A study to Assess Occupational Stress among the Farmers of Mahbubnagar District of Telangana, India

ABSTRACT

Aim: The main aim of the study was to analyze the occupational stress of the farmers.
Study design: The study followed Ex post facto research design.
Place and Duration of study: The current study was carried out purposively in Mahbubnagar district of Telangana during the year 2020-21 because the farmers of Mahbubnagar district are far behind in terms of scientific knowledge of agriculture and the productivity of the crops is being constant despite the huge developments in the technology interventions in the country.
Methodology: The purposive sampling technique was administered and one mandal namely Midjil was selected because most of farmers grow cotton and are far behind the technological interventions and data was collected from a randomly drawn sample of 170 respondents by personal interview method through structured interview schedule.
Results: The results of the study revealed that 70.59% respondents were having medium level of overall occupational stress followed by high stress (15.29%) and low stress level (14.12%) with high level financial stress (68.82%), medium level of weather stress (57.64%), medium level of work overload stress (70.00%), medium level of other people as stress (74.11%), medium level of farming hassles stress (64.70%).
Conclusion: It was concluded to focus on the occupational stress while promoting appropriate strategies with training programmes, demonstrations, develop and regulate policies like minimum support price, and provide subsidies on inputs, provision for storage facilities to avoid distress sale etc. from the state government.

Keywords:Occupational stress, financial stress, weather stress, farming hassles, work overload stress, other people as stress.

1. INTRODUCTION

Younger farmer especially, those younger than 50, report more stress than older farmers. Farmers in dairy or mixed (for e.g., grain and livestock) operation report higher stress than those grains only. Farmers employed in off farm jobs report more stress than full time operation. Typically, situations that are beyond our influence and have a prolonged duration tend to generate the most stressful conditions. The occupational stress process refers to the ways in which sources of stress in the work environment (stressors) can lead to psychological, behavioral, or physiologic manifestations of stress (strain), and to longer-term health effects (Landsbergis *et al.,* 2018).However, today farming as an occupation is one ofthe most dangerous work environments in terms of injuries, diseases due to hazardous situations and different physical, biological, chemical, psychological and sociological factors.Farmers exhibit an array of risk factors for poor mental health and more specifically, suicidal risk. These risk factors are compounded by a demanding occupation that makes it difficult to prioritize treating mental health problems as well as a farming culture that discourages acknowledging and seeking help for psychological problems(Belokar and Jitendra, 2022).The demands of the farming occupation, the nature of farming culture, and the risk factors farmers are prone to experiencing combine to put farmers at high risk for death by suicide.Studies indicate that farmers trying to die by suicide are most likely to use means to which they have easy access (Behere&Bhise, 2009).

Rural youth and women make up a significant portion of the population in developing countries, and they experience high unemployment rates. Engaging kids in agricultural activities is a common suggestion, but putting it into practice has proven difficult. After suffering substantial obstacles in finding farming-related or other labor, as well as access to land, information, money, and other services in their communities, rural youth in many developing nations are actively seeking employment prospects in

metropolitan regions (Thompson et al., 2023). The agricultural sector's enormous economic importance and great potential for increasing production provide major opportunities for developing countries to create avenues for youngsters to start a farm or small business.
Unfortunately, little research has been done on suicide intervention and postvention practices for farmers, despite farmers being at high risk for suicide. However, given that social support and sense of belonging were found to be protective factors against depressive symptoms and suicidal ideation in farmers, increasing social connection, support, and a sense of belonging in farmers is an important intervention (Anjali and Kanwaljit, 2018).Though there are many factors cause stress to farming people the factors such as Financial stressors, Weather Stressors, Work Overload Stressors, Other People as Stressors, Farming Hassles were considered for the study.

Objective of the study:
To study assess occupational stress among the farmers of Mahbubnagar district of Telangana state.

2. MATERIAL AND METHODS

The study was conducted in Mahbubnagar district of Telangana, during the year 2020-2021. The farmers of Mahbubnagar district are far behind in terms of scientific knowledge of agriculture and the productivity of the crops is being constant despite the huge developments in the technology interventions in the country. Besides it was found that occupational stress was being increased in cotton growing farmers and in Mahbubnagar most of the farmers grow cotton in their fields and in order to study the level of occupational stress this district was selected. And the farming practiced in Mahbubnagar district is mostly rainfed and is very much vulnerable to climatic variability. Ex-post facto research design was used in the present research study. Out of 15 mandalas of Mahbubnagar district one Mandal i.e., Midjil was selected purposively for the study because most of farmers grow cotton and are far behind the technological interventions. MidjilMandal consists of 28 villages, out of which 5 villages namely Kothapalle, Singamdoddi, Donur, Munnanur, Boinpalle were selected purposively. From each selected villages 5% farmers i.e., from Kothapalle village out of 491 farmers 25 farmers, from Singamdoddi village out of 547 farmers 27 farmers, from Donur village out of 867 farmers 43 farmers, Munnanur village out 454 farmers 23 farmers, Boinpalle village out of 1038 farmers 52 farmers were selected randomly, were taken by applying proportionate random sampling. Hence, the study sample comprised 170 farmers. Data was collected quantitatively using structured interview schedule conducted through personal interviews, and the analysis utilized appropriate statistical methods such as mean, standard deviation, frequencies, and percentages. The findings were meaningfully interpreted and relevant conclusions were drawn.

3. Results and Discussion

FINANCIAL STRESS:It is found from the Table 1 thatmajority of the respondents (68.82%) had high-level financial stress, followed by medium-level financial stress (31.18%) and low-level financial stress (0%). The classification of respondents was done into three categories based on mean and standard deviation.This high level of financial stress is majorly due to insufficient cash flows to meet financial obligations or for daily necessities, not availing loans sufficient loans from the banks, crop failure, high rising daily expenses, increase in cost of cultivation, low minimum support price, marketing losses.Government should provide more subsidies so as to encourage farmers and reduce their financial debt burden. These findings are in line with Kshirod *et al.,* (2015)
Weather stress:The findings presented in Table 1clearly indicatedthatmajority (57.65%) were in the category of medium level weather stress, followed by high level stress (21.76%), and low-level weather stress (20.59 %).The weather stress is mainly due to delay in planting or harvesting due to weather, insufficient irrigation facilities during critical stages of crop and adverse weather effects, crop loss due to weather, hail, not enough and frost.Extension officers need to organize training programs on management aspectsand motivate farmers to do diversified farmers. These findings were in conformity with the results of Ashalatha (2016).

Table 1. Distribution of farmers according to their stress level (N=170)

Variables/Category	No.	%	Mean	S.D.
Financial stress				
Low	0	0	**24.43**	**11.61**

Medium	53	31.18		
High	117	68.82		
Weather stress				
Low	35	20.59	**19.55**	**3.25**
Medium	98	57.65		
High	37	21.76		
Work overload stress				
Low	28	16.47	**22.65**	**3.37**
Medium	119	70.00		
High	23	13.53		
Other people as stress				
Low	19	11.18	**15.96**	**2.04**
Medium	126	74.12		
High	25	14.70		
Farming hassles				
Low	34	20.00	**17.73**	**2.35**
Medium	110	64.70		
High	26	15.30		

Work overload stress: the findings presented in Table 1 clearly indicated that majority(70.00%) had a medium level of work overload stress, followed by low (16.47%), and high level of work overload stress (13.53 %) respectively.Work overload stressors include factors like increased work load at peak times, pressure to take the right decisions during farming operations, long working hours, worrying about market condit0ions, having to make decisions without all necessary information.Initiatives should be taken to develop equipment's suitable for small and marginal farmers and make them available through custom hiring centers. These findings are in line with the results of Dhonadhiram (2018).

Other people as stress :It is found from the Table 1that majority (74.12%) experienced a medium level of stress, followed by high level of stress (14.70%) and low level of stress (11.18%) respectively.The factors that act as stressors in this category are dissatisfaction with the farm income by the family members, major changes in financial state, spending too much of money for entertainment etc., by the family members.Extension officials should conduct exposure visits and trainings to increase yields and productivity and motivate farmers in doing farming. Farmers are advised to develop support structures like associations, clubs, societies so as to share their problems, knowledge, solve their own problems, building collective actions for the common goal. These findings are in line with the findings ofParvathamma (2016).

Farming hassles :The findings presented in Table 1 shows that the majority of the respondents (64.70%) fell into the medium level of stress category, followed by low level of stress (20.00%) and high level of stress (15.30%).The factors that act as farming hassles are equipment breakdown during peak time, having to travel to long distance for goods, services, shopping, problem with weeds and insects, sickness in livestock if any, loss of farm help when needed the most.Farmers need to be empowered with skills and modern scientific knowledge by attending various trainings, exposure visits and by contacting extension personnel as the sustainable agriculture thrives on re-investment & restructuring. These findings were in line with the results of Gavhane, A.V. 2012.

Overall occupational stress among the respondents: The overall occupational stress was attained by summing up the scores of the five components viz., financial stress, weather stress, other people as stress, work overload stress, farming hassles. The classification of respondents was done into three categories based on mean and standard deviation.

Table 2 clearly indicated that, majority (70.59%) had medium stress, followed by high (15.29%) and low (14.12%) levels of overall occupational stress. Medium to high level of occupational stress of the respondents was observed in the study area followed by low leve of occupational stress. This indicates that medium amount of stress might be the result of indebtedness, medium amount of annual income

from the member of the family were not much satisfied, small and semi-medium land holding on which farmers cannot make much improvements. And the lack of economic motivation, risk orientation and scientific orientation were also the reason behind the increasing stress level. And the education level where farmers need to give much importance because to be in pace with the present advancements in the farming sector. And the awareness regarding the mass media exposure and extension contact has to be increased in order to reduce the stress level as much as possible.Farmers who qualify for institutional credit are encouraged to steer clear of borrowing funds from private money lenders and, instead, opt for institutional credit, given that the interest rates are substantially lower for institutional credit. The findings are in accordance with Ramesh and Madhavi (2009) and Kshirod *et al.,* (2015).

Table 2 Distribution of respondents according to their occupational stress level among the respondents

Category	Frequency	Percentage	Mean	S.D.
Low stress (up to 0.54)	24	14.12	0.58	0.04
Medium stress (0.55 to 0.61)	120	70.59		
High stress (above 0.61)	26	15.29		

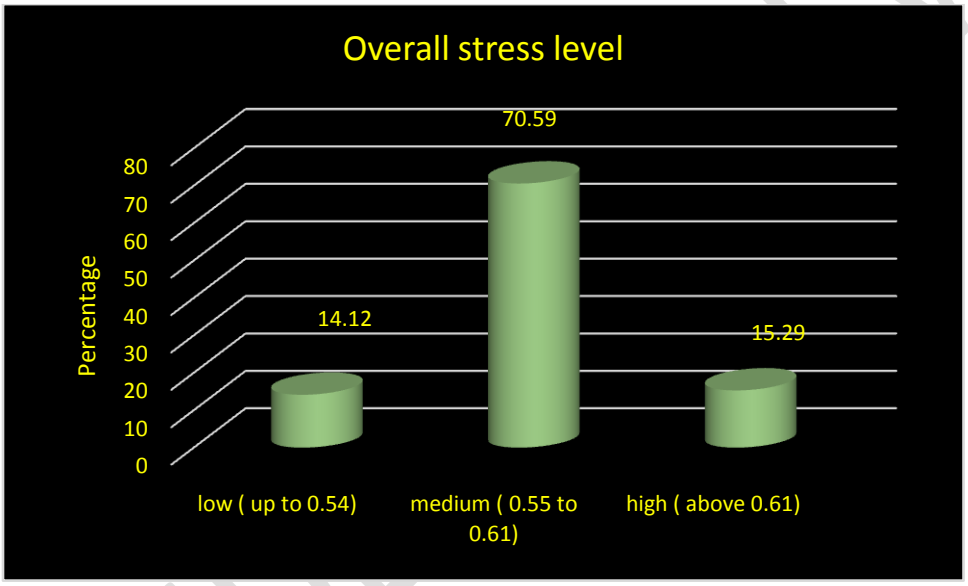

Figure1: Distribution of respondents according to overall stress level

4. CONCLUSION:

The findings revealed that majority of the farmers had medium level of occupational stress. The possible reasons for that majority was because majority of the farmers had medium levels of weather stress, work overload stress, other people as stress, farming hassles and low level of financial stress. Hence, it is imperative to focus on the occupational stress while promoting appropriate strategies with training programmes, demonstrations, develop and regulate policies like minimum support price, and provide subsidies on inputs, provision for storage facilities to avoid distress sale etc. from the state government.

REFERENCES

- Anjali N and Kanwaljit K. Stress coping strategies used by students of state agricultural universities (SAU`s). Indian Journal of Extension Education. 2018. 54(1); 161-167.
- Ashalatha KV and Das C. An Overview on Farmers suicidal tendency in India. International Journal of Management Humanities and Social Sciences. 2016.1(1):19-32.
- Beehr TA and Neman JE. “Job stress, employee health and organizational effectiveness: A facet analysis, model and literature review” personal psychological measurement. 1978.31, pp: 665-669.
- Behere C, Bhise M. Farmer’s suicide – Across culture. Indian J Psychiatry. 2009. 51:4.
- Belokar, Jitendra D. "A Study to Assess Occupational Stress among Farmers Residing in a Selected Rural Area of Rahata Taluka, Ahmednagar District." *Indian Journal of Public Health Research & Development* 13.1 (2022).
- Burrow, S. Occupational stress: The union perspective. Paper presented at the Academy of the Social Sciences Australia Workshop on Occupational Stress, Adelaide, South Australia, Australia. 2002.
- Dhonadhiram CS. Farming distress orientation among farmers in Lathur district. M.Sc. (Agri.) Thesis. Vasantrao naik marathwada krishi vidyapeeth, Parbhani.2018.
- Gavhane, AV. Farmers suicide in Parbhani and Seed District of Maharashtra State: Case studies. M Sc. Thesis (unpub.) MKV, Parbhani. 2012.
- Kureshi JS and Somasundaram KV. Assessment of occupational stress among farmers in Aurangabad district, Maharashtra. International Journal of Community Medicine and Public Health. 2015. 5(4):1434-1440.
- Landsbergis,PA, Dobson M, Lamontagne AD, Choi B, Schnall P, Baker DB. Occupational Stress. Publisher: Oxford University Press. 2018. DOI:10.1093/oso/9780190662677.003.0017.
- Lauren DeMartini, Colin Gillespie, Smita Narula, Jimmy Pan and Sylwia Wewiora. Every Thirty Minutes:Farmer Suicides, Human Rights, and the Agrarian Crisis in India. Report of Center for Human Rights and Global Justice at NYU School of Law. http://chrgj.org/wp-content/uploads/2012/10/Farmer-Suicides. pdf.2011.
- Mishra KK, Gupta N, Bhabulkar S. Sociodemographic profile of suicide attempters among the rural agrarian community of central India. Ind psychiatry J. 2015. 24(2):185-8.
- Parvathamma, GL. Farmers Suicide and Response of the Government in India-An Analysis. *International Organization of Scientific Research* Journal *of Economics and Finance.*2016.7(3):01-06.
- Ramesh A, Madhavi C.Occupational stress among farming people, Annamalai India. The Journal of Agricultural Sciences. 2009. 4(3): 115-125.
- Thompson R, Hagen BN, Lumley MN, Winder CB, Gohar B, Jones-Bitton A. “An Incredible Amount of Stress before You Even Put a Shovel in the Ground”: A Mixed Methods Analysis of Farming Stressors in Canada. Sustainability. 2023 Apr 7;15(8):6336.