

**ORIGINAL ARTICLE:**  
**"DETERMINANTS OF PSYCHOSOCIAL REACTIONS IN UNIVERSITY STUDENTS  
 POST COVID-19: A CROSS-SECTIONAL STUDY"**

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Submitted: August 29, 2023

Accepted: December 30<sup>th</sup>, 2023

### Abstract

**Objective:** To identify the mediating role of Perceived Social Support in Psychological Strength and Psychosocial Reactions in university students post COVID-19.

**Study Design:** Cross-sectional (correlation) research design was used.

**Place and Duration of study:** The data was collected via online mode through google forms between November 2021 to January 2022 from different state and private universities in Lahore, Pakistan.

**Subject and Method:** The purposive sample of  $N=150$  (men=70 and women=80) university students studying in first and last year of 18-24 years old ( $M=20.75$ ,  $SD=1.76$ ) were drawn from different public and private universities of Lahore. Data was collected using Psychological Strength Scale, Multidimensional Scale of Perceived Social Support and Psychosocial Reactions Scale. Data was analyzed using SPSS 25.

**Results:** Of the 150 participants, 70(46.7%) were men and 80(53.3%) were women. The overall mean age was  $20.75 \pm 1.76$  years. Pearson Product Moment Correlation revealed that a significant negative relation of Psychological Strength and Perceived Social Support with Psychosocial Reactions. Psychological Strength and Perceived Social Support had positive significant relationship ( $r = .68^{***}$ ), but a negative relationship between Perceived Social Support and Psychosocial Reactions ( $r = -.56^{***}$ ) and Psychological Strength with Psychosocial Reactions ( $r = -.33^{***}$ ) was also found in university students post COVID-19. Mediation analysis showed that Perceived Social Support fully mediated the relation among Psychological Strength and Psychosocial Reactions ( $p < .001$ ).

**Conclusion:** Study implicates that by increasing Psychological Strength and Perceived Social Support in university students we could reduce Psychosocial Reactions faced by them.

**Keywords:** Psychological Strength, Perceived Social Support, Psychosocial Reactions, university students, COVID-19.

### Introduction

With the occurrence of coronavirus 2019 (COVID-19), a complete social distancing was implemented worldwide where student population were confined to their homes instead of going to their institutes<sup>(1)</sup>. The enormity of the challenges brought by COVID-19 and the speed of its spread captured us unwary. We were all challenged by a hard time in every aspect emotionally, socially, and educationally. Especially to the university students as years spend in university are known to be the most important times in both scholarly and mental sense<sup>(2)</sup>. This stressing time faced by student impacted everyone differently, some demonstrated resilience, such as embracing active countermeasures and maintaining a steady mental state to deal with it. Where some showed resilience, some students couldn't handle it and faced psychological problems<sup>(3)</sup>.

Exploring within the same lines, psychological strength was found to be a very important protective factor during COVID-19 which encompasses the capability of a person to cope up with traumatic experiences<sup>(4)</sup>. The continuous growth of COVID-19, strict quarantine methods, and postpone in starting school, colleges, and universities all over the Pakistan were expected to persuade the mental fitness of university students<sup>(5)</sup>. Despite its psychological fitness effects, not much of a certain look at the psychological effects of university students going through the epidemic has been studied so the purpose of the current study was to explore the psychological consequence of the COVID-19 outbreak and its related elements amongst university students during Covid-19<sup>(6)</sup>.

Another important protective factor in the face of this pandemic is the Perceived Social Support by the students during lockdown. People can respond differently to the same stressful situation in a variety of ways<sup>(7)</sup>. People who receive enough encouragement from their family or friends typically have a stronger mental capacity and are both mentally and physiologically stronger<sup>(8)</sup>; Comparative to the individuals who seldom get sufficient support have a minimal psychological capability and weak psychological and physical wellbeing<sup>(9)</sup>. Like how family support may effectively help students manage challenging circumstances, reduce psychological stress, and prevent psychological wellbeing difficulties, supporting their psychological wellbeing growth, social support is crucial for students<sup>(10)</sup>. Other social support factors, such as family, instructors, etc., can also significantly benefit student's desire to take risks as well as the improvement of both their mental and physical well-being<sup>(11)</sup>.

Disconnection from friends and family, loss of freedom, concerns about the virus's spread, the length of the lockdown, hatred for the monotonous lifestyle, a potential shortage of necessities, a lack of clear information, potential economic harm, and prejudice are all lockdown stressors<sup>(12)</sup>. This all triggered an increased rate of anxiety which was greater among students contrasted to that amongst the common people<sup>(13)</sup>. This type of experience restricts their means to cope with this pandemic and causes Psychosocial Reactions among students. A few studies have demonstrated that restricted private space at home, pushed social distancing with classmates, absence of ability to intermingle with friends and teacher's directly, restricted right to use to learning resources, and take the students to experience dimness and trouble<sup>(14)</sup>. So, that is relevant to study the occurrence and presence of mental problems established by various students, which are experiencing sense of being afraid and worries but moreover, had to suffer controlled social activities with complete lockdown socially during COVID-19 which ultimately make worse their agony and signs of the psychological suffering<sup>(15)</sup>.

Universities play a crucial role in the lives of students, and the disruptions caused by the pandemic can have significant effects on their mental health<sup>(16)</sup>. Studying psychosocial reactions post COVID-19 allows for an exploration of both the challenges students faced and the resilience factors that contributed to coping. Findings of the research conducted post COVID-19 help in

understanding the specific ways in which this unprecedented event has affected the mental health and well-being of students. Findings could be utilized to design interventions addressing the specific psychosocial needs of the students and to formulate policies to foster a supportive and inclusive educational environment.

The aim of the current research was to look into the connection between Psychological Strength, Perceived Social Support and Psychosocial Reactions in University Students post COVID-19. It was hypothesized that Perceived Social Support would fully mediate the relationship between Psychological Strength and Psychosocial Reactions in University Students.

## Subject and Methods

### Research Design

Cross-sectional (correlation) research design was used in the present study.

### Study Population

One hundred and fifty students aged between 18-24 years ( $M=20.75$ ;  $SD=1.76$ ) were approached from a number of public and private universities of Lahore, Pakistan using purposive sampling technique. Students from first year and last year were taken as both these cohorts were highly susceptible to experience Psychosocial Reactions as first year students usually face adjustment issues due to drastic change in environment and senior year students experiences increased academic pressure. Disabled individuals and students enrolled in post-graduate programs were excluded.

### Measures

After taking informed consent from the participants, complete protocol was provided via online mode. A self-constructed demographic form including age, education, sexuality and the family structure, etc. was the part of the protocol.

Psychological Strength was assessed using Psychological Strength Scale<sup>(17)</sup> comprising of 21 items. The internal consistency was established by calculating the Cronbach Alpha (.93). It has three factors namely Revitalization of Self, Family/Relationships Bonding, and the third factor Religion and Spirituality.

Also used was the Multidimensional Scale of Perceived Social Support<sup>(18)</sup> comprising 12 items assessing the perceived social support from family, friends, and significant others. The alpha co-efficient of the scale was .88 suggesting a good internal consistency of scale.

Psychosocial Reactions post COVID -19 in university students were assessed using an indigenous Psychosocial Reactions Scale<sup>(19)</sup>. It was a self-report measure comprising of 27 items. Partakers were required to select option to each statement to the degree to which relates to them. The Cronbach alpha is (.92) showing a high-level internal consistency of PSR. It had two factors including depression and anxiety.

SPSS 25 was used to analyze the data. Descriptive statistics were carried out for demographic variables. Pearson Product Moment Correlation was calculated to look into the relationship between PSY, PSS and PSR. Hayes PROCESS v3 was used to conduct a mediation analysis to examine the mediating role of PSS in the relationship between PSY and PSR.

## Results

### Table-1

**Demographic characteristics (N = 150).**

Variables	Categories	f (%)
Gender	Men	70(46)
	Women	80(53)
Age	18-20 years	55(36)
	20-22 years	43(28)
	22-24 years	52(34)
Year of degree	First	74(49)
	Last	76(51)
Family System	Nuclear	92(61)
	Joint	58(38)
Residence	Day Scholar	100(66)
	Hosteller	50(33)

Note. f=frequency; %=percentage

Out of 150 subjects, 70(46%) were men and 80(53%) were women. The overall mean age was  $20.75 \pm 1.76$  years. The majority of the sample 76(51%) were in the last year of their degree program, and 92(61%) system were members of a nuclear family.

**Table-2**

**Inter-correlations among Psychological Strength, Perceived Social Support and Psychosocial Reactions of University Students post COVID-19 (N = 150).**

Variables	M	SD	PSY	PSS	PSR
PSY	41.6	12.6	-	.68***	-.53***
PSS	57.0	20.3	-	-	-.56***
PSR	42.1	23.0	-	-	-

Note. PSY=Psychological Strength; PSS=Perceived Social Support; PSR=Psychosocial Reactions

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

There was significant positive link among Psychological Strength and Perceived Social Support ( $p < 0.001$ ) and significant negative connection of Psychosocial Reactions ( $p < 0.001$ ) and Perceived Social Support ( $p < 0.001$ ) with Psychosocial Reactions (Table-2), demonstrating that college students were less likely to have Psychosocial Reactions when their Psychological Strength and Perceived Social Support

**Table 3**

**Hierarchical Regression Results for Psychosocial Reactions (N=150)**

Antecedent		Consequent						
		M(PSS)			Y(PSR)			
		$\beta$	SE	$p$		$\beta$	SE	$p$
PSY (X)	a	.68	.09	.001***	c'	.09	.17	.001***
PSS (M)		---	---	---	B	-.63	.10	.001***
Constant	i	11.01	4.20	.001***	I	5.51	4.45	.001***
$R^2 = .46$				$R^2 = .32$				
$F(1,148) = 130.98, p = .001***$				$F(2,147) = 34.97, p = .001***$				

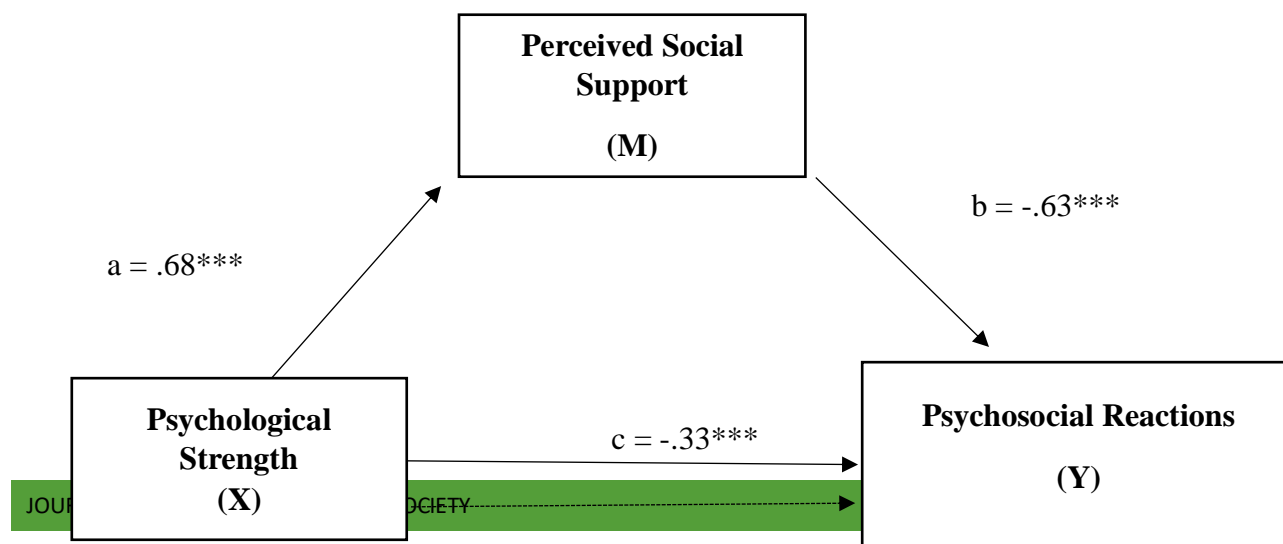
Note. PSY= Psychological Strength, PSS= Perceived Social Support, PSR= Psychosocial Reactions

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

Perceived Social Support served as a mediator revealing a strong predictive connection between Psychological Strength and Psychosocial Reactions ( $p < 0.001$ ). Additionally, Psychosocial Reactions were significantly predicted by Perceived Social Support ( $p < 0.001$ ). After adjusting for Perceived Social Support as a mediator, the correlation between Psychological Strength and Psychosocial Reactions becomes less strong, indicating that Perceived Social Support fully mediated the relationship between Psychological Strength and Psychosocial Reactions.

**Figure 1**

**Mediation Model of Perceived Social Support (M) On The Relationship Between Psychological Strength (X) And Psychosocial Reactions (Y)**



$$c' = .09***$$

## Discussion

Universities are vibrant social focal point where students interact with each other from states all over the world. Lately, the basics of this exclusive environment have been affected considerably by the quick outburst of COVID-19 pandemic which is making ambiguity about the effects for higher learning. As far as the studies conducted in Pakistan are considered, relatively very less work has been done to assess the Psychosocial Reactions faced by university Students because of COVID-19<sup>(20)</sup>. Hence, the cultural context of this study holds a huge literature gap and that is exactly why we chose to conduct our study on university students.

Results revealed that Perceived Social Support fully mediated the relationship between Psychological Strength and Psychosocial Reactions. Living in culture like ours where collectivism is observed, when COVID-19 hit with total quarantine it caused a panic in people and the prevalence of psychosocial reactions increased<sup>(21)</sup>. As we are dependent on our parents and loved ones for many aspects of our life, unlike the individualistic cultures, lockdown and separation from loved ones caused immense psychological and emotional issues<sup>(22)</sup>. Perceived social support fully mediated the relationship between psychological strength and Psychosocial Reactions in university students post COVID-19 because of academic stressor and social isolation coupled with the fear of getting the disease further exacerbated the mental health issues in university students<sup>(23)</sup>. Therefore, physical, emotional, and social bonds are essential for living a stable life especially in the age where students are exploring and forming relations outside the family realm<sup>(24)</sup>.

A few shortcomings of the current study were highlighted. First, the sample size for the data was small ( $N=150$ ). Second, the data was obtained from undergraduate students, the results may not be applicable for graduate or post-graduate students, also, limited to Lahore city of Pakistan. Third, data was collected via online forms, so observation of participants was not possible which hindered in accuracy of data, mostly presented to the study participants who had accessibility of internet, smart phones, and resources within a limited time span, limited financial resources and with limited data collected from university students only. All these restrictions will be addressed in future research to allow for more generalizable results.

## Conclusion

In university students, perceived social support mediated the relationship between psychological strength and psychosocial reactions post COVID 19. These results may be useful to clinical psychologists, counsellors, educators, and parents who work with university students who are struggling with the psychosocial consequences of COVID 19. Enhancing the psychological capacity of students through interventions could equip them with better resources to cope with life challenges.

## Acknowledgment

First, all praises and my gratitude to ALLAH ALMIGHTY, the most Beneficial and most Merciful, who has always shown me way and enable me to cope with this tedious job passionately with His unconditional support.

First and foremost, I want to thank my research's Dean, Dr. Sadia Saleem, for her inspiration and vast knowledge. Throughout the entire study process, her advice was helpful.

I would also like to thank all the participants and different universities for their patience and cooperation which helped me attaining my data to complete my research.

Last but not the least I am also very grateful to the University of Management and Technology, Lahore for providing me all the facilities, and assistance.

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**Disclaimer:** The text is based on a BS research project.

**Conflict of Interest:** None.

**Source of Funding:** None.



Undertaking

	Author's Name	Affiliation of Author	Contribution	Signature
1.	Misbal Naveed Khan Lodhi	Department of Applied Psychology, University of Management and Technology	Enhanced theoretical and conceptual understanding.	
2.	Muqaddas Ghafoor	Department of Applied Psychology, University of Management and Technology	Collected and analyzed the data, wrote the first draft	