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SECONDARY TRAUMATIC STRESS, BURNOUT AND POST-TRAUMATIC GROWTH AMONG VICTIM SERVICE PROVIDERS: THE MODERATING ROLE OF RESILIENCE

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Abstract

Victim service providers absorb the distress of the people they treat, yet research on indirect trauma exposure in Pakistan remains limited. This study examined whether secondary traumatic stress carries opposing consequences within a single workforce, predicting both burnout and reduced post-traumatic growth, and whether resilience moderates each pathway. Using a quantitative cross-sectional design, 300 victim service providers, comprising doctors, psychologists and psychiatrists, were recruited from public and private institutions through purposive sampling. Secondary traumatic stress and burnout were assessed with the Professional Quality of Life Scale (ProQOL), post-traumatic growth with the Post-Traumatic Growth Inventory Short-Form (PTGI-SF), and resilience with the Brief Resilience Scale (BRS). The three professional groups differed substantially, as doctors reported markedly higher burnout and lower resilience than psychologists and psychiatrists, while differences in secondary traumatic stress were small. With profession controlled, secondary traumatic stress remained a significant positive predictor of burnout and a significant negative predictor of post-traumatic growth. Resilience moderated the association between secondary traumatic stress and post-traumatic growth, weakening the decline in growth as stress increased, although it did not predict growth directly. The equivalent interaction for burnout was not significant once profession was taken into account. Male victim service providers reported higher burnout, post-traumatic growth and resilience, with no gender difference in secondary traumatic stress. Resilience appears to shape how victim service providers respond to accumulating indirect trauma, whereas burnout is closely tied to professional role. Resilience focused staff development may protect post-traumatic growth, while reducing burnout is likely to require attention to workload and professional role, with doctors a priority for monitoring.

INTRODUCTION

Professionals in trauma-focused jobs encounter the distress of others as part of their work, and according to Molnar et al. (2017) this frequent exposure raises their risk of secondary

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traumatic stress (STS). STS is a set of negative emotional and behavioral outcomes after indirect exposure to trauma, and it is especially common among people who care for trauma survivors (Figley, 1995; Vagni et al., 2020). Its symptoms are similar to those of post-traumatic stress and contain intrusive thoughts, emotional swings, avoiding reminders, and physical tension; ongoing empathy with trauma survivors can cause these symptoms (Figley, 1995; Dagan et al., 2016). Research finds that over half of participants in several studies report moderate to severe STS (Kellogg et al., 2018; Tsouvelas et al., 2022), with prevalence rates between 15% and 39% reported in mental health and related fields (Pellegrini et al., 2022).

Burnout (BO) is recognized as a major outcome of extended exposure to work-related stress (Nagle et al., 2024). It is described as a psychological syndrome that arises from unaddressed chronic stress at work, comprising emotional fatigue, a sense of detachment or negativity, and diminished professional effectiveness (Demerouti, 2024). Research demonstrates a notable occurrence of burnout among healthcare workers, with approximately 50% affected and close to 49% experiencing burnout due to elevated stress levels (Marković et al., 2024; Prasad et al., 2021). Burnout is also linked with functional impairment within the workplace, including decreased ability to perform work and increased absenteeism (Nagle et al., 2024). Emergency care settings show elevated levels of both STS and burnout. Emergency nurses report considerably increased STS and burnout alongside lower levels of compassion satisfaction (Lykins et al., 2021), and among healthcare professionals more broadly, secondary traumatic stress has been strongly associated with emotional exhaustion and depersonalization (Orrù et al., 2021).

In addition to the well-established detrimental effects, exposure to trauma has been linked with the emergence of positive psychological changes. People who have experienced trauma may go through growth and distress at the same time, which suggests that both processes can coexist rather than be mutually exclusive (Linley et al., 2003). Post-traumatic growth (PTG), proposed by Tedeschi and Calhoun (2004), is conceptualized as a series of beneficial psychological changes that occur after adversity and include increased personal strength, deeper life appreciation and enhanced interpersonal relationships. Research on the connection between STS and PTG has revealed a negative correlation among nursing staff (Ogińska-Bulik, 2018).

Resilience is commonly described as the ability to withstand stress, maintain psychological balance, and regain wellbeing after being exposed to extremely difficult or unfavorable situations (Cinar, 2020). Greater resilience is associated with reduced burnout and a lower susceptibility to stress-related outcomes (Marković et al., 2024), and STS and resilience have been demonstrated to be strongly inversely correlated (Jafar Jalal et al., 2019). Resilience was also identified as a protecting aspect during the COVID-19 pandemic, decreasing anxiety and secondary traumatic stress symptoms in healthcare workers (Orrù et al., 2021). Resilience has been positively associated with PTG and with attributes that show predictive value across multiple PTG aspects (Ogińska-Bulik, 2018), as well as with decreased levels of STS and burnout and increased compassion satisfaction (Ratzon et al., 2022). Among Indian mental health professionals, recurrent exposure to clients' traumatic experiences predicted increased STS and burnout, while resilience served as a buffer against these adverse outcomes (Bhagwagar, 2022).

Rationale

This research investigates the effect of STS on both the negative and the positive response, burnout and post-traumatic growth, while assessing resilience in this relationship as a moderator. A research review has identified STS as a significant concern among nurses working in emergency and trauma care settings (Park et al., 2025), and a meta-analysis among emergency nurses indicated a 65% prevalence rate for STS, with elevated STS levels during

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the pandemic of COVID-19 (Xu et al., 2024). Prior studies have consistently shown that STS is related to negative work-related outcomes, particularly burnout, which involves emotional exhaustion, diminished professional efficacy and detachment from work (Brown et al., 2017; Caravaca Sánchez et al., 2018), and mental health professionals are highly susceptible to burnout (O'Connor et al., 2018). Exposure to trauma may at the same time result in favorable psychological outcomes, as PTG and post-traumatic stress have been shown to coexist among directly exposed trauma survivors (Shakespeare-Finch & Lurie-Beck, 2014).

There is evidence that traumatic exposure can cause both positive transformation and psychological distress concurrently (Linley et al., 2003; Shakespeare-Finch & Lurie-Beck, 2014); however, limited empirical research integrates these two pathways into one framework. This is a significant gap, because the same exposure can give rise to contrasting outcomes. Resilience as a moderator on the relationship between STS, burnout and PTG has also not been sufficiently explored, despite its theoretical significance. A moderator changes the strength or direction of a relationship rather than acting directly on the outcome. Resilience has done this in two studies. It weakened the link between burnout and well-being in medical workers (Safiye et al., 2021), and the link between occupational stress and burnout in women social workers (Stanley et al., 2021). Resilience also buffered the adverse outcomes of recurrent exposure to clients' traumatic experiences among mental health professionals (Bhagwagar, 2022) and accounted for part of the pathway from secondary traumatic stress to burnout among critical care nurses (Jeong & Shin, 2023). A recent scoping review indicated that resilience may operate on this pathway as a moderator which mitigates the impact of traumatic stress on growth (Orovou et al., 2026), and the association between resilience and growth has been found to vary according to the level of trauma exposure among social workers (Finklestein & Laufer, 2021).

Gender is treated as a study variable because the demands of trauma work do not fall equally on men and women. A meta-analysis of twelve studies found women in close and sustained contact with trauma victims to be consistently more susceptible to secondary traumatization than men (Baum et al., 2014), so women were expected to report higher secondary traumatic stress. Male therapists, by contrast, have been found more likely than female therapists to report elevated vicarious growth (Cleary et al., 2023), so men were expected to score higher on post-traumatic growth. Gender differences in post-traumatic growth and resilience have not been examined among victim service providers in Pakistan.

Fewer than 500 psychiatrists serve a population above 244 million in Pakistan, and workplace mental health programmes are effectively absent (Mahesar et al., 2025; Thompson & Saleem, 2025). Victim service providers who absorb their patients' trauma therefore work without the occupational support that much of the existing literature assumes. There is limited research on exposure to indirect trauma in Pakistan. Prior research has investigated burnout, compassion fatigue, and vicarious trauma among professionals, highlighting the importance of protective factors and the prevalence of psychological distress in Pakistan (Azam et al., 2023; Khalily et al., 2017), and a recent qualitative study emphasized the psychological impact of indirect trauma among mental health professionals working with war refugees (Butt et al., 2025). Nonetheless, no research has yet examined the effects of secondary traumatic stress on burnout and PTG simultaneously, and the moderating influence of resilience among these interactions has yet to be empirically investigated within the Pakistani context. The present study addresses these gaps by testing burnout and post-traumatic growth as parallel outcomes of secondary traumatic stress within a single framework, with resilience as the moderator.

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Hypotheses

1. Secondary traumatic stress will positively correlate with burnout among victim service providers.
2. Secondary traumatic stress will negatively correlate with post-traumatic growth among victim service providers.
3. Secondary traumatic stress will significantly and positively predict burnout among victim service providers.
4. Secondary traumatic stress will significantly and negatively predict post-traumatic growth among victim service providers.
5. Female victim service providers will exhibit significantly higher levels of secondary traumatic stress and burnout relative to their male counterparts.
6. Male victim service providers will exhibit significantly higher levels of post-traumatic growth and resilience as compared to female victim service providers.
7. Resilience is anticipated to function as a moderator in the association between secondary traumatic stress and burnout among victim service providers.
8. Resilience is anticipated to function as a moderator in the association between secondary traumatic stress and post-traumatic growth among victim service providers.

Method

Research Design

In this research a quantitative cross-sectional research design was utilized, and self-report measures were used to study the relationship between secondary traumatic stress, burnout, post-traumatic growth and resilience among victim service providers.

Sample

The study included 300 victim service providers, recruited from public and private institutions using purposive sampling. Participants were aged between 22 and 55 years and had a minimum of fourteen years of formal education. The study focused on second responders to trauma, including psychologists, psychiatrists and medical doctors who were regularly exposed to trauma-related cases and had at least one year of professional experience in trauma-related settings. First responders to trauma, including police officers, firefighters and emergency personnel, were excluded from the study.

Measures

Secondary Traumatic Stress

In order to measure secondary traumatic stress, the Professional Quality of Life Scale (ProQOL) subscale was used (Hudnall Stamm, 2009). This 10-item subscale is rated on a 5-point Likert scale ranging from 1 (never) to 5 (very often), and elevated scores indicate greater severity of secondary traumatic stress. The original scale demonstrated good internal consistency, $\alpha = .81$ (Hudnall Stamm, 2009).

Burnout

In order to measure burnout, the Professional Quality of Life Scale (ProQOL) subscale was used (Hudnall Stamm, 2009). The 10 items of this subscale (1, 4, 8, 10, 15, 17, 19, 21, 26 and 29) are rated on a 5-point Likert scale ranging from 1 (never) to 5 (very often). Higher scores reflect higher levels of burnout, and according to the developer of the scale the Cronbach's alpha of burnout is $\alpha = .75$ (Hudnall Stamm, 2009).

Post-Traumatic Growth

In order to measure post-traumatic growth, the Post-Traumatic Growth Inventory Short-Form (PTGI-SF), developed by Cann (2010), was used. The 10 items are rated on a 6-point Likert scale ranging from 0 (I did not experience this change) to 5 (I experience this change). A high score reflects a greater degree of post-traumatic growth. The original authors reported that Cronbach's alpha was $\alpha = .90$ (Cann, 2010).

Resilience

In order to measure resilience, the Brief Resilience Scale (BRS), developed by Smith et al. (2008), was used. The 6 items are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with items 2, 4, and 6 reverse coded. Higher scores reflect higher resilience, and across the four samples

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the Cronbach's alpha value ranged from .80 to .90 (Smith et al., 2008).

Procedure

The study adhered to ethical guidelines approved by the institutional ethics committee. Participation was voluntary, all participants were provided with informed consent forms prior to the collection of data and were informed that their responses would be used exclusively for research purposes. Data were collected through a questionnaire booklet comprising a demographic form and the standardized scales. Participants were approached in their respective institutions after obtaining formal permission, clear instructions were provided and participants were encouraged to provide genuine responses to every item.

Data Analysis

IBM SPSS (version 27) and PROCESS Macro (version 4.2) were used to analyze data. Missing values were handled by proration, whereby each respondent's completed items were averaged and scaled to the full item count, allowing all 300 participants to be retained as the final analytic sample. Analyses included descriptive statistics, reliability analysis, bivariate correlation, independent samples t-test, ANOVA, regression analysis and moderation analysis. Because the three professional groups differ in training and working conditions, profession was entered as a covariate in the regression and moderation models so that each association could be estimated independently of professional composition.

Results

Table 1 Participants' Demographic Characteristics (N = 300)

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	20-30	122	40.7
	31-45	117	39.0
	46-65	61	20.3
Profession	Psychiatrist	32	10.7
	Psychologist	42	14.0
	Doctor	226	75.3

Table 1 summarizes the background characteristics of the study sample. Most participants were aged between 20 and 45 years, and most respondents were doctors, followed by psychologists and psychiatrists.

Table 2 Descriptive Statistics and Reliability Estimates of the Study Variables (N = 300)

Variables	*K*	α	*M*	*SD*	Range		Skew	Kurtosis
					Potential	Actual		

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						Range			
Secondary Traumatic Stress		10	.73	27.47	6.18	10-50	13-40	-.42	-.37
Burnout		10	.80	28.75	6.92	10-50	14-41	-.46	-.86
Post-Traumatic Growth		10	.90	31.75	8.89	0-50	10-50	-.16	-.45
Brief Resilience Scale		6	.70	20.29	4.08	6-30	8-30	-.40	.49

Table 2 summarizes the descriptive and reliability analyses conducted across all study variables. All skewness and kurtosis indices remained within the -1 to +1 threshold, indicating a normal distribution that supports the suitability required for parametric analysis, and Cronbach's alpha for the four study variables ranged from .70 to .90, reflecting acceptable internal consistency (George & Mallery, 2010).

Table 3 Bivariate Correlation Among Study Variables (N = 300)

	1	*2*	*3*
1. STS	-	.28**	-.65**
2. BO		-	-.16**
3. PTGI			-

*Note. STS = Secondary Traumatic Stress; BO = Burnout; PTGI = Post-Traumatic Growth Inventory. *p < .05; **p < .01; ***p < .001.*

Table 3 presents the correlation coefficients among the study variables. Secondary traumatic stress correlated positively and significantly with burnout and negatively and significantly with post-traumatic growth, and burnout was also found to correlate negatively and significantly with post-traumatic growth

Table 4 Mean Differences on the Basis of Gender in the Study Variables (N = 300)

Variables	Male (n=169) M	*SD*	Female (n=131) M *SD*		*t(df)*	*p*	95% CI *LL*	*UL*	Cohen's d
STS	26.96	6.06	28.13	6.30	-1.63 (298)	.10	-2.59	.24	-0.19
BO	29.48	6.66	27.80	7.16	2.10 (298)	.04	.10	3.26	0.24
PTGI	33.04	8.26	30.08	9.40	2.90 (298)	.004	.95	4.97	0.34
BRS	20.74	3.65	19.72	4.53	2.16 (298)	.03	.09	1.95	0.25

Note. STS = Secondary Traumatic Stress; BO = Burnout; PTGI = Post-Traumatic Growth Inventory; BRS = Brief Resilience Scale; CI = confidence interval; LL = lower limit; UL = upper limit. *p < .05; **p < .01; ***p < .001.

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Findings presented in Table 4 demonstrate significant differences between male and female victim service providers in burnout, post-traumatic growth and resilience, as male victim service providers scored higher on each of these variables. Nevertheless, in terms of secondary traumatic stress, gender differences failed to reach statistical significance. The Cohen's *d* values obtained for burnout, post-traumatic growth and resilience suggest small to modest effects, approaching the threshold for a medium effect size (Cohen, 1977).

Table 5 Differences in Study Variables by Professional Group (N = 300)

Variable	*Psychiatrist (n = 32) M (SD)*	*Psychologist (n = 42) M (SD)*	*Doctor (n = 226) M (SD)*	*F(2, 297)*	*p*	*η²*
STS	25.23 (5.21)	26.66 (6.41)	27.94 (6.21)	3.15	.044	.02
BO	22.96 (6.45)	20.79 (5.26)	31.04 (5.57)	77.71	<.001	.34
PTGI	35.53 (7.11)	31.29 (9.19)	31.30 (8.96)	3.30	.038	.02
BRS	22.62 (3.58)	23.17 (3.50)	19.43 (3.88)	23.85	<.001	.14

Note. STS = Secondary Traumatic Stress; BO = Burnout; PTGI = Post-Traumatic Growth Inventory; BRS = Brief Resilience Scale; η^2 = eta squared.

Table 5 reports differences between the three professional groups. Burnout separated them most sharply, $F(2, 297) = 77.71$, $p < .001$, $\eta^2 = .34$, with doctors scoring higher than psychiatrists and psychologists (Tukey, $p < .001$), who did not differ from one another. Resilience showed the reverse pattern, $F(2, 297) = 23.85$, $p < .001$, $\eta^2 = .14$, as doctors reported lower resilience than either group ($p < .001$). Group differences in secondary traumatic stress, $F(2, 297) = 3.15$, $p = .044$, and post-traumatic growth, $F(2, 297) = 3.30$, $p = .038$, were small ($\eta^2 = .02$); the only pairwise difference to survive correction was higher post-traumatic growth among psychiatrists than doctors ($p = .031$).

Table 6 Secondary Traumatic Stress Predicting Burnout and Post-Traumatic Growth After Controlling for Profession (N = 300)

Variables	*B*	*SE*	*β*	*t*	*p*	95% CI	
						LL	*UL*
(Constant)	8.98	1.90		4.73	<.001	5.25	12.71
STS	.24	.05	.21***	4.35	<.001	.13	.35
Profession	5.00	.51	.48***	9.83	<.001	4.00	6.00
R2 = .31, Adjusted R2 = .30 , F(2, 297) = 65.31, p < .001							
Post-traumatic growth							
(Constant)	58.33	2.22		26.24	<.001	53.96	62.70
STS	-.92	.06	-.64***	-14.42	<.001	-1.05	-.80
Profession	-.45	.60	-.03	-.75	.453	-1.62	.72
R2 = .42, Adjusted R2 = .42 , F(2, 297) = 108.07, p < .001							

Note. STS = Secondary Traumatic Stress; CI = confidence interval; LL = lower limit; UL = upper limit. Profession (1 = psychiatrist, 2 = psychologist, 3 = doctor). ***p < .001.

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Table 6 shows secondary traumatic stress predicting each outcome with profession held constant. Secondary traumatic stress and profession together accounted for 30% of the variance in burnout, F(2, 297) = 65.31, p < .001. Secondary traumatic stress remained a significant positive predictor after adjustment (β = .21, p < .001), and profession carried the larger weight (β = .48, p < .001).

The model for post-traumatic growth explained 42% of the variance, F(2, 297) = 108.07, p < .001. Secondary traumatic stress predicted lower post-traumatic growth (β = -.64, p < .001), while profession did not contribute significantly (β = -.03, p = .453).

Table 7 Resilience as a Moderator Between Secondary Traumatic Stress and Burnout After Controlling for Profession (N = 300)

Variables	*BO*		*t*	*p*
	B	*SE*		
Constant	17.40 [14.64, 20.16]	1.40	12.40	<.001
BRS	-.32 [-.50, -.14]	.09	-3.44	.001
STS	.18 [.07, .29]	.05	3.33	.001
BRS*STS	-.03 [-.05, .00]	.01	-1.94	.054
Profession	4.23 [3.22, 5.25]	.52	8.20	<.001
R	.60			
R^2	.36			
F	41.16			
ΔR^2	.01			

Note. Values in brackets are 95% confidence intervals. STS = Secondary Traumatic Stress; BRS = Brief Resilience Scale.

Table 7 presents resilience as a moderator between secondary traumatic stress and burnout with profession controlled. The model was significant, F(4, 295) = 41.16, p < .001, explaining 36% of the variance. Secondary traumatic stress (B = 0.18, p = .001) and resilience (B = -0.32, p = .001) each predicted burnout, and profession remained a strong predictor (B = 4.23, p < .001). The interaction did not reach significance once profession was included, B = -0.03, p = .054, ΔR^2 = .01.

Table 8 Resilience as a Moderator Between Secondary Traumatic Stress and Post-Traumatic Growth After Controlling for Profession (N = 300)

Variables	PTGI		*t*	*p*
	B	*SE*		
Constant	32.87 [29.57, 36.18]	1.68	19.57	<.001
BRS	-.11 [-.32, .11]	.11	-.97	.331
STS	-.89	.06	-13.75	<.001

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Variables	PTGI		*t*	*p*
	B	*SE*		
	[-1.02, -.76]			
BRS*STS	.05	.02	3.28	.001
	[.02, .09]			
Profession	-.32	.62	-.51	.610
	[-1.53, .90]			
R	.66			
R^2	.44			
F	58.36			
ΔR^2	.02			

Note. Values in brackets are 95% confidence intervals. STS = Secondary Traumatic Stress; BRS = Brief Resilience Scale.

Table 8 presents resilience as a moderator between secondary traumatic stress and post-traumatic growth with profession controlled. The model was significant, $F(4, 295) = 58.36$, $p < .001$, explaining 44% of the variance. Secondary traumatic stress predicted lower growth ($B = -0.89$, $p < .001$), while resilience ($B = -0.11$, $p = .331$) and profession ($B = -0.32$, $p = .610$) showed no direct effect. The interaction was significant, $B = 0.05$, $p = .001$, $\Delta R^2 = .02$.

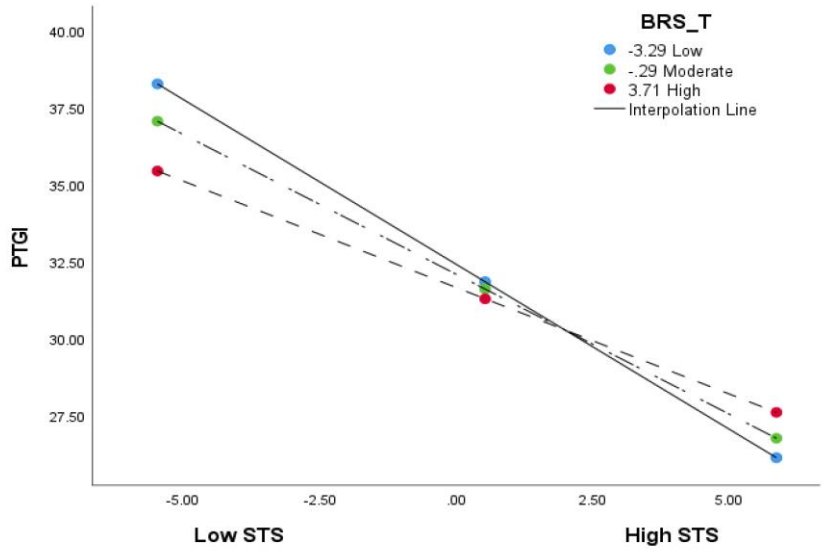

Figure 1 Resilience as a Moderator in the Relationship Between Secondary Traumatic Stress and Post-Traumatic Growth

Figure 1 shows this interaction. Post-traumatic growth falls as secondary traumatic stress rises. Victim service providers with low resilience report the highest PTG when STS is low but decline most steeply, while those with high resilience begin lower and decline least.

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Discussion

This research examined the effect of secondary traumatic stress on burnout and post-traumatic growth among victim service providers, and the moderating role of resilience. Secondary traumatic stress correlated positively with burnout and negatively with post-traumatic growth, and predicted both outcomes after profession was taken into account, supporting the first four hypotheses. A meta-analysis of employees subjected to indirect trauma identified a positive association between STS and occupational burnout (Cieślak et al., 2014), a meta-analysis of 33,906 healthcare workers reported the same association (Ulaş & Seçer, 2025), and continuous indirect exposure has been identified as an occupational risk factor for emotional exhaustion (Alqablan & Almahboub, 2021; Cummings et al., 2018; Lee et al., 2021). Elevated STS accompanies diminished growth where coping resources are inadequate (Cai et al., 2024; Ogińska-Bulik, 2018; Zeng et al., 2023). The two pathways are rarely tested together, and here a single exposure raised distress and eroded growth within one sample. Evidence is not uniform. Distress and growth may coexist depending on coping strategies and working conditions (Manning-Jones et al., 2016), a meta-analysis reported a positive association between the constructs (Melinte et al., 2023), and qualitative work has identified conditions that hinder growth as well as facilitate it (Bryngeirsdottir & Halldorsdottir, 2022).

Resilience did different work on the two outcomes. It moderated the association between STS and PTG, supporting the eighth hypothesis, as the negative association weakened when resilience was higher while resilience alone did not predict growth. Resilience therefore shapes how providers respond to accumulating indirect trauma rather than raising growth on its own. A scoping review reported that resilience operates on this pathway as either a mediator or a moderator of PTG (Orovou et al., 2026), and among social workers the association between resilience and growth varied with level of exposure (Finklestein & Laufer, 2021). The seventh hypothesis received weaker support. Resilience predicted lower burnout directly, consistent with its role as a protective resource (Harker et al., 2016; Hobfoll, 2011; Luthans, 2002; Mercer et al., 2023), but the interaction term fell short of significance once profession was entered, placing these data closer to a main-effect than a buffering model of resource protection (Cohen & Wills, 1985). Individual resilience appears to govern the growth pathway, while burnout was tied more closely to professional position than to personal resources.

The professional groups differed to a degree the whole-sample analyses concealed. Doctors reported substantially higher burnout than psychologists (d = 1.86) and psychiatrists (d = 1.42), and lower resilience than both other groups, whereas psychiatrists and psychologists did not differ. STS was distributed fairly evenly across the three groups. Exposure to patients' trauma was therefore shared, while its cost was not. Higher burnout among physicians than among other professional groups has been reported elsewhere (Kalinienė et al., 2024). Psychiatrists and psychologists enter trauma work with formal training in psychological processes and some habit of reflective practice, and clinical supervision and professional autonomy are protective against burnout in this group (O'Connor et al., 2018), while doctors carrying comparable caseloads have neither, and Pakistan provides no workplace mental health provision to either group (Mahesar et al., 2025; Thompson & Saleem, 2025). Burnout here looks less like an individual deficit than a feature of professional role, and interventions aimed at personal resilience may miss what drives it. This also qualifies the moderation results, since the buffering effect of resilience on burnout weakened once professional group was accounted for.

Gender differences followed the predicted pattern for PTG and resilience but not for STS. The fifth hypothesis, that female victim service providers would report higher STS and burnout, was not supported. Gender differences in STS did not reach significance,

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consistent with the meta-analysis by Hensel et al. (2015) reporting no consistent gender disparities among therapeutic workers. Male providers reported higher burnout, contrary to the direction predicted. Occupational stressors and coping style appear to bear more heavily on burnout than gender, and male professionals may be more susceptible because they express distress less readily (Maccacaro et al., 2011; Zhang et al., 2022). The sixth hypothesis was supported, as male providers reported higher PTG and resilience (Cleary et al., 2023).

Limitations and Recommendations

Several limitations qualify these findings. The cross-sectional design prevents causal inference, and longitudinal work is needed to establish direction. Purposive sampling and the restriction to doctors, psychiatrists and psychologists limit generalisability. Doctors outnumbered the other two groups. This reflects the composition of hospital settings in Pakistan rather than a sampling artefact, and group variances were homogeneous, but comparisons between psychiatrists and psychologists were underpowered, so the absence of differences between them should not be read as equivalence. Cultural factors specific to the Pakistani setting were not measured, and only resilience was tested as a moderator. Because all measures were self-reported in one session, common method variance cannot be excluded. Two features of the data argue against a purely methodological account. The association was observed across two separate instruments with different response formats, whereas secondary traumatic stress and burnout, which share an instrument and position in the booklet, were more weakly associated; common method variance would predict the reverse ordering. The two measures also share no item content. Replication with temporally separated assessments would strengthen confidence in this effect.

Implications

These findings have practical implications for trauma-exposed professionals and the organizations that employ them. STS emerges as a vulnerability factor for burnout and for reduced PTG, and resilience shapes the PTG pathway. Because burnout differed so markedly by professional group, monitoring should be allocated by role rather than by individual assessment alone, with doctors carrying trauma caseloads a priority. Resilience training should accompany rather than replace attention to workload and professional conditions.

Conclusion

The present research examined the effect of secondary traumatic stress on burnout and post-traumatic growth among victim service providers, together with the moderating role of resilience. STS predicted higher burnout and lower PTG after profession was controlled. Resilience moderated the pathway to PTG, while the equivalent effect on burnout did not hold once professional group was taken into account. Profession was the strongest predictor of burnout, with doctors reporting higher burnout and lower resilience than psychiatrists and psychologists in comparable work. The consequences of secondary traumatic stress are therefore shaped by professional position as well as personal resilience.

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