Psychological Capital And Mental Health Of Pakistani Rescue Workers: The Role Of Professional Quality Of Life

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Abstract

The current study aimed to examine the role of the dimensions of professional quality of life (ProQOL) in the relationship between psychological capital (PsyCap) and the mental health of rescue workers. A cross-sectional survey was conducted, consisting of a sample of (N = 502) male rescue workers (firefighters; emergency medical staff; ambulance drivers; emergency/disaster rescue workers; shift/station in charge) from different cities in Punjab, Pakistan. Instruments used in the present research included Urdu versions of the Mental Health Inventory, PsyCap Questionnaire, and ProQOL Scale. Findings indicated that PsyCap was significantly positively related to mental health and compassion satisfaction, whereas, significantly negatively related to burnout. Path analysis showed that dimensions of ProQOL (burnout and compassion fatigue) except compassion satisfaction significantly mediated the relationship between PsyCap and mental health. The findings concluded that rescue workers exhibited a higher level of compassion, satisfaction, PsyCap and mental health. The findings provide support and underscore the need for interventions aimed at enhancing personal resources (efficacy, hope, resilience, and optimism), ProQOL and the mental health of rescue workers.

Keywords: Rescue workers, psychological capital, compassion satisfaction, burnout, secondary traumatic stress, mental health

Introduction

Rescue workers are frequently exposed to an array of potentially traumatic, hazardous, and stressful incidents (Benedek et al., 2007) that may affect their mental health (Lopes-Cardozo et al., 2012; Greene-Cramer et al., 2021). Exposure to challenging circumstances has led to mental health problems that have directly affected one group, rescue workers (Lanza et al., 2018; Mao et al., 2018; Spoorthy et al., 2020). Rescue workers, or rescuers, refer to individuals who assist people in emergency circumstances such as disaster (Sifaki-Pistolla et al., 2016). The personnel from the helping profession (e.g., rescue workers, nurses, and social workers) frequently spend their time providing helping services to others in need (Maslach et al., 2001) due to prolonged exposure

to stressful incidents (Mitchell, 2020). They put their own lives at greater risk of burnout and compassion fatigue (Boland et al., 2018; Ortega-Campos et al., 2020), distress and mental health problems (Augsburger, 2020, Ben-Zur & Michael, 2007; Gray-Stanley & Muramatsu, 2011; Maslach et al., 2001). It is not requisite in all circumstances that rescue workers suffer themselves by experiencing traumatic incidents; rather, it could be due to secondary exposure to trauma (Figley, 1995a). Extensive literature has indicated that emergency workers suffer from secondary traumatic stress/compassion fatigue (Greinacher et al., 2019)., burnout (Kalemoglu, & Keskin, 2006); and mental health problems (Figley, 1995b; Mao et al., 2018; Marmar et al., 1999, Sprang et al., 2007, Wagner et al., 1998). Indeed, most studies on rescue workers have focused traditionally on negative dimensions of psychological health and quality of life than positive dimensions (Paton et al., 2003), such as post-traumatic stress disorder (PTSD), burnout, and stress (Schaufeli & Bakker, 2001; Turner et al., 2002). However, there is little or no research on rescue workers' positive psychological resources, strengths, well-being, and the positive dimension of quality of life in Pakistan.

In the Pakistani context, rescue workers work under unique circumstances that places them in more stressful and challenging work situation due to an upsurge in terrorism over decades. According to The Global Terrorism Index (2020), Pakistan is ranked 7th among the most affected countries by terrorism. This report indicates that despite a relative decline in terrorism, it remains a significant threat in Pakistan (Institute for Economics & Peace, 2020). Exposure to challenging circumstances has led to mental health problems that have affected society (Khalily et al., 2011). Still, rescuers have been directly affected as a consequence of terrorism (Razik et al., 2013). Schaufeli and Bakker (2001) reported that the

journal of occupational health psychology published 94% of papers on negative aspects of employee health and work-related outcomes, while only 6% of articles were published on positive aspects between 1996 to 2001.

More specifically, previous literature piloted little or no research on rescue workers' positive psychological resources, strengths, mental health, and positive dimensions of quality of life in Pakistan. This area is neglected not only in Pakistan but also in Asian countries. This argument is supported by a meta-analysis carried out analyzing 28 studies consisting of 20,424 samples of rescuers from all around the world. The combined global prevalence for PTSD was 10%. It was found that Asian countries showed a higher prevalence of PTSD than pooled worldwide prevalence (Berger et al., 2012). This indicates that rescuers in the Asian continent, especially in Pakistani society as a developing country, have reached an alarming level of mental health problems (Gadit, 2005; Khalily, 2011). The present research was taken as an initiative to investigate the role of positive resources in mental health among the rescue workers from rescue 1122. Such organizations have never been the focus of the attention of researchers and concerned authorities. Rescue 1122 was initiated at the provincial level by the government of Punjab as the first ever organized emergency humanitarian service of international standards. It is operational in 36 districts of Punjab and provides services to other provinces as well in emergency and disaster situations. It has rescued 116,928,92 sufferers of road accidents, fire explosions, building collapses, crime incidents, drowning, and blast explosions since its initiation, with an average response rate of 7 minutes (Performance of Rescue 1122, 2022).

In the present study seeking to address critical gaps, a comprehensive review of the literature suggested addressing positive attributes possessed by this personnel that might help to overcome distress and burnout at work.

Understanding how rescue workers in their workplace settings deal with burnout, distress, and fatigue using their perceived psychological resources and well-being, might contribute to organizational theory and practice by reducing the cost of caring for those in helping professions.

The concept of psychological capital (PsyCap) explains positive personal resources consisting of four state like capacities (hope, efficacy, resilience, and optimism), which stresses capitalizing strengths over weaknesses. Empirical research suggests that PsyCap can effectively cope with stress (see, e.g., Avey et al., 2009; Luthans & Youssef-Morgan, 2017; Ogińska-Bulik, & Zadworna-Cieślak, 2018), which is one of the powerful predictors of mental health outcomes. PsyCap has been associated with several behavioral, dispositional, and occupational outcomes, including mental health (Krasikova et al., 2015), psychological well-being, happiness (Avey et al., 2010; Culbertson et al., 2010), job satisfaction (Avey et al., 2011).

Research (Higuchi et al., 2016, Razik et al., 2013) highlights the prevalence of mental health problems among emergency and helping professions. A large body of literature has indicated that emergency workers suffer from secondary traumatic stress, compassion fatigue, and emotional exhaustion (Chatzea et al., 2018; Figley, 1995b; Marmar et al., 1999, Wagner et al., 1998). These work-related positive and negative outcomes are components of professional quality of life. The positive dimension of quality of life was first introduced by Stamm (2002), which explains the concept in which a person feels pleasure in doing a task while helping others. This conceptualization is helpful to shed light on a positive indicator of the quality of life among rescue workers, which has rarely been investigated. Numerous researchers (Bao & Taliaferro, 2015; Bozgeyikli, 2012; Hegney et al., 2015) have explored the predictive role of PsyCap about professional quality of life

(ProQOL). The predictive role of PsyCap is essential to identify as a protective mechanism preventing compassion fatigue and increasing compassion satisfaction. A considerable number of studies (Luthans et al., 2007) have explored the predicting role of PsyCap (Bao & Taliaferro, 2015; Peng et al., 2013), efficacy (Bozgeyikli, 2012), resilience (Hegney et al., 2015; Pietrantoni & Prati, 2008), in predicting ProQOL dimensions. On the other hand, very few studies have explored the role of ProQOL dimensions, compassion fatigue, burnout, and secondary traumatic stress (Adams et al., 2006; Ahmad et al., 2015; Burke et al., 2010), Haber et al., 2013; Markham, 2009), job satisfaction (Faragher et al., 2005) in predicting outcomes related to mental health. A few studies have explored the relationship between PsyCap, subjective well-being, job satisfaction and burnout (Baka, 2015; Hansen et al., 2015) in mental health. This study contributes to the field of occupational health and how positive psychological resources can add to overcome work related and health related outcomes (e.g., burnout, compassion fatigue, and mental health). As a result, we decided to inspect the predictive role of PsyCap and ProQOL in predicting mental health among rescue workers. Moreover, we tried to find the meditational role of ProQOL dimensions in the relation between PsyCap and mental health.

Relationship between PsyCap, ProQOL and mental health

Mental health outcome (e.g., stress) is the transaction between a person and environment, where the work environment has been appraised as challenging (Lazarus, 1999). Within the context of helping professions, personnel due to prolonged exposure to stressful incidents are anticipated to experience burnout (Devereux et al., 2009), secondary traumatic stress (Figley, 1983) and psychological distress (Lopes-Cardozo et al., 2012). To combat stress, several resources are used that are described as centrally valued

entities. The conservation of resources theory explains stress and successful adaption in individuals when they encountered by stressful incidents. The basic principle of the theory is that workers struggle to attain, preserve, foster, and keep the things they centrally value, and when resources are threatened, stress occurs (Hobfoll, 1988). Researchers have acknowledged several resources that positively influence the well-being of personnel at work. These positive resources proposed by Luthans, Avolio et al. (2007) serve as a framework to understand psychological resources. These states like resources include hope (Snyder et al., 1991); efficacy (Bandura, 1986); resilience (Masten & Reed, 2002) and optimism (Scheier & Carver, 1985). When combined, form a multidimensional higher-order construct of PsyCap.

Self-efficacy. It is one's belief in one's ability to succeed in a particular situation; individuals with efficacy are less likely to be affected by distrust, adverse responses, hurdles, and distress; furthermore, efficacy is a substantial indicator to function effectively under fear, challenge and stress, mainly due to one's perception of personal control.

Optimism. It is an explanatory style that attributes positive actions to subjective, stable and universal reasons and attributes negative events to external, momentary and situation specific factors.

Resilience. It is the ability to bounce back from adversity and is characterized as positive coping and adaptation in adverse incidents.

Hope. It is defined as "a positive motivational state that is based on an interactively derived sense of successful (1) agency (goal-directed energy) and (2) pathways (planning to meet goals)" (Snyder et al., 1991, p. 287).

These resources are needed to be introduced while making interventions to improve well-being and work-related outcomes. Researchers (Bao & Taliaferro, 2015; Bozgeyikli, 2012; Hegney et al., 2015) have

explored the predictive role of the PsyCap dimension separately toward discrete components of ProQOL and as a whole. The question of predictability is important to identify pathways to develop and sustain PsyCap and to establish a protective mechanism to prevent the development of compassion fatigue and increase compassion satisfaction. The mediated effect of quality-of-life dimensions has yet to be sufficiently investigated, but still, only some studies support the findings of the present study. Baka (2015) found that job burnout mediates between job resources and mental health. The positive role of PsyCap was found to positively impact quality of work life (Mortazavi et al., 2012). It can be concluded that PsyCap has a buffering effect through ProQOL in improving the mental health of rescue workers. A large body of research suggest that mental health outcomes, both positive and negative, are the consequence of work related stressors as well as psychological resources (Avey et al., 2010; Culbertson et al., 2010; Krasikova et al., 2015; Luthans et al., 2013; Selvaraj, 2015; Singh & Mansi, 2009) job satisfaction (Avey et al., 2011) compassion fatigue, burnout, and secondary traumatic stress (Adams et al., 2006; Baka, 2015; Vîrgă et al., 2020). PsyCap has been a negative predictor of anxiety, stress, and cynicism (Avey et al., 2011).

Owing to the scarcity of literature on the role of positive dimensions (e.g. PsyCap, compassion satisfaction) in Pakistan, this study aimed to explore rescue workers' PsyCap and its relationship with dimensions of ProQOL and mental health. Departing from preceding research in the evaluation of dimensions of quality of life and mental health, it was intended not to include only negative outcomes (e.g. burnout, compassion fatigue, & distress symptoms) but to introduce positive resources and outcomes (e.g. PsyCap & compassion satisfaction). The positive personal resources are imperative to investigate since; emergency workers are vulnerable to increased stress and adaptation and PsyCap. We

proposed that quality of life dimensions could have an indirect effect through which it could affect the relationship between PsyCap and mental health.

Methods and Measures

Objectives
1. To investigate the relationship between mental health, ProQOL, and PsyCap among rescue workers.
2. To explore the predictive role of ProQOL between PsyCap and mental health among rescue workers.

Hypotheses

1. PsyCap positively predicts compassion satisfaction.
2. PsyCap negatively predicts burnout and compassion fatigue/secondary traumatic stress.
3. Compassion satisfaction positively predicts mental health
4. Compassion fatigue/secondary traumatic stress and burnout negatively predict mental health
5. Dimensions of ProQOL (compassion fatigue, burnout and compassion satisfaction) will mediate the relationship between PsyCap and mental health.

Participants

Sample for the main study comprised (N = 502) male rescue workers, including firefighters (n = 159), emergency medical staff (n = 99), ambulance drivers (n = 123), Emergency/Disaster Rescue workers (n = 64), and Shift/Station Incharge (n = 57). The data were collected from Pakistan rescue 1122 stations: Rawalpindi (n = 116), Murree (n = 65), Wah (n = 15), Jhelum (n = 50), Sarghoda (n = 130), Chinniot (n = 11), Khoshab (n = 50), and Faisalabad (n = 120). The respondents' age ranged from 22 to 44 years (M = 30.49, SD = 3.54), job experience ranged from

1 to 12 years (M = 6.37, SD = 2.10), and their monthly income ranged from 16000 to 35000 (M = 26115.45, SD = 3417.26). Purposive sampling was used to access the participants. Only rescue workers were included in the research who had been deployed to operations in any emergency or disaster situation. The control room staff was not included in the present study.

Measures

Mental Health Inventory (MHI). The mental health was assessed using (Veit & Ware, 1983).the present study, thetudy MHI Urdu version was used (Khan et al., 2015). MHI comprised 38 items, consisting of two subscales in which Psychological Distress contained 22 items (e.g. "How much of the time have you felt lonely during the past month?"). Psychological Well-being contained 16 items (e.g. "How much of the time during the past month did you feel relaxed and free from tension?"). Response options for MHI ranged from 1 = all of the time to 6 = none of the time. High score on mental health indicates better mental health. The translation and validation study in Pakistan showed high reliability of subscales .95 and .96, respectively (Khan et al., 2015). In the current study, Cronbach's alpha for MHI was .93 (M = 173.26).

Psychological capital Questionnaire (PCQ-12) Self-Rater Short Form. PsyCap was measured using the psychological capital self-rater short form developed by Luthans et al. (2007). This study used Urdu translated version (Abbasi, 2015). It consists of four subscales, including Hope (e.g., "I can think of many ways to reach my current work goals"), Optimism (e.g., ., "I always look on the bright side of things regarding my job"), Efficacy (e.g., "I feel confident presenting information to a group of colleague"), and Resilience (e.g., "I usually take stressful things at work in stride") adapted from

previous work on these variables (Parker, 1998; Scheier & Carver 1985; Snyder et al., 1996; Wagnild & Young 1993). All items are measured using a 6-point rating scale with response categories: 1 = Strongly Disagree, to 6 = Strongly Agree. These four aspects were used as indicators of higher order latent construct PsyCap. Confirmatory factor analysis on a sample of 502 indicated that each of the facets had high factor loadings on PsyCap construct (efficacy .83; Hope .93; Resilience .84; Optimism .86). The goodness of fit indices for psychological capital questionnaire factors fitted within range: χ^2 = 82.58, root mean square error of approximation (RMSEA) = .03, the goodness of fit index (GFI) = .97, and comparative fit index (CFI) = .98 were found to be in the acceptable range. Confirmatory factor analysis for PCQ in several studies (e.g., Luthans, 2005; Avolio, 2007) supported PsyCap as a higher-order construct with four factors efficacy, hope, resilience, and optimism. The PCQ has good internal consistency for the composite score and each subscale (Efficacy = .76, Hope = .70, Resilience = .63, Optimism = .67) and the present study's composite alpha coefficient of .85.

Professional Quality of Life Scale (ProQOL R-V). The Professional Quality of Life was measured using ProQOL R- V developed by Stamm (2010) and translated into Urdu by Iftikhar (2016). ProQOL R-V consists of 30 items and three subscales: Compassion satisfaction, burnout, and secondary traumatic stress. The scale has no composite score as a whole (Stamm 2010). The scale consists of 30 items with the following number of items for each of the three subscales; compassion satisfaction (e.g. "I get satisfaction from being able to [help] people"), burn out burnout feel trapped by my job as a [helper])," secondary traumatic stress (e.g. "I am preoccupied with more than one person I [help]"). Respondents were asked to rate on a 5 – a point Likert scale and specify how often they had

experienced these positive and negative states during the last month. Responses categories ranged from 1 = Never to 5 = Very Often. The reliabilities of subscales ranged from .75-.81.

Permission was sought to use scales for the present study.

Procedure

The survey was conducted by one of the researchers. A questionnaire booklet comprised a survey information sheet, an informed consent form, a demographic sheet and three measures, PCQ-12, MHI, and ProQOL R- V, **which were** manually distributed. Individual administrations were carried out in several ways. The average time taken by the participants to fill out questionnaires was 20 minutes. A total of 667 questionnaire booklets were distributed, whereas 557 questionnaires were returned. The response rate was 83.5%; out of 557 questionnaire booklets, 55 were discarded because of similar patterns and unanswered responses.

Ethical considerations

Before visiting Rescue stations, permission was sought from concerned authorities (e.g., National Institute of Psychology and District Emergency Officers' Rescue 1122). Participants were informed about voluntary participation, anonymity and data confidentiality, the right to withhold any information they did not want to disclose, and their right to quit at any moment if they wanted.

Statistical analysis

To analyze the data, descriptive, correlation and model testing were used. Model testing was executed through AMOS version 21 to explore the meditational effects of dimensions of professional life in the relationship between PsyCap and mental health. Output was generated with various goodness of fit indices that

explained the degree to which the proposed model is a good model. These indices include the chi-sure (χ^2), relative/normed chi-square (χ^2/df), root mean square error of approximation (RMSEA), Standardized Root Mean Square Residual (SRMR), incremental fit index (IFI), the goodness of fit index (GFI), and comparative fit index (CFI). The goodness of fit criteria is IFI, GFI, and CFI > .90, whereas RMSEA and SRMR < .08 (Brown & Cudeck, 1993). For χ^2 statistics, recommendation range from as high as 5.0 (Wheaton et al., 1977) to as low as 2.0 (Tabachnick & Fidell, 2007).

Table 1. Means, Standard Deviations, and Correlations of the Study Variables

Sr. No	Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	PsyCap	59.84	7.37	_	.80**	.58**	.75**	.74**	.44**	-.44**	.34**	.49**	-.27**	-.50**	-.16**
2	Effi	14.95	2.58		_	.56**	.44**	.49**	.39**	-.40**	.31**	.48**	-.23**	-.45**	-.12**
3	Hope	19.39	2.97			_	.51**	.53**	.36**	-.34**	.30**	.39**	-.22**	-.41**	-.14**
4	Resi	15.11	2.10				_	.50**	.29**	-.32**	.19**	.31**	-.20**	-.32**	-.12**
5	Opti	10.38	1.54					_	.35**	-.34**	.29**	.36**	-.20**	-.41**	-.11**
6	MH	43.10	6.06						_	-.92**	.89**	.51**	-.56**	-.65 **	-.26**
7	PD	19.09	5.64							_	-.68**	-.49**	.54**	.62**	.25**
8	PW	21.12	6.23								_	.42**	-.50**	-.56 **	-21**
9	CS	165.39	22.56									_	-.34**	-.69 **	-.10*
10	CF/STS	45.68	13.50										_	.62**	.21**
11	Burnout	59.04	10.52											_	.24**
12	Stress A	59.84	7.37												_

Note. PsyCap = Psychological Capital; Effi = Efficacy; Resi = Resilience; Opti = Optimism; CS = Compassion Satisfaction; CF/STS = Compassion Fatigue/Secondary Traumatic Stress; MH = Mental Health; PD = Psychological Distress; PW = Psychological Well-Being; Stress A = Stress Appraisal

$**p \leqslant .01$.

Results

Table 1 shows means, standard deviations, alpha reliabilities, and bivariate correlations. PsyCap is significantly positively correlated with mental health' significant positive correlation between PsyCap and compassion satisfaction was also found. Subsequently, a significant negative correlation is found between PsyCap, burnout and secondary traumatic stress. Furthermore, compassion satisfaction is significantly positively related with mental health, while burnout and secondary traumatic stress are significantly negatively correlated with mental health. Likewise, burnout and secondary traumatic stress are significantly negatively correlated with mental health.

Table 2 Model Fit Indices in the Relationship between Mental Health, Professional Quality of Life and PsyCap among Rescue Workers (N = 502)

Model	χ^2	χ^2/df	GFI	IFI	CFI	SRMR	RMSEA
1	362.15(23)	15.75	.84	.83	.83	.08	.17
2 e6 ↔ e7	208.93(22)	9.49	.91	.91	.91	.06	.13
3 e5 ↔ e6	62.69(21)	2.99	.97	.98	.98	.04	.06

Note. IFI = Incremental Fit Index; GFI = Goodness of Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Table 2 shows the results for model testing fit indices, where ProQOL was proposed to mediate the relation between PsyCap and mental health. Model 1 showed poor fit to data, as it has all the fit indices below the acceptable range. In order to improve model to reach acceptable range, covariance between the errors of same subscales are added which are conceptually related. After adding error covariance between e6 and e7, values of GFI, IFI, and CFI improved, while values of χ^2/df and RMSEA are below the acceptable range in model 2. To achieve a good fit error, the covariance between e5 and e6 is added. After adding modification, Model 3 shows a good fit to data with all values falling in an acceptable range.
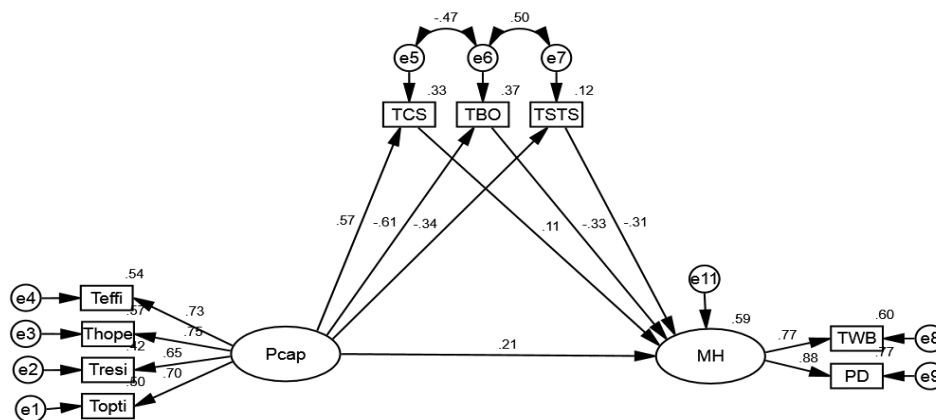

Figure 1. Model explaining interrelationship between variables and prediction of mental health

Figure 1 represents the proposed structural equation model. In this model, PsyCap is predicting mental health and ProQOL (compassion satisfaction, compassion fatigue/secondary traumatic stress, burnout), while ProQOL is mediating the relationship between PsyCap and mental health. The direct (without mediator) and indirect (with mediator) effects of variables in the model are presented in Table 3.

Table 3 Standardized Path Coefficients for Direct and Indirect Effects (N = 502)

Criterion Variable	Predictor Variable	β	P	95%CI	
				LL	UL
Direct Effect					
MH	PsyCap	.20	.003	.19	.44
CS	PsyCap	.26	.001	.15	.38
BO	PsyCap	-.20	.001	-.28	-.11
CF/STS	PsyCap	-.11	.01	-.20	-.02
MH	CS	.12	.07	-.01	.24
MH	BO	-.32	.001	-.45	-.18
MH	CF/STS	-.33	.001	-.42	-.43
Indirect Effects					
MH	PsyCap through ProQOL	.37	.001	.46	.28
MH	PsyCap through CS	.03	.07	.06	.15
MH	PsyCap through BO	.06	.001	.03	.10
MH	PsyCap through CF/STS	.03	.01	.01	.07
Total Effects					
MH	PsyCap	.57	.001	.48	.66

Note. CI = confidence interval; LL = lower limit; UL = upper limit; Psychological Capital = PsyCap; MH = Mental Health; CS = Compassion Satisfaction; CS = Burnout; CF/STS = Compassion Fatigue/Secondary Traumatic Stress; ProQOL = Professional Quality of Life

Table 3 depicts standardized coefficients for direct and indirect paths along 95% confidence interval and p values. The mediation effect of ProQOL (compassion satisfaction, compassion fatigue/secondary traumatic stress, burnout), between PsyCap and mental health was tested by using bootstrap estimation procedure with AMOS 21. According to Preacher and Hayes (2004) in order for mediation to be significant the indirect effect's confidence interval does not include zero at (p < 0.05). PsyCap has direct significant effect on mental health (β = .20, p < 0.01). While indirect effect through ProQOL (compassion satisfaction, compassion fatigue/secondary traumatic stress, burnout) is also significant (β = .37, p < 0.001).

In this manner, hypothesis is supported. The total effect of PsyCap on mental health is significant. Furthermore, to test the discrete direct and indirect effects through subscale on mental health the two paths were constrained at 0. The direct effect of PsyCap on Compassion Satisfaction, burnout and secondary trauma are significantly predicting ProQOL. Hence hypotheses 2 and 3 are also supported. The direct effect of compassion satisfaction on mental health is nonsignificant, on the other hand compassion fatigue, secondary traumatic stress, and burnout are significantly predicting the mental health which supports the hypothesis 4. The indirect effect through compassion satisfaction is nonsignificant, whereas other two indirect paths

are significantly predicting mental health as: PsyCap through burnout and secondary traumatic stress. The nonsignificant path is not excluded since it is not a discrete construct; rather it is a dimension of ProQOL. The indirect effect explained a total of 59% variance in mental health.

Discussions

Present study explored rescue workers' PsyCap and its relationship with ProQOL and mental health. It was also expected that the mental health of rescue workers would be better when level of PsyCap and compassion satisfaction would be high, and level of burnout and secondary traumatic stress will below. Our findings revealed that PsyCap was positively related with mental health. This result supports the study that suggests PsyCap is a significant predictor of mental health (Krasikova et al., 2015). Organizational researchers (e.g. Luthans et al., 2008; Luthans et al., 2007) have proposed PsyCap as principal construct in its application to positive psychology. Previous literature (Avey et al., 2010, Culbertson et al., 2010; Kariskova et al., 2015; Luthans et al., 2013) has indicated a substantial link between PsyCap and mental health suggesting that organizations can improve the wellbeing of their employees. Furthermore, our findings revealed that PsyCap was positively related with compassion satisfaction. This indicates that higher PsyCap is associated with greater propensity to increase compassion satisfaction. These findings are consistent with previous studies, that PsyCap resources of hope, optimism, resilience and efficacy are positively associated with work satisfaction (Bozgeyikli, 2012; Luthans et al., 2007; Prati et al., 2010).

Findings also revealed negative relationship between PsyCap burnout and secondary traumatic stress. This indicates that as level of PsyCap increases the levels of burnout and secondary traumatic stress tend to decrease. This finding was found to be consistent with

earlier studies (Bozgeyikli, 2012; Hegney et al., 2015; Prati et al., 2010) which stated that as level of PsyCap resources increase the level of burnout and secondary trauma tend to decrease. Enhancing positive psychological resources is found to be helpful in preventing compassion fatigue and other negative outcomes (Bao & Taliaferro, 2015). These findings indicate that rescue workers higher at PsyCap are likely to have greater satisfaction while helping others at their work and associated with lower burnout and compassion fatigue.

Findings of present study revealed significant positive relationship between compassion satisfaction and mental health, and significant negative relationship between compassion fatigue and burnout. These findings are consistent with previous findings, compassion fatigue (Adams et al., 2006), burnout (Burke et al., 2010, Peng et al., 2013), job satisfaction, burnout and stress (Faragher et al., 2005) in predicting mental health. It implies that rescue workers who are higher at compassion satisfaction and lower at compassion fatigue and burnout are more likely to have better mental health. The participants of this research might have observed religion as strong source of motivation because religion transforms cognitions into more positive thoughts by means of belief system. The role of religious and spiritual beliefs in reducing negative outcomes (e.g. distress, burnout) is also evident from previous researches (Ano & Vasconcelles, 2005; McColl et al., 2000; Pargament & Ano, 2006; Sonnentag & Grant, 2012; Yasien et al., 2016). Other factors that have contributed to positive resources and well-being of rescue workers could be norms and values of collectivistic culture; sense of community, sense of compassion, coping, and relatedness towards others (Cicognani et al., 2009; Naz et al., 2010; Yasien et al., 2016).

Since there is very little empirical evidence (Ding et al., 2014; Premanand et al.,

2015) regarding the mediation role of burnout, compassion satisfaction and compassion fatigue. Our findings of mediation analysis revealed that dimensions of compassion fatigue, burnout and compassion satisfaction significantly mediated between PsyCap. Since mediated effect of quality-of-life dimensions has been insufficiently investigated, a few studies support the findings of present study. Baka (2015) found that job burnout mediates between job resources and mental health. It was found in a study that quality of life is a significant predictor of mental health of employees (Markham, 2009). It may be concluded that PsyCap has buffering effect through ProQOL in improving mental health of rescue workers. This can be further justified in a manner that high PsyCap lowers the level of burnout and compassion fatigue and boost up the level compassion satisfaction of rescue workers which ultimately lead to better mental health. This indicated that burnout, compassion fatigue and compassion satisfaction significantly mediated between the predictor and outcome variable.

Implications for psychological theory and practice

The findings of present study provide support and underscore need for interventions aimed at enhancing personal resources (efficacy, hope, resilience, and optimism), PsyCap as whole, ProQOL and the mental health of rescue workers. These PsyCap resource are state that can be changed and developed by means of instructional programs (Luthans et al., 2007), and through PsyCap Intervention Training model (Luthans et al., 2006). The findings can provide organizations to develop psycho education programs and workshops in relation to positive PsyCap resources encompassing efficacy, hope, resilience and optimism to cope effectively with stressful incidents. The results can also provide interventions to develop training programs related to mental health (e.g., risk and protective

factors) for rescue workers and other vulnerable populations. Organizations can also schedule refresher courses monthly to tune-up rescue workers' morale by expanding the findings of the present research. Findings can provide insight to constitute policies and techniques for long-term training programs.

Conclusion

Our findings concluded that the relationship between PsyCap and mental health was mediated by dimensions of ProQOL. Rescue workers exhibited a higher level of compassion satisfaction, PsyCap and mental health. Still, there is a persistent need for more research to introduce policies that might help rescue workers with available resources to better cope with challenging and high-risk profession demands. It is questionable to eliminate distress and burnout among rescue workers yet completely; our findings propose that Pakistani rescue workers work with high positive attributes (e.g., PsyCap, compassion satisfaction and better mental health). Further exploration is desired to examine how available psychological resources can be reserved, accumulated and built upon that could help in professional training in helping professions.

Data Availability Statements

The data that support the findings of this study are available on request from the corresponding author, [Maryam Haleem]. The data are not publicly available due to restrictions, e.g. contains information that could compromise the privacy of research participants**.**

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