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Stress, Anxiety & Depression among Flood Affected People in Kerala

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Abstract:

In the present research paper researcher attempted to find the level of stress, anxiety and depression among flood affected people in Kerala, for this purpose the sample of 158 subjects [96 (60.8%) Male and 62 (39.2%) Females] were selected through simple random sampling technique in Karla. 21 itemed Depression Anxiety Stress Scale (DASS) constructed by Fernando Gomez was used for the assessment purpose. For data analysis and hypothesis testing mean and t-test and Pearson's correlation was applied through SPSS 20 version. The finding shows that female and respondents living in joint families are having high stress, anxiety and depression than male and those living in nuclear families. Further it is also revealed that (1.27%) are having moderate, (7.59%) sever and (91.14%) of respondents are having extremely sever level of anxiety. Also (8.86%) respondents are having mild, (31.65%) moderate and (59.49%) respondents are having severe level of stress respectively. Similarly (1.26%) have mild, (48.10%) moderate, (41.78%) severe, and (8.86%) respondents are having extremely sever level of depression. The results also revealed that respondents anxiety and stress are significantly differs with respect to their gender and family type. Also positive relationship was found between the stress, anxiety and depression.

Key words.: *Stress, Anxiety, Depression, flood, Gender and Family Type*

I. INTRODUCTION

Humanity road activated its disaster desk on August 16 after severe flash flooding and landslides impacted the state of Kerala in India due to heavy rains. Water was seen gushing down the streets in Kozhikode, Kerala, cutting off road links and submerging several villages. Some 10,000 kilometers of roads have been destroyed or damaged and hundreds of homes lost, At least 87 people have been killed, more than 85,000 have been displaced, and the Kochi Airport is shut down.

This flood not only damages the properties of people but also take their lives, which badly affect their psychological wellbeing and quality of life. Studies also showed various symptoms resulting from exposure to natural disasters like floods. Among these consequences, individuals may experience symptoms of stress, anxiety, post-traumatic stress disorder (PTSD), depression etc. Tapsell (2001) reported stress, anxiety, fainting, panic attacks, depression, lethargy and agoraphobia among flood affected people. Ginexi, Weihs, Simmens, & Hoyt (2000) found that anxiety and depression among victims are related to losses in the event of flooding. Liu et al., (2006), Mason, Andrews, & Upton (2010), Norris, Baker, Murphy, & Kaniasty (2005) investigated that mental health disorders are commonly found in people affected by natural disasters such as floods are post-traumatic stress disorder (PTSD), followed by depression and anxiety. Sankar & Wani (2016) found significant differences in anxiety, stress and depression with respect to gender. Phifer (1990) revealed that flood exposure was associated with significant increases in depression and

anxiety. Nasir, Zainah, & Khairudin (2012) reported that flood victims suffered cognitive, emotional and behavioral shortfalls such as fear, anxiety, hopelessness, helplessness and depression. On the other side, Watson, (1967) investigated that anxieties among flood victims can cause stress, fear and restlessness. Kaplan (1983) revealed that the flood disrupts normal life and activities results adaptive behavior and psychological disorder. Davidson (2004) in his study found that women were two times more likely to develop PTSD than men.

II. OBJECTIVES

1. To find the level of stress, anxiety and depression among flood affected people in Kerala.

2. To find the significant difference in stress, anxiety and depression with respect to gender.

3. To find the significant difference in stress, anxiety and depression with respect to family type.

4. To find the significant relationship between variables

III. HYPOTHESES

1. There would be significant difference found in anxiety, stress, and depression with respect to gender.

2. There would be significant difference found in anxiety, stress, and depression with respect to family type.

3. There would be significant relationship found between the variables.

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Variables: Gender and family type are taken as experimental variables and criterion variables are anxiety, stress and depression in the present study.

Sample: In the present study the investigator take sample of 158 subjects selected through sample random sampling technique from kouchi.

Measuring Tool: Short version of depression anxiety stress scale (DASS) constructed by Lovibond & Lovibond (1995) was used for data collection. The scale comprises of 21 items equally divided into 3 subscales (stress, anxiety, and depression) 7 items for each variable, each item is scored as 0 - 4 as per the responses.

IV. RESULTS

Table 1: Distribution of subjects with respect to gender

Variable	Sub Variable	Frequency	%
Gender	Male	96	60.8
	Female	62	39.2
	Total	158	100.0

Table 2: Distribution of subjects with respect to family type

Variable	Sub Variable	Frequency	%
	Nuclear	87	55.1
Family Type	Joint	71	44.9
	Total	158	100.0

Table 3: Distribution of subjects with respect to level of Anxiety

Variable	Category	Score	N	%
	Normal	0-3	-	-
	Mild	4-5	-	-
Anxiety	Moderate	6-7	2	1.27
	Severe	8-9	12	7.59
	Extremely Severe	10+	144	91.14
	Total		**158**	**100**

Table 4: Distribution of subjects with respect to level of Stress

Variable	Category	Score	N	%
	Normal	0-7	-	-
	Mild	8-9	14	8.86
Stress	Moderate	10-12	50	31.65
	Severe	13-16	94	59.49
	Extremely Severe	17+	-	-
	Total		**158**	**100**

Table 5: Distribution of subjects with respect to level of Depression

Variable	Category	Score	N	%
	Normal	0-4	-	-
	Mild	5-6	2	1.26
Depression	Moderate	7-10	76	48.10
	Severe	11-13	66	41.78
	Extremely Severe	14+	14	8.86
	Total		**158**	**100**

Table 6: Gender wise mean difference of subjects with respect to Anxiety, Stress, and Depression

	Gender	N	Mean	S.D	df	t-value	p-value
Anxiety	Male	96	13.00	2.32	156	9.61	.000
	Female	62	15.65	1.10			
Stress	Male	96	11.94	2.00	156	7.99	.000
	Female	62	13.87	1.02			
Depression	Male	96	10.48	2.21	156	2.89	.004
	Female	62	11.39	1.71			

Table 7: Family wise mean difference of subjects with respect to Anxiety, Stress, and Depression

	Family Type	N	Mean	S.D	df	t-value	p-value
Anxiety	Nuclear	87	13.45	2.33	156	3.69	.000
	Joint	71	14.76	2.12			
Stress	Nuclear	87	12.15	1.93	156	4.18	.000
	Joint	71	13.37	1.72			
Depression	Nuclear	87	10.62	2.16	156	1.46	.145
	Joint	71	11.10	1.94			

Table 8: Correlation between variables

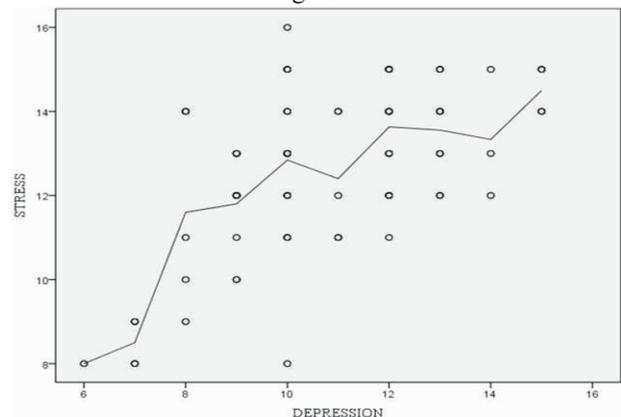|	Gender	Family Type	Anxiety	Stress	Depression
Gender	1	.629**	.557**	.490**	.215**
Family Type		1	.281**	.314**	.115
Anxiety			1	.595**	.358**
Stress				1	.605**
Depression					1

**. Correlation is significant at the 0.01 level (2-tailed).
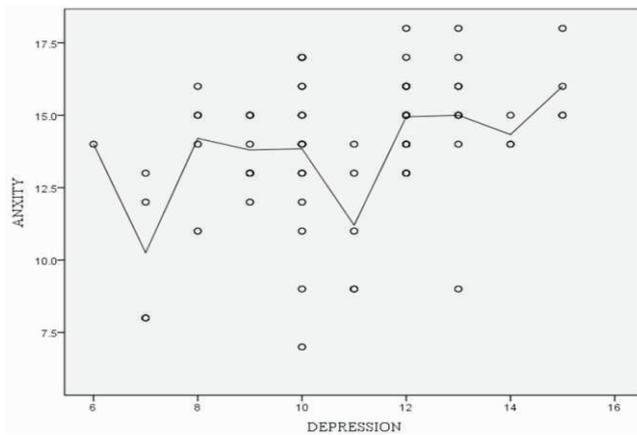
Figure-1
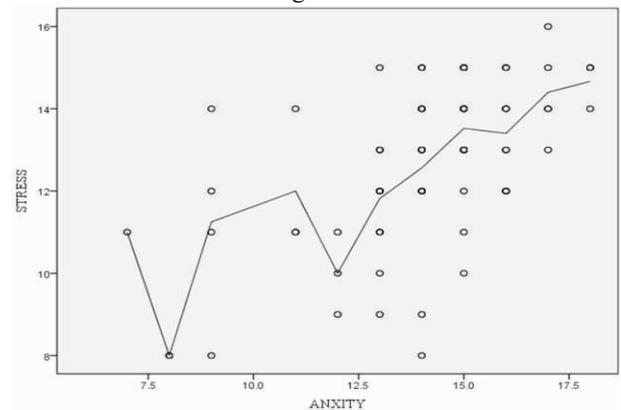
Scatterplot showing the relationship between Anxiety & Stress

Figure-2

Scatterplot showing the relationship between Stress & Depression

Figure-3

Scatterplot showing the relationship between Anxiety & Depression

V. DISCUSSION

The results in the present study showed that majority (91.14%, n=144) respondents are having extremely sever level of anxiety, however (7.59%, n=12) are having sever and very least (1.27%, n=2) are having moderate level of anxiety respectively. It is also found that majority (59.49%, n=94) of respondents are having extremely sever level of stress, however (31.65%, n=50) are having sever and very least (8.86%, n=14) are having moderate level of stress respectively.

Further it is also divulge that majority (48.10%, n=76) of respondents are having moderate level of depression, (41.78%, n=66) are having sever, (8.86%, n=14) are having extremely severe and very least (1.26, n=2) are mild level of depression respectively.

The significant p-value (p=.000) infers that anxiety and stress significantly differs with respect to gender and family type. It is also found that male respondent and those living in joint families are having high level of stress anxiety and depression than female and those living in nuclear families respectively. The average anxiety, stress and depression with respect to gender was found to be [(Anxiety, Male=13.00, Female= 15.65), (Stress, Male= 11.94, Female=13.87), and (Depression, Male=10.48, Female= 11.39)], simultaneously with respect to family type it was found to be [(Anxiety, Nuclear Family= 13.45, Joint Family= 14.76), (Stress, Nuclear Family= 12.15, Joint Family= 13.37), and (Depression, Nuclear Family=10.62, Joint Family= 11.10] respectively. Therefore on the basis of above findings both first and second hypotheses are partially accepted.

The results also divulge that age is positively relationship with independent and dependent variables. Gender is found significantly correlated with anxiety (r= .557), stress (r= .490), and depression (r= .215), simultaneously positive significant relationship of family type with anxiety (r= .281), and stress (r= .314) is reported. Hence on the basis of the above findings the third hypothesis is also accepted.

VI. CONCLUSIONS

On the basis of the findings of the study, it can be concluded that anxiety and stress significantly differs with gender and family type, also significant relationship was found between gender, family type, anxiety, stress, and depression respectively.

VII. ACKNOWLEDGMENT

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