thesis was to investigate the possible moderating effect of difficulties in emotion regulation on the relationship between empathy

and secondary traumatic stress. However, difficulties in emotion regulation was not found to be a moderator on the relationship between empathy and STS. The results indicated that there was a tendency towards moderating effect of difficulties in emotion regulation on the relationship between empathy and secondary traumatic stress, although the results did not reach the conventional levels of accepted significance.

In the literature of STS, although there are very few studies investigating the role of emotion regulation difficulties on the process of secondary traumatic stress. However, some recent findings supported that positive emotion regulation strategies such as cognitive appraisal reduces the risk of secondary traumatic stress (Măirean, 2016). Cognitive reappraisal was also found to have a significant moderating effect on the relationship between emotional empathy and prosocial tendencies in another study (Lockwood, Seara-Cardoso & Viding, 2014). This study may not reveal a piece of strong evidence for the moderating role of difficulties in emotion regulation, there are still promising clues for the possible associations

One possible explanation for this finding can be related to the sample size. As a result of power analysis in this study, moderation analysis required participants between 200 and 400. In this study, although it was reached more than 300 participants, the final sample size included 214 due to missing items. Having reached a bigger sample size would have an effect the results of the study in terms of moderation analysis. Another explanation can be related to the level of difficulties in emotion regulation and compassion satisfaction. This sample group reported lower means of difficulties in emotion regulation. This suggests that the mental health professionals in this study are able to employ effective, positive strategies when they are in stressful relational settings. Similarly, compassion satisfaction means of the sample group was found to be higher than STS and burnout means. In summary, low levels of difficulties in emotion regulation and

high levels of compassion satisfaction would be protective factors in the sample of this study.

4.5. The Strengths of the Study

Our approach can be distinguished by its systems theory perspective. Adopting the systems theory in general, Ecological Systems Theory and Secondary Traumatic Stress and Compassion Fatigue Resilience Model in specific allowed us to investigate the possible associations among STS, burnout, compassion satisfaction, empathy and difficulties in emotion regulation at a very comprehensive level. Systemic perspective provided us the liberty to investigate mental health professionals who work with traumatized clients as a part of their ecosystems. There is an increasing interest in the field of secondary traumatic stress and burnout in mental health workers in Turkey. The studies examined secondary traumatic stress in Turkish population mostly focused on its relationship with the variables such as severity of traumatic stress, personal traumatic background of the therapist, year of experience, perceived social support and other demographics (Yılmaz, 2006; Altekin, 2014; Zara and İçöz, 2015; Kahil, 2016). Our aim in this study was to provide in-depth analysis of a connection between empathy and secondary traumatic stress and the possible moderating effect of difficulties in emotion regulation. That seems to have been neglected in Turkish literature. Another original aspect of our study is that all the variables in our study are multidimensional reflecting the nature of the variables that are involved. Multidimensional nature of empathy, for instance, gave us the opportunity to have a better understanding of its role on secondary traumatic stress. Difficulties in emotion regulation is a relatively new concept that is studied based on its relation to STS, burnout, and compassion satisfaction. Including difficulties in emotion regulation in this study is also one of the unique contributions to the literature. These aspects of the problem make this study

significantly more challenging than previous studies that were investigating the correlates of STS.

4.6. Limitations and Future Research Suggestions

There are some limitations to this study. First, the current study can not claim that there is a cause and effect relationship between the variables of this study due to its cross-sectional design. This study analyzed correlation, prediction and moderation effect between variables. Another limitation is related to the sample utilized in this study. The convenience sampling was used in this study. The population of this study consisted mostly of female psychologists and clinical psychologists with an average age of 31 who live in Istanbul. Additionally, mental health workers in this study reported that they mainly work in private practice. At the beginning of this study, it was aimed to reach mental health workers who work mainly severely traumatized clients in two major refugee centers in Turkey. Due to the organizational obstacles in the process of permission, trauma workers who extensively in contact with trauma victims could not be approached. Furthermore, the sample of this reported year of work experience in the present work between 1 and 6 years. Less experienced and highly experienced trauma workers are not well represented in this study. Therefore the results of the present study can not be generalized to the whole population of mental health workers. Another limitation of this study is that the self-report nature of its design. Since there is a possibility that mental health professionals may have answer the measures as they have idealized themselves but not according to the objective situations, the results may not reflect the actual negative impacts of working with traumatized people. Finally, due to a technical mistake one item for the scales of fantasy, personal distress and perspective taking was not administered in the survey package. Although the reliabilities of these subscales were not differentiated from their original ones, this should be noted as another limitation of the current study.

This study aimed to investigate the possible associations between the variables of secondary traumatic stress, burnout, compassion satisfaction, empathy and emotion regulation. First of all, future studies can measure the same variables with a more representative sample. This study included mostly psychologists, clinical psychologist, and counselors. Future researches can be conducted with other professionals who are exposed to traumatic experiences of others including psychiatrists, nurses, rescue teams, emergency personnel, social workers, child welfare workers. For instance, although attorneys are not trauma workers like mental health professionals, they are highly exposed to different types of traumatic stories of their clients such as child abuse, domestic violence, graphic or bloody evidence, human trafficking, homelessness or sexual assault (Levin et. al., 2011). The source of the traumatic exposure could be social service, court, police reports, and client interviews. There are indications that attorneys practicing in the public defender showed symptoms of PTSD, secondary trauma, burnout and low level of compassion satisfaction. (Kessler et al., 1994). Studies focusing on different profession group in terms of STS, burnout, compassion satisfaction, empathy, and difficulties in emotion regulation may expand the understandings in this field.

Moreover, a higher number of participant can make a difference in terms of the findings related to the moderation effect of emotion regulation. It may also be possible to gain more information how experience changes STS in long term through longitudinal work. Also phenomenological research can be conducted in order to understand the experiences of mental health workers who work with trauma victims. In-depth interviews and direct observations may allow trauma workers to reflect their actual experiences more openly with in an phenomenological study. Finally, effectiveness studies can be conducted for alternative prevention workshops, treatment programs and intervention programs for enhancing emotion regulation strategies.

4.7. Clinical Implications

It is important to accept that secondary traumatic stress and burnout are avoidable work-related mental health conditions for trauma workers, psychotherapists or social workers. Beyond all sorts of precautions, it is crucial to create a reasonable organizational atmosphere if the work includes trauma exposure. Burnout an STS are occupational hazards and the organizations are responsible to protect their workers from the harmful consequences of working with traumatized clients in the first place. Creating a supportive workplace is one of the liabilities of an organization whether it is a battered woman shelter or a refugee center.

Prevention of STS and burnout is possible (Salston & Figley, 2003). Trauma education, voluntary crises intervention programs for the trauma workers, regular group and individual supervision support, enhancing individual self-care of trauma worker can be very helpful prevention activities. The risk of STS can be reduced by taking trauma-related educations. Gaining information about trauma and naming possible effects of working with traumatized is helpful to develop awareness for mental health workers. Being prepared for the stressful situations in advance may reduce the stress of workers. Steed & Downing (1998) highlighted the need to educate therapists about the potential impact of vicarious traumatisation and possible coping strategies in their phenomenological study. Supervision is also fundamental for prevention and healing process of both STS and burnout (Yassen, 1995). Trauma workers would benefit weekly group supervisions that allow them to share and process their emotional burden due to working with traumatized. Individual prevention and treatments such as relaxation, assertiveness training, keeping a balance in life, exercise, seeking professional support, asking for help from friends and family should be considered to be protective for STS (Yassen, 1995).

There are some interventions have been designed specifically to heal secondary traumatic stress, burnout and vicarious traumatizarion such as Accelerated Recovery Program (ARP) (Gentry, Baranowsky & Dunning, 2002). The ARP is a five-session protocol that offers trauma workers the opportunities to learn by experiential participation and brief treatment procedures for negative arousal reduction resulting from secondary traumatic stress and vicarious traumatisation (Bercier & Maynard, 2015). The ARP has features gathered from Narrative Therapy, EMDR, CBT, Time-limited Trauma Therapy, NLP, hypnotherapy, Thought Field Therapy and burnout interventions. In this program, professionals are challenged to develop five primary skills to cope with secondary traumatic stress. These are named "resiliency skills, self-management and self care, connection with others, skills acquisition, and internal and external conflict resolution" (Gentry, Baranowsky & Dunning, 2002).

Finally, it is important to choose a prevention or treatment approach which is most suitable for the trauma worker group. Above all, it is crucial to embrace a systemic perspective for assessing, preventing and treatment of secondary traumatic stress in mental health workers.

CHAPTER 5

CONCLUSION

This study explored the role of difficulties in emotion regulation on the association between empathy and secondary traumatic stress among the mental health workers who work with survivors of trauma in Turkey. First, the possible relationship between secondary traumatic stress and difficulties in emotion regulation, burnout and difficulties in emotion regulation and then compassion satisfaction and difficulties in emotion regulation were investigated. A significant medium, positive correlation between secondary traumatic stress and difficulties in emotion regulation and similarly, a medium positive correlation between burnout and difficulties in emotion regulation were found in this study. A significant medium negative correlation was found between compassion satisfaction and difficulties in emotion regulation. There are very limited studies in the literature that examine the associations between difficulties in emotion regulation and STS, burnout and compassion satisfaction. For that reason, this study presents a unique contribution to the literature. Second, it was proposed that the dimensions of empathy, perspective taking, fantasy, empathic concern, and personal distress would predict secondary traumatic stress of mental health workers. Fantasy as a cognitive empathy and personal distress as emotional empathy significantly predicted secondary traumatic stress. Perspective taking and empathic concern, on the other hand, did not predict secondary traumatic stress. While personal distress was found as a significant predictor for burnout, perspective taking predicted compassion satisfaction. Empathy was never studied as a multidimensional factor regarding its effect on STS, burnout and compassion satisfaction in Turkish sample. This is also another uniqueness of this study. Finally, the present study aimed to find a moderating effect of difficulties in emotion regulation on the relationship between empathy and secondary traumatic stress. Difficulties in emotion regulation was not found to be significant

moderator on the relation between empathy and secondary traumatic stress. The results of this study provided a contribution by investigating the associations between secondary traumatic stress, burnout, compassion satisfaction, empathy, and difficulties in emotion regulation from the systems theory perspective. Reducing personal distress level of trauma workers and promoting perspective taking, compassion satisfaction and more adaptive emotion regulation skills instead of withdrawal may be preventive for secondary traumatic stress and burnout.

References

- Abendroth, M., & Figley, C. (2013). Vicarious trauma and the therapeutic relationship. *Trauma and the traumatic relationship*, 111-125.
- Adams, R. E., Boscarino, J. A., & Figley, C. R. (2006). Compassion fatigue and psychological distress among social workers: A validation study. *American Journal of orthopsychiatry*, 76(1), 103-108. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2699394/
- Alarcon, G. M. (2011). A meta-analysis of burnout with job demands, resources, and attitudes. *Journal of Vocational Behavior*, 79(2), 549-562. http://isiarticles.com/bundles/Article/pre/pdf/58830.pdf
- Altekin, S. (2014). Vicarious traumatization: an investigation of the effects of trauma work on mental health professionals in Turkey. *Yayınlanmamış Doktora tezi, İstanbul, Boğaziçi Üniversitesi.VandenBos, G. R. (2007).*
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5®)*. American Psychiatric Pub.
- Badour C.L., & Feldner M.T. (2013). Trauma-related reactivity and regulation of emotion: Associations with posttraumatic stress symptoms. *Journal of Behavioral Therapy Experimental Psychiatry*, 44 (1), 69–76. doi: 10.1016/j.jbtep.2012.07.007.
- Baird, K., & Kracen, A. C. (2006). Vicarious traumatization and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly*, 19(2), 181-188.
- Barrett, M. S., & Barber, J. P. (2005). A developmental approach to the supervision of therapists in training. *Journal of Contemporary*

- *Psychotherapy*, *35*(2), 169-183.https://link.springer.com/article/10.1007/s10879-005-2698-8
- Barrett, M. G. (2016). The Relationship Between Empathy and Humor Styles and Secondary Traumatic Stress in the Public Mental Health Workplace (Doctoral dissertation, Antioch University).
- Batson, C. D. (2009). *These things called empathy*. InJ. Decety & W. Ickes (Eds.), The Social Neuroscience of Empathy. Cambridge, MA: MIT Press.
- Batson, C. D., Ahmad, N., Lishner, D. A., & Tsang, J. (2016). Empathy and altruism. Oxford handbook of hypo-egoic phenomena: Theory and research on the quiet ego, 161-174.http://ldysinger.stjohnsem.edu/@books1/Snyder_Hndbook_of_Positive_Psychology.pdf#page=504
- Beck, C. T. (2011). Secondary traumatic stress in nurses: a systematic review. *Archives of psychiatric nursing*, 25(1), 1-10.https://www.sciencedirect.com/science/article/pii/S0883941710000580
- Bell, H., Kulkarni, S., & Dalton, L. (2003). Organizational prevention of vicarious trauma. *Families in society, 84*(4), 463-470. https://www.ce-credit.com/articles/100716/
- Ben-Porat, A., & Itzhaky, H. (2009). Implications of treating family violence for the therapist: Secondary traumatization, vicarious traumatization, and growth. *Journal of Family Violence*, 24(7), 507-515.https://psycnet.apa.org/record/2009-10590-008
- Bercier, M. L., & Maynard, B. R. (2015). Interventions for secondary traumatic stress with mental health workers: A systematic review. *Research on Social Work Practice*, 25(1), 81-89.

- Berscheit, Kelly A.. (2013). A Systems View of Early Interventions for Vicarious

 Trauma: Managing Secondary Trauma Stress. Retrieved from Sophia, the

 St. Catherine University repository website: https://sophia.stkate.edu/msw_papers/151
- Bjureberg, J., Ljótsson, B., Tull, M. T., Hedman, E., Sahlin, H., Lundh, L. G., ... & Gratz, K. L. (2016). Development and validation of a brief version of the difficulties in emotion regulation scale: the DERS-16. *Journal of psychopathology and behavioral assessment, 38*(2), 284-296.https://link.springer.com/article/10.1007/s10862-015-9514-x
- Borntrager, C., Caringi, J. C., van den Pol, R., Crosby, L., O'Connell, K., Trautman, A., & McDonald, M. (2012). Secondary traumatic stress in school personnel. *Advances in School Mental Health Promotion*, *5*(1), 38-50.
- Boscarino, J. A., Figley, C. R., & Adams, R. E. (2004). Compassion fatigue following the September 11 terrorist attacks: A study of secondary trauma among New York City social workers. *International journal of emergency mental health*, 6(2), 57.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2713725/#R6
- Bonn-Miller M.O., Vujanovic A.A., Boden M.T., Gross J.J. Posttraumatic stress, difficulties in emotion regulation, and coping-oriented marijuana use. *Cognitive Behaviour Therapy.* 2011;40:34–44.
- Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. *Social work*, *52*(1), 63-70.
- Bride, B. E., Smith Hatcher, S., & Humble, M. N. (2009). Trauma training, trauma practices, and secondary traumatic stress among substance abuse

- counselors. *Traumatology, 15*(2), 96-105.<u>https://journals.sagepub.com/doi/abs/10.1177/1534765609336362</u>
- Brunet, A., Weiss, D. S., Metzler, T. J., Best, S. R., Neylan, T. C., Rogers, C., et al. (2001). The Peritraumatic Distress Inventory: A proposedmeasure of PTSD Criterion A2. *American Journal of Psychiatry*, *158*,1480–1485.
- Burnett Jr, H. J., & Wahl, K. (2015). The compassion fatigue and resilience connection: A survey of resilience, compassion fatigue, burnout, and compassion satisfaction among trauma responders. *International Journal of Emergency Mental Health and Human Resilience*, 17, 318–326. http://dx.doi.org/10.4172/1522-4821.1000165
- Cieslak, R., Anderson, V., Bock, J., Moore, B. A., Peterson, A. L., & Benight, C. C. (2013). Secondary traumatic stress among mental health providers working with the military: prevalence and its work-and exposure-related correlates. *The Journal of nervous and mental disease*, 201(11), 917. https://www.ncbi.nlm.nih.gov/pmc/articlesPMC4892748/
- Cloitre M., Miranda R., Stovall-McClough K.C., Han H. Beyond PTSD: emotion regulation and interpersonal problems as predictors of functional impairment in survivors of childhood abuse. *Behavior Therapy*. 2005;36:119–124.
- Courtois, C. A., & Ford, J. D. (Eds.). (2009). *Treating complex traumatic stress disorders: An evidence-based guide*. Guilford Press.
- Conrad, D., & Kellar-Guenther, Y. (2006). Compassion fatigue, burnout, and compassion satisfaction among Colorado child protection workers. *Child abuse & neglect*, 30(10), 1071-1080. https://www.ncbi.nlm.nih.gov/pubmed/17014908

- Creamer, T. L., & Liddle, B. J. (2005). Secondary traumatic stress among disaster mental health workers responding to the September 11 attacks. *Journal of Traumatic Stress: Official Publication of the International Society for Traumatic Stress Studies, 18*(1), 89-96.https://www.ncbi.nlm.nih.gov/pubmed/16281200
- Crumpei, I., & Dafinoiu, I. (2012). The relation of clinical empathy to secondary traumatic stress. *Procedia-Social and Behavioral Sciences*, *33*, 438-442. https://www.sciencedirect.com/science/article/pii/S187704281200167X
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44(1), 113-126.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, 10, 85.
- Davis, M. H., Hull, J. G., Young, R. D., & Warren, G. G. (1987). Emotional reactions to dramatic film stimuli: the influence of cognitive and emotional empathy. *Journal of personality and social psychology, 52*(1), 126.https://www.researchgate.net/profile/Mark_Davis18/publication/19342004
- Decety, J., Bartal, I. B. A., Uzefovsky, F., & Knafo-Noam, A. (2016). Empathy as a driver of prosocial behaviour: highly conserved neurobehavioural mechanisms across species. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 371(1686), 20150077.https://journals.sagepub.com/doi/abs/10.1177/1534582304267187
- Decety, J., & Jackson, P. L. (2004). The functional architecture of human empathy. *Behavioral and cognitive neuroscience reviews*, *3*(2), 71-100.

- Devilly, G. J., Wright, R., & Varker, T. (2009). Vicarious trauma, secondary traumatic stress or simply burnout? Effect of trauma therapy on mental health professionals. *Australian and New Zealand Journal of Psychiatry*, 43(4), 373-385.
- Dekel, R., Siegel, A., Fridkin, S., & Svetlitzky, V. (2018). The double-edged sword: The role of empathy in military veterans' partners distress. *Psychological Trauma: Theory, Research, Practice, and Policy, 10*(2), 216-224.
- Ehring, T., & Quack, D. (2010). Emotion regulation difficulties in trauma survivors: The role of trauma type and PTSD symptom severity. *Behavior therapy, 41*(4), 587-598.https://www.sciencedirect.com/science/article/abs/pii/S000578941000081X
- Eisenberg, N., & Strayer, J. A. (1987). *Empathy and Its Development*. Cambridge, UK: Cambridge UniversityPress
- Eisenberg N., Fabes R., Guthrie I., Reiser M. (2000). Dispositional emotionality and regulation: their role in predicting quality of social functioning. *J. Pers. Soc. Psychol.* 78 136–157. 10.1037/0022-3514.78.1.136
- Engeler, A., Yargıç, L. İ. (2007) Kişiler arası tepkisellik indeksi: Empatinin çok boyutlu ölçümü. *New Symposium Journal. (www.yenisymposium.net)*, 45(3), 119-127.
- Everall, R. D., & Paulson, B. L. (2004). Burnout and Secondary Traumatic Stress: Impact on Ethical Behaviour. *Canadian Journal of Counselling*, *38*(1), 25-35.https://psycnet.apa.org/record/2004-11485-004

- Feshbach, N. D. (1975). Empathy in children: Some theoretical and empirical considerations. The *Counseling Psychologist*, 5(2), 25-30.https://journals.sagepub.com/doi/abs/10.1177/001100007500500207
- Figley, C. (1982, February). *Traumatization and comfort: Close relation- ships may be hazardous to your health.* Paper presented at Families and Close Relationships: Individuals in Social Interaction, Texas Tech University, Lubbock, TX.
- Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder:

 An overview. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatised* (pp. 1–20). New York, NY: Brunner/Mazel Publishers.
- 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). Springfield, IL, US: Charles C Thomas Publisher.https://psycnet.apa.org/record/1999-02836-003
- Figley, C. R. (2002a). Compassion fatigue: Psychotherapists' chronic lack of self-care. *Journal of Clinical Psychology*, *58*, 1433–1441. http://dx .doi.org/10.1002/jclp.10090
- Figley, C. R. (2003). *Compassion fatigue: An introduction*. Traumatology Institute at Tulane University (New Orleans).https://sites.google.com/site/charlesfigley/Home/traumatologyinstitute/research/cf
- Figley, C. R., & Figley, K. R. (2009). Stemming the tide of trauma systemically: The role of family therapy. *Australian and New Zealand Journal of Family Therapy*, 30(3), 173-183.

- Finlay-Jones, A. L., Rees, C. S., & Kane, R. T. (2015). Self-compassion, emotion regulation and stress among Australian psychologists: Testing an emotion regulation model of self-compassion using structural equation modeling. *PloS one*, *10*(7), e0133481.
- Fonagy, P. (2018). Affect regulation, mentalization and the development of the self. Routledge.
- Freudenberger, H. J. (1974). Staff burn-out. *Journal of social issues, 30*(1), 159-165.https://spssi.onlinelibrary.wiley.com/doi/abs/10.1111/j. 1540-4560.1974.tb00706.x
- Galek, K., Flannelly, K. J., Greene, P. B., & Kudler, T. (2011). Burnout, secondary traumatic stress, and social support. *Pastoral Psychology*, 60(5), 633-649.
- Gentry, J. E., Baranowsky, A. B., & Dunning, K. (2002). The Accelerated Recovery Program (ARP) for compassion fatigue. In C. R. Figley (Ed.), Psychosocial stress series, no. 24. Treating compassion fatigue (pp. 123-137). New York, NY, US: Brunner-Routledge.
- George, E., & Engel, L. (1980). The clinical application of the biopsychosocial model. The American journal of psychiatry, 5, 535-544.
- Gleichgerrcht, E., & Decety, J. (2013). Empathy in clinical practice: how individual dispositions, gender, and experience moderate empathic concern, burnout, and emotional distress in physicians. *PloS one*, 8(4), e61526. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0061526
- Greinacher, A., Derezza-Greeven, C., Herzog, W., & Nikendei, C. (2019). Secondary traumatization in first responders: a systematic review.

- European journal of psychotraumatology, 10(1), 1562840. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6346705/
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of psychopathology and behavioral assessment*, 26(1), 41-54.https://link.springer.com/article/10.1023/b:joba.0000007455.08539.94
- Gross, J. J. (2001). Emotion regulation in adulthood: Timing is everything.

 Current directions in psychological science, 10(6), 214-219.https://www.blackwellpublishing.com/content/BPL_Images/Journal_Samples/cdir0963-7214~10~6/152.PDF
- Hammond, D. (2010). The science of synthesis: Exploring the social implications of general systems theory. University Press of Colorado.
- Hansen, E. M., Eklund, J. H., Hallén, A., Bjurhager, C. S., Norrström, E., Viman, A., & Stocks, E. L. (2018). Does Feeling Empathy Lead to Compassion Fatigue or Compassion Satisfaction? The Role of Time Perspective. *The Journal of psychology*, 152(8), 630-645.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* Guilford Publications.
- Held, P., Owens, G. P., Schumm, J. A., Chard, K. M., & Hansel, J. E. (2011). Disengagement coping as a mediator between trauma-related guilt and PTSD severity. *Journal of Traumatic Stress*, 24, 708–715. http://dx.doi.org/10.1002/jts.20689
- Hensel, J. M., Ruiz, C., Finney, C., & Dewa, C. S. (2015). Meta-analysis of risk factors for secondary traumatic stress in therapeutic work with trauma

- victims. *Journal of Traumatic Stress*, 28(2), 83-91. https://onlinelibrary.wiley.com/doi/full/10.1002/jts.21998
- Hoffman, M. L. (2000). Empathy and Moral Development.Cambridge, UK: Cambridge University Press.
- Horesh, D., & Brown, A. D. (2018). Post-traumatic Stress in the Family. *Frontiers*in psychology, 9, 40. https://www.ncbi.nlm.nih.gov/pmc/articles/
 PMC5808160/
- IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.
- Irving, P., & Dickson, D. (2004). Empathy: Towards a conceptual framework for health professionals. *International Journal of Health Care Quality* Assurance, 17(4), 212–220.
- Izard, C. E., & Ackerman, B. P. (2000). Motivational, organizational, and regulatory functions of discrete emotions. Handbook of emotions, 2, 253-264.
- Jenkins, S. R., & Baird, S. (2002). Secondary traumatic stress and vicarious trauma: A validational study. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies,* 15(5), 423-432. https://onlinelibrary.wiley.com/doi/abs/10.1023/A:1020193526843
- Kahil, A. (2016). Travmatik yaşantıları olan bireylere yardım davranışında bulunan profesyonel ve gönüllülerin ikincil travmatik stres düzeylerinin incelenmesi (Yüksek lisans tezi). *Ankara, Ufuk Üniversitesi*.

- Kanno, H., Kim, Y. M., & Constance-Huggins, M. (2016). Risk and Protective Factors of Secondary Traumatic Stress in Social Workers Responding to the Great East Japan Earthquake. *Social Development Issues*, *38*(3), 64-78. https://www.researchgate.net/publication/268114454
- Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Benjet, C., Bromet, E. J., Cardoso, G., ... & Florescu, S. (2017). Trauma and PTSD in the WHO world mental health surveys. European journal of psychotraumatology, 8(sup5), 1 3 5 3 3 8 3 . https://www.tandfonline.com/doi/full/10.1080/20008198.2017.1353383
- Kilpatrick, J. (2016). The Effects of Empathy on Vicarious Trauma in the Visual Language Interpreter. https://ir.lib.uwo.ca/cgi/viewcontent.cgi? article=1037&context=psychK_uht
- Kim, H., & Han, S. (2018). Does personal distress enhance empathic interaction or block it?. *Personality and Individual Differences*, 124, 77-83. https://www.sciencedirect.com/science/article/pii/S0191886917307122
- Klimecki, O., & Singer, T. (2012). Empathic distress fatigue rather than compassion fatigue? Integrating findings from empathy research in psychology and social neuroscience. *Pathological altruism*, 368-383.
- Köverová, M., & Ráczová, B. (2017). Selected Psychological Aspects of Helping Professionals. *Individual & Society/Clovek a Spolocnost*, 20(1).
- Kulkarni, S., Bell, C. H., Hartman, J. L., & Herman-Smith, R. L. (2013). Exploring individual and organizational factors contributing to compassion satisfaction, secondary traumatic stress and burnout in domestic violence service providers. *Journal of the Society for Social Work and Research*, 4, 114–130. http://dx.doi.org/10.5243/jsswr.2013.8

- Lambert, M. J., & Barley, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, research, practice, training, 38*(4), 357.https://www.researchgate.net/ publication/232477357
- Lamothe, M., Boujut, E., Zenasni, F., & Sultan, S. (2014). To be or not to be empathic: The combined role of empathic concern and perspective taking in understanding burnout in general practice. *BMC Family Prac-tice*, *15*, 15. http://dx.doi.org/10.1186/1471-2296-15-15
- Larsen, D., & Stamm, B. H. (2008). Professional quality of life and trauma therapists. https://proqol.org/Compassion-Satisfaction.html
- Levin, A. P., & Greisberg, S. (2003). *Vicarious trauma in attorneys*. Paper presented at the 2nd Annual Pace Women's Justice Center Domestic Violence Think Tank, Pace Law School, White Plains, NY
- .Levin, A. P., Albert, L., Besser, A., Smith, D., Zelenski, A., Rosenkranz, S., & Neria, Y. (2011). Secondary traumatic stress in attorneys and their administrative support staff working with trauma-exposed clients. The *Journal of nervous and mental disease*, 199(12), 946-955.
- Lockwood, P. L., Seara-Cardoso, A., & Viding, E. (2014). Emotion regulation moderates the association between empathy and prosocial behavior. *PloS one*, *9*(5), e96555.
- Ludick, M. (2013). Analyses of experiences of vicarious traumatisation in shortterm insurance claims workers (Unpublished doctoral dissertation). University of the Witwatersrand, Johannesburg, South Africa.
- Ludick, M., & Figley, C. R. (2017). Toward a mechanism for secondary trauma induction and reduction: Reimagining a theory of secondary traumatic

- stress. Traumatology, 23(1), 112. Advance online publication. http://dx.doi.org/10.1037/trm0000096
- MacRitchie, V. J. (2006). Secondary traumatic stress, level of exposure, empathy and social support in trauma workers (Unpublished master's thesis). University of the Witwatersrand, Johannesburg, South Africa.
- MacRitchie, V., & Leibowitz, S. (2010). Secondary traumatic stress, level of exposure, empathy and social support in trauma workers. *South African Journal of Psychology, 40*(2), 149-158.
- Măirean, C. (2016). Emotion regulation strategies, secondary traumatic stress, and compassion satisfaction in healthcare providers. *The Journal of psychology, 150*(8), 961-975.https://www.tandfonline.com/doi/abs/10.1080/00223980.2016.1225659
- Mariano, M., Pino, M. C., Peretti, S., Valenti, M., & Mazza, M. (2017). Understanding criminal behavior: Empathic impairment in criminal offenders. *Social neuroscience*, 12(4), 379-385.
- Marmaras, E. (2001). The relationship between empathy and attachment styles and vicarious traumatization in female trauma therapists (Doctoral dissertation, ProQuest Information & Learning).
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World psychiatry*, 15(2), 103-111.
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current directions in psychological science*, 12(5), 189-192.https://
 journals.sagepub.com/doi/abs/10.1111/1467-8721.01258

- McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of traumatic stress*, 3(1), 131-149.
- Pearlman, L. A., & Saakvitne, K. W. (1995). Treating therapists with vicarious traumatization and secondary traumatic stress disorders. *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized, 23,* 150-177.
- McLean, C. P., & Foa, E. B. (2017). Emotions and emotion regulation in posttraumatic stress disorder. *Current opinion in psychology, 14*, 72-77.
- Mearns, J., & Cain, J. E. (2003). Relationships between teachers' occupational stress and their burnout and distress: Roles of coping and negative mood regulation expectancies. Anxiety, Stress & Coping, 16(1), 71-82. https://www.tandfonline.com/doi/abs/10.1080/1061580021000057040
- Mennin, D. S., Heimberg, R. G., Turk, C. L., & Fresco, D. M. (2005). Preliminary evidence for an emotion dysregulation model of generalized anxiety disorder. *Behaviour research and therapy*, *43*(10), 1281-1310.
- Michalopoulos, L. M., & Aparicio, E. (2012). Vicarious trauma in social workers: The role of trauma history, social support and years of experience. *Journal of Aggression, Maltreatment & Trauma, 21,* 646–664. http://dx.doi.org/10.1080/10926771.2012.689422
- Nelson-McEvers, J. A. (1995). *Measurement of self-care agency in a noninstitutionalized elderly population*. (Unpublished thesis dissertation). Grand Valley State University,
- Neumann, D. A., & Gamble, S. J. (1995). Issues in the professional development of psychotherapists: Countertransference and vicarious traumatization in

- the new trauma therapist. *Psychotherapy: Theory, research, practice, training, 32*(2), 341.
- Newell, J. M., & MacNeil, G. A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue. *Best Practices in Mental Health*, 6(2), 57-68.
- Nichols, M. P. (2013). *Family Therapy: Concepts and Methods 10th*. London: Pearson New International Edition.
- Olff, M., Langeland, W., Draijer, N., & Gersons, B. P. (2007). Gender differences in posttraumatic stress disorder. *Psychological bulletin*, *133*(2), 183.
- Pack, M. (2016). Self-help for Trauma Therapists: A Practitioner's Guide. Routledge.
- Pack, M. (2013). Vicarious traumatisation and resilience: An ecological systems approach to sexual abuse counsellors' trauma and stress. Sexual abuse in australia and New Zealand, 5(2), 69.
- Paquette, Dede & Ryan, John. (2011). Bronfenbrenner's Ecological Systems
 Theory. Retrieved from http://www.floridahealth.gov/AlternateSites/CMS-Kids/providers/early_steps/training/documents/bronfenbrenners_ecological.pdf
- Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. Professional Psychology: Research and Practice, 26(6), 558.https://psycnet.apa.org/fulltext/1996-15656-001.html
- Perlman, L. & Saakvitne, K. (1995). *Trauma and the therapist*. New York, NY: WW Norton.Pearson, G. (2012).

- Racker, H. (1957). The meanings and uses of countertransference. *The Psychoanalytic Quarterly*, 26(3), 303-357.
- Ray, S. L., Wong, C. I., White, D., & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology*, 19, 255–267. http://dx.doi.org/10.1177/1534765612471144
- Republic of Turkey Ministry of Interior Directorate General of Migration Management (2019). *Yıllara Göre Geçici Koruma Kapsamındaki Suriyeliler*.[Brochure]. Retrieved from http://www.goc.gov.tr/icerik3/gecici-koruma 363 378 4713
- Reyes, N. M. (2013). Emotion Regulation and Emotionality: An examination of correlates of social skills in young children with High Functioning Autism Spectrum Disorders and Typical Development (Doctoral dissertation, Virginia Tech).
- Richardson, D. A., Jaber, S., Chan, S., Jesse, M. T., Kaur, H., & Sangha, R. (2016). Self-compassion and empathy: impact on burnout and secondary traumatic stress in medical training. Open J Epidemiol, 6, 161-166.
- Robins, P. M., Meltzer, L., & Zelikovsky, N. (2009). The experience of secondary traumatic stress upon care providers working within a children's hospital. Journal of Pediatric Nursing, 24(4), 270-279.
- Rogers, C. R. (1962). The interpersonal relationship. *Harvard educational review,* 32(4), 416-429.https://www.centerfortheperson.org/pdf/the-interpersonal-relationship.pdf
- Rolston, A., & Lloyd-Richardson, E. (2017). What is emotion regulation and how do we do it?. *Cornell Research Program on Self-Injury and Recovery.*

- [on-line].[cit. 2017-22-09] Available at: http://www. selfinjury. bctr. cornell. edu/perch/resources/what-is-emotion-regulationsinfo-brief. pdf. Google Scholar.
- Russell, M., & Brickell, M. (2015). The "double-edge sword" of human empathy:

 A unifying neurobehavioral theory of compassion stress injury. *Social Sciences*, 4(4), 1087-1117.
- Saakvitne, K., & Pearlman, L. (1996). *Transforming the pain: A workbook on vicarious traumatization*. New York: Norton.
- Sabin-Farrell, R., & Turpin, G. (2003). Vicarious traumatization: implications for the mental health of health workers?. Clinical psychology review, 23(3), 449-480.
- Salston, M., & Figley, C. R. (2003). Secondary traumatic stress effects of working with survivors of criminal victimization. *Journal of traumatic stress*, 16(2), 167-174.
- Salvagioni, D. A. J., Melanda, F. N., Mesas, A. E., González, A. D., Gabani, F. L., & de Andrade, S. M. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. PloS one, 12(10), e0185781.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5627926/
- Sexton, L. (1999). VT of counsellors and effects on their workplaces. *British Journal of Guidance and Counselling*, 27, 393-403.
- Simpson, L. R., & Starkey, D. S. (2006). Secondary traumatic stress, compassion fatigue, and counselor spirituality: Implications for counselors working with trauma. https://www.counseling.org/Resources/Library/Selected%20Topics/Crisis/Simpson.htm

- Singer, T., & Lamm, C. (2009). The social neuroscience of empathy. Annals of the New York Academy of Sciences, 1156(1), 81-96. https://www.researchgate.net/publication/24250208
- Slattery, S. M., & Goodman, L. A. (2009). Secondary traumatic stress among domestic violence advocates: Workplace risk and protective factors. *Violence against women, 15*(11), 1358-1379.
- Slocum-Gori, S., Hemsworth, D., Chan, W. W., Carson, A., & Kazanjian, A. (2013). Understanding Compassion Satisfaction, Compassion Fatigue and Burnout: A survey of the hospice palliative care workforce. *Palliative Medicine*, 27, 172–178.
- Sodeke-Gregson, E. A., Holttum, S., & Billings, J. (2013). Compassion satisfaction, burnout, and secondary traumatic stress in UK therapists who work with adult trauma clients. *European journal of psychotraumatology, 4*(1), 21869. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3877781/
- Sonnentag, S., & Bayer, U. V. (2005). Switching off mentally: predictors and consequences of psychological detachment from work during off-job time. Journal of occupational health psychology, 10(4), 393.
- Sprang, G., Craig, C., & Clark, J. (2011). Secondary traumatic stress and burnout in child welfare workers: a comparative analysis of occupational distress across professional groups. *Child welfare*, 90(6).
- Stamm, B.H. (2010). The Concise ProQOL Manual, 2nd Ed. Pocatello, ID: ProQOL.org.
- Steed, L. G., & Downing, R. (1998). A phenomenological study of vicarious traumatisation amongst psychologists and professional counsellors

- working in the field of sexual abuse/assault. *Australasian Journal of Disaster and Trauma Studies*, 2(2).https://psycnet.apa.org/record/2001-03472-003
- Thomas, J. (2013). Association of personal distress with burnout, compassion fatigue, and compassion satisfaction among clinical social workers. *Journal of Social Service Research*, 39(3), 365-379.
- Thomas, J. T., & Otis, M. D. (2010). Intrapsychic correlates of professional quality of life: Mindfulness, empathy, and emotional separation. *Journal of the Society for Social Work and Research*, *1*(2), 83-98.https://www.journals.uchicago.edu/doi/pdfplus/10.5243/jsswr.2010.7
- Thompson, R. A. (1991). Emotional regulation and emotional development. *Educational Psychology Review, 3(4),* 269–307.
- Thompson, R. A. (1994). Emotion regulation: A theme in search of definition.

 Monographs of the society for research in child development, 59(2-3),
 25-52.
- Thompson, R. A., & Calkins, S. D. (1996). The double-edged sword: Emotional regulation for children at risk. *Development and Psychopathology*, 8, 163–182.
- Tull, M. T., Barrett, H. M., McMillan, E. S., & Roemer, L. (2007). A preliminary investigation of the relationship between emotion regulation difficulties and posttraumatic stress symptoms. *Behavior Therapy*, 38(3), 303-313. https://www.sciencedirect.com/science/article/abs/pii/S0005789407000214
- Turliuc, Maria & Bujor, Liliana. (2013). Emotional Regulation, Expansion of the Concept and its Explanatory Models. *Applied Social Sciences*.

- Psychology, Physical Education and Social Medicine (10): 1-4438-4524-8, (13): 978-4438-4524-3. 1. 99-106.
- Van der Wal, R. A., Bucx, M. J., Hendriks, J. C., Scheffer, G. J., & Prins, J. B. (2016). Psychological distress, burnout and personality traits in Dutch anaesthesiologists: a survey. *European Journal of Anaesthesiology (EJA)*, 33(3), 179-186.
- VandenBos, G. R. (2007). *APA dictionary of psychology*. American Psychological Association. https://dictionary.apa.org/trauma
- Wagaman, M. A., Geiger, J. M., Shockley, C., & Segal, E. A. (2015). The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers. *Social work*, 60(3), 201-209.
- Wheeler, S. (2010). An exploration of secondary trauma effects in members of the Victoria Police Force. *Retrieved August*, *16*, 2011.
- Wilson, J. P., & Thomas, R. B. (2004). Empathy in the treatment of trauma and PTSD. Routledge.https://www.taylorfrancis.com/books/9780203020999
- Winek, J. L. (2009). Systemic family therapy: From theory to practice. Sage.
- Yassen, J. (1995). Preventing secondary traumatic stress disorder. In C. R. Figley (Ed.), Brunner/Mazel psychological stress series, No. 23. Compassion fatigue: *Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 178-208). Philadelphia, PA, US: Brunner/Mazel.https://psycnet.apa.org/record/1995-97891-009
- Yeşil, A., Ergün, Ü., Amasyalı, C., Er, F., Olgun, N. N. & Aker, A. T. (2010). Çalışanlar İçin Yaşam Kalitesi Ölçeği Türkçe uyarlaması geçerlik ve

- güvenilirlik çalışması. *Noropsikiyatri Arşivi, 47*(2), 111-117. doi: 10.4274/npa.5210.
- Yılmaz, B (2006). Arama kurtarma çalışanlarında travma sonrası stres belirtileri ve travma sonrası büyüme. Unpublished Master"s Thesis, Ankara, Turkey.
- Yiğit, İ., & Yiğit, M. G. (2017). Psychometric Properties of Turkish Version of Difficulties in Emotion Regulation Scale-Brief Form (DERS-16). Current Psychology, 1-9.
- Zara, A., & İçöz, F. J. (2015). Secondary traumatic stress in mental health workers in Turkey. *Journal of Clinical Psychiatry*, *18*(1), 15-23.
- Zenasni, F., Boujut, E., Woerner, A., & Sultan, S. (2012). Burnout and empathy in primary care: three hypotheses.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3381244/

APPENDICES

Appendix A

The Informed Consent Form

(In Turkish)

Bilgilendirilmiş Onam Formu

Sayın katılımcı,

Bu araştırma İstanbul Bilgi Üniversitesi Klinik Psikoloji Yüksek Lisans programı bünyesinde Dr. Öğr. Üyesi Ümit Akırmak danışmanlığında, Aslı Çiğdem Cemgil tarafından yürütülmektedir. Bu çalışmanın amacı ruh sağlığı alanında çalışan bireylerin duygusal, bilişsel ve fiziksel anlamda ne tür deneyimler yaşadıklarını incelemektir. Bu çalışmaya katılmanın size doğrudan bir faydasının olması beklenmemekle birlikte, ruh sağlığı alanında çalışanların deneyimlerini anlamak ve olası koruyucu faktörlerin ortaya koyulması açısından faydalarının olacağı düşünülmektedir.

Bu araştırmaya katılım tamamen gönüllülük esasına dayanmaktadır ve dilediğiniz zaman hiçbir gerekçe bildirmeden bu çalışmadan çekilebilirsiniz. Ancak, çalışmanın amacına ulaşabilmesi için sizden, bütün soruları eksiksiz cevaplamanız beklenmektedir. Anketin tamamlanması yaklaşık 13 dakika sürmektedir. Soruların doğru ya da yanlış bir cevabı yoktur; bu sebeple, soruları içtenlikle ve sizi en iyi yansıtacak şekilde cevaplamanız önemlidir. Bu araştırma anketinin hiçbir aşamasında kimlik bilgileriniz ya da kişisel olarak tanınmanıza yol açacak bilgiler sorulmayacaktır. Yanıtlarınız araştırmacılar dışında hiç kimseyle paylaşılmayacak, her bir katılımcıdan toplanan veriler birer araştırma

numarası verilerek değerlendirmeye alınacaktır. Toplu halde değerlendirilecek veriler sadece bilimsel anlamda yayın ya da konferanslarda kullanılabilecektir.

Araştırmayla ile ilgili herhangi bir sorunuz olduğunda Psk. Aslı Çiğdem Cemgil'e acozsoy@yahoo.com e-posta adresinden ulaşabilirsiniz.

____Yukarıda verilen bilgiler doğrultusunda, bu çalışmaya katılmayı kabul ediyorum.

Appendix B

The Demographic Information Form

(In Turkish)

Kişisel ve Mesleki Bilgi Formu

Yönerge: Aşağıdaki sorular bu araştırmaya katılan her katılımcının genel özelliklerini daha iyi anlayabilmek için size yönlendirilmektedir. Lütfen size verilen boşluklara cevaplarınızı yazınız.

1. Cinsiyetiniz:	Kadın ()	Erkek ()	Belirtmek istemiyorum ()
2. Yaşınız (gün-ay-yı	1):/	/	
3. Medeni durumunu Ayrılmış() Diğer (l			nış() İlişki içinde()
4. Mesleğiniz: Psikol	log () Klinik	x Psikolog ()	Psikolojik Danışman ()
Psikiyatrist () Sos	yal Hizmet Uzı	manı () Göni	illü () Çevirmen ()
Diğer (Lütfen belirtin	niz)
5. Kaç yıldır bu mesl	eği icra ediyors	sunuz? (Toplan	n:)
6. Çalıştığınız kurum	ı:		
7. Çalıştığınız kurum	daki göreviniz		
8. Şu anda çalıştığını	z kurumda ne l	kadar süredir ça	ılışıyorsunuz?
3 aydan az	1-	-3 yıl	10 yıldan fazla
3-6 ay	3-	-6 yıl	

6-12 ay		6-10 yıl		
9. Çalıştığınız	yerleşim yerir	nin adı (il/ilçe/k	öy)	
	_	da ya da kurum et () Hayır	_	vizyon (vaka çalışmaları
11. Eğer süpei kaç saat alıyo		çalışmaları dest	eği) alıyorsanız	z, bu desteği haftada
1 saatten a	az	2-3 saat		
1-2 saat		3 saatten	fazla	
_	z kurumda yar P Evet ()	_	kişilerden travı	matik nitelikte olaylar
danışanlarınız	dan ne sıklıkta		e sıklıkta dinled	rini son üç ayda diğinizi aşağıda verilen
0	1	2	3	4
Hiçbir zaman	Nadiren	Ara sıra	Sık sık	Her zaman
Ciddi bir	kaza veya yara	ılanma		
Ani yakın	kaybı (Ör:İnti	har, kaza, hasta	alık)	
Doğal afe	et (deprem, sel	vs.)		
Aile içi ve	ya ilişki içi şid	ldet		
Cinsel ist	ismar			
Tecavüz				

Ciddi bir sağlık sorunu veya ameliyat
İşkence
Tutsak kalma
Savaş
Other
14. Travmatik olarak değerlendirdiğiniz kişisel bir deneyiminiz oldu mu?
Evet () Hayır ()
15. Cevabınız evet ise aşağıda belirtilen durumların hangilerini deneyimlediğinizi yanlarındaki boşluğa işaretleyiniz. Birden fazla işaretleme yapabilirsiniz.
Ciddi bir kaza veya yaralanma
Ani yakın kaybı (Ör:İntihar, kaza, hastalık)
Doğal afet (deprem, sel vs.)
Aile içi veya ilişki içi şiddet
Fiziksel ve/veya duygusal istismar
Cinsel istismar
Tecavüz
Ciddi bir sağlık sorunu veya ameliyat
Ciddi bir sağlık sorunu
İskence

 _ Tutsak kalma
 _ Savaş
Diğer (Lütfen belirtiniz.

Appendix C

Professional Quality of Life Scale (ProQOL IV)

(In Turkish)

Çalışanlar İçin Yaşam Kalitesi Ölçeği

Yaptığımız işin veya mesleğin gereği olarak insanlara yardım etmek, onların yaşantısıyla doğrudan temasa geçmemizi sağlar. Duygularımız ya da yaşanılan acıyı paylaşabilmemiz ve hissedebilmemiz yardım ettiğimiz kişinin olumlu ve olumsuz yaşantılarından veya durumundan etkilenecektir. Mesleğinizin özelliklerinden kaynaklanabilecek olumlu ve olumsuz deneyimleriniz hakkında sorular sormak istiyoruz. Lütfen, her soruyu içinde bulunduğunuz durumu göz önüne alarak değerlendiriniz. GEÇTİĞİMİZ SON BİR AYDAKİ duygu ve düşüncelerinizi dikkate alarak içinde bulunduğunuz durumu ne kadar sıklıkla yaşadığınızı 1 ile 5 arasındaki rakamlardan herhangi birini seçerek yanıtlayınız. Katkılarınız için teşekkür ederiz.

1=Hıçbır zaman	2=Nadiren	3=Bazen	4=S1K S1K	5=Çok Sık
1. Kendimi mut	tlu hissediyoru	m.		
2. Yardım ettiği	m kişiler zihni	mi aşırı meşgu	ıl ediyor.	
3. İnsanlara yar	dım edebiliyor	olmaktan mer	mnun oluyorum	
4. Başkalarıyla	ilişki kurabildi	ğimi hissediye	orum.	
5. Ani ya da bel	klenmedik ses o	duyunca sıçrıy	or ya da ürküyo	orum.
6. Başkalarına y	yardım ettikten	sonra kendim	i daha güçlü his	sediyorum

7. Yardım eden rolümle kendi özel hayatımı birbirinden ayırmakta
zorlanıyorum.
8. Yardım ettiğim kişinin yaşadığı çok acı bir olay uykumun bozulmasına
neden oluyor.
9. Yardım ettiğim kişilerin yaşadığı stresin bana de geçebileceğini
düşünüyorum.
10.Yardım eden olarak kendimi kapana sıkışmış gibi hissediyorum.
11. Yardım için yaptığım çalışmalarımdan dolayı zaman zaman kendimi zorda hissediyorum.
12. İşimi seviyorum.
13. Yardım eden olmamın sonucunda kendimi çökkün hissediyorum.
14. Yardım ettiğim kişilerin başlarından geçen çok acı yaşantıları sanki kendim yaşıyormuş gibi hissettiğim oluyor.
15. Bana güç veren inançlarım var.
16. Bildiğim yardım yöntemlerini ne kadar çok kullanabilirsem o kadar iyi hissediyorum.
17. Her zaman olmak istediğim gibi bir insanım.
18. İşim beni tatmin ediyor.
19. Kendimi tükenmiş hissediyorum.
20. Yardım ettiğim kişiler ve onlara yaptığım yardımlarla ilgili olumlu düşünce ve duygular taşıyorum.

21. Yaptığım işin yoğunluğu veya yardım ettiğim kişilerin çokluğu gibi
nedenlerle kendimi tükenmiş hissediyorum.
22. İşimde yaptıklarımla bir fark yaratabileceğime inanıyorum.
23. Bana, yardım ettiğim insanların korku verici yaşantılarını hatırlattığı için
çeşitli etkinlik ve durumlarda bulunmaktan kaçınıyorum.
24. Yardım edebildiğim durumlardan gurur duyuyorum.
25. Yardım etmemin sonucu olarak sıkıntı verici veya korkutucu
düşüncelerim oluyor.
26. Çalışma sisteminden dolayı kendimi çıkmaza girmiş gibi hissediyorum.
27. Yardım eden olarak kendimi "başarılı" hissediyorum.
28. Travma mağdurlarıyla yaptığım çalışmaların önemli bölümlerini
hatırlayamıyorum.
29. Çok hassas bir insanım.
30. Bu isi sectiğim için mutluyum.

Appendix D

Interpersonal Reactivity Index (IRI)

(In Turkish)

Kişiler Arası Tepkisellik İndeksi

Aşağıdaki ifadeler sizin değişik durumlardaki düşüncelerinizi ve duygularınızı soruşturmaktadır. Her bir maddenin sizi ne kadar iyi tanımladığını sayfanın başındaki cetveldeki uygun rakamları (1-2-3-4-5) seçerek belirleyiniz. CEVAP VERMEDEN ÖNCE HER BİR MADDEYİ DİKKATLİCE OKUYUNUZ. Olabildiği kadar dürüstçe cevap veriniz. Teşekkürler.

3

5

4

1

1	11	1	— - —-1
Beni			Beni
iyi bir şekilde			iyi bir şekilde
tanımlamıyor			tanımlıyor
1. Başıma gelebilece fanteziler kurarım.	k olan şeyler hakk	ında, zaman zamaı	n hayaller ve
2. Benden daha talih duyarım.	siz insanlar için ge	enellikle merhamet	li, alakalı hisler
3. Olayları "bir başkı	a kişinin" bakış aç	ısından görmeyi zo	or bulurum.
4. Başka kimselerin	problemleri olduğı	ında, onlar için faz	ıla üzülmem.

5. Bir romandaki karekterlerin duygularını gerçekten içimde hissederim.
6. Acil durumlarda, vesveseli ve rahatsız hissederim.
7. Bir piyes veya film izlerken genellikle tarafsızımdır ve sıklıkla kendimi ona tamamen kaptırmam.
8. Bir karara varmadan önce diğerlerinin anlaşamadığı yönlerden olaya bakmaya çalışırım.
9. Birinden yararlanıldığını gördüğümde, ona karşı koruyucu olduğumu hissederim.
10. Çok heyecanlı bir durumun içinde olduğumda çaresizlik hissederim.
11. Arkadaşlarımın bakış açısından olayların nasıl göründüğünü gözümde canlandırarak onları daha iyi anlamaya gayret ederim.
12. İyi bir kitaba veya filme son derece kapılmak benim için bir parça nadir bir durumdur.
13. Birinin incindiğini gördüğümde, sakin kalma eğilimindeyimdir.
14. Başka kimselerin talihsizlikleri genellikle beni büyük ölçüde rahatsız etmez. R
15. Bir şeyde haklı olduğumdan eminsem, başkalarının fikirlerini dinleyerek fazla zaman harcamam.
16. Bir piyes veya filmi gördükten sonra, karekterlerlerden biriymişim gibi hissetmişimdir.
17. Gergin duyguların olduğu bir ortamda olmak beni korkutur.

18. Birine haksız davranıldığını gördüğümde, onlar için bazen çok fazla
acıma hissetmem.
19. Genellikle acil durumların üstesinden gelmekte çok becerikliyimdir.
20. Gördüğüm şeyler bana oldukça dokunur.
21. Her sorunun iki yönü olduğuna inanırım ve her iki yönden de bakmaya
çalışırım.
22. Kendimi oldukça yumuşak kalpli bir kişi olarak tanımlarım.
23. İyi bir film seyretttiğimde, kendimi çok kolaylıkla baş karakterin yerine koyabilirim.
24. Acil durumlarda kontrolü kaybetmeye eğilimliyimdir.
25. Birine kızdığımda, genellikle bir süre için kendimi onun yerine koymaya çalışırım.
26. İlginç bir hikaye veya roman okuduğumda, hikayedeki olaylar benim
başıma gelse neler hissedeceğimi gözümde canlandırırım.
27. Acil bir durumda çok yardıma ihtiyacı olan birini gördüğümde, param
parça olurum.
28. Birilerini eleştirmeden önce, onların yerinde olsam nasıl hissedeceğimi
gözümün önünde canlandırmaya calışırım

Appendix E

Difficulties in Emotion Regulation Scale-Brief Form (DERS-16)

(In Turkish)

Aşağıdaki ifadelerin size ne sıklıkla uyduğunu, her ifadenin yanında yer

Duygu Düzenleme Güçlüğü Ölçeği-Kısa Form (DDGÖ-16)

alan 5 dereceli öle	çek üzerinden	değerlendiriniz	. Her bir ifad	lenin altındaki 5
noktalı ölçekten, s	ize uygunluk y	yüzdesini de di	ikkate alarak,	yalnızca bir tek
rakamı yazınız.				
1	2	3	4	5
Hemen hemen	Bazen	Yarı yarıya	Çoğu zaman	Hemen hemen
hiç				her zaman
(0-10%)	(11-35%)	(36-65%)	(66-90%)	(91-100%)
1.Duygularıma	ı bir anlam vern	nekte zorlanırım	1.	
2.Ne hissettiği	m konusunda ka	armaşa yaşarım.		
3.Kendimi köt	ü hissettiğimde	işlerimi bitirme	kte zorlanırım.	
4. Kendimi kö	tü hissettiğimde	kontrolden çık	arım.	
5. Kendimi kö	tü hissettiğimde	uzun süre böyl	e kalacağına in	ianırım.
	ötü hissetmeni	n yoğun depre	esif duyguyla	sonuçlanacağına
inanırım.				

_7. Kendimi kötü hissederken başka şeylere odaklanmakta zorlanırım.

8. Kendimi kötü hissederken kontrolden çıktığım korkusu yaşarım.
9. Kendimi kötü hissettiğimde bu duygumdan dolayı kendimden utanırım.
10. Kendimi kötü hissettiğimde zayıf biri olduğum duygusuna kapılırım.
11. Kendimi kötü hissettiğimde davranışlarımı kontrol etmekte zorlanırım.
12. Kendimi kötü hissettiğimde daha iyi hissetmem için yapabileceğim hiçbir şey olmadığına inanırım.
13. Kendimi kötü hissettiğimde böyle hissettiğim için kendimden rahatsız olurum.
14. Kendimi kötü hissettiğimde kendimle ilgili olarak çok fazla endişelenmeye başlarım.
15. Kendimi kötü hissettiğimde başka bir şey düşünmekte zorlanırım.
16. Kendimi kötü hissettiğimde duygularım dayanılmaz olur.

ETİK KURUL DEĞERLENDİRME SONUCU/RESULT OF EVALUATION BY THE ETHICS COMMITTEE

(Bu bölüm İstanbul Bilgi Üniversitesi İnsan Araştırmaları Etik Kurul tarafından doldurulacaktır/This section to be completed by the Committee on Ethics in research on Humans)

Başvuru Sahibi / Applicant: Aslı Çiğdem Cemgil

Proje Başlığı / Project Title: Traumatic Stress Among Mental Health Workers in Turkey: Moderating Role of Emotion Regulation on the Relationship Between Empathy and Secondary Traumatic Stress

Proje No. / Project Number: 2018-20024-127

1.	Herhangi bir değişikliğe gerek yoktur / There is no need for revision	XX
2.	Ret/ Application Rejected	
	Reddin gerekçesi / Reason for Rejection	
)eğe	erlendirme Tarihi / Date of Evaluation: 13 Aralık 2018	4 1 1 1 1

Kurul Başkanı / Committee Chair

Doc. Dr. Itir Erhart

Uye / Committee Member

Prof. Dr. Hale Bolak

Üye / Committee Member

Prof. Dr. Koray Akay

Uye / Committee Member

Prof. Dr. Ayhan Özgür Toy -

Uye / Committee Member

Prof. Dr. Ash Tunc

Üye / Committee Member

Prof. Dr. Turgut Tarhanlı

Uye Committee Member

Prof. Dr. Ali Demirci