

A Correlational Analysis within Psychological Well-Being, Environmental Attitude, Occupational Stress and Change Proneness among Professional Organic Farmers of Pune District (N-150)

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ABSTRACT: The purpose of the study is to find an association of change proneness and psychological well-being of the organic agricultural population. For this study, two instruments have been considered i.e. Psychological Well-being Scale (2012) by Sisodia.D.S and Choudhary.P. Second, Environmental attitude by Haseen Taj(2001), Occupational stress by Naik.D (2019) and forth one is Change Proneness(2010) by Pareek.U. For the present research sample has been selected by purposive sampling technique on 150 professional organic farmers from Pune district of Maharashtra state, India. Results indicated that psychological well-being, Environmental Attitude, Occupational Stress and Change Proneness in the professional organic farmers have significantly correlated with each other.

Keywords; psychological well-being, Environmental Attitude, Occupational Stress, Change Proneness, professional organic farmers

I. INTRODUCTION

‘God Said, “I Need Somebody Strong Enough To Clear The Trees And Yet Should Be Gentle Enough To Tame The Lambs And Somebody To Seed, Weed, Feed, Breed ” So God Made A Farmer.’

The wonderful statements of ‘So God Made A Farmer’ is a speech of Radio Broadcaster Paul Harvey in 1978. The speech was given as an extension of ‘The Genesis Creation Narrative Referring To God’s Actions On The 8th Day Of Creation’(Harvey.P.,1978)

Agricultural practices in the Vedic period started from c.1500 BC and ended in c.500 BC, corresponding to the last period of the Chalcolithic years and Iron Age in India. The possible information acquired from north-western parts of India to the entire alluvial of the river Ganga(Buddha,1970).

**TABLE 1
 ORGANIC AGRICULTURE AND KEY INDICATORS AND TOP COUNTRIES(FiBL,2021)**

INDICATORS	WORLD	TOP COUNTRIES
Countries with Organic activities	2019-187 Countries	
Organic Agricultural land	2019-72.3 million hectares (1999-11 million hectares)	Australia-35.7 million hectares Argentina-3.7 million hectares Spain-2.4 million hectares

Organic share of total agricultural land	2019-1.5%	Liechtenstein- 41.00% Austria-26.1% SaoTome & Principe-24.9%
Wild collection & further non-agricultural areas	2019-35.1 million hectares (1999- 4.1 million hectares)	Finland-4.6million hectares Zambia-3.2million hectares Namibia-2.6 million hectares
Producers	2019-3.1 million producers (1999-200'000 producers)	India-1'366'226 Uganda-210'351 Ethiopia-203'602

Source: FiBL Survey 2021, based on National data sources data from certifiers & IFOAM-Organics International

According to FIBL and IFOAM (2021), about 1 '366' 226 hectares of land is under organic farming in India. Growth of the land has been started from 42,000 ha under certified organic farming during 2003-04, the organic agriculture has uplifted almost 29 fold during the last 5 years.

Maharshi Parashar, grandson of Maharshi Vashista, the book consists of two hundred and forty-three verses. Moreover, it is the theory of agriculture exhibited in such a way that the farmers would benefit by its implementation. In the Krishni Parasher, theory explores all aspects about plant life such as organic farming techniques, crop management, holistic farming, or rather sustainable use of available resources etc. (Maheshwari, 2018).

According to Diener and Smith (1999), Psychological or subjective well-being as a construct, encompassing four specific and distinct components including, Pleasant or positive well-being (e.g., joy, enthusiasm, happiness, mental well-being), Unpleasant affect or psychological distress (e.g., guilt, shame, Sadness, anxiety, worry, anger, stress, depression), Life satisfaction (evaluation of one's life) Domain or situation satisfaction (e.g., work, family, leisure, health, finance, self).

As the income gap increases to expand individual's feelings of deprivation which further worsen their psychological well-being that is undoubtedly responsible for the psychological basis for social conflict and amplified risk (Liu, 2021).

According to Goldberg and Williams (1998) The General Health Questionnaire which is a measure of self reported psychological distress recently. Correlations between farmers' attitudes and behavior showed that attitudes to farm productivity, efficiency and tidiness dominated management decisions to the exclusion of wildlife consideration.

As per Vogel.S. & Vienna (2013) investigations on farmers' environmental attitudes. For this study a survey of 2095 farmers in Austria taken which was based on a complex model of environmental attitudes in the agricultural sector has been developed. Using path analysis this model was confronted with the survey data both to test it and to explore some major questions of the current environment debate. An important finding is the strong influence that practical knowledge and personal experience have on the farmers' behavior. Another major result of the model in comparison with other studies in the strong relationship derived between attitude and behavior.

Research on stress in Farmers which describe occupational stress in farming. For this study a postal survey of farmers in the region of South West of England was conducted. Results show extreme levels of occupational stress in farming families i.e. on the General Health questionnaire (GHQ) 35% of respondents scored positively whereas female participants revealed significantly higher scores than males. A significant proportion of respondents also showed elevated levels of anxiety and depression as measured by the hospital Anxiety scale (HAD) Indices of psychological distress were associated with health issues and family conflicts though the major sources of stress. These sources were perceived by the farming families as coping with new legislation farming families who reported a greater number of stressors (Booth.N.J., & Lloyd. K., 2000).

Change proneness is a likelihood to accept new things, novel to be assimilated in their style of work. Change is meaningful in relation to some situations. Change is a movement, a process of alteration by relinquishing an already acquired position to acquire a new position (Pareek, 2002).

Moreover, researchers explored the strength of natural resources management (NRM) programs, which are necessary to reach a large number of farmers at the non-conventional farm which were aimed at well-being intervention strategies. However, it has developed to locate environmental degradation. Hence, NRM can influence the well-being of farmers. For this project qualitative Meta synthesis to re-analyse studies patterns were used to examine several social dimensions of NRM in Australia which generates a theoretical background of the potential solutions. These solutions address differences between NRM and well-being that are intended to describe subsequent empirical work. Importantly, NRM intervention strategies consisted of several necessary components of farmers' well-being i.e. social capital, self-efficacy, social identity, material well-being and health itself (Schirmer et al. 2015)

According to Thomas. H.V. and others (2003) Psychiatric morbidity was not significantly associated with farm type / size in this study farmers reported a lower prevalence of psychiatric morbidity than the general population but were more likely to report thinking that life is not worth living, particularly after, the low prevalence of psychiatric account (adds ration 2.56, 95% CI 1.39 to 4.69) while limited the comparison to rural or semi rural families then this elevated risk was far more visible. to estimate the prevalence of neurotic symptoms in a sample of British farmers, to investigate what farming characteristics are associated with psychiatric.

Farming as a way of life expansion experienced well-being by the farm spouses and or Norwegian farm people are specifically immune to distress. On the farm Farm spouses themselves admired the fresh air, contact with livestock and the freedom and independence on farmwork (Melberg, 2003) unexpectedly, which indicated to several necessary domains of being farming positively.

Research on Health Risks faced by Turkish Agricultural Workers. For observing the biopsychosocial health of the farmer, participants of 177 farmers from 11 central villages in Kars, Turkey, were taken. Results showed that the depression rate among the study group was 62.1%, the incidence of physical health problems was 52.0% and the rate of social isolation was 53.7%. There was a statistically significant difference between the depression scale scorer (lower education levels), having three children and physical condition of the three children and social isolation. This study is providing data which is based on evidence to understand the causality of

health problems in this population as well as in planning the development of public health and veterinary services which are based on local requirements (Cakmur, H, 2014).

AIM OF THE STUDY

To find out psychological well-being, environmental attitude, occupational stress and change proneness among professional organic farmers.

OBJECTIVE OF THE STUDY

To observe correlation of psychological well-being, environmental attitude, occupational stress and change proneness among professional organic farmers

HYPOTHESIS

“Significant relationship will be observed within psychological well-being, environmental attitude, occupational stress and change proneness of professional organic farmers”

Independent Variable

Professional Organic Farmers

Dependent Variables

- Psychological-well-being
- Environmental Attitude
- Occupational Stress
- Change Proneness

SAMPLE SELECTION

In this study purposive sampling technique is used for the procedure of sample selection. The sample of the present study consisted of 150 men of professional organic farmers from Pune district of Maharashtra state, India. Their age range is between 30 to 65 years. All of them have minimum HSC qualification. All farmers should have 3 to 10 acres of farmland as well as should grow edible crops only.

Research Design

Incomplete Within-Groups Design

Tools of the study

1. Psychological Well-Being Scale (Sisodia & Choudhary, 2012)

The scale consists of 50 items in Five Areas— Satisfaction, Efficiency, Sociability, Mental Health and Interpersonal Relation. This scale can be administered on any age group. Present test has reliability 0.87 by test retest method and validity is 0.94.

2. Environmental Attitude Scale- (Taj, 2001)

Present scale contains sixty-one items consisting of six areas of environment such as population explosion, health and hygiene, polluters, wild life, forests, and environmental concerns. This test is for the age group of 14 to 50 years. Present scale has reliability 0.67 by test retest method and validity satisfied. Present scale norms are based on sex, locality, and religion occupational status.

3. Farmer’s Occupational Stress Scale

For present research, Farmer’s Occupational Stress Scale has been developed by the Researcher. The occupational stress scale with 20 items was administered to 50 farmers to determine reliability. Likert’s method of summated ratings was used in this scale. The reliability analysis of data is presented in table 1.

Table 2
Reliability Coefficients of Test
Number of Subjects = 50, Number of Items = 20

Types of Reliability	Reliability Coefficients
Spearman-Brown Reliability	0.8013**
Split-half Reliability	0.8008**

** Significant at .01 level

All the reported reliability coefficients are statistically significant and within ideal range for a scale to be called reliable. The validity of the scale was determined by the LawShe (1975) method and it was found to be statistically significant (0.91).

The A-C study consists of 15 pictures depicting different change situations.

Reliability – The inter-judge reliability of the test was found 0.86, Validity of the test is Rank order correlation was 0.58 and this is significant at 0.01 level. Test is for farmers of all ages.

4. Change Proneness attitude towards change (A-C) for farmers (Pareek, 2002)

The instrument (A-C study) measuring change-proneness is a semi-structured projective technique.

Statistical Analysis

The results are depicted in table below

Table 3
Value of Correlation (r) between Psychological well-being, Environmental Attitude, Occupational Stress and Change Proneness in Group of Professional Organic Farmers (N=150)

	Psychological well-being	Environmental Attitude	Occupational Stress	Change Proneness
Psychological Well-being		.752**	-.735**	.661**
Environmental Attitude	.752**		-.671**	.553**
Occupational Stress	-.735**	-.671**		-.534**
Change Proneness	.661**	.553**	-.534**	

** Significant at .01 level

A perusal of the table indicates that there exists a significant and positive relationship between psychological well-being and environmental attitude of professional organic farmers at .01 level of statistical significance ($r = .752, p < .01$). Similarly, there exists a significant and positive association between psychological well-being and change proneness in professional organic farmers ($r = .661, p < .01$). It was also

observed that there exists a significant but negative correlation between psychological well-being and occupational stress in professional organic farmers ($r = -.735, p < .01$).

A perusal of the table indicates that there exists a significant and negative relationship between environmental attitude and occupational stress in professional organic farmers at .01 level of statistical significance ($r = -.671, p < .01$). A

significant and positive association between environmental attitude and change proneness was also observed in professional organic farmers ($r = .553, p < .01$).

A perusal of the table also indicates that there exists a significant and negative relationship between occupational stress and change proneness in professional organic farmers at .01 level of statistical significance ($r = -.534, p < .01$).

The correlation coefficients show that increase in psychological well-being also results in enhanced environmental attitude and change proneness as well as reduced occupational stress while increased environmental attitude results in superior change proneness and reduced occupational stress in professional organic farmers. A negative association between occupational stress and change proneness indicate that when occupational stress increases change proneness in professional organic farmers decreases significantly.

On the basis of the result it can be said that psychological well-being, environmental attitude, occupational stress and change proneness in professional organic farmers are significantly interrelated, hence correlational hypothesis is accepted.

A perusal of the table indicates that there exists a significant and positive relationship or correlation between change proneness and psychological well-being of inorganic agricultural population ($r = .661, p < .01$). As per statistical analysis, it can be concluded that change proneness and psychological well-being of inorganic agricultural population have significantly associated.

It found that if psychological well-being increases, change proneness also increases. It indicates that, a farmer who consists of high or positive psychological well-being meant life satisfaction, efficiency, sociability, mental health and interpersonal relations that farmer also has high change proneness which meant a attitude towards change may be deemed as a function of an individual's orientation in the continuum extending from the most favorable acceptance of change to the sternest rejection this may be conceived of as a disposition of a person to accept change and may be called change proneness (Parrek. U & Purohit.S,2010).

It can be said that, there exists a significant and high or positive correlation between psychological well-being and change proneness.

The reported findings suggest that the farm workers in this study experience life on the farm as difficult specific conclusions are made on

the basis of the empirical findings as well as suggestions for future policy directions, further research and possible programme interventions. (Thekiso.M.S.2009).

Results strongly support the calls of many organizations to improve delivery of mental health support services to Australian farmers. They also suggest that these strategies are likely to be most effective if they are accompanied by support that focuses on the financial well-being of farmers, such as farm financial counseling and planning, or programs that help farmers diversify economic opportunity both on and off the farm. For those farmers considering leaving farming – whether for retirement or due to financial stress - providing support through the period prior to and during the last phase it found that the poorer well-being was frequently experienced (Schirmer J.,2015).

It was found in the Chinese General Social Survey (CGSS2005) which examines the relationships between social change, social support and the psychological well-being of individuals in both urban and rural areas as well as the role of marital status in Chinese society. Results show that, perception of socioeconomic status, status change and status comparison are more likely to influence psychological well-being than increasing health care costs. (Liu & others, 2021).

II. CONCLUSION

In the present study, correlation within psychological well-being, environmental attitude, occupational stress and change proneness of professional organic farmers have been found significant correlation between them.

The coping inventory for stressful situations. In the research study participants reported relatively poor states of physical health as well as nutritional deficiencies, poor mental health outcomes, poor quality life and lack of primary health education and supportive health infrastructure. Women revealed the highest heart rate and negative mental health outcomes while men revealed higher alcohol intakes. (Vorster et al 2000). The coping inventory for stressful situations. The General Health Questionnaire (Goldberg & Williams, 1988) which is a measure of self reported recent psychological distress. Correlations between farmers' attitudes and behavior showed that attitudes to farm productivity, efficiency and tidiness dominated management decisions to the exclusion of wildlife consideration.

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