

SOCIAL ISOLATION AND RESILIENCE COPING AS CORRELATES OF MENTAL ILLNESS IN ADULTS DURING COVID-19

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ABSTRACT

Objective: The current study has been designed to investigate the relationship between social isolation and mental illness and to identify the mediating role of resilience coping in adults.

Methods: The online data of 600 adults were recruited through a snowball sampling strategy. The age range of the participants was 18 years and above ($M=25.64$, $SD=7.635$). UCLA Loneliness Scale (Russel, 1996), Brief Resilience Coping Scale (Sinclair & Wallston, 2004), and Depression, Anxiety and Stress Scale (Lovibond & Lovibond, 1995) were used.

Results: Findings showed a significant positive association between social isolation and mental illness, while a negative association between social isolation and resilience coping. Additionally, resilience coping mediated the association between social isolation and mental illness [95% CI (LLCI: .0132, ULCI: .0802)].

Conclusion: Social isolation poses significant mental health risks and resilience coping can be used to improve mental illnesses.

KEYWORDS: COVID-19, Social Isolation, Resilience Coping, Depression, Anxiety, Stress, Mental illness.

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INTRODUCTION

In early 2020, the entire world was gripped by the threat of developing a chronic infectious disease with the emergence of the menacing pandemic Corona Virus Disease, 2019 (COVID-19). Pakistan also faced this worldwide public health crisis. COVID-19 was and still is a global emergency with international concern requiring cooperation at the public level. Further, it requires safety measures to impede its rapid transmission rate and the substantial risk of contamination.¹ This led the health system globally to devise remedies to restrain the spread of disease and to have sound regulations in place.²

The most recommended and useful preventive strategy to control COVID-19 is social isolation.³ In the context of COVID-19, social isolation is defined as physically separating oneself from others to avert the viral spread of a contagious disease.⁴ It is a state of being

alone i.e. avoiding the company of others and remaining in isolation from the community.⁵ Social isolation also has been widely implemented in the past to impede or avoid the substantial transmission of viruses during pandemics such as Middle East Respiratory Syndrome, Spanish Flu, Ebola, and Plague.⁶

The Pakistani government initiated a nationwide lockdown and enforced curfews to hamper the community transmission of COVID-19. It was recommended during the lockdown in March 2020 to avoid social gatherings with more than 10 people. Social distancing measures suggest keeping a distance of at least 2m and avoiding unessential social activities. Stay-at-home orders were put in place and people were allowed to leave their houses only in case of emergency or for essential services.⁷ These measures had prospective behavioral and clinical repercussions.¹ Restricting social interactions and isolating oneself physically could lead to boredom, lethargy, and exhaustion which could have a detrimental impact on health and can lead to chronic illness.⁸ Social isolation results in a profound decrement in physical activity levels and is compounded by several mental problems such as stress, anxiety, and depression; frustration, adjustment disorder, post-traumatic stress disorder, and insomnia in people.^{9, 10}

Individuals in social isolation experience intense

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anxiety. They have irrational, illogical, and biased thoughts. The uncertainty associated with novel and comparatively acute infection increases the apprehension which gets amplified by isolation during the lockdown. People with other comorbidities are more vulnerable to these mental disorders as well as those working in the health care system such as doctors, nursing staff, and laboratories. Those who are quarantined for a long period are also vulnerable to developmental disorders.¹¹

Individuals' coping style moderates the relationship between social isolation and mental health.¹² The individual employs various strategies to engage themselves and keep themselves busy or distracted.¹³ Resilience coping – the tendency to cope with stress in a highly adaptive way, is a dynamic process comprised of positive adaptation in the face of severe adversity.¹⁴ Resilience coping is associated with positive psychological as well as physical outcomes. Highly resilient individuals have more capacity to cope with social isolation without a mental breakdown. Resilient coping promotes the usage of adaptive cognitive and behavioral coping processes during the pandemic.¹³

In the context, mentioned above, the current study identifies the association of social isolation, resilience coping, and demographic variable (love for social gathering) with mental illness. Further, it investigates that resilience coping acts as a mediator between social isolation and mental illness (depression, anxiety, and stress).

MATERIAL & METHOD

Ethical clearance was obtained from the Ethical Review Committee (ERC) of Riphah Institute of Clinical and Professional Psychology (RICPP), Riphah International University, Lahore. Data was collected via an online survey from 7 major cities in the Punjab province of Pakistan. These were Lahore, Faisalabad Gujranwala, Rawalpindi, Sahiwal, Bahawalpur, and Sialkot. A total of 700 participants were approached via snowball sampling strategy and valid questionnaires were received back from 600 participants (358 women and 242 men; 85.71% response rate) aged 18 years and above ($M=25.64$, $SD=7.635$). An Online Google form was created, and all research protocols were uploaded on the form. Participants who followed the link arrived at the survey home page which contained the details of the study, minimal required age, institutional affiliations, and informed consent form outlining confidentiality and use of data only for research purposes as well as their right to withdraw from the research if they wanted to do so.

Participants who were not diagnosed with COVID-19, were at home for the last three months, not working, and were avoiding social gatherings and friends meet up were included in the research. Participants with COVID-19 positive, working from home, taking online classes, diagnosed with any mental disorder, diagnosed

with severe physical illness, and participants looking after COVID-19 positive family member/s were excluded from the study. Moreover, participants who were bereaved by the death of a close family member within the past six months were also excluded.

Basic demographic details were obtained using a demographic questionnaire. It consisted of items related to age, gender, marital status, qualification, family system, residential area, religion, and profession of the participants. Further, it included items related to participants' sources of information about COVID-19 and their responses to it.

The UCLA Loneliness Scale was used to assess loneliness and social isolation among participants. It measures mild, moderate, and severe levels of loneliness. It is a 20 items self-reported measure with 4 points Likert scale ranging from 1 to 4 (1=never, and 4=always). The scale has high internal consistency ranging from 0.89 to 0.94.¹⁵ Reliability for the current study was 0.84.

The Brief Resilience Coping Scale (BRCS) is a 4-item scale devised to measure coping tendencies with stress in a highly adaptive way. Respondents rate the items by using a 5-point Likert scale (1= does not describe me at all and 5= describes me very well). The internal consistency of the scale is 0.76¹⁴ and the reliability for the current study was 0.71.

The Depression, Anxiety and Stress Scale (DASS-21) measures negative emotional states of depression, anxiety, and stress. The scale consists of 21 items, three sub-scales i.e. depression, anxiety, and stress, and responses are recorded on a 4-point Likert scale. Scoring ranges from 0 to 3 where 0 = never, Scale has excellent reliability 0.81 for depression, 0.89 for anxiety, and 0.78 for stress.¹⁶ Internal consistency in the current study was good, 0.80 for depression, 0.86 for anxiety, and 0.75 for stress.

Data collected through the above-mentioned measures were analyzed statistically using SPSS-20. Descriptive and inferential statistics were used for analyzing the data. Inferential statistics included correlation and process analysis.

RESULTS

Total of 600 individuals 358 females (59.7%) and 242 males (40.3%) participated in the study. The age range of the participants was 18 years and above ($M=25.64$, $SD=7.635$). The majority 442 of the participants (73.7%) were unmarried. A large number of participants i.e., 372 (62.0%) came from the nuclear family system. The majority of the participants (i.e., 430; 71.7%) were educated until 14 years of education. Over fifty percent ($N= 311$, 51.8%) reported to get COVID-19 information from social media. Most of the subjects reported to be (424, 70.7%) were

afraid of COVID-19.

Table 1 indicates that individuals who have isolated themselves are more inclined towards mental illness and have less resilience coping. Furthermore, there was a significant negative association between love for social gatherings and mental illness indicating that an increase in social gatherings results in a decrease in mental illness. Moreover, there is a significant negative correlation between resilience coping and mental illness.

Table 2 demonstrates the association of mediator (resilience coping) with social isolation. PROCESS Analysis (Hayes, 2012) was used to examine the mediating role of resilience coping between social isolation and mental illness. The mediation model was tested in different steps. Path 'a' was tested in the first step by examining the association of social isolation (independent variable) with resili-

ence coping (mediator). Findings concluded that social isolation significantly and negatively correlates with resilience coping, which points out that the increase in social isolation decreases resilience coping ($b = -.057, p < .000$) with a 0.02% variance.

In the second step path 'b' was tested and revealed a significant negative association between resilience coping (mediator) and mental illness (dependent variable). It was found that increase in resilience coping results in a decrease in mental illness. Findings showed that there was a significant indirect effect of social isolation on mental illness through resilience coping, the coefficient (social isolation and mental illness) was significant, $B = .04, SE = .02, 95\% CI = .0132, .0802$.

DISCUSSION

The findings of the current study established a clear linkage between social isolation and mental illness (depression, anxiety, and stress) during the COVID-19 pandemic. Social isolation has not only been found to be associated with cognitive decline and depression, but also it leads to physical deterioration. It negatively influences health via a complicated interconnected source.¹⁷ Furthermore, isolation has a temporal and synergistic relationship with depression and it was identified as the distinguishing factor in predicting mental health problems in individuals.¹²

In the current study, a negative relationship emerged between social isolation and resilience coping. Social isolation is associated with maladaptive coping mechanisms and on contrary to it healthy socialization is linked with adaptive coping mechanisms.¹² Lonely and non-lonely adolescents both employ sad passivity and unhealthy coping styles. On the other hand, non-lonely youngsters adapt unhealthy coping styles only temporarily and prepare for more active coping styles. However, lonely adolescents employ maladaptive coping styles to a maladaptive degree.¹⁸

Findings indicate a positive relationship between the desire for social gatherings and mental health. These findings are in line with previous research confirming that socialization and healthy interaction with family members, relatives, colleagues, and friends reduce apprehensive, depressive feelings and result in developing feelings of security.¹⁹ Likewise, another study revealed that individuals with a huge social circle, positive social relations, and support from significant others have the advantage of developing effective communication skills and reducing

Table 1: Descriptive Statistics and Correlation between Variables.

Variables	M	SD	1	2	3	4
1.Social Isolation	46.5	9.86	-			
2.Resilience Coping	13.8	3.34	-.16**	-		
3. Mental Illness	19.6	12.1	.43**	-.26**	-	
4. Love for Social Gathering	1.38	.48	.03	-.06	-.10**	-

Note: $p < .01^{**}$, M= Mean, SD= Standard Deviation

Table 2: Association of Path 'a' (Independent Variable with Mediator)

Dependent Variable	Social Isolation (Independent Variable)		
	B	t (597)	P
Resilience Coping	-.05	-4.2	.00***

Note: $p < .001^{***}$, t=test statistic, B=Unstandardized Coefficient.

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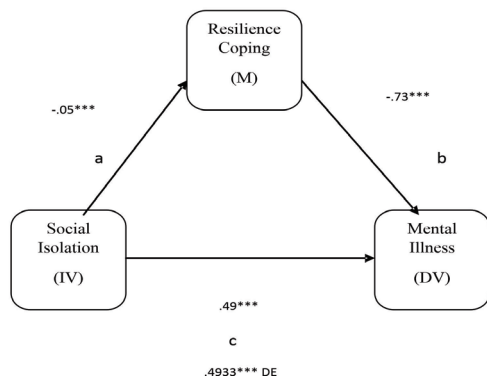


Fig 1: Showing results of the process when the hypothesis model was tested, with resilience coping as a mediator between social isolation and mental illness.

depression and other mental health problems, and acting as a social cure for mental issues.^{20,21} The current study found a positive relationship between fear of COVID-19 and mental illness. During a pandemic situation, fear increases cortisol levels and anxiety which makes the symptoms of mental disorders worse.^{22, 23}

Lastly, it was found that resilience coping mediates the relationship between social isolation and mental illness. It was reported that coping is a strong negative predictor of depression and anxiety and is a significant predictor of mental health.^{12,24} Previous research report positive and negative coping styles mediate the relationship between social isolation and adjustment.¹³

Implications of the study are manifold, including a guideline for mental health professionals to devise assessment procedures to identify the risk of developing mental illnesses during a pandemic or health crisis. Further, developing intervention strategies for those quarantined for long durations would be a cornerstone.

The data was collected online, hence there are some limitations, and the results should be interpreted accordingly e.g., the possibility of unreliable or fake responses and the unavailability of the researcher to answer the queries of the participants. Further, as data was collected from only major cities of Punjab, findings cannot be generalized to a larger population especially those from rural geographical vicinity.

CONCLUSION

Social isolation can have a drastic impact on the mental health of people. It can be a significant predictor of mental illness. Furthermore, resilience coping mediates the relationship between social isolation and mental illness.

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under

- Jameel R:** Conceptualized the idea of this research. Prepared and edited the manuscript
- Adeeb S:** Conceptualized the idea of this research. Prepared and edited the manuscript
- Mushtaq M:** Conceptualized the idea of this research. Prepared edited and final review of the manuscript
- Jabeen S:** Conceptualized the idea of this research. statistical analysis and interpretation for the work.
- Latif S:** Prepared and edited the manuscript. Drafting the work or revising it critically for important intellectual content.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.



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