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Psychological vulnerability of rural farm women

V Kavitha Kiran and K Yashoda

Abstract

Present study was taken up to find out the Psychological vulnerability of Rural Farm women of Telangana from the adopted villages of Maheshwaram Mandal, Ranga Reddy district, Hyderabad. Results showing Depression and Stress could be stated that there were no significant differences in Psychological Vulnerability dimension with regard to age. The study concludes that educational differences in Psychological Vulnerability as not found. With regard to impact of independent variables age, education, occupation, caste and income on dependent variables Anxiety and Depression, the study concludes age to be an influencing factor on Depression and anxiety that means as age increases Depression and anxiety were also increasing.

Keywords: Psychological vulnerability, anxiety, depression, stress and farm women

Introduction

Psychological health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" .Mental disorders are normally defined by some combination of abnormal thoughts, emotion, behavior, and relationships with others. Psychological disorders include depression, anxiety, stress, schizophrenia, bipolar disorder, and emotional/psychological distress .The most common mental disorders are said to be anxiety and depressive disorders, which are a reaction to the stresses of life. A person with an anxiety disorder feels distressed a lot of the time, for no apparent reason, and a person with a depressive disorder can experience a long-term depressed mood and loss of interest in activities that used to be enjoyable. The burden of Psychological disorders continues to grow with substantial impacts on health and major social, human rights, and economic consequences around the world

Researchers have identified a number of occupational health risks through studies of farming communities, and some have specified farming as an especially stressful occupation. Farming is associated with a range of physical and Psychological health risks because of the hard work under challenging conditions. Studies on Psychological health in farming communities around the world have identified several common risk factors, namely: commodity prices, debt, climate change, drought, overwork, government regulations, isolation, role conflict, time pressure, and poor housing.

It has been shown that chronic stressors have a major influence on well-being and health. Particularly, stress is associated with an increased prevalence of mental disorders, such as depression and anxiety. Stress has dominated the literature as one of the most broadly researched psychosocial constructs, mainly in the work-related stress area. Work-related stress is defined as a conflict when the demands of work are high, and the worker cannot manage, control, or cope with that stress .For farmers in particular, the advent of future climate change means that their job will become even more stressful .Williams reported that chronic stress among farming communities might lead to physical problems (e.g., headaches, sleep problems), Psychological problems (e.g., anxiety, anger, depression), and cognitive issues (e.g., memory loss, inability to make decisions). Farmers have also been more likely to report that life was not worth living than non-farmers. Psychological problems among farmers can affect their lives in different ways, and the impact of stress factors are varied among them. These include less interest in pleasure, less concentration, loss of appetite, weight change, tiredness, irritability, problems sleeping, fatigue, loss of control, and anxiety Also, loss of selfesteem, withdrawal from social activity, relationship breakdown, forgetfulness, loss of temper, relaxation problems, feeling blue, and substance abuse have been reported .A danger of burnout and exhaustion is possible with all these symptoms. Burnout is a gradually developing disorder that may consist of physical and mental exhaustion, a cynical attitude towards work, and a reduction in self-esteem.

Most importantly, mental disorders have been identified as one of the key risk factors for suicide attempts among farmers. High suicide rates among farmers, farm manager and agricultural laborer have been reported in several studies, which is considered one of the most serious concerns affecting some farming communities.

Review:

Berkowitz and Perkins (1988) ^[2] found that farm women who are in conflict with their husbands about farm roles, or are unhappy with their marriages, are more likely to report stress related health symptoms. Female farmers whose husbands worked more hours on the farm reported higher depressive symptoms. Farm women's depressive symptoms have also been found to be positively associated with perceived racial or ethnic discrimination and family conflict Alston *et al.* (2013) found a significant increase in women's work hours reflected their emotional distress; also that farm women are more likely to talk about their partner's health and ignore their own. Pattnaik *et al.* (2015) ^[7] also described the feminization of agriculture as the feminization of agrarian distress.

Pesticide exposure, economic hardship and worrying about finances has often been identified as significant risk factors for female farmers' Psychological Health This may be a result of women undertaking additional on-farm work because of a reduction in farm paid labour. Carruth and Logan (2005) [5] found that women were more likely to report depressive symptoms if they reported driving a tractor, using pesticides, and if they had a recent farm-related injury. Beseler et al. (2012) [3] found an increase in the risk of depression among women with a history of pesticide poisoning. Lu examined pesticide exposure based on the duration of pesticide use amongst Philippines farmers, and reported the mean duration of pesticide exposure of 14.2 years for males and 15.4 years for females, resulting in mental and physical abnormalities in 5.4% of males and 13.3% of females. In addition, a lack of family support and listening to loud machines were also predictors of poor female Psychological Health Alpass and collegues (2009) [1] found that farm women experienced higher levels of stress in trying to understand new farming

Age of farmers and the association with Psychological Health issues has been discussed in-depth in the literature. Overall, younger farmers experienced higher levels of stress-related symptoms]. This was most likely associated with higher debt levels. However, Çakmur (2018) [4] found that the frequency of depressive symptoms was higher among farmers who were 35 years or older. It has also been found that there are more mental impairments observed with aging farmers]. Polain *et al.* (2019) [8] found that older farmers felt an irresistible sense of loss during prolonged drought compared with younger farmers. Scarth *et al.* (2017) [9]. found a farmer's depressive symptoms were not significantly related to their age. In addition, lower education levels, being married and having marital stress and not living in a joint family,were associated with poorer farmer Psychological Health.

The association with farm type (system used—such as organic farming and industry type) was also a considerable focus in the literature .A study on comparing the self-reported psychological health of workers on organic and conventional horticultural farms by Cross *et al.* (2009) showed no significant difference. However, using scores from the Short Depression Happiness Scale, organic farmers were significantly happier than conventional farmers. Similar self-reported questionnaire survey by Khan *et al.* (2002) ^[6] on 200

conventional and 157 organic farmers in Indiana, USA, found conventional farmers demonstrated a significantly higher frequency of neurological symptoms and depression problems. Similar results were found in Australian irrigatio .However, Brigance et al. (2002) indicated that some of the risk factors that affect the Psychological Health of organic farmers—e.g., economic insecurity, long hours of work, social isolation, and unpredictable weather conditions—are the same as the mental risk factors for conventional farmers. A recent qualitative study by Soto Mas et al. (2016) on health issues in organic farming argue that although exposure to hazardous pesticides is lower amongst organic farmers, organic farming mostly relies on a few people performing a lot of tasks for cultivation, harvesting, and distribution. This issue can increase psychological and physical risk factors for organic farmers.

Methodology

Research Design: Exploratory study was carried out in field practice area of the Maheswaram Mandal, Ranga Reddy District

Locale of the study: Sample was identified from the adopted villages namely Pendyala, Kalvakol, Subhanpura, Kollapadkal and Rama chandraguda (5) of Maheshwaram mandal, RR District, Hyderabad.

Sample size: 160 farm women from 5 villages formed the sample of the study

Tool: Psychological Vulnerability scale developed by AICRP- Human Development, PJTSAU, Hyderabad. The scale was tested for its reliability and validity and then administered to the sample.

Results and Discussion

 Table 1: Demographic profile

S. No	Attributes	Options	Frequency	Percentage
		15-20	3	2%
1	A ()	21-30	38	24%
1.	Age (years)	31-50	80	50%
		51 and Above	39	24%
	Candan	Male	0	0
2.	Gender	Female	160	100%
		Illiterate	104	65%
		Primary	7	4%
		Secondary	18	11%
3.	Ed	High school	16	10%
٥.	Education	Inter	9	6%
		Degree	6	4%
		PG	0	0
		Ph d	0	0
		Farming	121	76%
		Business	9	6%
4.	Occupation	Govt /Pvt Employee	3	2%
	_	House wive	20	12%
		Others	7	4%
		OC	45	28%
5.	Caste	OBC	72	45%
		SC/CT	43	27%
		Married	153	96%
6.	Marital Status	Unmarried	0	0
0.		Divorce	0	0
		Widow	7	4%

With regard to age, out of 160 women, 3 (2%) were in the age group of 15-20 yrs, 38 (24%) were in the age

- group of 21-30 yrs, 80 (50%) were in the age group of 31-50 yrs and 39 (24%) were in the age group of 51 and above.
- With regard to gender 160 (100%) were women.
- With regard to education, out of 160 women, 104 (65%) were Illiterate, 7 (4%) completed primary education, 18 (11%) completed secondary education, 16 (10%) were completed High School, 9(6%) completed inter, 6(4%) were Degree.
- With regard to occupation, out of 160 women, 121 (76%) were fully involved in agricultural activities, 9 (6%) were involved in Business, 3 (2%) were Govt. Employees, 20 (12%) were involved in House activities and 7(4%) were other activities.
- With regard to caste 45(28%) were OC, 72 (45%) were under BC category and 43(27%) were under SC/ST category.
- With regard to Marital status 153(96%) were married and 7(4%) were Widows.

S. No	Attributes	Cotogowy	7	Yes		No		
5. NO	Attributes	Category	Frequency N	Percentage %	Frequency N	Percentage %		
		High/ Good	34	21%	126	79%		
1.	Sleep issues	Average	110	69%	50	31%		
		Low / Poor	16	10%	144	90%		
		High/ Good	17	11%	143	89%		
2.	Anxiety	Average	136	85%	24	15%		
		Low / Poor	7	4%	153	96%		
		High/ Good	5	4%	155	96%		
3. Depr	Depression	Average	151	94%	9	6%		
		Low / Poor	4	2%	156	98%		
		High/ Good	23	14%	137	86%		

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Table 2: Psychological Vulnerability

 The above table depicts the Psychological Vulnerability of Farm women.

Average

Low / Poor

Stress

4.

- With regard to Sleep issues, out of 160 Farm women, 69% were in average, 21% exhibited good and only 10% showed poor Sleep problems.
- With regard to Anxiety, out of 160 Farm women, 85% were in average, 11% exhibited good and only 4%
- showed Poor in Anxiety.

26

157

84%

2%

• With regard to Depression, out of 160 Farm women, 94% were in average, 4% exhibited good and only 2% showed Poor in Depression.

16%

98%

 With regard to Stress, out of 160 Farm women, 84% were in average, 14% exhibited good and only 2% showed poor in Stress levels..

 Table 3: ANOVA-age wise differences in dimension of Psychological Vulnerability

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	471.614	35	13.475	1.613	.030*
Anxiety	Within Groups	1027.304	123	8.352		
	Total	1498.918	158			
	Between Groups	899.519	35	25.701	1.120	.319
Depression	Within Groups	2823.538	123	22.956		
	Total	3723.057	158			
Stress	Between Groups	613.124	35	17.518	1.425	.082
	Within Groups	1512.247	123	12.295		
	Total	2125.371	158			

With regard to age wise differences in dimensions of Psychological Vulnerability, the study found that in Psychological Vulnerability dimensions, i.e, Anxiety (Between Groups, within Groups and in Total) significant differences found. Depression and Stress could be stated that there were no significant differences in Psychological Vulnerability dimension with regard to age.

Table 4: ANOVA Education wise differences in dimension of Psychological Vulnerability

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	37.039	6	6.173	.642	.697
Anxiety	Within Groups	1461.879	152	9.618		
	Total	1498.918	158			
	Between Groups	128.148	6	21.358	.903	.494
Depression	Within Groups	3594.909	152	23.651		
	Total	3723.057	158			
	Between Groups	82.775	6	13.796	1.027	.410
Stress	Within Groups	2042.596	152	13.438		
	Total	2125.371	158			

The data on Psychological Vulnerability was analyzed with ANOVA to find out that education wise differences in Psychological Vulnerability dimension scores. The results of the analysis presented in the table show that there were no significant educational differences in any of Psychological

Vulnerability dimensions, Anxiety, Depression and Stress as the calculated f value and p value more than 0.05 level of significance. Hence the study concludes that educational differences in Psychological Vulnerability were not found.

Table 5: ANOVA Occupation wise differences in dimension of Psychological Vulnerability

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	98.858	4	24.715	2.718	.032*
Anxiety	Within Groups	1400.060	154	9.091		
	Total	1498.918	158			
	Between Groups	144.237	4	36.059	1.552	.190
Depression	Within Groups	3578.819	154	23.239		
	Total	3723.057	158			
	Between Groups	75.889	4	18.972	1.426	.228
Stress	Within Groups	2049.482	154	13.308		
	Total	2125.371	158			

The above table showed on Psychological Vulnerability was analyzed with ANOVA to find out that Occupation wise differences in Psychological Vulnerability dimension scores. The results represented that there was significant occupational difference in Psychological Vulnerability dimensions with

regard to Anxiety. Depression and Stress as the calculated f value and p value more than 0.05 level of significance. The study concludes that women with only agriculture as occupation tend be more anxious than others.

Table 6: ANOVA Caste wise differences in dimension of Psychological Vulnerability

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	25.469	3	8.490	.890	.448
Anxiety	Within Groups	1468.405	154	9.535		
	Total	1493.873	157			
	Between Groups	150.582	3	50.194	2.232	.087
Depression	Within Groups	3462.918	154	22.486		
	Total	3613.500	157			
	Between Groups	67.241	3	22.414	1.696	.170
Stress	Within Groups	2035.619	154	13.218		
	Total	2102.861	157			

The data Indicated on Psychological Vulnerability was analyzed with ANOVA to find out that caste wise differences in Psychological Vulnerability dimension scores. The results of the analysis represented that there were no significant caste

differences in Psychological Vulnerability dimensions with regard to Anxiety, Depression and Stress as the calculated f value and p value more than 0.05 level of significance.

Table 7: ANOVA Income wise differences in dimension of Psychological Vulnerability

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	19.956	4	4.989	.515	.725
Anxiety	Within Groups	1501.488	155	9.687		
	Total	1521.444	159			
	Between Groups	32.282	4	8.070	.334	.855
Depression	Within Groups	3747.662	155	24.178		
	Total	3779.944	159			
	Between Groups	55.713	4	13.928	1.029	.394
Stress	Within Groups	2097.262	155	13.531		
	Total	2152.975	159			

With regard to income wise differences in Psychological Vulnerability scores, the study reveals that in Anxiety,

Depression and Stress dimension no significant differences were found.

Table 8: Regression of Independent variables on Dependent variable Anxiety

Model	Unstand	dardized Coefficients	Standardized Coefficients		S:a
Model	В	Std. Error	Beta	ι	Sig.
Age	.031	.015	.203	2.138	.034*
Education	.016	.204	.008	.078	.938
Occupation	.110	.215	.049	.511	.610
Caste	.194	.369	.043	.525	.601
Income	.230	.289	.064	.796	.427

a. Dependent Variable: Anxiety

With regard to impact of independent variables age, education, occupation, caste and income on dependent variable anxiety, the study concludes age to be an influencing

factor on anxiety that means as age increases anxiety was also increasing.

Table 9: Regression of Independent variables on Dependent variable Depression

Madal	Unstandardized Coefficients		Standardized Coefficients	4	C!~
Model	В	Std. Error	Beta	· ·	Sig.
Age	.043	.023	.179	1.886	.061*
Education	148	.319	047	464	.643
Occupation	.139	.335	.040	.414	.679
Caste	.872	.575	.124	1.515	.132
Income	104	.450	018	230	.818

a. Dependent Variable: Depression

With regard to impact of independent variables age, education, occupation, caste and income on dependent variable Depression, the study concludes age to be an

influencing factor on Depression that means as age increases Depression was also increasing.

Table 10: Regression of Independent variables on Dependent variable Stress

Model	Unstand	ardized Coefficients	Standardized Coefficients	4	C:~
Model	В	Std. Error	Beta	ı	Sig.
Age	.020	.018	.112	1.165	.246
Education	.055	.245	.023	.223	.824
Occupation	.271	.257	.102	1.054	.294
Caste	.375	.442	.070	.849	.397
Income	.278	.345	.065	.806	.422

a. Dependent Variable: Stress

With regard to impact of independent variables age, education, occupation, caste and income on dependent variable Stress. Hence, the study concluded that there were no significant differences found.

Conclusion

Works about counseling were extended to include multiinstitutional situations. These showed increasing concern with the personal interaction between the counselor and the person counseled. It can be used for adults who do not have serious problems but need to talk with a trained helpful person. Such interaction as a process of self-discovery and helpful to the elderly. The Counselling center resolve the Psychological problems. So we are planning to establish one councelling Centre in the adopted villages.

References

- Alpass F, Flett R, Humphries S, Massey C, Morriss S, Long N. Stress in Dairy Farming and the Adoption of New Technology. Int. J Stress Manag. 2009; 11:270-281. doi: 10.1037/1072-5245.11.3.270.
- 2. Berkowitz A, Wesley Perkins H. Stress among farm women: Work and family as interacting systems. J. Marriage Fam. 1988; 46:161. doi: 10.2307/351874.
- 3. Beseler C. Ph.D. Thesis. Colorado State University; Fort Collins, CO, USA. Diagnosed Depression and Low, Intermediate, and High Pesticide Exposures in Iowa and North Carolina Farm Applicators and Their Spouses Enrolled in the Agricultural Health Study, 2012.
- 4. Çakmur H. Health Risks Faced by Turkish Agricultural Workers. Sci. World J. 2018; 2014:1-8. doi: 10.1155/2014/185342.
- Carruth A., Logan C. Depressive Symptoms in Farm Women: Effects of Health Status and Farming Lifestyle Characteristics, Behaviors, and Beliefs. Publ. Health Promot. Dis. Prev. 2005; 27:213-228. doi: 10.1023/A:1015206224421

- 6. Khan *et al.* Schizophrenia: genes and environment. Biol Psychiatry. 2002; 47(3):210-20.
- 7. Pattnaik I, Lahiri-Dutt K, Lockie S, Pritchard B. The feminization of agriculture or the feminization of agrarian distress? Tracking the trajectory of women in agriculture in India. Asia Pac. Econ. 2015; 23:138-155. doi: 10.1080/13547860.2017.1394569
- 8. Polain JD, Berry HL, Hoskin JO. Rapid change, climate adversity and the next 'big dry': Older farmers' mental health. Aust. J Rural Health. 2019; 19:239-243. doi: 10.1111/j.1440-1584.2011.01219.x.
- 9. Scarth RD, Zwerling C, Lewis MQ, Burmeister LF. Depression and risk factors among Iowa farmers. J. Agromedicine. 2017; 3:207-216. doi: 10.1300/J096v04n03_04.
- 10. Williams R. The ongoing farm crisis: Health, mental health and safety issues in Wisconsin. Rural Ment. Health. 2001; 26:15-17.