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REVIEW ARTICLE

# Prevalence of compassion fatigue among helping professions and relationship to compassion for others, self-compassion and self-criticism

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## Abstract

**Introduction:** Helping professionals are at high risk of being affected by the negative aspects of helping such as compassion fatigue. To date, no study has provided a comprehensive overview of compassion fatigue and compared the prevalence among different helping professions.

**Objectives:** The aim of this study was to explore the prevalence and differences in compassion fatigue among different helping professions. We also wanted to explore the relationship between compassion, self-compassion, self-criticism and compassion fatigue.

**Methods:** Six hundred and seven participants working in the helping professions were recruited. The sample consisted of 102 nurses, 44 doctors, 57 paramedics, 39 home nurses, 66 teachers, 103 psychologists, 40 psychotherapists and coaches, 76 social workers, 39 priests and pastors and 41 police officers. The data were collected using an online questionnaire battery measuring levels of compassion, self-compassion, self-criticism, compassion fatigue and compassion satisfaction.

**Results:** We found significant differences in compassion fatigue levels among various helping professions. No large differences were found in the compassion and self-compassion levels exhibited by professionals with medium versus low compassion fatigue scores. However, participants with higher levels of compassion fatigue scored higher in self-criticism. Self-criticism was found to be the best predictor of compassion fatigue. The effect of profession on compassion fatigue as mediated by self-criticism and self-compassion was significant.

**Conclusions:** Based on the results, we recommend designing programs to combat compassion fatigue that teach helping professionals to better manage their work time and workload (hours per week with clients/patients) and learn healthier inner talk (less self-critical and more self-compassionate).

KEYWORDS
compassion, compassion fatigue, helping professions, self-compassion, self-criticism

## 1 | INTRODUCTION

Compassion can be defined as the feeling that occurs when witnessing another person's suffering which motivates the desire to help the other person (Goetz et al., 2010). It can also be conceptualised as consisting of five components, not just as an emotion: (1) recognising suffering, (2) understanding the universality of human suffering, (3) feeling for the suffering person, (4) tolerating uncomfortable feelings and (5) motivation to act in order to alleviate suffering (Strauss et al., 2016). Compassion can be felt in relation to oneself—self-compassion—which Neff (2003) states is compassion directed inwards, towards oneself as an object of care and interested in situations of suffering. The opposite way of relating to oneself is self-criticism, defined by Blatt and Zuroff (1992) as the harsh and constant evaluation of oneself, followed by feelings of shame, failure, guilt or unworthiness. Gilbert and Procter (2006) describe self-criticism as having the capacity to manifest in an inner critical voice that issues various suggestions and commands, convictions or emotions.

According to Figley (2002a), the very act of compassion has consequences: In our efforts to empathise and see things from the suffering person's perspective, we may end up suffering as well. Compassion fatigue can be defined as a state of tension and preoccupation with traumatised patients through re-experiencing the traumatic events and attempts to avoid the client and reminders of the trauma that reduces our interest in and capacity to bear the suffering of others (Figley, 2002a). Compassion fatigue refers to an identifiable set of negative psychological symptoms experienced by helping professionals (Figley, 1995) that results from care provision and exposure to either primary trauma (experienced first-hand) or secondary trauma (providing care to those who have experienced or are experiencing trauma). It is often used in literature interchangeably with other terms such as secondary traumatic stress or vicarious traumatisation. Figley (1995) offered a definition of secondary traumatic stress as a consequent emotions and behaviour resulting from the knowledge about traumatising situation experienced by other person, causing stress from the intention or actual help to the traumatised or suffering person. Vicarious traumatisation can be defined according to Pearlman and Mac Ian (1995) as the transformation that occurs within the therapist or other trauma worker as a result of empathic engagement with client´s trauma experience and causes changes in the therapist´s ways of experiencing self, others and the world. Compassion fatigue can also be conceptualised as a combination of burnout and secondary traumatic stress (Stamm, 2010). Burnout is considered as one element of compassion fatigue, which is related to workplace stressors and associated with feelings of hopelessness and difficulty coping with work; the second element is secondary traumatic stress that relates to exposure to traumatic stressful events, resulting in fear, difficulty sleeping, intrusive thoughts or avoidance (Stamm, 2010). Compassion fatigue can be accompanied by various symptoms that affect seven domains. Figley (2002b) describes these as cognitive (e.g. decreased concentration, disorientation, apathy), emotional (e.g. powerlessness, anxiety, numbness), behavioural (e.g. irritability, withdrawal, hypervigilance), spiritual (e.g. loss of purpose, questioning prior beliefs, lack of self-satisfaction), personal relations (e.g. decreased interest in intimacy, isolation from others, increased interpersonal conflicts), somatic (e.g. sweating, rapid heartbeat, dizziness) and lastly work performance (e.g. lowered motivation, absenteeism, exhaustion). Based on the previous studies, the negative effects of helping are often described under various terms such as compassion fatigue, secondary traumatic stress or vicarious trauma and although there has been some discussion on whether these terms all refer to the same construct (e.g. Adams et al., 2006; Jenkins & Baird, 2002), there is so far no evidence of differences between these concepts (Stamm, 2010). However, it is important to note that some authors have attempted to differentiate between compassion fatigue, secondary traumatic stress and vicarious traumatisation (e.g. Bride, 2007; Thomas & Wilson, 2004). Furthermore, some helping professionals experience the negative impact of helping in the form of compassion fatigue, many of them may also experience the positive side of helping, labelled as compassion satisfaction (Stamm, 2010). These professionals may experience pleasure derived from being able to help others and continue to be committed and effective in their work.

**What is known about the topic?**

- Helping professionals are at high risk of compassion fatigue.
- Compassion fatigue refers to an identifiable set of negative psychological symptoms experienced by helping professionals.
- Compassion fatigue can also be conceptualised as a combination of burnout and secondary traumatic stress.

**What this paper adds?**

- This study is the first to provide a comprehensive overview of compassion fatigue and compare the prevalence among different helping professions.
- Based on the results, we recommend teaching helping professionals to better manage their work time.
- According to this research findings, helping professionals would also benefit from learning healthier inner talk (less self-critical and more self-compassionate).

### 1.1 | The prevalence of compassion fatigue

Compassion fatigue is often experienced by helping professionals such as nurses, social workers, psychotherapists and others who are often required to provide a high degree of care to clients (Ray et al., 2013). Helping professions can be defined as those entailing professional interaction between a helping expert and client, initiated to nurture the growth of, or address, the person's

physical, psychological, intellectual or emotional constitution, including through medicine, nursing, psychotherapy, psychological counselling, social work, education or coaching (Graf et al., 2014). Consequently, most researchers focus on studying compassion fatigue in various helping professions. The prevalence of compassion fatigue varies among the helping professions. For example, Van Mol et al. (2015) conducted a systematic review of professionals working in intensive care units. They concluded, based on two studies, that the prevalence of compassion fatigue was 7.3% and 40%, respectively, and that the prevalence of secondary traumatic stress, based on five studies, ranged from 0% to 38.5%, while the prevalence of burnout was between 0% and 70.1%. A study of physicians in Serbia and Bosna and Hercegovina showed that the majority of family physicians had moderate levels of compassion satisfaction (70%), burnout (75%) and secondary traumatic stress (55.8%) (Račić et al., 2019). A meta-analysis of 15 studies involving oncology nurses showed that the prevalence of compassion fatigue was 19% for low compassion satisfaction, 56% for medium and high burnout and 60% for medium and high compassion fatigue (Ortega-Campos, Vargas-Román, Velando-Soriano, Suleiman-Martos, Cañadas-de la Fuente, Albendín-García, & Gómez-Urquiza, 2020). Furthermore, a study by Johnson (2014) reported the presence of compassion fatigue in 11% of paediatric nurses. A study of compassion fatigue among mental healthcare providers showed that the majority experienced the average levels of compassion fatigue (Patel, 2018). Research conducted by Craig and Sprang (2010) reported that only 5% of psychologists and social workers were at high risk of compassion fatigue. A study of social workers showed that many social workers were likely to experience at least some compassion fatigue symptoms, with 70% of social workers in this study experiencing at least one symptom of secondary traumatic stress in the last week, while 55% met the criteria for at least one of the core symptom cluster, and 15% met the criteria for a PTSD diagnosis (Bride, 2007). The prevalence among teachers and pedagogues in high poverty public schools is quite high, with 90% scoring within the high range (Abraham-Cook, 2012). Another study investigating teachers, by Koenig (2014), reported that 70.3% of participants had experienced secondary trauma. Although police officers face trauma in their work, experiences of compassion fatigue are understudied among this population (Andersen & Papazoglou, 2015). Nonetheless, one study of police officers working with sexual assault victims showed that around 84% of participants had low compassion fatigue and 16% had medium compassion fatigue. None scored high (Turgoose et al., 2017). Similarly, very low levels of compassion fatigue were found in another study involving police officers (Grant et al., 2019). Lastly, in a recent study by Burnett, Sheards and Clair-Thompson (2020), it was reported that 82.5% of police officers reported having moderate or high levels of compassion fatigue. A study of compassion fatigue on the Slovak population showed that the prevalence of compassion satisfaction among helping professionals was higher than the prevalence of compassion fatigue. The study involved 240 helping professionals including psychologists, social workers and health professionals (Köverová & Ráczová, 2017a, 2017b). Helping professionals also indicated experiencing more positive than negative emotions in their work. From this study, it seems that the positive aspects of helping are more common among helping professionals in Slovakia.

## 1.2 | Factors related to compassion fatigue

In recent years, researchers have focused their attention on studying personal factors contributing to compassion fatigue, such as empathy, self-compassion and self-criticism, and we will summarise their results in the following part. As Duarte et al. (2016) found, the ability to empathise with others is a potential risk factor for developing compassion fatigue, whereas self-compassion could be a factor that protects helping professionals. Similarly, in a sample of student counsellors and psychotherapists, participants with higher levels of self-compassion were found to experience greater well-being and compassion satisfaction while also reporting lower compassion fatigue and burnout (Beaumont, Durkin, Hollins Martin, & Carson, 2015). In another study, self-compassionate nurses were found to be less likely to suffer from burnout symptoms and experience greater compassion satisfaction (Durkin, Beaumont, Hollins Martin & Carson, 2016). This finding has been confirmed by research into student midwives: Those with greater self-compassion reported less compassion fatigue and burnout (Beaumont et al., 2015, 2016). As Duarte and Pinto-Gouveia (2017a) found, nurses who experience greater compassion satisfaction also seem to have more empathetic feelings and sensitivity towards others. By contrast, nurses who experienced more compassion fatigue and burnout tended to be more self-judgmental and have more feelings of distress on seeing others suffering. Another study on nurses produced similar results, self-compassion predicted higher levels of compassion satisfaction and lower levels of compassion fatigue (Duarte & Pinto-Gouveia, 2017b). Udipi, McCarthy Veach, Kao and LeRoy (2008) profiled genetic counsellors who are at risk of compassion fatigue—as professionals who experience burnout tend to be self-critical, cannot handle stressful situations, have a larger patient caseload, experience more distressing events and seek support as a coping strategy. Burnout was found to be the strongest predictor of compassion fatigue. Furthermore, significant predictors of burnout identified in nurses were lack of meaningful recognition, more years of practice and belonging to the 'Millennial' generation (born 1981–1996), whereas receiving meaningful recognition, higher job satisfaction, belonging to the 'Baby Boomer' generation (born 1946–1964) and fewer years of practice significantly predicted compassion satisfaction (Kelly, Runger, & Spencer, 2015). Similar findings were obtained in a study on psychotherapists, showing that compassion fatigue decreased with increasing length of practice (Kabunga et al., 2016). But Köverová & Ráczová (2017a, 2017b) found that professionals with more experience (10+ years) reported higher levels of compassion fatigue than less experienced professionals. A similar finding was reported in a study on police officers (Turgoose et al., 2017). Furthermore, as

reported by Yu et al. (2016), higher compassion fatigue was found among oncology nurses with more years of practice with passive coping styles. Moreover, empathy, training and support from the organisation were found to be a significant protector against compassion fatigue. A systematic review and meta-analysis of 15 studies showed similar results and concluded that compassion fatigue affects women and nurses with more years of experience (Ortega-Campos et al., 2020). In addition, Bell, Hopkin and Forrester (2019) reported that prison mental health professionals and correctional officers who were more frequently exposed to traumatic events were found to be experiencing greater levels of burnout, compassion fatigue and reduced compassion satisfaction.

From these previous studies, we can conclude that more compassionate and self-compassionate professionals tend to experience fewer symptoms of compassion fatigue and greater compassion satisfaction. These results also indicate that health professionals who have greater self-compassion tend to experience compassion fatigue less, whereas those who are more self-critical are more likely to experience compassion fatigue. However, not enough research has studied the relationship and predictive power of self-criticism as a factor contributing to compassion fatigue.

### 1.3 | Aim of the present study

To date, no study has focused on the prevalence and differences in the extent to which different helping professions experience compassion fatigue. We aim to provide a comprehensive overview of compassion fatigue among different helping professions. Only a few studies have focused on studying compassion fatigue experiences among helping professionals in Central Europe. Therefore, the main aim of this study was to explore the prevalence of compassion fatigue among different helping professions and explore differences in experiences of compassion fatigue on a sample of various helping professions in Central Europe. Another aim of this study was to examine the relationship between compassion fatigue on the one hand and compassion for others, self-compassion and self-criticism, compassion satisfaction, burnout, length of practice and hours per week with clients/patients on the other hand.

## 2 | METHODS

### 2.1 | Measures

#### 2.1.1 | Professional quality of life scale

To measure the levels of compassion fatigue and compassion satisfaction, the Professional Quality of Life Scale, version 5 (PROQOL; Stamm, 2009) was used. This scale (Stamm, 2010) consists of 30 items and incorporates two aspects: positive (compassion satisfaction—CS) and negative (compassion fatigue—divided into secondary traumatic stress—STS and burnout—BO). Compassion satisfaction represents the pleasure derived from being able to work well. A higher score represents greater satisfaction related to the ability to be an effective caregiver. Burnout is viewed as one of the elements of compassion fatigue and is associated with the feelings of hopelessness and difficulty handling the work and doing it effectively. The second component of compassion fatigue, secondary traumatic stress, is work-related secondary exposure to traumatic stressful events, resulting in fear, difficulty sleeping, intrusive images and avoiding reminders of the person's traumatic experiences. Each subscale consists of 10 items rated on a 5-point scale ranging from 1 ('Never') to 5 ('Very Often') indicating the frequency of experiencing the positive and negative consequences of helping in the last 30 days. The CS items include 'I believe I can make a difference through my work', STS items include 'I feel depressed because of the traumatic experiences of the people I help' and finally for BO 'I feel "bogged down" by the system'. Higher scores on the CS subscale represent greater levels of compassion satisfaction. Higher scores on the STS and BO subscales represent greater levels of compassion fatigue. This scale is a reliable and valid measure in terms of construct validity. The reported Cronbach alphas for the subscales were 0.88 for CS, 0.75 for BO and 0.81 for STS. The Slovak translation of this scale showed good psychometric properties (Köverová, 2016, 2018). Construct and discriminant validity was supported via correlations with related constructs such as anxiety, depression and optimism. The reported Cronbach alpha for the subscales was as follows: 0.81 for CS, 0.79 for CF, 0.56 for BO and 0.75 for STS. A factor analysis was conducted on our sample and confirmed the factor model given in Köverová (2018). The Cronbach alpha for our sample was 0.74 for the whole scale, 0.86 for CF, 0.75 for BO, 0.82 for STS and 0.86 for CS.

#### 2.1.2 | Sussex-oxford compassion for the self scale

Levels of self-compassion were measured with the Sussex-Oxford Compassion for the Self Scale (SOCS-S; Gu et al., 2019). This scale is based on the definition that compassion comprises five dimensions: recognising suffering, understanding the universality of suffering, feeling for the suffering person, tolerating the uncomfortable feelings and the motivation to act in order to alleviate suffering. The scale consists of 20 items, rated on a 5-point Likert scale ranging from 1 ('not at all true') to 4 ('always true'). Items include 'I'm good at recognizing when I'm feeling distressed', 'I understand that feeling upset at times is part of human nature' and 'When I'm upset, I try to do what's best for myself'. The psychometric analysis of this scale showed adequate internal consistency and convergent and discriminant validity, significantly correlating with related constructs. The Cronbach alpha for this scale was 0.93 (Gu et al., 2019). The scale has been adapted and tested on the Slovak population and showed good psychometric properties (Kanovský & Halamová, 2021) with a reported Cronbach alpha of 0.89. The Cronbach alpha for the current sample was 0.89 for the whole scale, 0.82 for recognising suffering, 0.77 for universality

of suffering, 0.73 for the feeling for suffering subscale, 0.69 for tolerating feelings and 0.80 for motivation to act.

#### 2.1.3 | Sussex-oxford compassion for others scale

Levels of compassion for others were measured with the Sussex-Oxford Compassion for Others scale (SOCS-O; Gu et al., 2019). This scale is based on the definition that compassion comprises five dimensions: recognising suffering, understanding the universality of suffering, feeling for the suffering person, tolerating the uncomfortable feelings and the motivation to act in order to alleviate suffering. It consists of 20 items, rated on a 5-point Likert scale ranging from 1 ('not at all true') to 4 ('always true'). Items include 'I notice when others are distressed', 'When I hear about bad things that are happening to other people, I feel concerned about their well-being' and 'I am sensitive to other people's distress'. The psychometric analysis of the scale showed adequate internal consistency and convergent and discriminant validity, which was supported with correlations with related constructs. The Cronbach alpha for the scale was 0.94 (Gu et al., 2019). The scale was also adapted and tested on the Slovak population and showed good psychometric properties (Kanovský & Halamová, 2021) with a Cronbach alpha of 0.93. The Cronbach alpha for the current sample was 0.91 for the whole scale, 0.88 for recognising suffering, 0.86 for universality of suffering, 0.72 for the feeling for the suffering subscale, 0.68 for tolerating feelings and 0.81 for motivation to act.

#### 2.1.4 | Forms of self-criticising/attacking and self-reassuring scale

To measure the levels of self-criticism, we used the Forms of Self-Criticizing/Attacking and Self-Reassuring Scale (FSCRS; Gilbert et al., 2004). The scale consists of 22 items divided into three dimensions: reassured self (RS), inadequate self (IS) and hated self (HS). Participants are required to rate the items on a 5-point Likert scale (ranging from 0 ('not at all like me') to 4 ('extremely like me'). Items of reassured self include, for example, 'I am able to remind myself of positive things about myself'. Inadequate self consists of items such as 'There is a part of me that feels I am not good enough'. and finally hated self includes items like 'I have a sense of disgust with myself'. Higher scores for the IS and HS subscales represent greater levels of self-criticism. Higher mean scores for the RS subscale represent greater levels of self-reassurance. Results from the available data analyses (e.g. Castilho et al., 2015; Kupeli, Chilcot, Schmidt, Campbell, &Troop, 2013), including a Slovak sample (Halamová et al., 2017), showed that the FSCRS has good reliability and validity properties. The construct validity for the FSCRS scale was supported via correlations with linked constructs, such as self-criticism and self-compassion (Halamová et al., 2017). The scale was also analysed cross-culturally using 13 different non-clinical samples (Halamová et al., 2018), and the original three-factored solution was confirmed. Reported Cronbach alpha for the FSCRS subscales varied between 0.75 and 0.92 (Halamová et al., 2018). The Cronbach alpha for the current sample was 0.90 for the FSCRS scale, 0.86 for IS, 0.71 for HS and 0.80 for RS.

### 2.2 | Research sample

To begin with, we calculated the minimum number of participants from each helping profession needed for our research. Our research sample contained 10 helping professions, and the G*Power program calculation showed we needed a minimum of 39 participants. Our convenience sample of helping professionals ($N = 607$) was recruited via contact with various professional associations and organisations, through websites and social networking sites targeting both helping professions and the general public (Facebook, online discussion forums) and lastly, through family and friends. The data collection was conducted from January until October 2020. This study received an approval from an ethical committee of a Faculty of Social and Economic Sciences at Comenius University in Bratislava. All participants gave their informed consent prior to their inclusion in the study.

The research sample consisted of 474 women and 133 men, with a mean age of 37.9 ($SD = 11.2$). 79.1% of participants were Slovak, 15.5% Czech, 4.8% Hungarian, 4.8% Roma, 0.2% Moldovan, 0.2% Ruthenian and 0.2% Polish. Length of practice was as follows: 3% students, 34.4% 0–5 years, 20.9% 6–10 years, 9.6% 11–15 years, 9.9% 16–20 years, 7.2% 21–25 years, 6.8% 26–30 years, 3.5% 31–35 years, 3.3% 38–40 years and lastly 1.5% 41 and more years. Contact hours per week with clients/patients were as follows: 9.6% less than 5 hr, 19.3% 5–10 hr, 11.2% 11–15 hr, 10% 16–20 hr, 9.2% 21–25 hr, 7.2% 26–30 hr, 7.7% 31–35 hr, 11% 36–40 hr and 14.7% more than 41 hr.

Our sample consisted of 102 nurses—96 women and six men—with a mean age of 39.5 ($SD = 12.68$). Forty-four participants were doctors—36 women and eight men—with a mean age of 31.11 years ($SD = 726$). There were 57 paramedics—33 women and 24 men—with a mean age of 35.59 ($SD = 11,72$). Thirty-nine participants were home nurses—37 women and two men—with a mean age of 49.76 ($SD = 7.73$). There were 66 teachers—64 women and two men—with a mean age of 42.07 ($SD = 10.55$). Our sample included 103 psychologists—100 women and 3 men—with a mean age of 30.57 ($SD = 6.66$). Psychotherapists and coaches accounted for 40 of the participants—31 women and nine men—with a mean age of 40.57 ($SD = 9.01$). There were also 76 social workers—64 women and 12 men—mean age 35.98 ($SD = 9.93$). Thirty-nine participants were priests or pastors—one woman and 38 men with a mean age of 43.64 ($SD = 9.83$). And lastly, our sample included 41 police officers—12 women and 29 men—with a mean age of 40.70 ($SD = 10.43$).

### 2.3 | Data analyses

For the data analyses, we used IBM SPSS statistics, version 23. We computed the reliability coefficients (Cronbach's alpha) for each of the scales and their dimensions. We then computed the Kruskal–Wallis test to find differences in compassion fatigue levels between various helping professions. For the multiple pairwise comparisons, we used Mann–Whitney U-tests. We controlled for inflation of type I error in posthoc tests by using the Bonferroni correction. The relationships between the variables were first analysed using Spearman correlations. Then, multiple linear regression was computed in order to predict the value of the dependent variable (compassion fatigue) based on six independent variables (self-criticism, self-compassion, compassion for others, compassion satisfaction, length of practice and frequency of contact with clients/patients). Assumptions of normality, linearity and multicollinearity were checked. Unstandardised coefficient (*B*), standard error (*SE*), standardised coefficient ($\beta$), *t* statistic and *p*-value are reported. The strength of the predictor variables was measured based on the standardised beta value, representing the degree to which each predictor affects the outcome variable. Furthermore, a parallel mediation analysis was carried out using Hayes Process Macro, model 4 (Hayes, 2017), to determine how the independent variable (years of practice, hours per week with client/patient and profession) influences the dependent variable (compassion fatigue) through the mediator variables (self-criticism and self-compassion). Three separate parallel mediation analyses were conducted; each with one independent variable.

## 3 | RESULTS

### 3.1 | Differences in how helping professions experience the Professional Quality of Life dimensions

The results of the Kruskal–Wallis test showed that there were statistically significant differences in the way the various helping professions experienced compassion fatigue, with medium effect size, $H(9) = 53.60$; $p = 0.000$; $\eta^2 = 0.09$. Statistically significant differences with medium effect size were also found in the two dimensions of compassion fatigue—burnout, $H(9) = 46.511$; $p = 0.000$; $\eta^2 = 0.08$ and secondary traumatic stress, $H(9) = 58.104$; $p = 0.000$; $\eta^2 = 0.10$. The results showed that there were statistically significant differences in compassion satisfaction levels between the various helping professions with medium effect size, $H(9) = 42.876$; $p = 0.000$; $\eta^2 = 0.07$. To measure the exact differences, a series of two group comparisons were computed. In order to avoid spurious positives, the Cronbach alpha value was lowered to account for the number of comparisons computed. The descriptive statistics for each profession are listed in Table 1.

### 3.2 | Compassion fatigue—CF

The level of CF was calculated by adding the items for STS and BO subscales. The results showed that home nurses experienced significantly higher CF levels than psychotherapists and coaches, with a large effect size, M-W U = 316; $p = 0.000$; $r_m = 0.51$. Nurses had higher CF levels than psychotherapists and coaches, and the difference was statistically significant with a medium effect size; M-W U = 991.5; $p = 0.000$; $r_m = 0.40$. Similarly, pedagogues had higher CF levels than psychotherapists and coaches, and the result was statistically significant with a large effect size, M-W U = 519.5; $p = 0.000$; $r_m = 0.51$. Pedagogues also had higher CF levels than paramedics, and the result was statistically significant with a small effect size, M-W U = 1243; $p = 0.001$; $r_m = 0.29$. Doctors had significantly higher CF levels than paramedics, with a medium effect size, M-W U = 731.5; $p = 0.000$; $r_m = 0.36$. They also had significantly higher CF levels than psychotherapists and coaches, with a large effect size, M-W U = 303.5; $p = 0.000$; $r_m = 0.56$. Lastly, the results showed that psychologists experienced higher CF levels than psychotherapists, with a medium effect size, M-W U = 1221.5; $p = 0.000$; $r_m = 0.32$. No other statistically significant differences in CF level were found between the helping professions. Multiple comparisons were also conducted for the CF dimensions—STS and BO—in order to obtain a better understanding of these.

### 3.3 | Secondary traumatic stress—STS

Home nurses were found to have higher STS levels than paramedics, and the difference was statistically significant with a medium effect size, M-W U = 591.5; $p = 0.000$; $r_m = 0.40$. Home nurses also experienced significantly higher STS levels than social workers, with a medium effect size, M-W U = 897; $p = 0.001$; $r_m = 0.32$. They were also found to have significantly higher STS levels than psychologists, with a medium effect size, M-W U = 1229.5, $p = 0.000$, $r_m = 0.30$; and psychotherapists, with a large effect size, M-W U = 291, $p = 0.000$, $r_m = 0.54$. Doctors were found to have significantly higher STS levels in comparison to psychotherapists, with a medium effect size, M-W U = 1229.5; $p = 0.000$; $r_m = 0.44$. Similarly, nurses were found to be experiencing higher STS levels than psychotherapists, with a statistically significant result and medium effect size, M-W U = 1050.5; $p = 0.000$; $r_m = 0.38$. Nurses also indicated having significantly higher STS levels in comparison to paramedics, although with a small effect size, M-W U = 1973.5; $p = 0.000$; $r_m = 0.27$. The results of our analysis also show that pedagogues experienced significantly higher STS levels than paramedics, with a medium effect size, M-W U = 1100; $p = 0.000$; $r_m = 0.36$. Pedagogues also had significantly higher STS levels than social workers, with a small effect size, M-W U = 1656.5, $p = 0.000$, $r_m = 0.29$; and psychologists, with a small effect size, M-W U = 2296, $p = 0.000$, $r_m = 0.27$. No other statistically significant differences were identified in helping professionals' STS levels.

**TABLE 1** Descriptive statistics of the Professional Quality of Life Scale dimensions

| | | CF | CS | STS | BO |
|---|---|---|---|---|---|
| Nurses | *M* | 48.82 | 42 | 24.91 | 23.91 |
| | *Mdn* | 47 | 42.5 | 24 | 23 |
| | *IQR* | 16.5 | 8.3 | 9 | 9 |
| | *Min* | 26 | 14 | 12 | 10 |
| | *Max* | 79 | 50 | 44 | 43 |
| Doctors | *M* | 52.09 | 37.38 | 25.13 | 26.95 |
| | *Mdn* | 51 | 38 | 24 | 26 |
| | *IQR* | 18.5 | 9 | 9.8 | 10.5 |
| | *Min* | 33 | 20 | 11 | 17 |
| | *Max* | 79 | 48 | 46 | 37 |
| Paramedics | *M* | 43.14 | 41.86 | 21.33 | 21.80 |
| | *Mdn* | 41 | 43 | 20 | 22 |
| | *IQR* | 15 | 9 | 8.5 | 9.5 |
| | *Min* | 23 | 22 | 12 | 10 |
| | *Max* | 80 | 50 | 50 | 36 |
| Home nurses | *M* | 49.23 | 42.07 | 26.15 | 23.07 |
| | *Mdn* | 47 | 43 | 25 | 23 |
| | *IQR* | 15 | 8 | 8 | 9 |
| | *Min* | 25 | 30 | 13 | 12 |
| | *Max* | 74 | 50 | 43 | 33 |
| Pedagogues | *M* | 49.66 | 40.06 | 25.33 | 24.33 |
| | *Mdn* | 49 | 40.5 | 24 | 24 |
| | *IQR* | 17.5 | 8.3 | 9.3 | 9.3 |
| | *Min* | 27 | 27 | 14 | 12 |
| | *Max* | 86 | 50 | 43 | 43 |
| Psychologists | *M* | 45.14 | 39.29 | 21.92 | 23.22 |
| | *Mdn* | 44 | 40 | 22 | 22 |
| | *IQR* | 16 | 6 | 9 | 7 |
| | *Min* | 25 | 22 | 12 | 11 |
| | *Max* | 71 | 49 | 40 | 35 |
| Psychotherapists and coaches | *M* | 38.07 | 42.67 | 19.25 | 18.85 |
| | *Mdn* | 37 | 42 | 18 | 18 |
| | *IQR* | 11.8 | 6 | 6.8 | 6.8 |
| | *Min* | 25 | 29 | 12 | 12 |
| | *Max* | 59 | 50 | 34 | 32 |
| Social workers | *M* | 44.65 | 39.93 | 21.84 | 22.81 |
| | *Mdn* | 43 | 40 | 20.50 | 22 |
| | *IQR* | 16 | 9.8 | 10.5 | 8 |
| | *Min* | 27 | 25 | 12 | 12 |
| | *Max* | 78 | 50 | 42 | 37 |
| Priests and pastors | *M* | 44.69 | 42.07 | 23.56 | 21.12 |
| | *Mdn* | 44 | 42 | 23 | 22 |
| | *IQR* | 15 | 5 | 10 | 7 |
| | *Min* | 28 | 31 | 14 | 12 |
| | *Max* | 68 | 49 | 39 | 30 |

TABLE 1 (Continued)

| | | CF | CS | STS | BO |
|---|---|---|---|---|---|
| Police officers | *Mean* | 44.12 | 40.22 | 21.63 | 22.48 |
| | *Mdn* | 41 | 41 | 20 | 21 |
| | *IQR* | 16 | 6 | 8 | 6.5 |
| | *Min* | 30 | 20 | 13 | 14 |
| | *Max* | 76 | 49 | 42 | 34 |

CF: compassion fatigue; CS: compassion satisfaction; STS: secondary traumatic stress; BO: burnout.

### 3.4 | Burnout—BO

Significant differences in BO levels were found among home nurses (Mdn = 23; IQR = 9) and psychotherapists (Mdn = 18; IQR = 6.8), with home nurses experiencing significantly higher BO levels with a medium effect size, M-W U = 421; $p = 0.000$; $r_m = 0.40$. Nurses also showed significantly higher BO levels than psychotherapists, with a medium effect size, M-W U = 1116.5; $p = 0.000$; $r_m = 0.35$. Similarly, social workers had significantly higher levels than psychotherapists, with a medium effect size, M-W U = 923; $p = 0.001$; $r_m = 0.32$. The same applied to psychologists when compared with psychotherapists, M-W U = 1067.5; $p = 0.000$; $r_m = 0.37$. Pedagogues exhibited significantly higher BO levels than psychologists, with medium effect size, M-W U = 610; $p = 0.000$; $r_m = 0.45$. Furthermore, doctors were found to experience significantly higher BO levels than paramedics, M-W U = 744.5, $p = 0.000$, $r_m = 0.35$; psychologists, M-W U = 1442.5, $p = 0.000$, $r_m = 0.29$; psychotherapists, M-W U = 240.5, $p = 0.000$, $r_m = 0.63$; social workers, M-W U = 1049.5, $p = 0.000$, $r_m = 0.31$; priests and pastors, M-W U = 416.5, $p = .000$, $r_m = 0.44$; and police officers, M-W U = 502, $p = 0.000$, $r_m = 0.38$.

### 3.5 | Differences in compassion satisfaction—CS

In terms of CS levels, doctors were found to have significantly lower levels in comparison to home nurses, with medium effect size, M-W U = 492; $p = 0.001$; $r_m = 0.37$. Similarly, doctors study experienced lower CS levels than paramedics, with medium effect size, M-W U = 761, $p = 0.001$, $r_m = 0.34$, than nurses, M-W U = 1250, $p = 0.000$, $r_m = 0.35$; psychotherapists, M-W U = 442.5, $p = 0.000$, $r_m = 0.43$; and even priests and pastors, M-W U = 468.5, $p = 0.000$, $r_m = 0.39$. No other statistically significant results between other professions were found.

### 3.6 | Differences in CF based on length of practice and frequency of contact with clients/patients

Our results showed that there were no statistically significant results in the helping professionals' CF levels based on years of practice, $H(9) = 10.82$; $p = 0.288$. We found statistically significant differences in CF levels based on the frequency of contact with client/patient, $H(8) = 17.97$; $p = 0.021$. Professionals who spent less than 5 hr a week with clients/patients reported significantly lower CF scores than professionals who spent 36–40 hr a week on client/patient care, M-W U = 1329.5; $p = 0.002$, $r_m = 0.27$, and those who spent 41 and more hours taking care of clients/patients, M-W U = 1941; $p = 0.011$, $r_m = 0.21$. Even professionals who spent 5–10 hr per week on client/patient care reported significantly lower CF levels than those who spent 36 plus hours with clients/patients, M-W U = 1694, $p = 0.010$, $r_m = 0.19$. Similarly, professionals providing client care 11–15 hr a week reported significantly lower CF levels than those doing so for 36 hr and more, M-W U = 2194, $p = 0.046$, $r_m = 0.18$. Furthermore, professionals spending 16–20 hr on client care reported significantly lower levels than those spending 36 and more hours a week, M-W U = 1371, $p = 0.010$, $r_m = 0.23$.

TABLE 2 Descriptive statistics of Compassion, Self-compassion and Self-criticism levels

| | *M* | *Mdn* | *IQR* | *Min* | *Max* |
|---|---|---|---|---|---|
| | Low CF group | | | | |
| Compassion | 86.48 | 87 | 12 | 55 | 100 |
| Self-compassion | 80.61 | 81 | 14 | 45 | 0 |
| Self-criticism | 14.35 | 13 | 11.5 | 100 | 42 |
| | Medium CF group | | | | |
| Compassion | 83.41 | 83 | 12.5 | 43 | 100 |
| Self-compassion | 74.60 | 75 | 16 | 43 | 100 |
| Self-criticism | 23.36 | 23 | 15 | 0 | 56 |

### 3.7 | Differences in compassion, self-compassion and self-criticism based on CF levels

In order to ascertain whether there were any differences in levels of compassion, self-compassion and self-criticism based on CF levels, we categorised participants' mean CF score as low (score of 44 and less), medium (score between 45 and 82) or high (score 83 and more). This categorisation was based on the scale interpretation suggested by Stamm (2010). As only one participant scored high in CF, we compare the low and medium CF groups only. The results of the analysis showed that there were statistically significant results in the levels of compassion between the low and medium CF groups, but with a small effect size, M-W U = 37,357; $p = 0.000$; $r_m = 0.16$.

The difference in self-compassion levels was both small and statistically significant, M-W U = 31,874.5; $p = 0.000$; $r_m = 0.26$. Lastly, the difference in self-criticism level was statistically significant, with a medium effect size, M-W U = 22,803; $p = 0.000$; $r_m = 0.44$. The descriptive statistics for compassion, self-compassion and self-criticism are listed in Table 2.

### 3.8 | Correlation analysis

In order to study the relationships between compassion fatigue and other constructs, the Spearman correlations were computed. Correlations between 0.1 and 0.3 were categorised as a small relationship, 0.3–0.5 as medium strong, 0.5–0.8 as strong and above 0.8 as very strong (Akoglu, 2018; Field, 2013). The results are shown in Table 3, with the medium strong and strong correlations highlighted. We found a positive, medium strong relationship between CF and the inadequate self dimension of self-criticism, which was statistically significant. A strong, positive and statistically significant relationship was found with CF and the second dimension of self-criticism—hated self. The same was true for the overall self-criticism score: There was a strong, positive and significant relationship with CF. A negative, medium strong and statistically significant relationship was found between CF and with two of the dimensions of self-compassion—tolerating the uncomfortable feelings and motivation to act. In addition, a negative, medium strong and significant relationship was found with the overall self-compassion score. Furthermore, there was a very strong, positive and statistically significant relationship with BO and STS. The relationship with CS was found to be negative, medium strong and statistically significant. The rest of the relationships were either negligible or small. The only statistically significant correlation was with length of practice and SOCS-O Feeling for Suffering.

**TABLE 3** Spearman correlation coefficients

| | $r_s$ | *sig.* |
|---|---|---|
| Length of practice | 0.006 | 0.874 |
| Frequency of contact | 0.148 | 0.000*** |
| FSCRS_Reassured Self | −0.516 | 0.000*** |
| FSCRS_Inadequate Self | 0.493 | 0.000*** |
| FSCRS_Hated Self | 0.537 | 0.000*** |
| FSCRS_Self-criticism (HS+IS) | 0.540 | 0.000*** |
| SOCS-S_Recognising suffering | −0.201 | 0.000*** |
| SOCS-S_Universality of suffering | −0.138 | 0.001* |
| SOCS-S_Feeling for suffering | −0.252 | 0.000*** |
| SOCS-S_Tolerating feeling | −0.360 | 0.000*** |
| SOCS-S_Motivation to act | −0.334 | 0.000*** |
| SOCS-S_Self-compassion | −0.338 | 0.000*** |
| SOCS-O_ Recognising suffering | −0.155 | 0.000*** |
| SOCS-O_ Universality of suffering | −0.170 | 0.000*** |
| SOCS-O_Feeling for suffering | −0.054 | 0.186 |
| SOCS-O_Tolerating feeling | −0.267 | 0.000*** |
| SOCS-O_ Motivation to act | −0.139 | 0.001* |
| SOCS-O_Compassion to others | −0.191 | 0.000*** |
| PROQOL_Burnout | 0.894 | 0.000*** |
| PROQOL_Secondary traumatic stress | 0.905 | 0.000*** |
| PROQOL_Compassion satisfaction | −0.405 | 0.000*** |

Significance *$p \leq 0.05$; Significance ***$p \leq 0.001$.

### 3.9 | Multiple regression analysis

A multiple regression was run to predict compassion fatigue, on the basis of self-criticism, self-compassion, compassion for others, compassion satisfaction, length of practice and hours per week with client/patient. Our results showed that the independent variables explained 43.8% of the variability of the dependent variable—compassion fatigue. The remaining 56.2% of the variation was caused by factors other than the predictors in the model. The results showed that the independent variables statistically significantly predicted the dependent variable—compassion fatigue, $F$ (6, 600) = 77.916; $p = 0.000$, $R^2$=0.438. Out of the six variables, only four variables—length of practice ($p = 0.017$), hours per week with client/patient ($p = 0.000$), self-criticism ($p = 0.000$) and compassion satisfaction ($p = 0.000$)—added statistically significantly to the prediction. The highest contributing factor to compassion fatigue was self-criticism ($\beta = 0.497$), followed by compassion satisfaction ($\beta = -0.300$). Self-compassion and compassion for others did not contribute to the multiple regression model. Unstandardised coefficient ($B$), standard error ($SE$), standardised coefficient ($\beta$), $t$ statistic and $p$-value are reported in Table 4.

### 3.10 | Mediation analysis

We conducted three separate parallel mediation analyses using the combined scores from all groups of professionals, each with a different independent variable (years of practice, hours per week with a client/patient and profession) and analysed its effect on the dependent variable—compassion fatigue (sum up of STS and BO together)—through two mediators—self-criticism and self-compassion. These independent variables were selected on the base of previous findings pointing to the connection of more experiences and frequency of exposure to greater CF (e.g. Bell et al., 2019; Koverová & Ráczová, 2017a, 2017b; Račić et al., 2019; Ortega-Campos et al., 2020). Little is known about the role of profession in relation to the levels of CF; thus, we focused on studying how these independent variables influence compassion fatigue as mediated by our two mediators. We

provide the results in the following section. The first analysis was conducted with the independent variable—years of practice. The results are listed in Table 5.

The results showed that self-criticism is a negative and significant predictor of compassion fatigue, whereas self-compassion is a positive and significant predictor of compassion fatigue. The indirect effects of practice as mediated via our mediators, self-criticism and self-compassion were not found to be significant (as 0 falls between the lower bound and upper bound confidence intervals). The second mediation analysis was conducted with the independent variable, hours per week with client/patient. The results are listed in Table 6.

The results showed that along with self-criticism and self-compassion, the extent of exposure in terms of hours per week with client/patients is a significant and positive predictor of compassion fatigue. The indirect effects of practice as mediated via our mediators, self-criticism and self-compassion were not found to be significant (as 0 falls between the lower bound and upper bound confidence intervals). Lastly, we conducted one more mediation analysis with profession as the independent variable. The results are shown in Table 7.

Profession was found to be a negative and significant predictor of self-criticism, a positive and significant predictor of self-compassion and a negative and significant predictor of compassion fatigue. The indirect effect of profession mediated via self-criticism was negative and significant, the effect of profession mediated by self-compassion was negative and significant and the effect of profession mediated via the two mediators was negative and significant (as 0 falls outside the lower bound and upper bound confidence intervals).

## 4 | DISCUSSION

This study provided a comprehensive overview of the CF levels experienced by various helping professions—doctors, nurses, paramedics, home nurses, pedagogues, social workers, psychologists, psychotherapists and coaches, priests and pastors and police officers. We found levels of CF (STS and BO) and CS differed significantly between helping professions. Among the professions with the highest reported levels were doctors, pedagogues, home nurses, nurses and psychologists. By contrast, the profession with the lowest reported CF level was psychotherapists and coaches, which may be due to the extensive long-term training psychotherapists undergo, supervision or even the ability to better cope with and process emotions. Psychotherapists and coaches, along with priests and pastors, home nurses, nurses and paramedics experienced higher CS levels than other helping professions. Doctors had the lowest reported CS

**TABLE 4** Multiple regression model

| | *B* | *β* | *SE* | *t* | *p* |
|---|---|---|---|---|---|
| Self-criticism | 0.556 | 0.497 | 0.040 | 13.889 | 0.000*** |
| Self-compassion | 0.009 | 0.008 | 0.041 | 0.219 | 0.826 |
| Compassion for others | −0.046 | −0.038 | 0.046 | −1.014 | 0.311 |
| Compassion satisfaction | −0.572 | −0.300 | 0.069 | −8.265 | 0.000*** |
| Length of practice | 0.351 | 0.074 | 0.147 | 2.394 | 0.017* |
| Hours per week with client/patient | 0.544 | 0.129 | 0.130 | 4.182 | 0.000*** |

Significance *$p \leq 0.05$; Significance ***$p \leq 0.001$.

**TABLE 5** Direct and indirect effects of years of practice on compassion fatigue as mediated via self-criticism and self-compassion

| ***Direct effects*** | | | | |
|---|---|---|---|---|
| | ***b*** | ***se*** | ***sig.*** | |
| Practice on self-criticism | −0.21 | 0.17 | 0.220 | |
| Practice on self-compassion | −0.05 | 0.18 | 0.770 | |
| Practice on CF | 0.17 | 0.16 | 0.287 | |
| Self-criticism on CF | 0.59 | 0.04 | 0.000*** | |
| Self-compassion on CF | −0.11 | 0.04 | 0.004* | |
| ***Indirect effects*** | | | | |
| | *b* | *se* | *LB ci* | *UB ci* |
| Practice on CF (via self-criticism) | −0.12 | 0.11 | −0.3343 | 0.0825 |
| Practice on CF (via self-compassion) | 0.01 | 0.02 | −0.0398 | 0.0576 |
| Practice on CF (via both mediators) | −0.12 | 0.12 | −0.3566 | 0.1133 |

Significance *$p \leq 0.05$; Significance ***$p \leq 0.001$.

**TABLE 6** Direct and indirect effects of hours per week with client/patient on compassion fatigue as mediated via self-criticism and self-compassion

| *Direct effects* | | | | |
|---|---|---|---|---|
| | ***b*** | ***se*** | ***sig.*** | |
| Hours on self-criticism | 0.17 | 0.15 | 0.277 | |
| Hours on self-compassion | −0.15 | 0.16 | 0.364 | |
| Hours on CF | 0.51 | 0.14 | 0.001* | |
| Self-criticism on CF | 0.59 | 0.04 | 0.000*** | |
| Self-compassion on CF | −0.11 | 0.04 | 0.004* | |
| ***Indirect effects*** | | | | |
| | *b* | *se* | *LB ci* | *UB ci* |
| Hours on CF (via self-criticism) | 0.10 | 0.09 | −0.0753 | 0.2734 |
| Hours on CF (via self-compassion) | 0.02 | 0.02 | −0.0199 | 0.0654 |
| Hours on CF (via both mediators) | 0.11 | 0.10 | −0.0776 | 0.3134 |

Significance *$p \leq 0.05$; Significance ***$p \leq 0.001$.

**TABLE 7** Direct and indirect effects of profession on compassion fatigue as mediated via self-criticism and self-compassion

| *Direct effects* | | | | |
|---|---|---|---|---|
| | ***b*** | ***se*** | ***sig.*** | |
| Profession on self-criticism | −0.51 | 0.17 | 0.003* | |
| Profession on self-compassion | 0.38 | 0.18 | 0.034* | |
| Profession on CF | −0.51 | 0.15 | 0.001* | |
| Self-criticism on CF | 0.59 | 0.04 | 0.000*** | |
| Self-compassion on CF | −0.11 | 0.04 | 0.004* | |
| ***Indirect effects*** | | | | |
| | *b* | *se* | *LB ci* | *UB ci* |
| Hours on CF (via self-criticism) | −0.29 | 0.10 | −0.4901 | −0.0935 |
| Hours on CF (via self-compassion) | −0.04 | 0.03 | −0.1079 | −0.0011 |
| Hours on CF (via both mediators) | −0.33 | 0.11 | −0.5459 | −0.1199 |

Significance *$p \leq 0.05$; Significance ***$p \leq 0.001$.

level, significantly lower than the other helping professions. Doctors report the lowest levels of compassion satisfaction along with the highest levels of compassion fatigue, placing doctors at a higher risk of suffering as a result of doing their job and consequently their patients as well. Our results showed that healthcare professionals (doctors, nurses and psychologists) in particular, along with pedagogues, tended to experience compassion fatigue symptoms. This may be due to the poor quality of healthcare systems and education systems in Central Europe, which may have contributed to the professionals experiencing more of the negative aspects of caring (secondary traumatic stress as well as burnout). The COVID-19 pandemic may have been a contributing factor as the data were collected in the middle of it. The pandemic had a large impact on the healthcare system, adding to the workload and number of patients requiring care in an already overloaded healthcare system in Central Europe. Moreover, the pandemic meant that education was moved online, which was a big challenge for pedagogues. Our study is the first to compare these professions, and as such provides important and useful results for future CF studies and for setting up interventions to help sufferers cope with CF. We prepare a compassion satisfaction intervention based on these results to assist health professionals in increasing compassion satisfaction and mitigating the possibility of developing compassion fatigue. The prepared intervention will be administered online to helping professionals and will, for example, include exercises on identifying the symptoms of CF, self-sabotaging client-related thoughts, increasing mindfulness, mission awareness, developing more self-compassion and self-protection against self-criticism, learning tools to regulate the level of emotional engagement or building more work–life balance and self-care. Furthermore, we found that the length of practice did not appear to be associated with the level of CF. This finding contradicts previous findings that more experienced professionals have higher CF (Koverová & Ráczová, 2017a, 2017b; Račić et al., 2019; Ortega-Campos et al., 2020). That suggests that it is not the length

of practice in itself that is important, but that other factors such as compassion satisfaction, the demands of the job or frequency of contact with clients may play a more important role in the development of compassion fatigue.

Furthermore, as CF occurs as a result of contact with traumatic experiences of the client/patient (Figley, 1995), we predicted that professionals who spend more time with clients/patients would experience higher CF levels. Our results indicate that as professionals spend more time with clients/patients, their CF levels rise, although the effect sizes were not large. Similar finding was reported by Bell et al. (2018) where mental health professionals who were more frequently exposed to traumatic events reported greater levels of compassion fatigue.

This research finding could be used to better organise helping professionals' workloads to prevent compassion fatigue. Helping professionals could benefit from the effective management of clients/patient numbers, so they are not overwhelmed by others' traumatic experiences. Alternatively, they could engage in other kinds of work, rather than just working directly with clients/patients, such as administration, research and so on.

Furthermore, in this study, we focused on exploring the differences in compassion, self-compassion and self-criticism based on CF levels. We found there were small significant differences in compassion and self-compassion levels in professionals with low CF scores and medium CF scores. This finding is in line with previous research on this topic: Professionals with greater self-compassion were found to have lower CF levels (Beaumont et al., 2015, 2016; Durkin et al., 2016; Duarte & Pinto-Gouveia, 2017). However, only one participant in our study scored high in CF levels, making it impossible to capture this difference using our groups. The differences in self-criticism between the low and the medium CF group were in line with previous research (Uidipi et al., 2008; Duarte & Pinto-Gouveia, 2017). Self-criticism seems to be an important factor correlating with, and even predicting, compassion fatigue. Therefore, any compassion satisfaction intervention for the helping professionals should include a section how to combat own self-criticism. Based on the previous intervention research (e.g. Halamová et al., 2021), the efficient way of combating self-criticism is to learn to be more self-compassionate which means to be more kind and caring for self and self-protective which means to be more able to set boundaries.

We found that the independent variables (self-criticism, self-compassion, compassion for others, compassion satisfaction, length of practice and hours per week with client/patient) explained 43.8% of the variability of the dependent variable—compassion fatigue. Self-criticism was the best predictor of and contributing factor to CF levels. Self-compassion and compassion for others were not found to significantly contribute to CF, in contrast to previous findings (Beaumont et al., 2015, 2016; Duarte et al., 2016; Duarte & Pinto-Gouveia, 2017b; Durkin et al., 2016). This may be due to cultural differences in experiencing self-criticism and self-compassion (Halamová et al., 2018, 2020) as particular words and concepts may not have the same meaning in different cultures, or in some cases, not have a meaning at all. To further elaborate these findings, we conducted a parallel mediation analysis to determine the relationship between the effect of the following independent variables—years of practice, hours per week with a client/patient and profession—on the dependent variable, which was compassion fatigue as mediated via inner talk in the form of self-criticism and self-compassion. Our results showed that neither self-criticism nor self-compassion significantly mediated the effect of years of practice and hours per week on compassion fatigue. Profession did have a significant effect on compassion fatigue when mediated by self-criticism and self-compassion. Hours per week with a client/patient, profession and self-criticism and self-compassion were found to have a direct and significant effect on compassion fatigue. When designing prevention programs or intervention programs to combat compassion fatigue, we recommend paying special attention to inner talk to self and work time spent with clients. In real life, we cannot directly influence the selection of helping professionals because we need all helping professions to be represented in a society. However, compassion fatigue level can be managed through the use of special profession-specific work plans that help professionals to deal with the negative consequences of their job. Specifically, we can design programs to help people better manage their work time and workload (hours per week with clients/patients) and learn healthier ways of engaging in inner talk (being less self-critical and more self-compassionate).

Our findings suggest that self-criticism, along with compassion satisfaction, may be an important factor in building resilience against CF. Therefore, interventions alleviating CF should also focus more deeply on working with self-criticism and how to reduce it, and not just by developing self-compassion or compassion. For example, Emotion Focused Training for Self-Compassion and Self-Criticism (Halamová et al., 2021) may be an option as an intervention for helping professionals in combating compassion fatigue, as it focuses on developing self-compassion as well as increasing the skills of self-protection in order to combat self-criticism. Further research could verify its effectiveness on decreasing compassion fatigue along with already tested effect on increasing self-compassion and self-protection and decreasing self-criticism. Additionally, good interventions for reducing compassion fatigue should tackle ways of managing work with clients over the long term and how to handle the number of clients per week. Also, an intervention for combating compassion fatigue might consider including emotional intelligence section because the emotional competence of doctors is one of the most negatively and inversely correlated construct with CF (Huggard et al., 2013).

### 4.1 | Limitations and future research

The main limitation of our study is that the data collection was conducted during the COVID-19 pandemic, which had a severe impact on the helping professions. Some helping professions, such as social workers, found their work was considerably limited or complicated, while other professions such as doctors and medical

staff were under much more pressure than usual. This may have affected the overall results of our research. The pandemic may have led to an increase in the workload of psychologists and psychotherapists as under the lockdowns and social distancing rules, mental health problems and even domestic violence increased (e.g. Boserup et al., 2020; Cost et al., 2021; Leslie & Wilson, 2020; O'Connor et al., 2020; Wilson, Fitzgerald, Oosterhoff, Sevi, & Shook, 2020;). Another potential limitation of our study is the non-representative nature of our research sample. The sample of helping professionals was determined by how many were willing to participate in our study and complete the battery of questionnaires. This may have resulted in a disproportionate mix of men and women, with women predominating as men are less likely to participate in online surveys (Smith, 2008).

Future research should focus on a qualitative analysis of experiences of different helping professions to obtain a better understanding of the factors contributing to the development of compassion fatigue, of how compassion fatigue is experienced and how people cope with it. Also, larger and representative samples would yield more robust and rigorous results.

## 5 | CONCLUSION

This study fills a gap in the compassion fatigue research and offers a comprehensive overview and comparison of compassion fatigue in different helping professions. Additionally, it provides a better understanding of the factors contributing to compassion fatigue. By analysing the degree to which different helping professions experience compassion fatigue and which factors contribute to it, we can further focus on developing prevention programs tailored to each profession in order to reduce compassion fatigue and improve quality of life, including among the helping professionals' patients and clients.

### CONFLICTS OF INTEREST

The authors declare that they have no potential conflicts of interests.

### AUTHOR CONTRIBUTIONS

NO and JH designed the research project. NO collected the data. NO did the statistical analyses. NO and JH interpreted the data. NO and JH wrote the first draft of the article, revised the manuscript. Both authors read and approved the final manuscript.

### ETHICAL APPROVAL

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

### INFORMED CONSENT

Written informed consent was obtained from all individual participants included in the study.

### DATA AVAILABILITY STATEMENT

In order to comply with the ethics approvals of the study protocols, data cannot be made accessible through a public repository. However, data are available upon request for researchers who consent to adhering to the ethical regulations for confidential data.

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