

Secondary Traumatization and Emotional Exhaustion in Mental Healthcare Providers: The Mediating Role of Social Support

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Abstract

Background: Burnout, especially emotional exhaustion, is common among mental healthcare providers (MHP). It is caused by exposure to prolonged stress related job conditions, such as secondary traumatization. Social support is a protective factor for developing emotional exhaustion. In addition, higher levels of social support are associated with lower levels of secondary traumatization. However, it is unclear how social support and secondary traumatization are related. Social support may be a protective factor for developing secondary traumatization, as it is for emotional exhaustion. On the other hand, MHP who suffer more from secondary traumatization might experience less social support, for example because they fear stigmatization. This study examined whether social support mediates the relationship between secondary traumatization and emotional exhaustion. Further, it is explored whether the relation between secondary traumatization and social support is moderated by profession (physicians, psychologists and case managers). **Method:** In total, 593 MHP participated in this cross-sectional study. Participants completed a questionnaire including demographic characteristics, secondary traumatization, emotional exhaustion, and social support. **Results:** It was shown that no MHP experience high levels of secondary traumatization and relatively few experience high levels of emotional exhaustion, while they do experience much social support. Furthermore, as hypothesized, it was found that the relationship between secondary traumatization and emotional exhaustion is partially mediated by social support. Finally, no moderation effect of profession was found. **Conclusion:** These results imply that MHP have access to social support and make use of it, preventing emotional exhaustion. Mental healthcare organisations should maintain these resources for social support to

prevent emotional exhaustion. MHP who are less inclined to seek social support should receive extra attention, as should MHP who are more at risk of secondary traumatisation. Even though MHP experience the availability of social support, still 25% of the MHP do experience emotional exhaustion. Future research should examine which factors for this group contribute to the development of emotional exhaustion so that appropriate measures can be taken.

Keywords

Burnout, Secondary Traumatisation, Emotional Exhaustion, Social Support, Mental Healthcare Providers

1. Introduction

Burnout is a psychological syndrome emerging as a prolonged response to chronic interpersonal stressors at work, which is a major problem worldwide (WHO, 2019). The most widely accepted definition of burnout was proposed by Maslach and Jackson (1981), who described burnout as three-dimensional syndrome characterized by emotional exhaustion, depersonalisation (i.e., a cynical outlook towards others) and/or low level of personal accomplishment, of which at least two dimensions should be present. The prevalence rates of burnout among mental healthcare providers (MHP) vary widely (O'Connor, Neff, & Pitman, 2018), with reported prevalence rates between 1.2% and 59.2% (Sorgaard et al., 2017; Imai et al., 2004), depending on the way burnout is defined and measured.

In any case, burnout has major consequences, for both the individual and the mental healthcare institutions. A person with burnout typically experiences low physical and mental health, including for example sleeping problems, body pain, and depression (Azam, Khan, & Alam, 2017). Organisations have to deal with an employee who is less productive, often absent due to illness, and providing reduced quality of work (Taris, Houtman, & Schaufeli, 2013; Dewa et al., 2014; Salyers et al., 2017). In the US, among physicians alone, the costs of turnover and decreased productivity are approximately 4.6 billion dollars per year (Han et al., 2019).

In general, there are several explanations for the onset of burnout. The job demands-resources model (Demerouti et al., 2001) states that burnout occurs when there is an imbalance between the demands of the job and the ability to meet them. Factors such as understaffing, excessive workload and poor leadership are associated with burnout (Graber et al., 2008; Pinikahana & Happell, 2004). The capability approach (Sen, 1980) posits that burnout occurs when the needs of the employee do not sufficiently match the working conditions of the employer. For example, a lack of opportunities to develop skills is associated with burnout (Graber et al., 2008). Another factor that is associated with bur-

nout is the indirect exposure to traumatic content, also known as secondary traumatisation (STS; Hamama et al., 2019; Figley & Ludick, 2017; Cieslak et al., 2014). For example, Hamama and colleagues (2019) found that higher scores on STS are related to higher levels of burnout. Finally, a lack of social support is related to burnout (Kim et al., 2018). For example, it has been found that more social support leads to lower levels of burnout (Ariapooran, 2014).

In recent years, much scientific attention has been paid to a better understanding of burnout, especially among mental healthcare providers (Sweileh, 2020). O'Connor and colleagues (2018) found in their meta-analysis that MHP particularly score high on emotional exhaustion, with a prevalence of 40%, surpassing the other two dimensions of burnout, depersonalisation and personal accomplishment, with a prevalence of respectively 22% and 19%. The prevalence of high EE among MHP is higher compared to other healthcare professions that are at risk for burnout, such as oncology physicians (32%; Yates & Samuel, 2019), and emergency nurses (36%; Gómez-Urquiza et al., 2017).

The high prevalence of EE in MHP may be explained by STS (Figley, 1995). STS can be defined as “the natural, consistent behaviours and emotions that arise from the knowledge of a traumatic event experienced by a significant other and the stress resulting from helping or wanting to help a traumatised or suffering person” (Figley, 1995: p. 7). MHP, more than other healthcare providers, try to empathise with the client to reduce the client’s suffering, exposing them to experiences of traumatic events, which can have deleterious effects (Figley & Ludick, 2017; Michelson & Kluger, 2021). Previous research shows a relation between STS and burnout, especially EE (Cieslak et al., 2014), indicating that high levels of STS are associated with higher scores on EE. This association is also found in MHP (Collins & Long, 2003; Kraus, 2005). Therefore, it is hypothesized that there is a relation between STS and EE in the current study as well.

Social support (SS) on the other hand is considered a protective factor against EE (Kim et al., 2018; Velando-Soriano et al., 2020). Also, lack of SS appears to be a risk factor for developing burnout (Zhang et al., 2021). In addition, strong relations have been found between SS and STS. Research shows that higher levels of SS are associated with lower levels of STS (Greinacher et al., 2019; Boscarino, Adams, & Figley, 2010). As the findings of previous research are correlational, the direction of the relationship could also be the other way around; that MHP who suffer more from STS experience less SS. For example, it is possible that MHP are less inclined to seek help when they suffer more from STS. It is known that people with psychopathological symptoms are generally more reluctant to tell others about their mental health problems due to stigmatisation (Toth & Dewa, 2014). This also applies to MHP (Wallace, 2012). It has been shown, for example, that MHP who experience more personal, or work-related problems, such as burnout or depression, are not more likely to seek help than MHP who experience fewer problems (Siebert & Siebert, 2007). Furthermore, it appears that nurses with suicidal thoughts are even more reluctant to seek help than

nurses without suicidal thoughts (Kelsey et al., 2021). Several reasons have been found for not seeking support. One reason could be that MHP believe that they should not be vulnerable (Wallace & Lemaire, 2009). In addition, MHP fear that they will be perceived as less competent by colleagues, that they will lose status and even lose their job (Tay, Alcock, & Scior, 2018). Finally, MHP aim to protect others from exposure to traumatic content (Chrestman, 1995). On the other hand, co-workers are hesitant to offer support when they are not sure if their colleague is suffering from psychological distress. They worry about wrongly “victimizing” their colleague and fear retaliation (McCall, 2001; Marshall, 2008). In addition, when they want to offer help they often do not know what kind of support can be offered (Marshall, 2008). Since high levels of STS are associated with low levels of SS and previous research shows a relation between SS and EE, in this study, higher levels of STS are expected to be associated with lower scores on SS, leading to higher levels of EE.

Moreover, there may be differences between the different professions of MHP in SS when experiencing psychological stress. For example, social workers have been found to be more willing to seek psychological treatment than psychologists (Norman & Rosvall, 1994). Within the different professions in MHP, various factors have also been found that hinder the search for SS in times of stress. For example, physicians have been found to have negative attitudes towards mental healthcare and tend to deal with stress alone (Jones, Whybrow, & Coetzee, 2018). In addition, research shows that expressing emotions in medical practice is perceived as unprofessional and that physicians learn to suppress their feelings and not use the available support (Kerasidou & Horn, 2016). Finally, high levels of self-stigmatisation have been found in physicians, which reduces the willingness to seek help (Schomerus, Matschinger, & Angermeyer, 2009; Jones, Whybrow, & Coetzee, 2018). Psychologists, on the other hand, report low scores on self-stigmatisation (Tay, 2016). It turned out that the main factors for not seeking help in psychologists with mental health problems were difficulties finding a psychotherapist and a lack of time (Bears et al., 2013). Psychologists also experience stigma from society on psychological problems, shame and fear of being judged negatively preventing them from seeking help (Tay, Alcock, & Scior, 2018). Finally, nurses experience stigma on mental health problems, fear that they will be treated differently by their managers and they will not feel empathy when they talk about their mental problems, and are concerned about potential adverse consequences on career development, reducing their help-seeking behaviour (Galbraith, Brown, & Clifton, 2014; Hernandez, Morgan, & Parshall, 2016; Lee, Jeong, & Yi, 2020). As it seems, there are differences between mental healthcare professions in factors influencing help seeking behaviour. Therefore, it might be possible that the relationship between STS and SS is moderated by profession. This has not been investigated to date.

Surprisingly, despite much research has been conducted on burnout in MHP and the relation with STS and SS, no previous study examined the possible me-

mediating role of SS in the relationship between STS and EE. Investigating the mediating role of social support is important, as it can prevent EE in MHP and keep them mentally fit. This benefits mental healthcare organisations as low levels of EE are associated with lower staff turnover rates (Ducharme, Knudsen, & Roman, 2008), eliminating the need to invest time, money and energy in recruiting new employees and their onboarding processes (Duffield et al., 2014). In addition, it also benefits employees, who can work under better working conditions, which increases job satisfaction (Bovier et al., 2009). Finally, it is beneficial for clients because continuity of care can be ensured if there is less absenteeism among MHP (Woltmann et al., 2008), resulting in higher quality of care (Johnson et al., 2018). In addition, this research is the first to examine whether there are differences between physicians, psychologists, and case managers in how they experience social support when they are more secondary traumatised. Altogether, this helps healthcare managers to use targeted interventions to reduce and prevent EE, for the various mental healthcare professions.

2. Materials and Method

2.1. Design and Hypotheses

This cross-sectional study focused on the relation between STS, EE and STS among MHP. We hypothesized that, as in previous research, there is a positive relationship between STS and EE. The main hypothesis is that SS mediates the relationship between STS and EE. There is no specific hypothesis regarding the moderator profession; as there are differences between the various professions in mental health care in help seeking behaviour at higher levels of psychological stress, it is explored whether profession moderates the relation between STS and SS.

2.2. Procedure

This cross-sectional study was conducted on mental healthcare providers working in two large mental healthcare institutions (GGZ Breburg and GGZ Westelijk Noord-Brabant), both located in the south of the Netherlands. The MHP were selected by means of a convenience sampling method. To be included in this study, MHP had to provide direct care for patients. All MHP working in the two mental healthcare institutions who met the inclusion criterium were invited to participate in the study. All potential participants were contacted by e-mail and received a reminder 4 weeks after the original invitation to participate in the study if they had not already done so. In this email, information was provided about the study purpose and what participation would mean for them. They were also informed about the way of data processing and privacy handling. All information was stored anonymously and only the researchers had access to the data. Respondents obtained access to the survey via a link in the email. The online survey began with a brief introduction after which participants were asked to confirm that they consented to take part in the study by selecting “Yes”, from

a drop-down menu. The data collection took place between February 2020 and August 2020.

2.3. Participants

In total 2065 MHP met the inclusion criterium and were invited to participate, of which 623 responded (30.17%). Fourteen respondents filled in the questionnaire twice by mistake (0.77%) and 16 participants denied consent (0.68%). Ultimately, data of 593 respondents was used (28.72%). These MHP were divided in three professions; 1) “physicians”, professionals who provide pharmacological treatment, such as psychiatrists, physicians and nurse practitioners, 2) “psychologists”, professionals who provide psychological treatment, such as clinical psychologists, healthcare psychologists and psychotherapists, 3) “case managers”, professionals who provide psychological or medical counselling, such as nurses and social workers. In total, 63 physicians (10.62%), 149 psychologists (25.13%), and 381 case managers (64.25%) participated in the study. Those who were not willing to participate, mentioned various reasons, such as it was too time-consuming, already participating in other studies and no willingness to participate in another study. Finally, some respondents indicated that they struggle with burnout symptoms, or had struggled with burnout symptoms in the past and they did not feel that the organisation would do anything with the outcomes because this had not happened in the past.

2.4. Measurements

2.4.1. Socio-Demographics

Socio-demographics were assessed by a questionnaire measuring the respondents' age, gender, profession, work experience, contracture, overtime, and whether they were in training or not.

2.4.2. Emotional Exhaustion

To measure emotional exhaustion the Utrecht Burn-out Scale-C (UBOS-C; [Schaufeli & van Dierdonck, 2000](#)) was used, which is the Dutch translation of the Maslach Burnout Inventory (MBI; [Maslach & Jackson, 1986](#)). In our study we only used the subscale emotional exhaustion, consisting of 8 items. To determine low, medium or high levels of emotional exhaustion cut-off scores were used (<7 = low, 8 - 18 = medium, >18 = high). The reliability of the subscale emotional exhaustion of the UBOS-C in this study was good (Cronbach's alpha 0.89), which is similar to the reliability found in previous studies with a Cronbach's alpha of 0.87 (e.g., [Schaufeli & van Dierdonck, 2000](#)). Also, the validity and the test-retest reliability are good ([Schaufeli & van Dierdonck, 2000](#)).

2.4.3. Secondary Traumatization

Secondary traumatization was operationalised using the Dutch translation of the 10-item secondary traumatization module from the Professional Quality of Life (ProQoL; [Stamm, 2010](#)). A provisional assessment of risk for secondary trauma-

tisation can be achieved by summing items for the subscale, using cut-off scores of <22, 23 - 41 and >41 to determine a low, normal or high risk for secondary traumatisation, respectively. The reliability of the ProQol in this study was good (Cronbach's alpha 0.82), and similar to reliability found in previous studies with a Cronbach's alpha of 0.81 (e.g., [Stamm, 2010](#)). Also, the validity is good ([Stamm, 2010](#)).

2.4.4. Social Support

Social support was measured by the questionnaire perception and assessment of labour 2.0 (Vragenlijst Beleving en Beoordeling van Arbeid; VBBA 2.0; [van Veldhoven et al., 2014](#)). In this study, the dimension "relationship and communication" was used to measure the degree of SS. In total, this dimension contains the subscales "relationship with manager" and "relationship with colleagues", both consisting of 6 items (12 items in total). The reliability of the dimension "relationship and communication" in this study was good (Cronbach's alpha 0.84), and similar to the reliability found in previous studies with a Cronbach's alpha of 0.87 (e.g., [van Veldhoven et al., 2014](#)). Also, the validity is good ([van Veldhoven et al., 2014](#)).

2.4.5. Data Analysis

All data analyses were performed using the Statistical Package for the Social Science, version 26 (SPSS version 26; IBM corp.). First, data was checked on outliers, missing variables, and normality. Next, Independent sample T-tests and Analysis of variance (ANOVA) were used to test differences between groups on EE, STS and SS. Also, Pearson correlations were calculated for demographic characteristics and EE, STS, and SS. Next, the impact of STS (X) on EE (Y) through the possible mediating factor of SS (M) was tested. Model 4 in the PROCESS macro developed by [Hayes \(2013\)](#) was used to test the mediation hypothesis. Finally, it was examined whether profession (physicians vs. psychologists vs. case managers) moderated the relationship between STS and SS. Model 7 in the PROCESS macro was used to test the moderating hypothesis. Since case managers are the largest group, they were determined as the control group in the moderation analysis.

2.4.6. Ethical Considerations

This study was conducted after obtaining agreement from the local ethical science committees of both institutions. After completion of the questionnaire, answers were automatically saved in an excel file that can only be accessed by the leading researcher. The obtained data were only used for the purpose of the current study.

3. Results

3.1. Descriptive Statistics

Table 1 presents the characteristics of participants and descriptive statistics of

Table 1. Sample characteristics.

Variable	Total	Possible range	Actual range	Emotional exhaustion		Secondary traumatisation		Social support	
				M (SD)	t/F	M (SD)	t/F	M (SD)	t/F
<i>Age</i>	40.57 (11.88) ^a	0 - 100	18 - 66		0.95		0.83		1.08
<i>Gender</i>					-2.47*		-2.66*		-0.06
Male	133 (22.43%) ^b			12.15 (8.41)		17.41 (4.64)		40.44 (4.79)	
Female	460 (77.57%) ^b			14.17 (8.25)		18.64 (4.76)		40.74 (4.98)	
<i>Profession</i>					2.20		5.33*		1.00
Physician	63 (10.62%) ^b			13.92 (8.11)		17.41 (4.26)		41.10 (4.27)	
Psychologist	149 (25.13%) ^b			14.89 (7.88)		17.56 (4.29)		40.11 (4.53)	
Case manager	381 (64.25%) ^b			13.22 (8.49)		18.84 (4.95)		40.49 (4.83)	
<i>Work experience (in years)</i>	12.79 (10.70) ^a	0 - 50	0 - 46		0.94		1.10		1.13
<i>Contracture (in hours a week)</i>	30.41 (6.01) ^a	0 - 45	0 - 43		1.35		1.13		0.86
<i>Overtime (in hours a week)</i>	1.12 (4.77) ^a	0 - 40	0 - 28		1.40		1.02		0.69
<i>In training</i>					-0.23		-3.03*		0.48
Yes	205 (34.57%) ^b			13.60 (8.15)		17.56 (4.29)		40.59 (4.55)	
No	388 (65.43%) ^b			13.77 (8.41)		18.79 (4.94)		40.39 (4.78)	
<i>Emotional exhaustion</i>	13.71 (8.32) ^a	0 - 56	0.46						
Low	142 (23.95%) ^b								
Medium	313 (52.78%) ^b								
High	138 (23.27%) ^b								
<i>Secondary traumatisation</i>	18.37 (4.76) ^a	0 - 50	10 - 41						
Low	492 (83%) ^b								
Medium	101 (17%) ^b								
High	0 (0%) ^b								
<i>Social support</i>	40.46 (4.70) ^a	0 - 48	19 - 48						

* = $p < 0.05$ level (2-tailed); ^avalues represent mean (SD), ^bvalues represent n (%).

the study variables, including mean, standard deviation, possible range and actual range. The age of the respondents varied from 18 to 66 years old, with a mean of 40.57 years. Most participants were female (77.57%; $n = 460$) and were not in training (65.43%; $n = 388$). The average contracture was 30.41 hours a week, with an average overtime of 1.12 hours a week. The average work experience was 12.79 years.

A mean score of 13.71 (SD = 8.32) was found for EE. The prevalence of high EE in current study was 23.94%. Furthermore, a mean score of 18.37 (SD = 4.76)

was found for STS, with 17.03% of the participants scoring moderate and no MHP scored high on STS. Finally a mean score of 40.46 (SD = 4.70) was found for SS.

Significant gender differences were found on EE ($t = -2.47, p < 0.05$) and STS ($t = -2.66, p < 0.01$), with woman scoring higher compared to men. Further, differences were found with respect to profession on STS ($F = 5.33, p < 0.01$), with case managers scoring higher compared to physicians and psychologists. Also, significant differences were demonstrated of being in training or not on STS ($t = -3.03, p < 0.01$). MHP in training scored lower on STS compared to MHP who are not in training.

3.2. Associations between EE, STS, SS and Demographic Variables

Bivariate correlations between study variables are shown in **Table 2**. Results show STS and EE were positively associated ($r = 0.52, p < 0.001$), indicating that higher scores of STS are associated with higher scores of EE. Further, STS and SS were negatively related ($r = -0.23, p < 0.001$), indicating that higher levels of STS are associated with lower levels of SS. Finally, SS and EE were negative related ($r = -0.35, p < 0.001$), indicating that higher levels of EE were reported by MHP reporting lower levels of SS. Furthermore, older age ($r = -0.12, p < 0.01$) and male gender ($r = 0.10, p < 0.05$) were associated with lower levels of EE. Next, female gender ($r = 0.11, p < 0.01$), being a case manager ($r = 0.13, p < 0.01$) and not being in training ($r = 0.12, p < 0.01$) were associated with higher levels of STS. Finally, longer work experience was associated with less SS ($r = -0.10, p < 0.05$).

3.3. Social Support as a Mediator in the Association between STS and EE

Next, it was tested whether SS mediates the relationship between STS and EE

Table 2. Correlations among study variables.

	1	2	3	4	5	6	7	8	9	10
Age	-									
Gender	-0.15***	-								
Profession	0.02	0.08	-							
Work experience	0.76***	-0.07	0.01	-						
Contracture	-0.16***	-0.24***	-0.13**	-0.11**	-					
Overtime	-0.05	0.12***	0.13**	-0.05	0.14**	-				
In training	0.29***	-0.10*	-0.27***	0.29**	-0.07	0.11*	-			
EE	-0.12***	0.10*	-0.06	-0.06	0.02	-0.01	0.01	-		
STS	0.05	0.11**	0.13**	0.07	-0.01	0.05	0.12**	0.52***	-	
SS	-0.06	0.01	-0.02	-0.10*	0.06	0.06	-0.02	-0.35***	-0.23***	-

* = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$ (2-tailed).

(see **Table 3**). Results justify that the total effect of STS on EE (path c, see **Figure 1**) was significant ($B = 0.94$, $t = 15.43$, $p < 0.001$). The relationship between STS and SS (path a, **Figure 1**) was negative and significant ($B = -0.22$, $t = -5.48$, $p < 0.001$). Furthermore, the results showed that the relationship between SS and EE (path b, see **Figure 1**) was negative and significant ($B = -0.45$, $t = -7.44$, $p < 0.001$). The overall findings demonstrated a positive and significant impact of STS on EE (path c', see **Figure 1**) through SS ($B = 0.84$, $t = 14.09$, $p < 0.001$). The macro generated bootstrapped (5000 bootstraps were used in our study) confidence intervals did not contain zero, which indicates a significant, but partial, mediation effect (Preacher & Hayes, 2008).

Table 3. Mediation analysis.

Direct effect model					
Predictor		Outcome = M (social support)			
		<i>B</i>	SE	<i>T</i>	<i>p</i>
X (secondary traumatisation)	a	-0.22	0.04	-5.48	0.00*
Age		-0.01	0.02	0.58	0.56
Gender		0.26	0.46	0.57	0.57
Profession		0.08	0.28	0.30	0.77
Work experience		-0.05	0.03	-1.73	0.08*
Constant	i_1	43.85	1.47	29.90	0.00*
Direct effect model					
Predictor		Outcome = Y (emotional exhaustion)			
		<i>B</i>	SE	<i>T</i>	<i>p</i>
X (secondary traumatisation)	c'	0.84	0.06	14.09	0.00*
M (social support)	b	-0.45	0.06	-7.44	0.00*
Age		-0.11	0.04	-3.07	0.00*
Gender		0.73	0.67	1.09	0.28*
Profession		-1.53	0.41	-3.76	0.00*
Work experience		0.00	0.04	0.04	0.97
Constant	i_2	23.28	3.38	6.88	0.00*
Total effect model					
Predictor		Outcome = Y (emotional exhaustion)			
		<i>B</i>	SE	<i>T</i>	<i>p</i>
X (secondary traumatisation)	c	0.94	0.06	15.43	0.00*
Age		-0.12	0.04	-3.11	0.00*
Gender		0.61	0.70	0.88	0.38
Profession		-1.56	0.42	-3.68	0.00*
Work experience		0.02	0.04	0.55	0.58
Constant	i_3	3.73	2.23	1.68	0.09*

* = $p < 0.05$ level (2-tailed); N = 593; bootstrap sample size = 5000; SE = standard error.

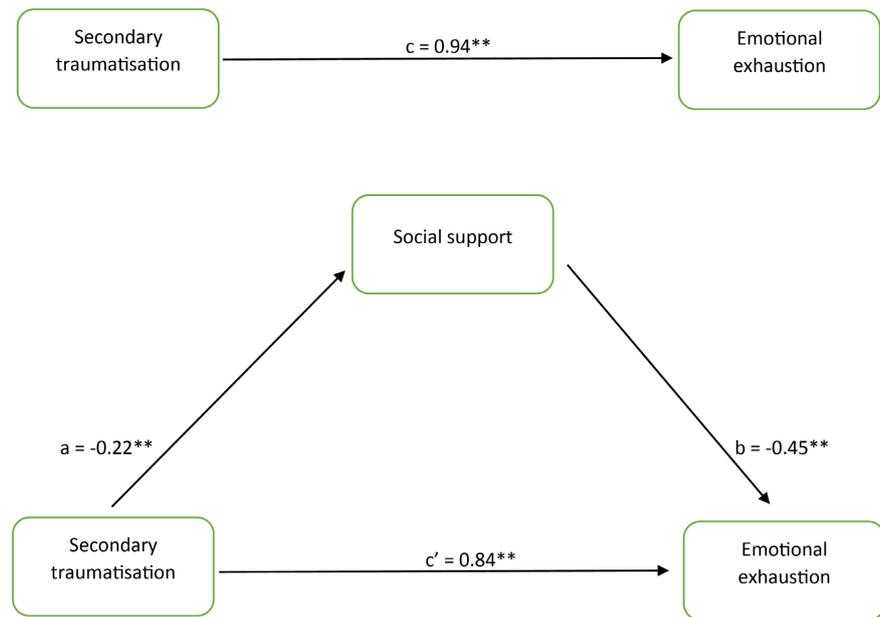


Figure 1. Mediation model of social support in the relationship between secondary traumatisation and emotional exhaustion. ** = $p < 0.01$ (2-tailed).

3.4. Profession as a Moderator in the Association between STS and SS

Finally, it was tested whether profession moderates the relationship between STS and SS (see **Table 4**). The model in which SS is the dependent variable, STS was significantly associated with SS (see **Table 4**; $B = -0.22$, $t = -4.66$, $p < 0.01$). Further, no moderating effect of profession has been found. As can be seen, the interaction effects between psychologists and case managers ($B = 0.02$, $t = 0.24$, $p > 0.05$) and physicians and case managers ($B = -0.10$, $t = -0.67$, $p > 0.05$) with STS were not significant.

4. Discussion and Conclusions

Burnout is a major problem worldwide. High prevalence of burnout has been found in the general working population (Honkonen et al., 2006). In mental healthcare, burnout is even more prevalent (Morse et al., 2012). The purpose of the present study was to gain more insight in burnout in MHP, so appropriate measures could be taken to prevent or reduce burnout. This study mainly focused on the associations between STS, EE and SS, especially whether the relation between STS and EE was mediated by SS.

Contrary to previous research, the present study found that our MHP are feeling pretty good in general. Most MHP reported low levels of EE and STS, while they experienced high levels of SS. The relatively low prevalence of EE found in present study could be due to the high percentage of case managers in present study. O'Connor and colleagues (2018) found in their meta-analysis a prevalence rate of 40% EE, while present study found a prevalence of 25%. The prevalence of EE found in our study is comparable to the prevalence found in

Table 4. Moderation analysis.

Predictor	Moderator variable model			
	Outcome = Y (social support)			
	<i>B</i>	SE	<i>T</i>	<i>p</i>
Constant	43.99	1.47	29.99	0.00*
STS	-0.22	0.05	-4.66	0.00*
W1 (Psychologists vs case managers)	-1.23	1.84	-0.67	0.50
W2 (Physicians vs case managers)	2.13	2.62	0.82	0.42
STS × W1	0.02	0.10	0.24	0.81
STS × W2	-0.10	0.14	-0.67	0.50
Age	0.01	0.02	0.60	0.55
Gender	0.43	0.47	0.91	0.36
Work experience	-0.05	0.03	-1.88	0.06*

* = $p < 0.05$ level (2-tailed); $N = 593$; bootstrap sample size = 5000; SE = standard error.

previous research among mental healthcare nurses (25%; Lopez-Lopez et al., 2019), who are considered as case managers in current study. Also, the results of our study indeed showed that case managers scored significantly lower on EE compared to psychologists and physicians. Next, previous research on STS was mostly conducted in high risk populations, such as MHP working with forcible displaced people (Roberts et al., 2021), first responders (Greinacher et al., 2019), and soldiers (Cieslak et al., 2013; Penix, Kim, Wilk, & Adler, 2018). The current study focused on general mental healthcare providers, who worked in less risky conditions, which could explain the relative low prevalence of STS in our study.

Further, as hypothesized, it was found that the relationship between STS and EE was partially mediated by SS. This suggests that MHP who are more secondary traumatised are more likely to experience higher levels of EE. But more importantly, social support seems to partly explain this relation. When MHP are more secondary traumatised they tend to experience less social support, leading to an increase of EE. This is in line with previous comparable research in which was found that SS mediates the relation between workplace violence and burnout (Duan et al., 2019).

Finally, it has been found that there were no differences between the various professions in MHP in the relationship between STS and SS. In other words, MHP experience less SS when they are more secondary traumatised, regardless of their profession. Possibly the same factors in physicians, psychologists and case managers contribute to less SS at higher levels of STS. On the other hand, there may be differences between the various professions in *why* they experience less support when they are more secondary traumatised. It could be that there are different underlying factors at work, while having the same influence on the

experienced SS. To date, this has not been investigated.

4.1. Implications for Research and Practice

Our study provides several implications for research and practice. First of all, in the present study it has been found that none of the MHP experienced high levels of STS and, compared to other studies, relatively few MHP experienced high levels of EE, while in general high levels of SS were experienced. This could mean that MHP generally have a pleasant workplace with little exposure to traumatised clients, leading to low levels of STS and relatively little EE. In addition, this study showed that MHP who were more secondary traumatised experienced less SS, which led to higher levels of EE. This could mean that MHP generally have access to SS and that they know how to use social support resources, leaving relatively few MHP secondary traumatised and emotionally exhausted. If the latter is the case, it is important that sufficient resources for SS are maintained to prevent STS and EE.

However, despite the low prevalence of STS, MHP who are more secondary traumatised are at risk for EE, because they experience less SS. There might be several explanations why MHP who are more secondary traumatised experience less social support. For instance, MHP with higher levels of STS might be less inclined to seek SS because they have more negative attitudes towards utilisation of support resources. Previous research by [Clapp and Beck \(2009\)](#) showed that higher levels of PTSD are associated with a greater negative network orientation, leading to lower levels of SS. In addition, it has been found that feelings of social isolation are associated with burnout ([Eliacin et al., 2018](#)). Possibly, as with PTSD, MHP with higher levels of STS also have greater negative network orientation due to feelings of shame, resulting in experiencing less SS and increasing feelings of social isolation. Seeking less SS may be a signal for worry and extra care, as it is a mediator between the strong relation of STS and EE. Managers and co-workers therefore need to be attentive on signals of social withdrawal on the workplace, such as absence on team meetings or supervision- and intervention-group meetings. Also, managers may ask during annual interviews about the extent that someone feels connected to the team and seek social support when they experience more stress, for example after an intensive treatment session. By monitoring, managers can gain insight into employees who are at risk of social isolation. Lastly, extra attention should be given to MHP who are a priori more at risk of STS, for example because they often work with traumatised clients.

Finally, despite most MHP experienced low to moderate levels of EE, almost one in four MHP did experience high levels of EE despite the availability of SS. For those, possibly the current support system might not be sufficient and other measures should be taken to prevent and/or reduce EE. However, it is unclear which interventions can be used effectively to prevent or reduce EE. Two studies, using meta-analyses and systematic reviews, evaluated the effectiveness to

reduce emotional exhaustion (Panagioti et al., 2017; West et al., 2016). Two types of interventions are distinguished: employee-directed interventions and organisation-directed interventions. It has been found that both employee-directed interventions and organisational-directed interventions are effective to reduce emotional exhaustion, with organisational-directed interventions being slightly more effective. However, the effect is small. Future research is needed to establish what interventions are effective for this group of MHP who do not benefit from the current support system so that additional measures can be taken to reduce and prevent EE.

4.2. Strengths and Limitations

This study is the first to focus on the mediating role of SS in the relationship between STS and EE in MHP. A large sample was collected from two major mental healthcare institutions, which gives a good representation of the work field. Also, this study examined whether there are differences across physicians, psychologists and case managers on SS, which has not been done so far.

However, there are some limitations to this study. First, the present study is based on cross-sectional data. Because there is no longitudinal follow-up, causal relationships cannot be determined (Carlson & Morrison, 2009). Furthermore, the low prevalence of STS and EE may be due to non-response bias (Sedgwick, 2014). In this study, less than 30% of the targeted MHP participated. It is possible that the MHP experiencing burnout did not participate in the study because they lacked the time and energy or have been absent from work. MHP with little SS and high levels of STS and EE may therefore not be included in the study, thereby biasing the results. However, as mentioned, many participants participated in this study, which gives a good representation of the field. Finally, this study focused exclusively on professional SS. Other forms of SS, for example informal SS, were not included in the study. Previous research shows that informal SS contributes in a distinct way than professional SS to reduce EE in social workers (Garcia et al., 2021). Future research should examine whether there are differences between professional and informal SS in MHP and how this relates to STS and EE.

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Ethics Approval

The CWO of GGzBreburg (2020-08) granted permission for this study to be done.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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