



The association between psychological capital, mental health, and burnout among specialists working in autism centers in Pakistan

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ABSTRACT

Introduction: Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder which influences a child's verbal, intellectual, and social parts of life. Professionals who handle children with autism face exceptional challenges as they come across hyperactivity, self-injurious behavior, compulsive behavior, and frequent meltdowns. The present research was designed to find out the relationship between psychological capital, mental health, and burnout among the professionals working in Autism Centers in Lahore Pakistan. Furthermore, it also aimed to investigate the role of mental health as a mediator between psychological capital and burnout.

Methods: The correlational research design and non-probability purposive sampling technique was used to collect the data. Participants of the study were Autism Therapist $n = 150$, including Behavior Therapist ($n = 80$), Speech Therapist ($n = 40$), and Special Educationist ($n = 30$) from 12 Autism centers in Lahore Pakistan. The research instruments included Psychological Capital Questionnaire, General Health Questionnaire, and Teacher Burnout Inventory. Hierarchical Multiple Regression Analyses was conducted for predicting demographic characteristics, psychological capital, and mental health burnout of professionals working with ASD.

Results: Present study showed that a significant positive relationship exists between psychological capital and mental health. Negative relationship among psychological capital and burnout was also found. It also revealed that the unsatisfactory working environment of Autism therapist predicted the burnout.

Conclusion: Social support in the work environment and supervision opportunities for trainees was key predictors of minimizing burnout and job satisfaction. A flexible environment and definite set of working hours is needed in every institute for positive well-being of the professionals working with children who have autism.

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Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder which is visible in children of ages between 2.5 and 3 years. It influences a child's verbal, intellectual, and social parts of life. Just about 1 out of 68 children determined to have ASD [1]. In Pakistan, a third world country according to 2017 Census, 55% of the population has been diagnosed with Autism [2]. There are at least 1,700,000 children with ASD in Pakistan [2]. The ratio of ASD is 6.31% merely in Lahore, Pakistan [3].

The child and adult who are diagnosed with ASD share a deficit in language, communication, deficit in emotional interaction with people and react severely to the daily changes of their routines, since infancy but signs are noticed by the end of second year [4]. Professionals who handle children with autism face exceptional challenges as they come across hyperactivity, self-injurious behavior, compulsive behavior, and frequent meltdowns. This leads to fatigue, stress, psychological distress, and other psychological or physical health

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complications among the caregivers and decreases their psychological well-being [5,6].

Burnout seems to be common in the professionals who have no change in workplace environment or people [7]. They follow the structured and scientifically designed program for the completion of the task which is time allotted. The children with autism have severe behavioral problem which are a challenging task. The dealing of these behaviors requires lot of physical output and mental effort. The staff of autism keeps changing due to these above factors and the load of the absent or new colleagues falls on others leading causes to burnout [8] and anxiety with depression [9] and psychological distress. Professionals who had healthy psychological capital had no risk of poor mental health and were able to escape burnout [4]. Those individuals with poor psychological capital when worked with ASD children faced psychological distress which led to burnout such as anxiety, depression, and psychophysiological problems. Intervention is needed for employed therapists who are faced by burnout [10]. Reducing job burnout is an important factor for increasing the psychological capital which can positively enhance mental health [11]. It is found that the untrained and inexperienced staff encountered lot of dissatisfaction in working with these children thus resulting in burnout [12].

The model of psychological capital can be utilized as a way out for positive well-being that professionals can use to counter negative consequences and stress faced while dealing with challenging behaviors of children. As per Luthans [13] four states hope, efficacy, resilience, and optimism are referred to as psychological capital (PsyCap). In the framework of aforementioned circumstances, the current study has been designed to investigate how psychological capital and mental health affect burnout in professionals working in Autism Centers.

In autism services, stressful factors include work overload, conflicts and indecisiveness, and high expectations of the parents. They offer their services for the challenging problems which are of great concern for the parent. They follow the structured and scientifically designed program for the completion of the task which are time allotted. The children with autism have severe behavioral problem which are a challenging task. The dealing of these behaviors requires lot of physical output and mental effort. Completing task in allocated time period is a very stressful task as it varies from child to child and depends on the severity of each child. The staff of autism keeps changing due to these

above factors and the load of the absent or new colleagues falls on others leading causes to burnout [4]. Higher positive qualities in the workplace should result in lower burnout, which represents the higher degrees of psychological well being (PWB) in the staff of ASD [14].

Specifically, the present study aims to inspect the immediate impact of psychological capital on mental health in Professionals of working with Autism in Pakistan. In addition, the object is to explore if mental health is a significant mediator in the relationship between psychological capital and burnout in professionals working with Autism.

Hypotheses

- There is a positive relationship between psychological capital and mental health among professionals of autism.
- There is a negative relationship between mental health and burnout among professionals of autism.
- There is a negative relationship between psychological capital and burnout among professionals of autism.
- Psychological capital and mental health are likely to predict burnout in professionals of autism.

Methods

Research design

Correlational Research Design was used. The nature of research was Quantitative.

Sample

The participants of the study included child psychologists, behavior therapists, speech therapists, and special educationists from different autism centers in Lahore Pakistan. There are around 20 Autism Centers in Lahore. Sample was calculated by G-Power analysis. Total number of proposed sample was $n = 170$. Non-probability purposive sampling technique was used to gather the data. The inclusion criteria was participants dealing with children diagnosed with ASD who have minimum 6 months experience and age minimum age 25 or more. The exclusion criteria was professionals doing multiple jobs, who had any physical disability and who had faced any significant stressor/death of a closed one within past 6 months, or providing care, special attention to their own child diagnosed with any Mental Disorder were excluded.

Measures

Demographics

The study comprised different demographic variables which included age, education, marital status, family system, nature of job, monthly income, job experience, duty shift, duty hours, critical incident, stress appraisal, and number of children.

Instruments

Psychological Capital Questionnaire (PCQ), originally developed by Luthans et al. [13] consisted of four subscales, including Hope, Optimism, Efficacy, and Resilience adapted by Parker et al. [15]. The value of alpha for the present study ranges from 0.71 to 0.84 and the total is 0.85. The Cronbach alpha reliability of total scale is 0.81.

General Health Questionnaire (GHQ). The GHQ had 28 items [16] and its Cronbach's alpha for the present study is $\alpha = 0.85$.

Teacher Burnout Scale (TBS). The TBS, created by Seidman and Zager [17] in 1987, was utilized to assess instructor burnout and the Cronbach alpha of this scale for the present study is $\alpha = 0.75$.

Procedure

Permission was obtained from the authors of the scale to be used in this study. All 20 autism institutes in Lahore Pakistan were invited for participating in the study, out of which 12 consented to participate in the study. Participants who consented to participate were briefed about the nature of the study. Total 250 questionnaires were distributed, 175 questionnaires were completed and returned. The incomplete questionnaires due to running of short time were discarded. A total number of 25 questionnaires were discarded during data entry as they were reflecting non-seriousness of the participants. Total period of data collection was 6 months. The response rate was 75%.

Ethical considerations

The ethics review committee of Riphah University, Lahore, Pakistan approved the study. Permission was taken from different concerned authorities and from authors of scales. Informed written consent was taken from the participants. Participants were assured that their identity will not be disclosed to anyone. Confidentiality was maintained in this research.

Results

The results section comprises of three sections. First section is the psychometric characteristics of data, second section includes the descriptive analyses of demographics and the third section includes the inferential statistics which provides information about the tested hypotheses in the current study.

Section 1: psychometric properties

This section comprised of psychometric properties of PCQ, GHQ, and TBS which include Cronbach alpha reliability, actual, potential range, mean, and standard deviation. It shows that the alpha reliability of psychological Capital is Cronbach's $\alpha = 0.81$. This scale has 24 items and the mean score is $M = 107.0$ ($SD = 8.45$). Moreover, the Alpha Reliability of GHQ has Cronbach's $\alpha = 0.85$, this scale was also highly reliable. This scale had 28 items and the Mean Score was $M = 35.1$ ($SD = 10.2$). The Alpha Reliability of TBS had Cronbach's $\alpha = 0.75$, that indicate moderate reliable. This Scale has 21 items and the Mean Score is $M = 80.5$, ($SD = 12.2$).

Section 2: demographics description

Participants of the study were Autism Therapist $n = 150$, including Behavior Therapist ($n = 80$; 62%), Speech Therapist ($n = 40$; 10%), and Special Educationist ($n = 30$; 27.3%) from 12 Autism centers in Lahore Pakistan. Most participants (63.3%) had 1–5 years of experience, and these participants work on daily wages followed by relatively 15,000–30,000 monthly salaries. The working hours of majority participants (55.3%) ranged between 5 and 8 hours. Majority of participants had 5–8 family members. Most of the participants (59.3%) had their own houses, 37.3% lived in rented homes and very few (3.3%) resided in government houses.

Section: 3 inferential statistics

Results show that unsatisfactory working environment has significant correlation with burnout. Ultimately, the unsatisfactory relationship of professionals with colleagues has significant negative correlation with mental health and burnout. Thus, it is highlighted that the burnout gets more prone among Autism therapist when they have low Psychological capital and unsatisfied working environment. The professionals who are dealing with severity level of ASD have highly significant correlation with psychological capital. It has significant

Table 1. Correlation matrix for psychological capital, mental health, burnout and demographics characteristics of professionals.

Sr.#	Variables	I	II	III	IV	V	VI	VII	M	SD
I	WE Unsatisfactory		–	–0.6	–0.4*	0.03***	0.07*	0.06**	0.06	0.23
II	Relationship			–	0.50	–0.10**	–0.08	0.10**	.05	0.22
III	Mild ASD				–	–0.28**	0.50**	–0.10*	0.03	0.18
IV	CR Unsatisfactory					–	–23.	–0.08**	0.12	0.32
V	Total PCQ							–0.53**	107.00	8.4
VI	Total GHQ							0.19	35.10	4.1
VII	Total TBS								80.55	0.22

WE: Working Environment; ASD: Autism Spectrum Disorder; CR: colleague Relationship; PCQ: Psychological Capital Questionnaire; GHQ: General Health Care; TBS: Teacher Burnout Scale.

* $p < 0.05$; ** $p < 0.01$.

Table 2. Hierarchical multiple regression analyses predicting on demographic characteristics, psychological capital and mental health on burnout of professionals working with ASD ($n = 150$).

Predictors	Burnout of professionals that working with ASD	
	ΔR^2	B
Step 1		
Working environment of Professionals	0.30**	0.45**
Step 2		
Psychological Capital	0.31**	0.38**
Step 3		
Mental Health	0.25	0.55
Total R^2 (0.86)		

a. Dependent variable, burnout.

b. Predictor variable in this model, working environment of professionals, psychological capital and mental health.

$p < 0.001$ **; ΔR^2 = Adjusted r square; B: Standardized Coefficient; total R^2 : r square.

negative correlation with burnout. Results of the present study show that disability of spectrum is not a major cause of burnout; the proper environment and training of therapist are prerequisite for eliminating the burnout among ASD therapist. The psychological capital has highly significant relationship with mental health in this study. Furthermore, the psychological distress among therapist on GHQ were reported low which indicates there mental health is good and burnout is low. The mental health with burnout has non-significant relationship among professionals of ASD.

Step 1 in regression analysis shows that the working environment of professionals is the significant predictor of burnout. The professionals who have unsatisfactory working environment are the predictors of more emotional exhaustion and

cynicism. The value of R^2 explained 30% variance in burnout of professionals.

Step 2 in showed that the low psychological capital of professionals is the significant predictor of burnout. It showed that stress cause the low optimism, self-efficacy which leads to burnout. The value of R^2 explained 31% variance in burnout of professionals.

Step 3 shows that mental health of professionals is the significant predictor of burnout. The mental health in this current study has shown two dimensions—psychological distress and psychological well-being. The psychological distress leads to burnout in professionals of ASD. The value of R^2 explained 25% variance in burnout of professionals.

Mediation analysis

To investigate the mediation a simple mediation analysis was performed using PROCESS. The outcome variable for the analysis was Burnout. The predictor variable was Psychological capital. The mediator variable was mental health. The indirect effect of psychological on burnout was found to be statically significant ($p = 0.000$, $F = 4.25$, $CI = 95\%$, $LL = 0.021$, $UL = 0.570$).

Discussion

The present study aimed to identify the relationship between psychological capital, mental health, and burnout among the professionals of Autism.

Descriptive statistics of the current study indicate that most of the professionals were dealing with the severity level of moderate ASD (70.7%). Besides the results showed that high proportion of professionals (66.0%) conducted one to one sessions. Evidence shows [18] that professionals who

Table 3. Matrix to find out difference on study variables.

Variables	Behavior Therapist (n = 80)		Special Educationist (n = 30)		Speech Therapist (n = 40)		t(217)	p	95%CI		Cohen' SD
	M	SD	M	SD	M	SD			LL	UL	
PCQ	14.45	8.06	6.09	9.49	8.03	10.61	2.48	0.01	33.5	36.8	0.53

handle these kinds of disabilities, need additional environmental settings like one to one session, the room environment and its setting matters a lot to balance the demands of caseload such as implementation of individualized educational planner. If these prerequisites are not provided to professionals, it can often lead to lower levels of efficacy (general teaching and personal teacher) and increased levels of burnout. Thus, in current study most of the responses of participants showed that they were having one to one session setting. Positive work environment reflects positive emotional feelings of professionals towards their job [19].

The current study also showed that most of the participants (63.3%) had 1–5 years of experience and these participants who worked on daily wages, followed by 15,000–30,000 monthly salaries were satisfied. Very few (5.3%) had less than 15,000 salary. Besides it also revealed that the working hours are 5–8 hours of maximum participants (55.3%). Jovanović [20] found in his study that for reducing burnout the important role is sufficient salary and workload. Moreover, existing literature revealed that the stress level was evident among professionals who had to take care of more than 3 family members [4], for the present study stress level was evident among professionals as majority of the participants had 5–8 family members Marital status is a source of social support which prevent and reduces the individual responses to stress and can predict PWB [21,22].

The results of the current study are supported by existing evidence [23] that healthy pattern of thinking likewise compassion, quality of work, resilience, and dimensions of psychological capital make the organizations enough strong to challenge the obstacles. Current study also suggested that if job mismatch the characteristics of therapist that would be on risk for burnout [10]. This research found that staff found in Autism institutes was lesser as compared to the children admitted causing psychological distress and emotional exhaustion [24]. Positive relationship was found between psychological capital and mental health of ASD professionals indicating that ASD therapist in Pakistan possesses higher level of PsyCap resources. One

such possible explanation for high scores on PsyCap and psychological well-being can be spiritual/religious beliefs [25]. The correlational matrix in current study reported that the professionals who had unsatisfactory working environment were more prone to burnout. They have low psychological capital. The unsatisfied working environment predicts the burnout among professionals. A series of logistic regression models showed that social support in the work environment and supervision opportunities for trainees were key predictors of minimizing burnout and job satisfaction.

In autism services, stressful factors include work overload, conflicts, and indecisiveness and high expectations of the parents. They offer their services for the challenging problems which are of great concern for the parent. They follow the structured and scientifically designed program for the completion of the task which are time allotted. The children with autism have severe behavioral problem which are a challenging task. The dealing of these behaviors requires lot of physical output and mental effort. Completing task in allocated time period is a very stressful task as it varies from child to child and depends on the severity of each child. The staff of autism keeps changing due to these above factors and the load of the absent or new colleagues falls on others leading causes to burnout [4]. Higher positive qualities in the workplace should result in lower burnout, which represents the higher degrees of PWB in the staff of ASD [12].

This study brought forth the psychological problems (burnout) experienced by Mental Health Professionals working in Autism Resource Centre in Lahore Pakistan. It was also highlighted the importance of Psychological Capital and the role of mental health in influencing burnout of professionals. This study provided valuable information regarding this sensitive issue so that development could be made and improvement could be bought to the mental health of professional psychologists by focusing on developing psycho-educations, interventions, and organizational intervention strategies. Ultimately, it gives insight in order to function effectively staff should be encouraged and facilitated to get rid of negative attitudes of personal failure and prevent

emotional fatigue which can lead to stressful family circumstances and social life. A definite set of working hours should be defined by policy makers so that burnout could be managed further. The study confirmed that flexible environment is need in every institute for positive well-being of the professional psychologists working with children who have autism.

Strengths

A meager literature exists on professionals' mental health and burnout working with Autism in third world country like Pakistan. People are still learning about autism and professional training have just started a few years back.

Therefore, the strength of the study was to identify causes of burnout in Pakistani professionals who have been trained. Professionals have to face tough situations for behavioral intervention to handle challenging behaviors, which cause stress resulting in burnout.

In addition, it is perceived in current study that the working environment and relationship with colleagues are the factors that decrease the burnout. Those therapists reporting high work demands and unsatisfactory working environment are more prone to emotional exhaustion. In third world country like Pakistan, economy plays a major factor too. The Autism therapists have to work on one to one session, the environmental changes, and individuality of ASD child leads to stress. The autism staff comprised in Pakistan was majority of the female. Being a conservative country, females have learnt to step out of their house and started to earn in clinics. Professionals working in different Autism Centers were approached (as data was collected from all of the 10 institutions present in a single city) to get diverse sample. This study showed that managing challenging behaviors increased psychological capital. Thus, all new professionals should be trained to manage stressful behaviors first so that burnout could be reduced. The study has shown that those with high psychological capital face less detrimental effects on mental health. Thus, optimism is an essential trait in the professionals dealing with children having autism.

Limitation

The limitation of the present study is insufficient sample size for generalizability of results. Future research should focus on interventions which are most useful for reducing burnout.

Conclusion

Social support in the work environment and supervision opportunities for trainees was key predictors of minimizing burnout and job satisfaction. A flexible environment and definite set of working hours is needed in every institute for positive well-being of the professionals working with children who have autism.

References

- [1] Baio J, Wiggins L, Christensen D, et al. Prevalence of autism spectrum disorder among children aged 8 years — autism and developmental disabilities monitoring network, 11 Sites, United States, 2014. *MMWR Surveill Summ* 2018; 67(SS-6):1–23; doi:<http://dx.doi.org/10.15585/mmwr.ss6706a1external> icon. Prevalence of autism spectrum disorder among children aged 8 years — autism and developmental disabilities monitoring network, 11 Sites, United States, 2014. *MMWR Surveill Summ* 2018; 67(6):1–23; doi:[10.15585/mmwr.ss6706a1external](https://doi.org/10.15585/mmwr.ss6706a1external)[2]. Girls with Autism [Internet], 2018. Available via <https://www.dawn.com/news/1399079>
- [3] Suhail K, Zafar F. Prevalence of autism in special education schools of Lahore. *23(3/4)*, 45. *Pakistan J Psychol Res* 2008;23(2):45–64.
- [4] Manzano-García G, Ayala JC. Relationship between psychological capital and psychological well-being of direct support staff of specialist autism services. The mediator role of burnout. *Front Psychol* 2017; 8:2277.
- [5] Lecavalier L, Leone S, Wiltz J. The impact of behaviour problems on caregiver stress in young people with autism spectrum disorders. *J Intellect Disabil Res* 2006; 50(Pt 3):172–83; doi:[10.1111/j.1365-2788.2005.00732.x](https://doi.org/10.1111/j.1365-2788.2005.00732.x). PubMed PMID: 16430729.
- [6] Lovell B, Wetherell MA. The psychophysiological impact of childhood autism spectrum disorder on siblings. *Res Dev Disabil* 2016; 49:226–34.
- [7] Maslach C, Marek T. Professional burnout, recent developments in theory and research. Routledge, London, UK, 1993.
- [8] Spence Laschinger HK, Finegan J, Wilk P. Situational and dispositional influences on nurses' workplace well-being: the role of empowering unit leadership. *Nurs Res* 2011; 60(2):124–31.
- [9] Arciuli J, Gray K, Tonge B, Einfeld S. Child language and literacy outcomes following positive parenting training. Society for the Scientific Study of Reading: Twenty-Fourth Annual Meeting Society for the Scientific Study of Reading (SSSR), Irvine, CA, 2017.
- [10] Hurt AA, Grist CL, Malesky LAJ, McCord DM. Personality traits associated with occupational 'burnout' in ABA therapists. *J Appl Res Intellect Disabil* 2013; 26(4):299–308.

- [11] Estiri M, Nargesian A, Dastpish F, Sharifi SM. The impact of psychological capital on mental health among Iranian nurses: considering the mediating role of job burnout. *Springerplus* 2016; 5(1):1377; doi:10.1186/s40064-016-3099-z[12]. Avey JB, Luthans F, Smith RM, Palmer NF. Impact of positive psychological capital on employee well-being over time. *J Occup Health Psychol* 2010; 15(1):17–28.
- [13] Luthans F, Avolio BJ, Avey JB, Norman SM. Positive psychological capital: measurement and relationship with performance and satisfaction. *Pers Psychol* 2007; 60(3):541–72.
- [14] Avey JB, Luthans F, Smith RM, Palmer NF. Impact of positive psychological capital on employee well-being over time. *J Occup. Health Psychol* 2010;15:17–28.
- [15] Parker S. Enhancing role-breadth self efficacy: The roles of job enrichment and other organizational interventions. *J Appl Psychol* 1998; 83(2):835–52.
- [16] Goldberg DP, Hillier VF. A scaled version of the General Health Questionnaire. *Psychol Med* 1979; 9(1):139–45.
- [17] Seidman SA, Zager J. The teacher burnout scale. *Educ Res Quart* 1987; 11:26–33.
- [18] Skuller JB. Teacher efficacy, teacher burnout, and attitudes towards students with autism. Doctoral dissertation, University of Louisville, Louisville, KY, 2011.
- [19] Peng J, Jiang X, Zhang J, Xiao R, Song Y, Feng X, et al. The impact of psychological capital on job burnout of Chinese nurses: the mediator role of organizational commitment. *PLoS One* 2013; 8(12):e84193; doi:10.1371/journal.pone.0084193. PubMed PMID: 24416095; PubMed Central PMCID: PMC3886971.
- [20] Jovanović V, Karić J, Mihajlović G, Džamonja-Ignjatović T, Hinić D. Work-related burnout syndrome in special education teachers working with children with developmental disorders—possible correlations with some socio-demographic aspects and assertiveness. *Eur J Spec Needs Edu* 2019. doi: 10.1080/08856257.2019.1572092.
- [21] Dwivedi S, Kaushik S, Luxmi. Organizational citizenship behaviour and demographic variables of employees in indian business processing outsourcing (BPO) sector. *J Organ Behav* 2015; 14(1):39–57.
- [22] Hank K, Wagner M. Parenthood, marital status, and well-being in later life: evidence from SHARE. *Soc Indic Res* 2013; 114:639–53.
- [23] Moradi M, SadriDamirchi E, Khazan K, Dargahi S. The mediating role of psychological capital on the relationship between spiritual intelligence and job burnout. *J Occup Health Epidemiol* 2017; 6(2):84–91.
- [24] Fore C, Martic C, Bender WN. Teacher burnout in special education: the causes and the recommended solutions. *High School J* 2002; 86(1):36–44.
- [25] Wright TA, Cropanzano R, Bonett DG. The moderating role of employee positive well being on the relation between job satisfaction and job performance. *J Occup Health Psychol* 2007; 12(2):93–104; doi:10.1037/1076-8998.12.2.93. PubMed PMID: 17469992.