

Journal of Advances in Biology & Biotechnology

Volume 27, Issue 5, Page 790-804, 2024; Article no.JABB.113913 ISSN: 2394-1081

# Study on Predictor Variables for Different Dimensions of Mental Health among Melavoi Village of Covid-19 Affected Young Adults Living in Anantapuram District, Andhra Pradesh

Y. D. Haritha <sup>a\*</sup>, Bilquis <sup>a</sup>, S. Prasanthi <sup>a</sup>, M. S. Chaitanya Kumari <sup>a</sup> and K. Kiran Prakash <sup>a</sup>

<sup>a</sup> Department of Human Development and Family Studies, College of Community Science, Acharya N.G. Ranga Agricultural University, Guntur, Andhra Pradesh, India.

### Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

### Article Information

DOI: 10.9734/JABB/2024/v27i5842

**Open Peer Review History:** 

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: https://www.sdiarticle5.com/review-history/113913

**Original Research Article** 

Received: 02/01/2024 Accepted: 06/03/2024 Published: 26/04/2024

### ABSTRACT

Early adulthood is an extremely diverse period of life. it encompasses a wide range of lifestyle choices and responsibilities. The pandemic has impacted the mental health of young adults very severely. Covid-19 pandemic there has been an increased risk of psychiatric disorders, chronic trauma with an eventual risk of increased suicidality and suicidal behavior linking this to immune mediated mechanisms of stress. For better dealing with these psychosocial issues of different strata of the society, psychosocial crisis prevention and intervention models should be urgently developed by the government, health care personnel and other stakeholders. Apt application of

<sup>\*</sup>Corresponding author: E-mail: haritha.honey12@gmail.com;

J. Adv. Biol. Biotechnol., vol. 27, no. 5, pp. 790-804, 2024

internet services, technology and social media to curb both pandemic and infodemic needs to be instigated. The main focus of the study was to swot on "Study on predictor variables for different dimensions of mental health among Melavoi village of Covid-19 affected young adults living in Anantapuram district, Andhra Pradesh". Purposive random sampling technique was selected for the study. The respondents were selected from Melavoi village of Anantapuram district, Andhra Pradesh. Male and Female who are in the age group of 18-35 years affected with Covid-19 was selected for the study. The group consists of 30 Covid-19 affected young adults of 15 males and 15 females from Melavoivillage for the study. The study found that Covid-19 outbreak made respondents to experience lot of mental health problems like emotional distress, anxiety, stress, despair, dissatisfaction, impatience irrespective of gender.

Keywords: Mental health; Covid-19; young adults; anxiety; stress; irrespective of gender; contaminated disease.

### 1. INTRODUCTION

Corona is a contaminated disease which was recognized in 2019, SARS-CoV-2 which produced respiratory ailment called Covid-19. World Health Organization released guidelines to prevent from the infection by following the ways i.e. washing hands regularly, wearing masks, maintaining social distance, getting vaccinated and go for booster when it was avail. Covid was affected to million peoples all around the world and caused severe mental health and psychosocial issues to the individuals.

The concept of mental health comprises personal well-being, belief in self, independent functioning, abilities, intergenerational dependency and recognition of the belief in their intellectual and emotional potential.

At every stage of life, from childhood to senescence mental health is very important. A person's mental health is influenced by daily activities. Over the course of the life, if individual experience mental health problems, the thinking pattern, state of mind and behaviour could be affected. Deppe et al [1]. Studied on Youth depression symptoms during Covid-19. The findings revealed that a twin analysis was done to adults with a considerable amount of unique environmental variance and genetic variance explained by the predictors that there was an increased depressive symptoms during pandemic.

Bell et al. [2] studied on impact of Covid-19 on youth mental health: a mixed methods survey. Young people report both positive and negative impacts of Covid-19 across multiple domains of mental health, wellbeing and functioning. Early intervention critical for preventing long term mental health impacts of Covid-19 on youth. Reijneveld et al. [3] studied on Effect of a severe disaster on the mental health of adolescents: a controlled study. The findings revealed that Psycho-social problems such as behavioural, emotional, and educational problems are highly prevalent among children and young people.

Azmiet al. [4] studied on Prevalence of Covid-19 pandemic, self-esteem and its effect on depression among university students in Saudi Arabia. In a study it received a total of 151 valid responses from respondents. It found that the presence of the Covid-19 pandemic had dramatically increased the depressive symptoms in students, especially in female students. The findings suggested instant consideration and support for students. It was also suggested to the quest for potential managing policies that have been known and effective during the pandemic. Moreover, training should be provided for students to shift their educational experience mindset to an adaptive mindset, which can help them adapt to the new ways of learning and education.

Jones et al. [5] studied on Mental health, suicidality, and connectedness among high school students during the Covid-19 pandemic— Adolescent behaviors and experiences survey, united states, january–june 2021. The findings of the study reported that disruptions and consequences related to the Covid-19 pandemic was higher in social isolation, family economic hardship, family loss or illness, and reduced access to health care, raise concerns about the effects on the mental health and well-being of youths.

Wright et al. [6] studied on Physical activity protects against the negative impact of coronavirus fear on adolescent mental health and well-being during the Covid-19 pandemic. During United Kingdom lockdown restrictions, 165 participants (100 female, aged 13-19) completed an online questionnaire assessing perceived Coronavirus prevalence and fear, physical activity, and indicators of mental health and well-being (stress, anxiety, depression, fatigue, vitality, and perceived health). Findings suggested that physical activity during the coronavirus pandemic can counteract the negative effects of Coronavirus fear on well-being. adolescent mental health and Therefore, physical activity should be promoted during lockdown to support good mental health and well-being.

O'Brien et al. [7] studied on Physical activity, mental health and wellbeing during the first Covid-19 containment in New Zealand: A crosssectional study. Sample consisted of 4007 the findings participants suggested that consideration should be given to individuals with comorbidities, poor subjective wellbeing prior to lockdowns, those experiencing financial strain and increased sitting time due to the working from home environment, as all were found to be negatively associated with physical activity and mental health. Providing support for these subgroups in the population may aid in providing a buffer to the negative impacts of physical inactivity on mental wellbeing.

Theis et al. [8] studied on The effects of Covid-19 restrictions on physical activity and mental health of children and young adults with physical and/or intellectual disabilities. A total of 125 respondents completed the survey. Respondents reported negative effects of lockdown restrictions, with 61% reporting a reduction in physical activity levels and over 90% reporting a negative impact on mental health (including poorer behaviour, fitness and social and mood. learning regression). The survey highlighted the negative impact of the Covid-19 lockdown on the physical activity levels and mental health of children and young adults with disabilities and highlighted the importance of addressing the needs of the disabled community as restrictions are eased.

Shamblaw et al. [9] conducted both cross sectional and longitudinal study on "Coping during the Covid-19 pandemic: Relations with mental health and quality of life" with sample of 1192 adults. This study stated that rates of depression and anxiety are significantly higher than reported rates prior to the pandemic and understanding effective coping strategies was critical to mitigating the negative mental health effects of Covid-19. Distraction and acceptance were the most commonly used coping strategies. Distraction based coping was associated with worse mental health and quality of life. Positive reframing was another adaptive coping strategy, associated with mental health and quality of life both cross sectionally and longitudinally. Strategies focused on positive reframing, and cognitive behavioural therapy would be useful intervention strategies during the pandemic.

### 2. METHODOLOGY

The main focus of the study was to swot on "Study on predictor variables for different dimensions of mental health among Melavoi village of Covid-19 affected young adults living in Anantapuram district. Andhra Pradesh". Purposive random sampling technique was selected for the study. Statistical Tools used frequency and percentage, multiple were regression. Frequency and percentages were calculated to interpret the demographic profile of the participants. Multiple regression was used to analyze the relationship between a single dependent variable and several independent variables. The respondents were selected from Melavoi village of Anantapuram district. Andhra Pradesh. Men and Women who are in the age group of 18-35 years affected with Covid-19 were selected for the study. The group consists of 30 Covid-19 affected young adults of 15 men and 15 women from Melavoi village for the study.

### 3. RESULTS AND DISCUSSION

A general information schedule was developed by the investigator for collecting the general information about the respondents. Interview schedule include age, gender, location, educational qualification, occupation, monthly income, type of family, number of dependents in the family. The developed interview schedule was pre-tested and changes were made accordingly.

### 3.1 General Profile of the Respondents of Covid-19 Affected Young Adults

It was evident from the above Table (1) that 67 percent of the male respondents were in the age range of 27-35 years and 33 percent were in the age group of 18-26 years. Whereas majority (87%) of the female respondents were in the age range of 27-35 years and 13 percent were in the age group of 18-26 years.

The Table 2 indicated that equal number (100%) of male and female rural respondents was selected for the study.

Out of fifteen, 27 percent of the male respondents completed degree and secondary education followed by 20 percent completed inter/diploma, 13 percent completed primary education and 7 percent were illiterates. Whereas out of fifteen, 33 percent of the female respondents completed inter/diploma followed by 27 percent completed degree, 20 percent completed secondary education, 13 percent were illiterates and 7 percent completed primary education. It was observed from the Table (4) that 33 percent of the male respondents were employed in private job and in business, 13 percent were employed in government job and in skilled occupation (farm workers, gardeners, pot makers, electrician, carpenter, plumber etc.) and 7 percent were not involved in any occupation. Whereas 40 percent of females were not involved in any occupation (Housewives/student) followed by 27 percent were employed in private job, 13 percent were in skilled jobs (pot makers, chefs gardners, farm workers etc.) and in business, only 7 percent were employed in government job.

Table 1. Distribution of respondents according to their age (n=30
---

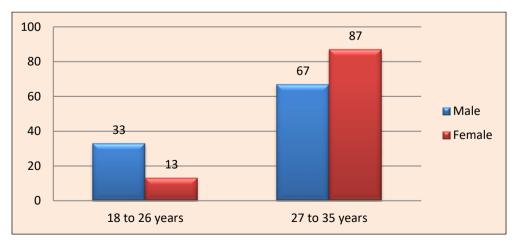
Area	Category	Mal	Male (n=15)		ıle (n=15)	Total (n=30)	
		F	%	F	%	F	%
Age	18 to 26 (Youth)	5	33	2	13	7	23
-	27 to 35 (Young Adult)	10	67	13	87	23	77

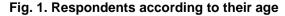
Area	Category	Male (n=15)		Fer	nale (n=15)	Total (n=30)	
		F	%	F	%	F	%
Rural	Gender	15	100	15	100	30	100

Table 2. Distribution of respondents according to their gender (n=30)

#### Table 3.Distribution of respondents according to their (n=30)

Area	Category	Male (n=15)		Female (n=15)		Total (n=30)	
		F	%	F	%	F	%
Education	Illiterate	1	7	2	13	3	10
	Up to V(Primary)	2	13	1	7	3	10
	VI to X (Secondary)	4	27	3	20	7	23
	Inter/diploma	3	20	5	33	8	27
	Degree	4	27	4	27	8	27





Haritha et al.; J. Adv. Biol. Biotechnol., vol. 27, no. 5, pp. 790-804, 2024; Article no.JABB.113913

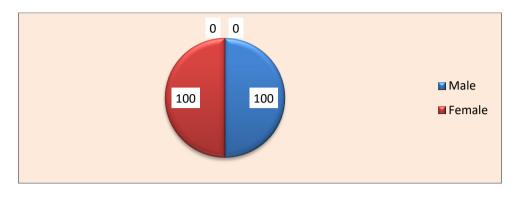


Fig. 2. Respondents according to their gender

Out of fifteen, 53 percent of the male respondents had annual income between two lakhs-five lakhs followed by 27 percent were in high category (5 lakhs and above) and 20 percent were in low category (below 2 lakhs). Whereas females out of fifteen, fourty seven percent of the female respondents had annual income between twofive lakhs followed by 33 percent of the respondents income between below had two lakhs and 20 percent of the

respondents had income between five lakhs and above.

It was evident from the Table (6) that more than fifty percent (53%) of the male respondents belonged to joint families and 47 percent of the respondents belonged to nuclear families. Whereas majority (60%) of the female respondents belonged families to joint 40 belonged to nuclear and percent families.

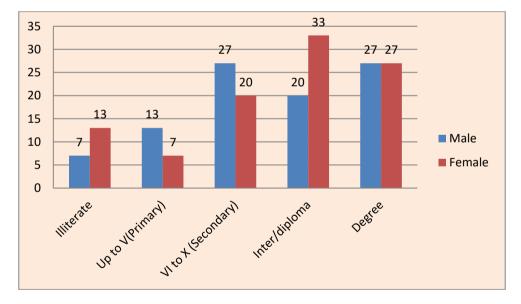


Fig. 3. Respondents according to their education

Table 4. Distribution of respondents	according to their occupation	n (n=30)
--------------------------------------	-------------------------------	----------

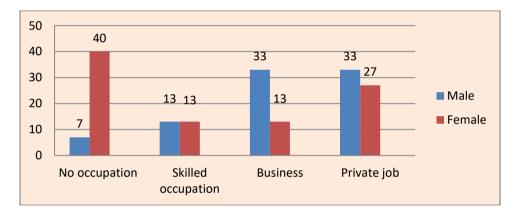
Area	Category	Male	(n=15)	Female (n=15)		Total (n=30)	
		F	%	F	%	F	%
Occupation	No occupation	1	7	6	40	7	23
	Skilled occupation	2	13	2	13	4	13
	Business	5	33	2	13	7	23
	Private job	5	33	4	27	9	30
	Govt. job	2	13	1	7	3	10

Area	Category	Male (n=15)		Female (n=15)		Total (n=30)	
		F	%	F	%	F	%
Income	Low: Below 2 lakhs	3	20	5	33	10	33
	Middle: 2 to 5 lakhs	8	53	7	47	15	50
	High: 5 lakhs and above	4	27	3	20	7	23

Table 5. Distribution of respondents according to their income (n=30)

### Table 6. Distribution of respondents according to their family type (n=30)

Area	Category	Male (n=15)		Fen	nale (n=15)	Total (n=30)	
		F	%	F	%	F	%
Family type	Nuclear	7	47	6	40	15	50
	Joint	8	53	9	60	17	57





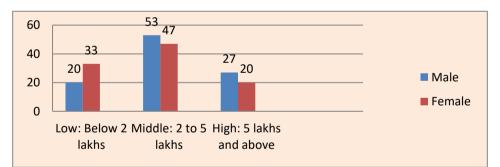


Fig. 5. Respondents according to their income

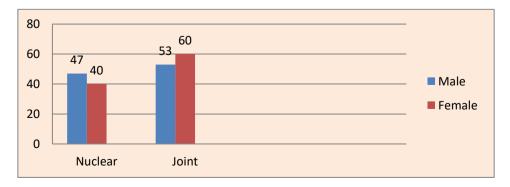


Fig. 6. Respondents according to their family type

Area	Category	Male (n=15)		Female (n=15)		Total (n=30)	
		F	%	F	%	F	%
No.of dependents	2 members	1	7	2	13	3	10
in the family	3 to 5	10	67	11	73	21	70
	6 and above	4	27	2	13	6	20

### Table 7. Distribution of respondents based on no. of dependents in thefamily (n=30)

It was observed from the Table 7 that 67 percent of the male respondents were in 3 to 5 number of dependents in the family followed by 27 percent of the respondents was in 6 and above number of dependents in the family and 7 percent were in 2 members- number of dependents in the family. Whereas majority (73%) of the female respondents were in 3 to 5 number of dependents in the family followed by 13 percent of the respondents were in 6 and above and 2 members- number of dependents in the family.

The Table (8) presented the illness type of the respondents. It was observed from the table that young adults those who were affected with coronavirus, equal number (100%) of male and female respondents have been taken for the study.

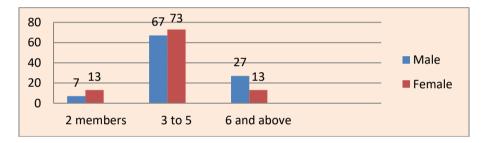


Fig. 7. Respondents based on no. of dependents in the family



Fig. 8. Respondents according to their illness type

Area	Category	Male (n=15)		Female (n=15)		Total (n=30)		
		F	%	F	%	F	%	
Illness type	Covid-19	15	100	15	100	30	100	

Table 9. Distribution of respondents according to their illness stage (n=30)

Area	Category	Male (n=15)			Female (n=15)		Total (n=30)	
		F	%	F	%	F	%	
Illness stage	Early Phase	11	73	12	80	23	77	
	Intermittent	3	20	3	20	6	20	
	Advance stage	1	7	0	0	1	3	

It was observed from the Table (9) that 73 percent of the male respondents were in early phase of illness followed by 20 percent were in intermittent and 7 percent were in advance stage. Whereas majority (80%) of the female respondents were in early phase of illness and 20 percent were in intermittent stage.

It was evident from the above Table (10) that 53 percent of the male respondents were admitted in hospital for 1 week to 2 weeks followed by 40

percent of the respondents were not admitted in the hospital and 7 percent of the respondents were admitted in the hospital more than 2 weeks. Whereas 47 percent of the female respondents were admitted in the hospital for 1 to 2 weeks followed by not admitted in the hospital (homequarantine and home precautions along with doctor prescribed medicine was been taken to recover from the virus) and 7 percent of the respondents were admitted in the hospital more than 2 weeks.

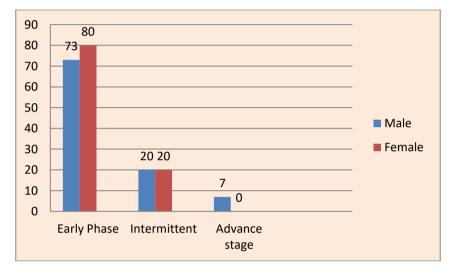


Fig. 9. Respondents according to their illness stage

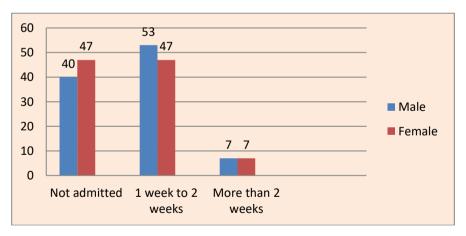


Fig. 10. Respondents duration on admitted in the hospital

Table 10. Distribution of respondents or	n admitted in the hospital (n	າ=30)
--	-------------------------------	-------

Area	Category		Category Male (		(n=15) Female		e (n=15)	Total (r	n=30)
		F	%	F	%	F	%		
Admitted in	Not admitted	6	40	7	47	13	43		
the hospital	1 week to 2 weeks	8	53	7	47	15	50		
	More than 2 weeks	1	7	1	7	2	7		

### Table 11. Predictor variables for positive self evaluation of rural experimental group respondents

R	R Sq	uare	Ad	justed R Sq	uare	Std. Error o	f the Estimate
.576ª	.331		.03	51		5.72957	
The predictor	s were age,	gender,	education,	occupation,	income,	type of family,	no. of dependents

in the family, illness stage, psychological problems and social problems

Coefficients					
Independent variable	<b>Regression Coefficient</b>	Std. Error	Beta	t-value	Sig
Gender	-1.719	2.521	150	682	.503
Age	824	.369	491	-2.230*	.038
Education	097	.940	023	104	.918
Occupation	522	1.225	121	426	.674
Income	-4.302	2.425	531	-1.774	.091
Type.of.family	1.930	2.936	.167	.657	.518
Dependents	-2.923	2.310	262	-1.266	.220
Illness stage	350	.286	297	-1.225	.235
<b>Psychological Problems</b>	232	.364	132	637	.531
Social problems	-1.719	2.521	150	682	.503

Note: Level of significance: \*\*0.01, \*0.05

### 3.2 Predictor Variables for Different Dimensions of Mental Health (Stepwise Regression)

The Table (11) depicted the contribution of independent variables to positive self evaluation of Covid-19 affected young adults analysed through step-wise regression. The regression model explained about independent variables together contributed 33 percent of variance together positive self evaluation of Covid-19 affected young adults. These were age (t=  $-2.230^{\circ}$ ) at 5 percent level of significance.

Regression co-efficient table indicated that every unit change in age increases positive self evaluation by -.824 units. Further it can also be inferred that Covid-19 affected young adults who were with better age had better positive self-evaluation. Therefore it can be concluded that age was found to be determinant on positive self evaluation among rural Covid-19 affected young adults.

The Table (12) depicted the contribution of independent variables to perception of reality of Covid-19 affected young adults analysed through step-wise regression. The regression model explained about independent variables together contributed 51 percent of variance together perception of reality of Covid-19 affected young adults. These were education (t= -3.019\*\*) at 1 percent level of significance and age (t= -2.230\*) at 5 percent level of significance.

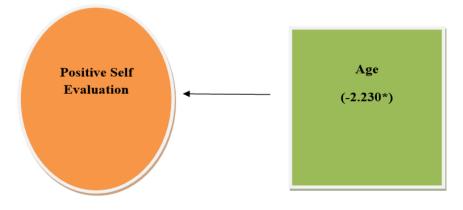


Fig. 11. Positive self evaluation of rural experimental group respondents Indicated 0.01 % level of significance; Indicated 0.05 % level of significance

#### Table 12. Predictor variables for perception of reality among rural experimental group respondents

R	R Square	Adjusted R Squar	e Std. Error of the Estimate		
.716 <sup>a</sup>	.512	.255	5.53681		
The predictors were age, gender, education, occupation, income, type of family, no. of dependents					
in the family,	illness stage, psycholog	gical problems and socia	l problems		

Coefficients					
Independent variable	Regression Coefficient	Std. Error	Beta	t-value	Sig
Gender	880	2.539	070	347	.733
Age	824	.369	491	-2.230*	.038
Education	-2.859	.947	603	-3.019**	.007
Occupation	.601	1.191	.126	.505	.620
Income	1.879	2.352	.210	.799	.434
Type.of.family	2.272	2.917	.178	.779	.446
Dependents	4.885	2.905	.417	1.682	.109
Illness stage	-3.723	2.271	302	-1.639	.118
Psychological problems	.134	.288	.103	.465	.647
Social problems	004	.354	002	011	.991

Regression co-efficient table indicated that every unit change in education increases perception of reality by -2.859 units, a unit changes in age increases perception of reality by -.824 units.

Further it can also be inferred that Covid-19 affected young adults who were with better age, education had better perception of reality. Therefore it can be concluded that age, education were found to be determinant on perception of reality among rural Covid-19 affected young adults.

The Table (13) depicted the contribution of independent variables to integration of personality of Covid-19 affected young adults analysed through step-wise regression. The

regression model explained about independent variables together contributed 25 percent of variance together integration of personality of Covid-19 affected young adults. These were education (t=  $-4.338^{**}$ ) at 1 percent level of significance.

Regression co-efficient table indicated that every unit change in education increases integration of personality by -1.146 units.

Further it can also be inferred that Covid-19 affected young adults who were with better education had better integration of personality. Therefore it can be concluded that education was found to be determinant of integration of personality among rural Covid-19 affected young adults.

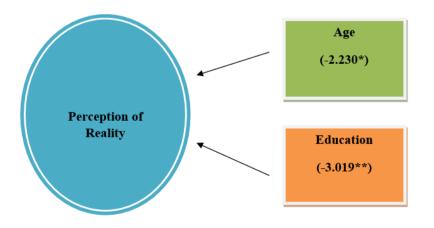


Fig. 12. Perception of reality among rural experimental group respondents Indicated 0.01 % level of significance; Indicated 0.05 % level of significance

# Table 13. Predictor variables for integration of personality rural experimental group respondents

R R S	R Square Adjusted R		Std. Err	or of the Es	stimate		
.505 <sup>a</sup> .255	5137		7.71979				
The predictors were age, gender, education, occupation, income, type of family, no. of dependents in the family, illness stage, psychological problems and social problems							
Coefficients							
Independent variable	Regression Coefficient	Std. Error	Beta	t-value	Sig		
Gender	2.220	3.540	.156	.627	.538		
Age	561	.515	296	-1.089	.290		
Education	-1.146	.264	813	-4.338**	.000		
Occupation	1.021	1.661	.190	.614	.546		
Income	-1.314	3.279	130	401	.693		
Type.of.family	-4.254	4.066	296	-1.046	.309		
Dependents	1.694	4.050	.128	.418	.680		
Illness stage	-4.059	3.166	292	-1.282	.215		
Psychological problems	429	1.320	080	325	.749		
Social problems	.024	.493	.011	.048	.962		

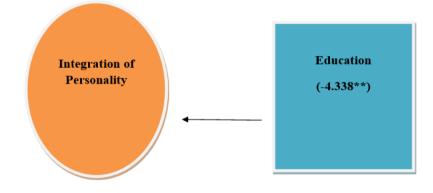


Fig. 13. Integration of personality among rural experimental group respondents Indicated 0.01 % level of significance; Indicated 0.05 % level of significance

R R	Square Adjusted R	Square S	td. Error o	of the Estin	nate
.707 <sup>a</sup> .5	.237	3	.57203		
The predictors were age	e, gender, education, occupation	on, income, type	of family,	no. of dep	endent
in the family, illness stag	ge, psychological problems and	social problems	5		
Coefficients					
Independent variable	Regression Coefficient	Std. Error	Beta	t-value	Sig
Gender	.563	1.638	.070	.344	.735
Age	4.039	1.874	.541	2.156*	.044
Education	748	.611	248	-1.225	.236
Occupation	.838	.769	.276	1.090	.289
Income	.564	1.517	.099	.372	.714
Type.of.family	-2.008	1.882	247	-1.067	.299
Dependents	.001	.228	.001	.003	.997
Illness stage	.078	1.465	.010	.053	.958
Psychological problems	.386	.186	.465	2.078	.052
Social problems	074	.238	070	312	.759

The Table (14) depicted the contribution of independent variables to autonomy of Covid-19 affected young adults analysed through stepwise regression. The regression model explained about independent variables together contributed 50 percent of variance together autonomy of Covid-19 affected young adults. These were age  $(t= 2.156^*)$  at 5 percent level of significance.

Regression co-efficient table indicated that every unit change in age increases autonomy by 4.039 units.

Further it can also be inferred that Covid-19 affected young adults who were with better age had better autonomy. Therefore it can be concluded that age were found to be determinant of autonomy among rural Covid-19 affected young adults.

The Table (15) depicted the contribution of independent variables to group oriented attitude of Covid-19 affected young adults analysed through step-wise regression. The regression model explained about independent variables together contributed 21 percent of variance together group oriented attitude of Covid-19 affected young adults. These were age (t=-2.349\*) at 5 percent level of significance.

Regression co-efficient table indicated that every unit change in age increases group oriented attitude by -1.770 by units.

Further it can also be inferred that Covid-19 affected young adults who were with better age had better group oriented attitude. Therefore it can be concluded that age was found to be determinant of group oriented attitude among rural Covid-19 affected young adults.

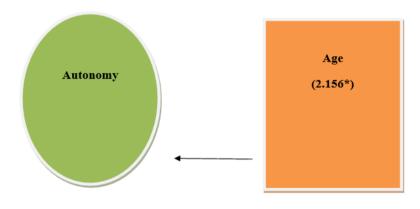


Fig. 14. Autonomy of rural experimental group respondents

# Table 15. Predictor variables for group oriented attitude rural experimental group respondents

R	R Square	Adjusted R Square	e Std. Error of the Estimate		
.462ª	.214	200	7.29019		
The predictors were age, gender, education, occupation, income, type of family, no. of dependents					
in the family, illness stage, psychological problems and social problems					

Coefficients					
Independent variable	<b>Regression Coefficient</b>	Std. Error	Beta	t-value	Sig
Gender	.043	3.343	.003	.013	.990
Age	-1.770	.754	585	-2.349*	.030
Education	.689	1.247	.140	.553	.587
Occupation	990	1.569	200	631	.536
Income	2.925	3.096	.316	.945	.357
Type.of.family	-1.165	3.840	088	303	.765
Dependents	4.127	3.824	.340	1.079	.294
Illness stage	1.643	2.990	.129	.550	.589
Psychological problems	212	.379	157	560	.582
Social problems	.160	.486	.092	.328	.746

Haritha et al.; J. Adv. Biol. Biotechnol., vol. 27, no. 5, pp. 790-804, 2024; Article no.JABB.113913

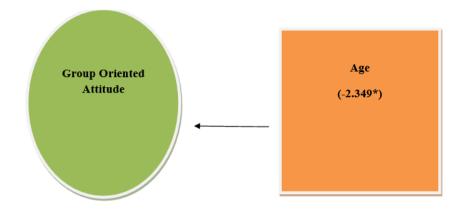


Fig. 15. Group oriented attitude of rural experimental group respondents Indicated 0.01 % level of significance; Indicated 0.05 % level of significance

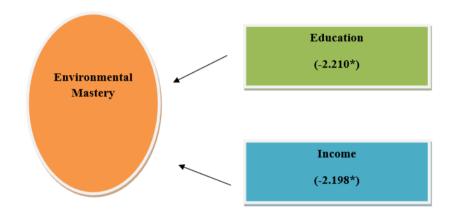


Fig. 16. Environmental mastery of rural experimental group respondents Indicated 0.01 % level of significance; Indicated 0.05 % level of significance

# Table 16. Predictor variables for environmental mastery rural experimental group Respondents

R R Sc	uare Adjusted R	Square	Std. Erro	r of the Es	timate		
.759 <sup>a</sup> .576	.353		6.26915				
The predictors were age, gender, education, occupation, income, type of family, no. of dependents in the family, illness stage, psychological problems and social problems							
Coefficients		·					
Independent variable	Regression Coefficient	Std. Error	Beta	t-value	Sig		
Gender	-4.139	2.874	270	-1.440	.166		
Age	.473	.418	.232	1.130	.272		
Education	-2.356	1.066	434	-2.210*	.040		
Occupation	1.623	2.663	.150	.609	.549		
Income	-7.230	3.289	508	-2.198*	.041		
Type.of.family	3.485	3.302	.225	1.055	.305		
Dependents	2.253	1.349	.390	1.670	.111		
Illness stage	1.319	2.571	.088	.513	.614		
Psychological problems	.528	.326	.334	1.622	.121		
Social problems	1.346	1.072	.234	1.256	.224		

The Table (16) depicted the contribution of independent variables to environmental mastery of Covid-19 affected young adults analysed through step-wise regression. The regression model explained about independent variables together contributed 57 percent of variance together environmental mastery of Covid-19 affected young adults. These were education (t=  $-2.210^{*}$ ) income (t= $-2.198^{*}$ ) at 5 percent level of significance.

Regression co-efficient table indicated that every unit change in education increases environmental mastery by -2.356 units, a unit change in income increases environmental mastery by -7.230 units.

Further it can also be inferred that Covid-19 affected young adults who were with better education, income had better environmental mastery. Therefore it can be concluded that education, income were found to be determinant of environmental mastery among rural Covid-19 affected young adults [10].

### 4. CONCLUSION

The pandemic had caused severe disruptions to everyday life, which raised the possibility of psycho-social issues and poor mental health. Young people were experiencing more psychological symptoms as a result of the combined impacts of psychological and social pressures, and concerns about Covid-19 were a major factor in the development of their pandemic-related mental health issues.

### CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

The findings of the study found that Covid-19 epidemic ignited stress, anxiety and depression. Adopting appropriate mental health interventions helps respondents to cope up from the situations effectively.

### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

### REFERENCES

1. Deppe M, Zapko-Willmes A. Youth Depression Symptoms During COVID-19. Zeitschrift für Psychologie; 2023.

- Bell IH, Nicholas J, Broomhall A, Bailey E, Bendall S, Boland A, Thompson A. The impact of COVID-19 on youth mental health: A mixed methods survey. Psychiatry Research. 2023;321: 115082.
- 3. Reijneveld SA, Crone MR, Verhulst FC, Verloove-Vanhorick SP. The effect of a severe disaster on the mental health of adolescents: A controlled study. The Lancet. 2003;362(9385):691-696.
- 4. Azmi FM, Khan HN, Azmi AM, Yaswi A, Prevalence Jakovlievic М. and of pandemic. COVID-19 self-esteem and its effect on depression among universitv students Saudi in Arabia, Frontiers in Public Health, 2022:10: 836688.
- Jones SE, Ethier KA, Hertz M, DeGue S, Le VD, Thornton J, Geda S. Mental health, suicidality, and connectedness among high school students during the COVID-19 pandemic—Adolescent Behaviors and Experiences Survey, United States, January–June 2021. MMWR Supplements. 2022;71(3):16.
- Wright LJ, Williams SE, Veldhuijzen van Zanten JJ. Physical activity protects against the negative impact of coronavirus fear on adolescent mental health and wellbeing during the COVID-19 pandemic. Frontiers in Psychology. 2021; 12:580511.
- 7. O'Brien WJ, Badenhorst CE, Draper N, Basu A, Elliot CA, Hamlin MJ, Faulkner Physical activity, mental health J. wellbeing during the first and COVID-19 containment in New Zealand: study. International cross-sectional А Journal of Environmental Research and Public Health. 2021;18(22): 12036.
- Theis N, Campbell N, De Leeuw J, Owen M, Schenke KC. The effects of COVID-19 restrictions on physical activity and mental health of children and young adults with physical and/or intellectual disabilities. Disability and Health Journal. 2021;14(3):101064.
- 9. Shamblaw AL, Rumas RL, Best MW. Coping during the COVID-19 pandemic: Relations with mental health and quality of life. Canadian Psychology /Psychologie Canadienne. 2021;62 (1):92.

Haritha et al.; J. Adv. Biol. Biotechnol., vol. 27, no. 5, pp. 790-804, 2024; Article no.JABB.113913

 Salari N, Hosseinian-Far A, Jalali R, Vaisi-Raygani A, Rasoulpoor S, Mohammadi M., Khaledi-Paveh B. Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: A systematic review and metaanalysis. Globalization and health. 2020; 16(1):1-11.

© Copyright (2024): Author(s). The licensee is the journal publisher. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history: The peer review history for this paper can be accessed here: https://www.sdiarticle5.com/review-history/113913