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COMPASSION FATIGUE, RUMINATION, AND LIFE SATISFACTION AMONG MENTAL HEALTH PROFESSIONALS AFTER COVID-19

Original Article

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ABSTRACT

Background: Mental health professionals, including nurses, psychiatrists, and psychologists, are frequently exposed to emotionally demanding situations that may lead to psychological challenges such as compassion fatigue and persistent negative thinking or rumination. The prolonged experience of emotional strain can diminish personal well-being and life satisfaction. The COVID-19 pandemic intensified these stressors, making it critical to understand their psychological impact on caregivers. This study aimed to explore how compassion fatigue and rumination are associated with life satisfaction among mental health professionals post-COVID-19.

Objective: To examine the relationship and predictive value of compassion fatigue and rumination on life satisfaction and to explore the mediating role of rumination among mental health professionals following the COVID-19 pandemic.

Methods: A correlational research design was employed, and purposive sampling was used to recruit 171 mental health professionals aged 25–50 years from various psychiatry departments. Participants completed the Compassion Fatigue and Satisfaction Test (ProQOL), the Ruminative Response Scale (RRS), and the Satisfaction With Life Scale (SWLS). Data were analyzed using SPSS version 22, including Pearson correlation, linear regression, mediation analysis, and independent t-tests.

Results: Compassion satisfaction was negatively correlated with rumination ($r = –.36$, $p < .001$) and positively associated with life satisfaction ($r = .24$, $p < .01$). Burnout and secondary traumatic stress showed significant positive correlations with rumination ($r = .53$ and $.39$, respectively; $p < .001$) and negative correlations with life satisfaction ($r = –.23$ and $–.33$, respectively; $p < .01$). Regression analysis revealed that compassion satisfaction positively predicted life satisfaction ($\beta = .166$, $p = .034$), while secondary traumatic stress negatively predicted it ($\beta = –.273$, $p = .003$). Rumination fully mediated the relationship between compassion fatigue and life satisfaction ($\Delta R^2 = .03$, $p < .01$).

Conclusion: The study confirms that compassion fatigue and rumination negatively impact life satisfaction among mental health professionals, with rumination acting as a key mediator. These findings highlight the need for targeted psychological interventions to manage cognitive and emotional strain in caregiving roles.

Keywords: Burnout, Compassion Fatigue, COVID-19, Life Satisfaction, Mental Health, Rumination, Secondary Traumatic Stress.

INTRODUCTION

The COVID-19 pandemic, caused by the highly contagious SARS-CoV-2 virus, brought about unprecedented disruptions globally. Beyond its physical health implications, it profoundly altered social, economic, and psychological landscapes, affecting populations worldwide. Governments implemented preventive measures, including physical distancing and lockdowns, to curb the virus's transmission. While essential, these restrictions had cascading consequences on mental well-being, manifesting as increased loneliness, anxiety, depression, and reduced life satisfaction. Emotional health challenges transcended borders, affecting both the general public and healthcare professionals (1). Among the most vulnerable were mental health professionals (MHPs), who, while supporting others, were themselves at risk of psychological strain due to their constant exposure to trauma, grief, and distress during the crisis. Health professionals, particularly those involved in direct patient care, faced significant risks due to heightened workloads, lack of protective equipment, uncertainty, and fears of infection (2). This intense environment contributed to a rise in compassion fatigue (CF)—a condition characterized by emotional exhaustion and reduced capacity to empathize, driven by prolonged exposure to the suffering of others (3,4). Distinct from burnout, CF results from indirect trauma, often referred to as secondary traumatic stress, which stems from empathic engagement with patients rather than the traumatic events themselves (5). Symptoms include irritability, fatigue, emotional numbness, substance use, absenteeism, and reduced professional efficacy. Mental health professionals, by the nature of their empathetic engagement, are particularly susceptible, with studies reporting significantly high levels of emotional weariness, reduced compassion satisfaction, and increased risk of burnout during the pandemic (6,7).

Simultaneously, rumination—defined as repetitive and passive focus on distressing thoughts—has emerged as a critical factor influencing mental health outcomes. Rumination intensifies the emotional burden by prolonging exposure to negative emotions and impeding adaptive coping strategies. It has been strongly linked to the onset and severity of depressive symptoms, particularly when individuals dwell on the causes and consequences of stressors rather than engaging in active problem-solving (8,9). During the COVID-19 pandemic, the uncertainty, loss, and helplessness experienced by mental health professionals likely fueled such maladaptive thinking patterns. Emerging research suggests that emotional rumination, in particular, may mediate the relationship between work-related stress and psychological distress, thereby exacerbating conditions such as anxiety and depression among healthcare workers (10,11). Life satisfaction, a global indicator of well-being, reflects individuals' subjective evaluation of their quality of life based on personal expectations and achievements. During the pandemic, life satisfaction significantly declined across various populations, with healthcare professionals reporting diminished contentment due to heightened occupational stress, isolation, and the emotional demands of caregiving (12). Several studies have highlighted that increased exposure to trauma, coupled with persistent rumination and compassion fatigue, may severely impair one's perception of personal and professional fulfillment (13,14). Furthermore, factors such as gender, job role, workload, and direct involvement in COVID-19 care have been shown to influence the severity of these psychological outcomes (15).

Despite extensive literature on compassion fatigue and burnout in various medical specialties, including oncology, emergency medicine, and intensive care, there is a noticeable lack of focused research on mental health professionals, especially in the post-COVID-19 context. Given that MHPs are uniquely positioned to absorb and respond to emotional trauma, the absence of targeted inquiry into how their empathy impacts their psychological health is a significant gap. The emotional toll endured by these professionals during the pandemic may have long-term implications for their well-being and clinical effectiveness. It is therefore essential to understand how compassion fatigue and rumination interrelate and influence life satisfaction within this critical workforce. In light of these considerations, the current study aims to explore the interrelationship between compassion fatigue, rumination, and life satisfaction among mental health professionals following the COVID-19 pandemic. Specifically, it investigates the extent to which compassion fatigue and rumination predict life satisfaction, and whether these psychological constructs vary across demographic factors. Understanding these dynamics is crucial for developing targeted interventions to protect and promote the mental health of those who serve on the frontlines of psychological care.

METHODS

A descriptive research design was employed in this study to systematically observe and quantify the relationship between compassion fatigue, rumination, and life satisfaction among mental health professionals following the COVID-19 pandemic. This design enabled the identification of key trends, associations, and psychological characteristics within a defined population, although it did not aim to establish causal inferences. The study recruited a purposive sample of 171 mental health professionals aged between 25 to 50 years,

with professional experience ranging from 0 to 10 years. Participants were drawn from psychiatry departments of hospitals and mental health clinics, based on pre-established inclusion and exclusion criteria. Only psychologists, psychiatrists, and psychiatric nurses were eligible for inclusion, whereas other healthcare workers and individuals outside the specified age range were excluded. The purposive sampling approach was deemed appropriate, as recommended in studies requiring specific participant characteristics (13). Sociodemographic data revealed that the sample consisted of 93 women (54.4%) and 78 men (45.6%), with 82 participants (48%) aged 25–35 years and 89 (52%) aged 36–50 years. Professionally, the sample included 73 psychologists (42.7%), 49 psychiatrists (28.7%), and 49 psychiatric nurses (28.7%). Regarding professional experience, 98 participants (57.3%) had 0–5 years of experience, and 73 (42.7%) had 6–10 years. Additionally, 100 participants (58.5%) were married, while 71 (41.5%) were unmarried. The sample was nearly equally divided between joint (50.3%) and nuclear (49.7%) family systems.

Data were collected through self-administered structured questionnaires distributed in person and via online platforms. Participants were approached after obtaining formal permission from relevant institutions, and the study's aim was clearly explained to all respondents. Written informed consent was obtained individually, and participants were assured of the voluntary nature of their participation, their right to withdraw at any time, and the confidentiality of their responses. Three standardized psychometric instruments were used. Compassion fatigue, burnout, and compassion satisfaction were measured using the Professional Quality of Life Scale (ProQOL). This 66-item scale includes three subscales: compassion satisfaction, burnout, and compassion fatigue. The compassion satisfaction subscale evaluates the pleasure derived from one's ability to help others, while the burnout and compassion fatigue subscales measure emotional exhaustion and secondary trauma respectively. Higher scores on the respective subscales indicate greater severity of those constructs. Rumination was assessed using the Ruminative Response Scale (RRS). This 22-item self-report tool evaluates the individual's tendency to engage in repetitive negative thinking in response to distress. The scale comprises two subdomains: brooding, which reflects passive and self-critical thinking, and reflection, which pertains to purposeful problem-solving. Items were scored on a 4-point Likert scale ranging from "rarely" to "almost always." The scale has demonstrated strong internal consistency, with Cronbach's alpha coefficients reported as .92 for the total scale and .78 and .75 for the brooding and reflection subscales, respectively, within the current sample.

Life satisfaction was measured using the Satisfaction With Life Scale (SWLS). This instrument assesses the cognitive-judgmental dimension of subjective well-being, consisting of five items rated on a 7-point Likert scale. The SWLS has been widely validated and exhibits high internal consistency, construct validity, and one-dimensionality. It has low correlations with affective states, indicating its specificity in measuring cognitive evaluations of life satisfaction. All procedures conformed to ethical standards for human research. Formal approval for data collection was granted by the Institute of Applied Psychology, University of the Punjab, Lahore. An authorization letter was signed by the institutional head, and the informed consent process was completed in accordance with ethical guidelines. Participants' privacy and data confidentiality were strictly maintained throughout the study. Additionally, permission to use the psychometric tools was obtained from the original authors.

RESULTS

The psychometric properties of the instruments used in the study were evaluated prior to main analyses. The Compassion Satisfaction and Fatigue Scale demonstrated high internal consistency with a Cronbach's alpha of .86, while the Rumination Response Scale also showed acceptable reliability with an alpha of .72. However, the Satisfaction with Life Scale had a notably low internal consistency, reflected by a Cronbach's alpha of .19, indicating potential limitations in its reliability within this sample. Descriptive statistics and correlation analyses revealed several significant relationships among the key study variables. Compassion satisfaction showed a significant negative correlation with burnout ($r = –.25$, $p < .01$), secondary traumatic stress (STS) ($r = –.22$, $p < .01$), and rumination ($r = –.36$, $p < .001$), while it was positively associated with life satisfaction ($r = .24$, $p < .01$). Burnout was negatively correlated with life satisfaction ($r = –.23$, $p < .01$) and positively with STS ($r = .58$, $p < .001$) and rumination ($r = .53$, $p < .001$). STS was also negatively correlated with life satisfaction ($r = –.33$, $p < .001$) and positively associated with rumination ($r = .39$, $p < .001$). Rumination, in turn, showed a significant negative correlation with life satisfaction ($r = –.21$, $p < .01$).

Linear regression analysis was conducted to assess the predictive value of compassion satisfaction, burnout, STS, and rumination on life satisfaction. The overall model accounted for 12% of the variance in life satisfaction ($R^2 = .12$, $F(4,166) = 6.67$, $p < .001$). Compassion satisfaction significantly and positively predicted life satisfaction ($\beta = .166$, $p = .034$), while STS significantly and negatively predicted life satisfaction ($\beta = –.273$, $p = .003$). Burnout ($\beta = –.005$, $p = .918$) and rumination ($\beta = –.01$, $p = .714$) did not demonstrate significant predictive value. A mediation analysis was performed to explore the indirect effect of compassion fatigue on life

satisfaction through rumination. In the initial step, compassion fatigue was found to significantly predict life satisfaction (β = –.17, p < .05), accounting for 3% of the variance (R^2 = .03). In the second step, when rumination was included as a mediator, compassion fatigue was no longer a significant predictor (β = –.12, p > .05), while rumination remained a significant negative predictor (β = –.17, p < .05). The reduction in regression weight and the significant change in R^2 (ΔR^2 = .03) confirmed that rumination fully mediated the relationship between compassion fatigue and life satisfaction.

Group comparisons using independent sample t-tests highlighted a significant gender difference in compassion fatigue. Female mental health professionals reported higher levels of compassion fatigue (M = 99.51, SD = 10.51) compared to their male counterparts (M = 96.05, SD = 11.37), t(171) = –2.06, p = .04, with a small effect size (Cohen's d = .31). No significant gender differences were found in rumination scores (t(171) = .67, p = .51). Similarly, comparisons based on family structure (joint vs. nuclear) revealed no significant differences in either compassion fatigue (t(171) = –.48, p = .61) or rumination (t(171) = –.206, p = .83). To address the missing objective regarding demographic differences in life satisfaction, independent sample t-tests were performed. The analysis revealed no statistically significant difference in life satisfaction between male and female mental health professionals (t = 0.02, p = 0.983), indicating gender did not significantly influence reported levels of life satisfaction. Similarly, life satisfaction did not differ significantly between those belonging to joint versus nuclear family systems (t = -0.51, p = 0.613), nor between professionals with 0–5 years and those with 6–10 years of work experience (t = 1.17, p = 0.243). These findings suggest that gender, family structure, and professional experience did not have a meaningful impact on perceived life satisfaction among mental health professionals following the COVID-19 pandemic.

Table 1: Psychometric Properties of Scale

Scale	***M***	***SD***	**Range**	**Cronbach's α**
Compassion satisfaction and fatigue	96.65	13.38	52- 149	.86
Rumination	66.02	10.36	28- 84	.72
Satisfaction with life	**19.13**	**3.28**	**11-28**	**.19**

Table 2: Mean, SD, & Correlations Matrix of Compassion satisfaction, Burnout, STS, Rumination and Life Satisfaction

	Variables	***n***	***M***	***SD***	**1**	**2**	**3**	**4**	**5**
1	Compassion satisfaction	171	32.95	6.26	-				
2	Burnout	171	32.88	6.17	-.25**	-			
3	Secondary Traumatic Stress (STS)	171	32.09	6.06	-.22**	.58**	-		
4	Rumination	171	66.02	10.36	-.36**	.53**	.39***	-	
5	**Life Satisfaction**	**171**	**19.13**	**3.28**	**.24****	**-.23****	**-.33*****	**-.21***	**-**

** P< .05. **P< .01. ***P<.001.*

Table 3: Regression Coefficients of Compassion Satisfaction, Burnout, STS, Rumination, and Life Satisfaction

Variables	***B***	***SE***	***t***	***P***	**95% CI**
Constant	21.85	2.634	8.298	000	[16.66, 27.06]
Compassion satisfaction	.09	.041	2.136	.034	[.007, .168]
Burnout	-.005	.051	-.104	.918	[-.106, .096]
STS	-.17	.048	-3.06	.003	[-.243, -.052]
Rumination	**-.01**	**.028**	**-.367**	**.714**	**[-.066, .045]**

Note CI =Confidence Interval

Table 4: Regression Analysis for Mediation of Rumination between Compassion Fatigue and Life Satisfaction

Variables	***B***	***95%CI***	***SE B***	***B***	***R²***	***ΔR²***
Step 1					.03	.03*
Constant	24.08***	[19.68, 28.47]	2.23			
Compassion fatigue	-.06*	[-.095, -.006]	.023	-.17*		
Step 2					.06	.03*
Constant	26.12***	[21.38, 30.85]	2.39			
Compassion fatigue	-.04	[-.082, .011]	.023	-.12		
Rumination	**-.05***	**[-.103, -.004]**	**.025**	**-.17***		

Note *CI= confidence interval *P < .05, ***p<.001*

Table 5: Mean Comparison of Male and Female Mental Health Professionals

		Male	**Female**				
Variables	*M*	*SD*	*M*	*SD*	*t171)*	*P*	Cohen's d
Compassion Fatigue	96.05	11.37	99.51	10.51	-2.06	.04	.31
Rumination	**66.60**	**9.74**	**65.53**	**10.88**	**.67**	**.51**	**.11**

Table 6: Mean Comparison of Mental Health Professionals of Joint and Nuclear Family System on Compassion Fatigue and Rumination

MHP's of joint Family			**MHP's of nuclear family**				
Variables	*M*	*SD*	*M*	*SD*	*t171)*	*P*	Cohen's d
Compassion fatigue	97.51	10.96	98.35	11.11	-.48	.61	.07
Rumination	**65.86**	**10.26**	**66.18**	**10.53**	**-.206**	**.83**	**.03**

Table 7: the demographic differences in life satisfaction based on independent sample t-tests

Demographic Variable	**t-value**	**p-value**	**Significance**
Gender (Male vs Female)	0.02	0.983	Not Significant
Family System (Joint vs Nuclear)	-0.51	0.613	Not Significant
Experience (0–5 yrs vs 6–10 yrs)	1.17	0.243	Not Significant

DISCUSSION

The current study aimed to investigate the relationship between compassion fatigue, rumination, and life satisfaction among mental health professionals following the COVID-19 pandemic. The results affirmed that compassion fatigue and rumination were significantly interrelated and both negatively influenced life satisfaction. Compassion satisfaction, a subcomponent of compassion fatigue, demonstrated a negative correlation with rumination, whereas burnout and secondary traumatic stress (STS) were positively associated with it. These findings align with existing literature, which consistently identifies emotional demands, exposure to trauma, and professional stressors as precursors to compassion fatigue and rumination in caregiving professions (16,17). Workplace trauma, emotional depletion, and the intensity of therapeutic engagement have been cited as significant contributors to compassion fatigue, impairing both professional performance and psychological well-being. Moreover, the data supported the hypothesis that both compassion fatigue and rumination adversely affect life satisfaction (18). Compassion satisfaction was positively associated with life

satisfaction, while burnout and STS demonstrated significant negative correlations. These outcomes are consistent with prior findings suggesting that sustained exposure to secondary trauma, professional exhaustion, and cognitive over-engagement in negative thought patterns contribute to a diminished sense of personal fulfillment (19). Rumination, particularly in response to emotionally distressing experiences, further compounded this effect by maintaining negative cognitive cycles, thereby impairing emotional recovery and reducing satisfaction with life. Collectively, these outcomes underscore the psychological vulnerability of mental health professionals during and after large-scale health crises like the COVID-19 pandemic (20).

The predictive analysis further reinforced the central role of compassion fatigue and rumination in shaping life satisfaction. Compassion satisfaction emerged as a positive predictor, while STS was a significant negative predictor of life satisfaction. Interestingly, burnout and rumination, despite their correlations, did not significantly predict life satisfaction in the regression model. However, mediation analysis revealed that rumination acted as a perfect mediator in the relationship between compassion fatigue and life satisfaction (21,22). The predictive effect of compassion fatigue on life satisfaction diminished once rumination was introduced as a mediator, highlighting the pivotal role of cognitive processing in emotional outcomes. These findings suggest that the mental health toll of caregiving professions is not solely dependent on emotional exhaustion but is significantly influenced by cognitive styles, such as persistent negative thinking (23). Contrary to the final hypothesis, no significant demographic differences were observed in life satisfaction across gender, family structure, or professional experience. This result diverges from some earlier research suggesting that gender roles, familial support systems, and job tenure may moderate emotional outcomes among healthcare workers. It is plausible that the collective psychological burden imposed by the pandemic leveled potential demographic disparities, suggesting that emotional strain was universally experienced across groups, regardless of individual characteristics (24,25).

One of the strengths of this study is its focused exploration of an under-researched group—mental health professionals—who were on the frontlines of psychological care during the pandemic but often overlooked in empirical research. The use of validated instruments for measuring compassion fatigue, rumination, and life satisfaction also enhances the credibility of findings. Nonetheless, certain limitations must be acknowledged. The internal consistency of the Satisfaction with Life Scale was notably low, indicating potential measurement error or cultural incongruence. All instruments were developed in Western settings, which may not fully capture psychological constructs in the Pakistani cultural context. Furthermore, the reliance on self-report measures and the cross-sectional design limit the ability to infer causality or track changes over time. The sample size, though sufficient for statistical power, may restrict the generalizability of findings to broader populations of mental health professionals. Additionally, the data collection being partially conducted online may have introduced response bias due to participant fatigue or lack of engagement. The non-experimental design also precludes the manipulation of variables, limiting insight into the causative direction of observed relationships. Despite these constraints, the findings offer valuable implications for clinical practice and institutional policies. Psychological interventions focused on reducing rumination and addressing compassion fatigue may enhance life satisfaction and overall well-being among mental health professionals. Organizational support mechanisms, resilience training, and routine psychological screening can serve as preventive strategies.

Future research should aim to include larger, more diverse samples across different regions and healthcare settings to enhance the external validity of results. Cross-cultural comparisons could provide richer insight into how cultural variables mediate the impact of compassion fatigue and rumination. Moreover, longitudinal designs could elucidate how these psychological processes evolve over time and under varying conditions of clinical exposure. Investigating the effectiveness of targeted interventions aimed at reducing rumination and supporting compassion satisfaction would further strengthen the applicability of findings in real-world settings. Overall, the study highlights the urgent need to address cognitive and emotional burdens among mental health professionals, particularly in post-pandemic contexts. By focusing on compassion fatigue and rumination as modifiable psychological processes, the findings offer direction for developing targeted support systems that not only protect caregiver well-being but also sustain the quality of care provided to clients.

CONCLUSION

This study concluded that compassion fatigue and rumination significantly influence the emotional well-being and life satisfaction of mental health professionals in the aftermath of the COVID-19 pandemic. The findings emphasized that while compassion satisfaction contributes positively to life satisfaction, burnout, secondary traumatic stress, and rumination have detrimental effects. Rumination was found to play a key mediating role, highlighting the importance of addressing cognitive patterns alongside emotional exhaustion in psychological care providers. Despite demographic variables showing no significant impact, the study reinforces the need for institutional strategies and psychological interventions to manage compassion fatigue and reduce maladaptive rumination. These insights

are particularly valuable for developing tailored support systems to safeguard the mental health of professionals who dedicate their work to supporting others.

AUTHOR CONTRIBUTION

Author	Contribution
Sheeza Sajjad*	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Samia Latif Khan	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Iram Amin	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Habiba Muqaddas	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Rashida Sadaqat	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Aurang Zaib Ashraf Shami	Substantial Contribution to study design and Data Analysis Has given Final Approval of the version to be published

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