ORIGINAL RESEARCH PAPER
Volume - 13 | Issue - 12 | December - 2024 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

IMPACT OF SOCIAL CONNECTEDNESS, EMOTIONAL DISTRESS, AGGRESSION AND PERSONALITY FACTORS ON COPING STRATEGIES AND QUALITY OF LIFE DURING COVID-19 PANDEMIC (3RD WAVE) IN INDIA

Clinical Psychology

Neha Gahlot — Clinical Psychologist, Department of Clinical Psychology, Mahatma Gandhi Medical College & Hospital, Jaipur (Rajasthan)

Rejani Thudalikunnil Gopalan — Dean & Professor, Clinical Psychology, Apex University, Jaipur (Rajasthan)

ABSTRACT

Introduction: The global COVID -19 pandemic had a significant impact on individuals' health and well-being that was not only limited to physical health but greatly affected the psychological health of people as well. Aim: The study aimed at examining the impact of social connectedness, emotional distress, aggression and personality factors on coping strategies and quality of life during the Covid-19 third wave. **Method:** A total sample of 60 participants were selected which were further divided into two age groups i.e., 18-40 years and 41-60 years. The tools administered to the sample were: The Social Connectedness Scale (SCS), Robertson Emotional Distress Scale, Buss-Perry Aggression questionnaire (BPAQ), Multidimensional Scale of Perceived Social Support (MSPSS), Brief COPE, Brief Resilience Scale (BRS), The Big-Five Inventory (BFI) and WHO Quality of Life Scale – Brief (WHOQOL- BREF). **Results:** The findings revealed that there was a significant difference between the two groups in openness to experience (personality) and physical health (QoL). Findings on linear regression analysis revealed a significant impact of social connectedness, emotional distress, aggression and personality traits on coping strategies and quality of life. On regression analysis, it was seen that resilience had a significant effect on coping strategies and perceived social support had a significant impact on coping strategies and quality of life. **Conclusion:** The levels of emotional and psychological distress and aggression have been seen to reduce as a sense of normalcy and acceptance of living with the pandemic had settled in leading to the utilization of more adaptive coping strategies, that ultimately result in improved quality of life.

KEYWORDS

Covid-19, third wave, social connectedness, emotional distress, quantitative analysis

INTRODUCTION & REVIEW

COVID-19 or Coronavirus disease 2019 first began in Wuhan, China in December 2019 and was eventually declared as a pandemic by World Health Organization (WHO) on March 11, 2020. The worldwide crisis has had a negative influence on people's health and well-being in addition to the direct effects of the coronavirus. At the time of a pandemic resulting from a contagious illness like COVID-19, the psychological responses of a population are significant to the development and expansion of the illness and to the aftermath of the illness, usually characterized by the presence of emotional turmoil and social disruption and these responses are key to helping the masses deal with and live through any subsequent losses they may face (Taylor, 2019). By January 2022, India had reported around 3 lakhs new cases for Covid-19. Nearly all Indian states are experiencing an increase in test positivity rates (TPR). As with the third wave, situation in India has improved to a great extent, with up to 80% to 90% of confirmed cases being asymptomatic or mildly symptomatic (Lahariya, 2022). Apart from India, other countries, such as USA, UK, Spain have also reported a decline in the cases and overall symptomatology.

Several studies have shown the role that our support system (family, friends etc.) plays in distressing situations, especially in situations such as a pandemic. Studies reported that sharing of physical activity experiences on social media sites has a positive relationship with social connectedness (Zuo et al., 2021), while reduced social connectedness and poorer mental health outcomes were found in terms of smaller social networks (Nitschke et al., 2021), coronavirus stress (Yildirim et al., 2021) and higher adolescent depression rates (Liu et al., 2022). Central personality factors are also responsible for response to a particular situation. Higher levels of neuroticism and extroversion were linked to high levels of stress during the pandemic (Liu et al., 2021), and higher neuroticism, lower conscientiousness, agree-ableness, openness and extroversion were found to be traits of maladaptive people (Li et al., 2021). COVID-19-related alterations and impacts were linked to higher neuroticism levels (Al-Omiri, 2021).

Coping strategies, mostly problem focused are adaptive in nature and help an individual approach distressing situations in a more productive way, as compared to emotion focused or avoidant coping strategies. Mishra et al. (2021) reported that 9.7% of healthcare professional students experienced stress, 27.7% experienced anxiety symptoms and 26.2% experienced depression during the pandemic and were seen to engage in emotion-focused and avoidant coping behaviours Moreover, increased use of avoidant coping was linked to high levels of discomfort and poorer growth than emotion-focused and problem-focused coping techniques (Chu et al., 2022).

Additionally, resilience was found to be the determinant of good psychological health. Jose et al. (2020) have reported moderate to high levels of resilience with mild to moderate levels of burnout among nurses in the emergency department of a North Indian tertiary care facility. Lindinger-Sternart et al. (2021) observed that USA had the highest level of resilience, followed by Europe, Pakistan, India, and Indonesia, with age having a favourable impact on resilience, varying along with marital status, educational attainment and professional standing. Perceived social support from those around us, has been a positive indicator for increased resilience and improved mental health and Grey et al (2020) found that individuals who reported having greater social support had a 63% decreased probability of experiencing increased levels of depression symptoms and 52% decreased likelihood of poor sleep quality as compared to those individuals who felt lower social support.

The pandemic in the first and second waves had serious mental health implications all over the world. Emotional and psychological distress, such as stress, fatigue, anxiety, depression, aggression, poor sleep quality, disturbed quality of life was found to be highly elevated. However, as the pandemic progressed, there was a shift in the severity of the symptoms and eventually, a significant reduction in psychological distress which has been reported in many studies. Ochnik et al. (2022) in their longitudinal research observed measurement at time points T1 (early 2021) and T2 (mid 2021) among young adult sample (20-40 years) which indicated that at T2 perceived stress was significantly lower than at T1, with T2 having medium levels of distress and T1 showing high level of distress. Rath et al. (2023) mentioned that only a small percentage of research participants i.e., 7.2 % experienced anxiety, out of which 79.3% were females. More than half of the participants (57.3%) reported less stress from work and 54% of the sample did not experience increased stress from home. Hussong et al. (2022) found that the adolescents in the study had lower rates of mental health problems and a higher HRQoL after the third wave of COVID-19, compared to research results assessed at the beginning of the pandemic.

Though many studies have been conducted in other countries on COVID pandemic, not many studies have reported in India especially

the impact of social connectedness, emotional distress, aggression and personality factors on coping strategies and quality of life during the Covid-19 third wave. Hence this study has been conducted.

METHOD

Aim: To examine the impact of social connectedness, emotional distress, aggression and personality factors on coping strategies and quality of life during Covid-19 third wave.

Objectives:

1. To find the level of social connectedness among patients diagnosed with Covid-19
2. To find the level of emotional distress among patients diagnosed with Covid-19
3. To find the level of aggression among patients diagnosed with Covid-19
4. To explore the personality among patients diagnosed with Covid-19
5. To find the coping strategies used by patients diagnosed with Covid-19
6. To find the level of quality of life among patients diagnosed with Covid-19
7. To find the impact of social connectedness, emotional distress, aggression and personality factors on coping strategies and quality of life among patients diagnosed with Covid-19.
8. To find the moderating effect of resilience and social support on coping strategies and quality of life among patients diagnosed with Covid-19.

Research Design: Cross-sectional Research Design

Sample and Sampling Method: A total of 60 individuals were chosen as the sample with age range 18 years-60 years. Individuals, who belonged to age ranges 18-40 years and 41-60 years, had a minimum education qualification of 8th standard, a diagnosis of Covid-19 within the last 3 months and had recovered, were included in the sample, whereas those who have had a previous major medical illness, major psychiatric illness or are physically disabled were excluded from the study. Two groups were formed with group 1 comprising of individuals in the age range of 18-40 years, whereas in group II the individuals were aged between 41-60 years and all were from North India. The sample was collected by using snow ball method.

Measures

Socio-demographic Datasheet

The datasheet was prepared for the study which listed the socio-demographic details of the participants as well as other details (such as the date of diagnosis, symptoms, complications (if any), date of recovery, need for hospitalization, whether the family was affected as well) were recorded.

Social Connectedness

The Social Connectedness Scale (SCS) by Lee and Robbins (1998) is an 8 item Likert scale assessing the connectedness to the individual's social world. The respondents rate the statements from '1' (strongly disagree) to '6' (strongly agree). The range of scale is from 8-48; greater scores indicate a greater sense of social connectedness and belongingness.

Emotional Distress

To measure emotional distress, the Robertson Emotional Distress Scale (2005), which is a 10 item Likert scale, has been used by the researcher with the scores ranging from 0 (“strongly disagree”) and 5 (“strongly agree”). The scores can be obtained by summing up and can be categorized in ranges i.e., normal (0-20), mild (21-30), moderate (31-40) and severe (41-50).

Aggression

The Buss & Perry Aggression Questionnaire (1992) comprises of 29 items and measures aggression on 4 factors i.e., Physical aggression (PA), Verbal aggression (VA), Anger (A) and Hostility (H). The total score for Aggression is the sum of all four factors.

Perceived Social Support

The Multidimensional Scale of Perceived Social Support (MSPSS) by Zimet el al (1988) has 12 items scored statements with items ranging from '1' (very strongly disagree) to '7' (very strongly agree). The scale has 3 subscales – Significant others, friends and family. Mean scale score from 1-2.9 is low support; 3-5 is moderate support and 5.1-7 is high support.

Coping Strategies

The Brief COPE is a 28-item questionnaire which is a shorter form of the Coping Orientation to Problems Experienced (COPE) inventory by Carver (1997). The scale measures the participants' responses ranging from '1' (I haven't been doing this at all) to '4' (I've been doing this a lot). The items measure coping styles on 3 subscales – problem focused coping, emotion focused coping and avoidant coping.

Resilience - The Brief Resilience Scale was developed by Smith et al. (2008) and is a 6-item scale. The responses range from 5 – strongly agrees to 1- strongly disagree. The scores indicate low resilience (1.00-2.99), normal resilience (3.00-4.30), and high resilience (4.31-5.00).

Personality Factors - The Big-Five Inventory developed by John and Srivastava (1999) consists of 44 items that are scored on a Likert scale with responses ranging from “5” (strongly agree) to “1” (strongly disagree) and it measures individual's personality on the five factors i.e., openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism.

Quality of Life - World Health Organization Quality of Life Scale-Brief (WHOQOL-Brief) is a 26-item scale that is used to assess the quality of life in 4 major domains: physical health, psychological health, social relationships, and environment. The responses to the scale range from 5 (“completely”) to 1 (“not at all). An overall quality of life up to 50% can be interpreted as poor quality of life, 50.1-75% as fair quality of life and above 75% as good quality of life.

Procedure

After approval from the university, the tools were converted into Google Forms. The procedure and purpose of the study were explained to the participants and proper consent was taken, after which the tools were given for online fill-up. The participants were further asked to provide contacts of other people who had tested Covid positive in the last 3 months. Once newer participants were contacted through snowball sampling method, the same procedure was repeated until the targeted sample size (N=60) had been achieved.

Statistical Analysis

After collecting the data, the data was analyzed by using SPSS v.28 software. Statistical methods such as mean, standard deviation, frequency distribution, independent t-test, simple linear regression, and moderation analysis were used to analyze the obtained sample data.

RESULTS AND DISCUSSION

The data analysis and results obtained from the participants are discussed in this section.

Table 1.1 Descriptive Statistics of Socio-demographic Variables.

Variables		Group 1		Group 2		Total (N=60) (total %)
		N=30	%	N=30	%	
Sex	Males	7	23%	9	30%	16 (27%)
	Females	22	77%	21	70%	43 (73%)
Education level	12th standard	3	10%	1	3%	4 (7%)
	Graduation	5	17%	6	20%	11 (18%)
	Post-graduation	13	43%	13	43%	26 (43%)
	M.Phil./Ph.D.	8	27%	9	30%	17 (28%)
	Other	1	3%	1	3%	2 (4%)
Socio-economic status	Low	1	4%	4	13%	5 (8%)
	Middle	19	63%	20	67%	39 (65%)
	High	10	33%	6	20%	16 (27%)
Marital status	Married	8	27%	27	90%	35 (58%)
	Unmarried/ Single	15	50%	1	3%	16 (27%)
	In a relationship	7	23%	0	0%	7 (12%)
	Divorced	0	0%	2	7%	2 (3%)
Need for hospitalization	Required	1	3%	10	33%	11 (18%)
	Not required	29	97%	20	67%	49 (82%)
Family affected	Affected	19	63%	13	43%	32 (53%)
	Not affected	11	37%	17	57%	28 (47%)

Note. Group 1= Participants in age group 18-40 years; Group 2= Participants in age group 41-60 years

Table 1.1 shows that majority of the sample in both groups were

females (73%), almost similar education (mean years of education 16.65 and 43% of the sample had post-graduation, and mostly belonged to middle socio-economic status (N=39, 65%). For marital status, majority of the sample in group 1 was unmarried/single (50%) whereas, for group 2, the majority of the sample was married (90%), 7% were divorced and 3% reported being unmarried/single. On hospitalization due to COVID, 97% of the sample in Group 1 did not require hospitalization while it was 67% for Group 2 and 33% of the sample required hospitalization. The percentage of family members got affected Covid-19 was 63% sample in group 1 and 43% in Group 2.

Table 1.2 Descriptive Statistics of the Symptoms and Complications of Covid-19.

Variables	Group 1		Group 2		Total (N=60) (Total %)
	N=30	%	N=30	%	
Symptoms of covid-19					
Fever	24	80%	15	50%	39(65%)
Cough	15	50%	7	23%	22 (37%)
Tiredness	26	87%	16	53%	42 (70%)
Loss of taste	7	23%	9	30%	16 (27%)
Sore throat	19	63%	8	27%	27 (45%)
Headache	15	50%	5	17%	20 (33%)
Aches and pains	11	37%	12	40%	23 (38%)
Diarrhoea	5	17%	2	7%	7 (12%)
Rash on skin and discoloration of fingers	2	7%	0	0%	2 (3%)
Red or irritated eyes	4	13%	1	3%	5 (8%)
Shortness of breath	7	23%	12	40%	19 (32%)
Chest pain	6	20%	7	23%	13 (22%)
Complications					
Pneumonia	2	7%	6	20%	8 (13%)
COPD	0	0%	1	3%	1 (3%)
Acute respiratory failure	1	3%	2	7%	3 (5%)
Acute liver injury	1	3%	0	0%	1 (3%)
Other	1	3%	3	10%	4 (7%)
None	26	87%	18	60%	44 (73%)

Table 1.2 demonstrates the common symptoms and complications of Covid-19 as reported by participants in third wave. The common symptoms were tiredness, fever, cough, aches and pains and shortness of breath and some had health complications like pneumonia and acute respiratory failure which were noticed in other studies too (Kumar et al.,2022).

Table 2 Results of Independent Sample t test on Social Connectedness, Emotional Distress, Aggression, Personality Factors, Coping Strategies and Quality of Life

Variables		Mean	SD	t value	P value
Social connectedness	Group 1	17.67	10.38	.055	.957
	Group 2	17.53	8.44		
Emotional distress	Group 1	20.47	13.93	.452	.653
	Group 2	19.03	10.38		
Aggression	Group 1	70.33	22.19	.708	.482
	Group 2	66.80	15.96		
Personality (o)	Group 1	37.23	4.33	4.336**	<.001*
	Group 2	32.27	4.53		
Personality (c)	Group 1	30.87	5.43	-1.313	.194
	Group 2	32.50	4.11		
Personality (e)	Group 1	26.70	5.00	-.809	.422
	Group 2	27.87	6.11		
Personality (a)	Group 1	35.93	4.62	1.438	.156
	Group 2	34.13	5.06		
Personality (n)	Group 1	23.80	5.12	1.468	.148
	Group 2	21.93	4.71		
Coping strategies (PF)	Group 1	24.57	5.01	.678	.500
	Group 2	23.77	4.07		
Coping strategies (EF)	Group 1	32.77	7.86	.177	.860
	Group 2	32.43	6.70		
Coping strategies (AC)	Group 1	19.30	6.90	1.393	.169
	Group 2	17.23	4.28		
Quality of Life (PH)	Group 1	14.24	3.21	-2.329	.023*
	Group 2	15.86	2.04		
Quality of Life (PSY)	Group 1	15.35	2.84	-.638	.526
	Group 2	15.80	2.55		
Quality of Life (SR)	Group 1	16.62	2.90	1.164	.249
	Group 2	15.68	3.29		
Quality of Life (ENV)	Group 1	17.13	2.34	1.057	.295
	Group 2	16.48	2.41		

Note. *. p>0.05; **. p>0.001; PF= Problem focused coping; EF=Emotion focused; AC= Avoidant coping; PH = Physical health; PSY= Psychological Health; SR= Social Relationships; ENV= Environment

Table 2 shows significant difference in mean between two groups on personality traits and quality of life. The table shows that in personality traits, group I was found to be more open to newer experiences as compared to group II (p=<0.001**); whereas on quality of life, group II showed better physical health as compared to group I (p=0.023*).

On social connectedness, both groups were connected to social work which falls in to moderate social connectedness category (M=17). It indicated that social isolation felt during the first two waves of the Covid-19 was not seen during the third wave due to greater understanding about ways to be connected with each other and feeling a sense of belongingness with the use of technology, leading to an improved sense of connectedness within one's network. The age in the sample (18 to 6o years) may also favor in terms of knowledge and use of social networking which is supported by the finding of Maral and Punetha (2022) that individuals over the age of 60 years or above were more likely to suffer from mental health issues and felt more socially disconnected and isolated from their surroundings during the Covid-19 pandemic in India

On emotional distress, group 1 was found to have a higher mean score (20.47) on emotional distress as compared to group 2 (19.03) though the differences were not statistically significant. Both the groups showed a normal level of emotional distress (0-20). In lieu of the third wave, it can be understood that there could be a lesser overall impact of physical symptoms on emotional health of the individuals, as with progression of course of Covid-19, individuals become more resistant to the physical symptoms, and develop greater immunity towards mental distress as well. It is well reported that the emotional distress was high during the beginning of pandemic but the decline was noticed during the third wave (Chen, Lin, Gao & Zou, 2022).

On aggression, Table 2 indicated that group 1 (M=70.33) scored more as compared to group 2 (M=66.80; SD=15.96). The mean score values are not statistically significant and fall in the low category for aggressive behavior. It suggests that aggression has seen to be reduced and more acceptance of the situation i.e., living with the pandemic has considerably increased. Coping strategies also showed differences in mean scores which were not statistically significant. On problem solving and avoidant coping respectively, group 1 (M_p=24.57; M_a=19.30) scored higher than group 2 (M_p=19.30; M_a=17.23). On emotion focused coping both group 1 (M=32.77) & group 2 (M=32.43) scored the same. Both the groups were found to deal with the situation through the use of positive reframing, planning, informational support, emotional support, acceptance, humor, acceptance, self-distraction and behavioral disengagement. Similar results have been found in other studies, where it was seen that younger age used avoidant coping more as compared to the older age group (55-79 years) which used more of emotional coping strategies (Fukase et al., 2022; Young et al., 2021).

Table 3.1 Regression Analyses of Social Connectedness, Emotional Distress, and Aggression and Personality Traits on Coping Strategies (Model Summary).

Model		R	R2	Adjusted R2	P value
1.	SCN – PF	.065	.004	-.013	.623
2.	EDS – PF	.212	.045	.029	.103
3.	AGR – PF	.158	.025	.008	.228
4.	PER (O) – PF	.393	.155	.076	.097
5.	PER (C) – PF				
6.	PER (E) – PF				
7.	PER (A) – PF				
8.	PER (N) – PF				
9.	SCN – EF	.245	.060	.044	.060
10.	EDS – EF	.322	.103	.088	.012*
11.	AGR – EF	.351	.123	.108	.006**
12.	PER (O) – EF	.518	.268	.201	.004**
13.	PER (C) – EF				

14.	PER (E) – EF				
15.	PER (A) – EF				
16.	PER (N) – EF				
17.	SCN – AC	.181	.033	.016	.167
18.	EDS – AC	.210	.044	.028	.107
19.	AGR – AC	.334	.111	.096	.009**
20.	PER (O) – AC	.589	.347	.286	.000**
21.	PER (C) – AC				
22.	PER (E) – AC				
23.	PER (A) – AC				
24.	PER (N) – AC				

Note. *. p>0.05; **. p>0.001; SCN= Social Connectedness; EDS= Emotional Distress; AGR= Aggression; PER= Personality; O= Openness to experience; C= Conscientiousness; E= Extraversion; A= Agreeableness; N= Neuroticism; PF= Problem focused coping; EF=Emotion focused; AC= Avoidant coping

From the table, it can be seen that the most significant results were found to be in emotional distress (p=0.012) and aggression (p=0.006), personality traits (p=0.004) with emotion focused coping (EF); and of aggression (p=0.009) and personality traits (p=0.000) with avoidant coping style (AC). While the two groups differ on all the domains of the personality traits, the statistically significant difference between them is visible in the 'openness to experience' domain. Mean of group 1 was 37.23 (± 4.33) and mean of group 2 was 32.27 (± 4.53), which is significant at 0.01 level (Table 2). On conscientiousness, extraversion, agreeableness and neuroticism, the two groups' scores on all the domains were in high category (>25).

Table 3.2 : Regression Analyses of Social Connectedness, Emotional Distress, Aggression and Personality on Quality of Life (Model Summary).

Model		R	R2	Adjusted R2	P value
1.	SCN – PH	.259	.067	.051	.045*
2.	EDS – PH	.461	.213	.199	.000**
3.	AGR – PH	.112	.013	-.004	.392
4.	PER (O) – PH	.654a	.428	.375	.000**
5.	PER (C) – PH				
6.	PER (E) – PH				
7.	PER (A) – PH				
8.	PER (N) – PH				
9.	SCN – PSY	.156	.024	.008	.234
10.	EDS – PSY	.433	.188	.174	.001**
11.	AGR – PSY	.002	.000	-.017	.989
12.	PER (O) – PSY	.693	.480	.431	.000**
13.	PER (C) – PSY				
14.	PER (E) – PSY				
15.	PER (A) – PSY				
16.	PER (N) – PSY				
17.	SCN – SR	.229	.052	.036	.078
18.	EDS – SR	.180	.032	.016	.168
19.	AGR – SR	.020	.000	-.017	.882
20.	PER (O) – SR	.472	.223	.151	.016*
21.	PER (C) – SR				
22.	PER (E) – SR				
23.	PER (A) – SR				
24.	PER (N) – SR				
25.	SCN – ENV	.143	.020	.004	.276
26.	EDS – ENV	.327	.107	.091	.011*
27.	AGR – ENV	.043	.002	-.015	.742
28.	PER (O) – ENV	.621	.386	.329	.000**
29.	PER (C) – ENV				
30.	PER (E) – ENV				
31.	PER (A) – ENV				
32.	PER (N) – ENV				

Note. *. p>0.05; **. p>0.001; SCN= Social Connectedness; EDS= Emotional Distress; AGR= Aggression; PER= Personality; O= Openness to experience; C= Conscientiousness; E= Extraversion; A= Agreeableness; N= Neuroticism; PH= Physical Health; PSY= Psychological Health; SR= Social Relationships; ENV= Environment

Through the table it can be seen, that significant results have been found in social connectedness (p=0.045), emotional distress (p=0.000), personality traits (p=0.000) on physical health domain (D1) of quality of life. On domain 2 (D2), i.e., the psychological health domain, emotional distress (p=0.001) and personality traits (p=0.000), had significant results. On social relationships domain (D3), only personality traits (p=0.016) were seen to have significant results. On Environment domain (D4), emotional distress (p=0.011) and personality traits (p=0.000) were found to have significant results. It is well reported in previous literature that social support and feeling connected can help people maintain a healthy body and mind (Martino, Pegg & Frates, 2015).

Table 3.1 and Table 3.2 demonstrate the model summary for regression analyses of social connectedness with coping strategies and quality of life respectively. It can be seen from the table that the predictor variable had an overall impact on physical health domain of quality of life (R^2 value=0.067; p-value=0.045) but did not predict coping strategies. Model summary for regression analyses of emotional distress with coping strategies (table 3.1) and quality of life (table 3.2) depicts predictor variable (emotional distress) had a significant impact on emotion focused coping (p value=0.012). Similarly, predictor variables showed significant impact on physical health (p-value= 0.000**), psychological health (p-value= 0.001**) and satisfaction with environment (p-value=0.011). Aggression was seen to predict emotion focused (p-value = 0.006**) and avoidant focused coping style (p value = 0.009**). However, aggression did not predict any impact of aggression on the four domains of quality of life. On regression analyses of personality traits and coping strategies (dependent variable), openness to experience and agreeableness were both seen to predict emotion focused as well as avoidant focused coping strategies. Alqahtani et al (2022) have been reported that travel restrictions, social distancing, quarantine and lockdown during COVID pandemic has affected the physical and psychological health of individuals and they stressed the importance of social connectenednss. Lathabhavan and Sudevan (2022) have mentioned in their study that both waves of the COVID-19 pandemic have been associated with psychological distress in India and social support and feeling connected helped individuals to reduce distress associated with pandemic (Martino, Pegg & Frates, 2015) as mentioned in the current study.

Table 4.1 Moderation Analysis of Resilience, Perceived Social Support, Coping Strategies and Quality of Life (model Summary).

Model		R	R2	Adjusted R2	P value
Coping strategies	RES, Age	0.284	0.081	0.048	0.091
	RES, Age, RES x age	0.308	0.095	0.046	0.132
	PSS, Age	0.317	.101	0.069	0.049*
	PSS, Age, PSS x Age	0.322	.104	0.055	0.104
Quality of Life	RES, Age	0.148	.022	-0.012	0.533
	RES, Age, RES x age	0.239	.057	0.007	0.344
	PSS, Age	0.411	.169	0.140	0.005**
	PSS, Age, PSS x Age	0.430	.184	0.141	0.009**

Note. *. p>0.05; **. p>0.001; RES= Resilience; PSS= Perceived Social Support

The above-mentioned table 4.1 shows the model summary for the moderation analysis of resilience, perceived social support, coping strategies and quality of life. From the table, it can be noticed that perceived social support had an effect on coping strategies (R^2= 0.101; p=0.049) and this effect was statistically significant at 0.05 level. It was also found that perceived social support had a significant effect on quality of life (R^2=0.169; p=0.005). Similar results have been reported in previous literature on COVID -19 that perceived social support from three different resources, significant others, friends, and family helped individuals to cope up with pandemic (Cahuas et al, 2023; Kim, Swana & Sarma, 2024). Tindle, Hemi & Moustafa (2022) explained that social support facilitates higher levels of psychological flexibility which indirectly reduces psychological distress by reducing avoidant coping and increasing approach coping strategies.

Table 4.2 Moderation Analysis of Resilience Perceived Social Support, Coping Strategies and Quality of Life (coefficients).

Variables	Model	t	Sig.
Coping strategies	Age	-1.049	.299
	RES	-2.076	.042
	Age	-1.099	.276
	RES	-1.529	.132
	Age x RES	.927	.358
	Age	-.455	.651
	PSS	2.380	.021

	Age	-.492	.625
	PSS	.269	.789
	Age x PSS	.425	.673
Quality of Life	Age	.322	.749
	RES	1.109	.272
	Age	-1.369	.176
	RES	-1.028	.308
	Age x RES	1.450	.153
	Age	.759	.451
	Perceived SS	3.399	.001
	Age	1.135	.261
	PSS	1.956	.055
	Age x PSS	-1.027	.309

Note. *. p>0.05; **. p>0.001; RES= Resilience; PSS= Perceived Social Support

Table 4.2 shows the significance values for the moderation analysis of resilience, perceived social support, coping strategies and quality of life. In the first model, it can be seen that, resilience significantly predicted coping strategies (p= 0.042). No interaction effect was found to be present. For the second model, it was found that perceived social support significantly predicted coping strategies (p=0.021), but there was no interaction effect between perceived social support, age and coping strategies. Fourth model showed perceived social support had a significant effect on quality of life (p=0.01), however, no interaction effect was found.

Resilience was seen to have a negative moderating impact on coping strategies but not on quality of life. It was also seen that age did not have any impact on coping strategies or quality of life. The results were supported by a study done by Sampogna et al. (2021), where it was seen that maladaptive coping strategies were predicted by lower levels of resilience, and these coping strategies included self-blame, emotional disengagement, venting and self-distraction. Finally, there was no interaction effect or moderating effect between the predictor variables (age) and moderator (resilience) on criterion variables (coping strategies and quality of life).

Thus, it can be concluded that perceived social support was seen to have a negative moderating impact on coping strategies and positive impact on quality of life. It was also seen that age did not have any impact on coping strategies or quality of life. Additionally, there was no interaction effect or moderating effect between the predictor variables (age) and moderator (perceived social support) on criterion variables (coping strategies and quality of life).

Conclusion, Limitations, Implications, & Suggestions

As individuals are becoming increasingly adaptive to this global pandemic, the levels of emotional and psychological distress as well as aggression have been seen to reduce and a sense of normalcy and acceptance of living with the pandemic has settled in. Individuals who are extroverted are more open to newer experiences, and therefore tend to be more socially connected than those who have an introverted personality. This has led to utilization of more adaptive coping strategies such as problem focused coping and emotion focused coping, and less use of avoidant coping styles. Use of adaptive coping strategies not only had benefits in the short term, but also in the long term as it eventually increases an individual's overall quality of life.

The present study has few limitations such as small sample size, snowball sampling procedure leads to highly educated sample which limited the information from all walks of life, and majority of the sample was females and sample collected only from north India. To fully understand the impact of the illness on those suffering from it, family members could be interviewed, to gain deeper knowledge and further validate the individual's account of illness, their personality style, and fundamental coping strategies. In addition to that, future studies could also focus on the level of anxiety before and after receiving information related to Covid-19 and the effect this knowledge had on their perception and expectations from the pandemic. For individuals reporting symptoms of Covid-19 that were intolerable and difficult to manage, supportive and family counselling could be provided to help them deal with their and their families' emotions in a better way. Moreover, relaxation techniques to ease their autonomic nervous system response could also be taught to the individuals suffering from severe anxiety and stress as a result of the pandemic.

REFERENCES

1. Al-Omiri, M. K., Alzoubi, I. A., Al Nazeh, A. A., Alomiri, A. K., Maswady, M. N., & Lynch, E. (2021). COVID-19 and personality: A cross-sectional multicenter study of the relationship between personality factors and COVID-19-related impacts, concerns, and behaviors. Frontiers in Psychiatry, 12, 126-147.
2. Alqahtani, J. S., Almamary, A. S., Alghamdi, S. M., Komies, S., Althobiani, M., Aldhahir, A. M., & Naser, A. Y. (2022). Effect of the COVID-19 pandemic on psychological aspects. COVID-19 and the Sustainable Development Goals, 235–258. https://doi.org/10.1016/B978-0-323-91307-2.00007-9
3. Buss, A. H., & Perry, M. (1992). The aggression questionnaire. Journal of Personality and Social Psychology, 63(3), 452-453.
4. Cahuas, A., Marenus, M. W., Kumaravel, V., Murray, A., Friedman, K., Ottensoser, H., & Chen, W. (2023). Perceived social support and COVID-19 impact on quality of life in college students: an observational study. Annals of medicine, 55(1), 136–145. https://doi.org/10.1080/07853890.2022.2154943
5. Carver, C. S. (1997). You want to measure coping but your protocol'too long: Consider the brief cope. International journal of Behavioral Medicine, 4(1), 92-100.
6. Chen, X., Lin, F., Gao, H., & Zou, Y. (2022). Stratified changes in emotional distress during the COVID-19 pandemic: Evidence from a longitudinal survey of residents in Hubei province, China. Journal of psychosomatic research, 160, 110959. https://doi.org/10.1016/j.jpsychores.2022.110959
7. Chu, G. M., Goger, P., Malaktaris, A., & Lang, A. J. (2022). The role of threat appraisal and coping style in psychological response to the COVID-19 pandemic among university students. Journal of affective disorders reports, 8, 100325-100333.
8. Fukase, Y., Ichikura, K., Murase, H., & Tagaya, H. (2022). Age-related differences in depressive symptoms and coping strategies during the COVID-19 pandemic in Japan: A longitudinal study. Journal of Psychosomatic Research, 155, 110737-110746.
9. Grey, I., Arora, T., Thomas, J., Saneh, A., Tohme, P., & Abi-Habib, R. (2020). The role of perceived social support on depression and sleep during the COVID-19 pandemic. Psychiatry research, 293, 113452-113459.
10. Huang, Y., Su, X., Si, M., Xiao, W., Wang, H., Wang, W., ... & Qiao, Y. (2021). The impacts of coping style and perceived social support on the mental health of undergraduate students during the early phases of the COVID-19 pandemic in China: a multicenter survey. BioMed Central psychiatry, 21(1), 1-12.
11. Hussong, J., Möhler, E., Kühn, A., Wenning, M., Gehrke, T., Burckhart, H., Richter, U., Nonnenmacher, A., Zemlin, M., Lücke, T., Brinkmann, F., Rothoeft, T., & Lehr, T. (2022). Mental Health and Health-Related Quality of Life in German Adolescents after the Third Wave of the COVID-19 Pandemic. Children (Basel, Switzerland), 9(6), 780. https://doi.org/10.3390/children9060780
12. John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives, 102-138.
13. Jose, S., Dhandapani, M., & Cyriac, M. C. (2020). Burnout and resilience among frontline nurses during COVID-19 pandemic: a cross-sectional study in the emergency department of a tertiary care center, North India. Indian journal of critical care medicine: peer-reviewed, official publication of Indian Society of Critical Care Medicine, 24(11), 1081-1088.
14. Kim, A.W., Swana, S. & Sarma, M.S. Evaluating the Buffering Role of Perceived Social Support and Coping Resources Against the Adult Mental Health Impacts of COVID-19 Psychosocial Stress: A Cross-Sectional Study in South Africa. ADV RES SCI (2024). https://doi.org/10.1007/s42844-024-00141-4
15. Kumar, G., Mukherjee, A., Turuk, A., Bhalla, A., Talukdar, A., Shivnitwar, S. K., Ojha, U. K., Menon, G. R., Sahu, D., Panda, S., Rao, V. V., Singh, S. K., & Bhargava, B. (2022). Characterizing the third wave of COVID-19: An analysis from the National Clinical Registry of COVID-19. The Indian journal of medical research, 155(5&6), 478–484. https://doi.org/10.4103/ijmr.ijmr_276_22
16. Lahariya, C. (2022). Third Wave of the COVID-19 pandemic in India: What lies ahead? Observer Research Foundation (ORF). https://www.orfonline.org/expert-speak/third-wave-of-the-covid-19-pandemic-in-india-what-lies-ahead/
17. Lathabhavan, R., & Sudevan, S. (2022). The Impacts of Psychological Distress on Life Satisfaction and Wellbeing of the Indian General Population During the First and Second Waves of COVID-19: A Comparative Study. International journal of mental health and addiction, 1–12. Advance online publication. https://doi.org/10.1007/s11469-021-00735-4
18. Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The social connectedness and the social assurance scales. Journal of counseling psychology, 42(2), 232-241.
19. Li, M., Ahmed, M. Z., Hiramoni, F. A., Zhou, A., Ahmed, O., & Griffiths, M. D. (2021). Mental health and personality traits during COVID-19 in China: a latent profile analysis. International Journal of environmental research and public health, 18(16), 8693-8707.
20. Lindinger-Sternart, S., Kaur, V., Widyaningsih, Y., & Patel, A. K. (2021). COVID-19 phobia across the world: Impact of resilience on COVID-19 phobia in different nations. Counselling and psychotherapy research, 21(2), 290-302.
21. Liu, S. R., Davis, E. P., Palma, A. M., Sandman, C. A., & Glynn, L. M. (2022). The acute and persisting impact of COVID-19 on trajectories of adolescent depression: Sex differences and social connectedness. Journal of affective disorders, 299, 246-255.
22. Liu, S., Lithopoulos, A., Zhang, C. Q., Garcia-Barrera, M. A., & Rhodes, R. E. (2021). Personality and perceived stress during COVID-19 pandemic: Testing the mediating role of perceived threat and efficacy. Personality and Individual differences, 168, 110351-110357.
23. Maral, P., & Punetha, D. (2022). Older adult life in COVID-19 pandemic: Focus on social isolation, loneliness, and minimization of risks. Industrial Psychiatry Journal, 31(1), 168-171.
24. Martino, J., Pegg, J., & Frates, E. P. (2015). The Connection Prescription: Using the Power of Social Interactions and the Deep Desire for Connectedness to Empower Health and Wellness. American journal of lifestyle medicine, 11(6), 466–475. https://doi.org/10.1177/1559827615608788)
25. Mishra, J., Samanta, P., Panigrahi, A., Dash, K., Behera, M. R., & Das, R. (2021). Mental health status, coping strategies during Covid-19 pandemic among undergraduate students of healthcare profession. International Journal of Mental Health and Addiction, 1-13.
26. Nitschke, J. P., Forbes, P. A., Ali, N., Cutler, J., Apps, M. A., Lockwood, P. L., & Lamm, C. (2021). Resilience during uncertainty? Greater social connectedness during COVID-19 lockdown is associated with reduced distress and fatigue. British Journal of Health Psychology, 26(2), 553-569.
27. Ochnik, D., Arzenšek, A., Rogowska, A. M., Mars Bitenc, U., & Benatov, J. (2022). Changes in Mental Health during the COVID-19 Pandemic among Representative Sample of Young Adults from Germany, Israel, Poland, and Slovenia: A Longitudinal Study. International Journal of Environmental Research and Public Health, 19(10), 5794-5805.
28. Rath, P., Gautam, S., Jain, S., Bajpai, A., Singh, M., & Kaushik, S. (2023). Impact of third wave of COVID-19 pandemic on mental health and its related lifestyle: a cross sectional survey. International Journal of Community Medicine & Public Health, 10, 766-775.
29. Sampogna, G., Del Vecchio, V., Giallonardo, V., Luciano, M., Albert, U., Carmassi, C., ... & Fiorillo, A. (2021). What is the role of resilience and coping strategies on the mental health of the general population during the COVID-19 pandemic? Results from the

Italian multicentric comet study. Brain sciences, 11(9), 1231.
30. Taylor, S. (2019). The psychology of pandemics: Preparing for the next global outbreak of infectious disease. Newcastle upon Tyne, UK: Cambridge Scholars Publishing. Asian Communication Research, 17(2), 98-103.
31. Tindle, R., Hemi, A. & Moustafa, A.A. Social support, psychological flexibility and coping mediate the association between COVID-19 related stress exposure and psychological distress. Sci Rep 12, 8688 (2022). https://doi.org/10.1038/s41598-022-12262-w
32. Whoqol Group (1998). Development of the World Health Organization WHOQOL-BREF quality of life assessment. Psychological medicine, 28(3), 551-558.
33. Yıldırım, M., Çiçek, İ., & Şanlı, M. E. (2021). Coronavirus stress and COVID-19 burnout among healthcare staffs: The mediating role of optimism and social connectedness. Current psychology, 40(11), 5763-5771.
34. Young, N. A., Waugh, C. E., Minton, A. R., Charles, S. T., Haase, C. M., & Mikels, J. A. (2021). Reactive, agentic, apathetic, or challenged? Aging, emotion, and coping during the COVID-19 pandemic. The Gerontologist, 61(2), 217-227.
35. Zimet, G. D., Powell, S. S., Farley, G. K., Werkman, S., & Berkoff, K. A. (1990). Psychometric characteristics of the multidimensional scale of perceived social support. Journal of personality assessment, 55(3-4), 610-617.
36. Zuo, Y., Ma, Y., Zhang, M., Wu, X., & Ren, Z. (2021). The impact of sharing physical activity experience on social network sites on residents' social connectedness: a cross-sectional survey during COVID-19 social quarantine. Globalization and Health, 17(1), 1-12.