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Attitude of Farm Families Towards Gender Equity: Development and Validation of a Scale

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ABSTRACT

Gender equity is the means to achieve gender equalities in farm families. According to their respective needs based on equivalency in terms of rights, benefits, obligations, and opportunities are considered fair in the treatment of farm women and farmers. Thus, it was very essential to measure the favorableness of farm families toward gender equity. It measures to reflect their acceptance and thought process regarding present gender dynamics in their house and farm. The present study focussed to devise an instrument and for that, a Likert's Summated rating technique was used in the year 2022 with a true standardized methodology to construct the attitude towards gender equity. A total of 94 items were constructed by reviewing related literature. Based on the 80 responses from experts, 16 items were screened through item analysis. A split-half technique was used to measure the reliability of the scale and the reliability coefficient was 0.861. The validity of the scale was also proved as per experts' judgments.

INTRODUCTION

Gender dimensions largely remained absent from mid of twentieth-century discussions of agriculture and rural development. However, the first thorough discussion on gender was brought by Ester Boserup (1970) with her 1970 book on Woman's Role in Economic Development. She has drawn explicit attention to the gendered division of labor that arises in both "traditional" and "modern" agricultural systems and to the fact that economic development could not be fully evaluated without the recognition of the hidden contributions of women throughout the world, particularly in the form of unpaid work. Further many evident social scientists have demonstrated the wide range of roles played by men and women in agriculture. Women, especially in many developing countries, comprise the largest percentage of the workforce in the agricultural sector. They play a predominant role and have an important economic contribution to agricultural production. The extent of women involvement remains maximum in operations like transplanting, weeding, harvesting and storing (Nain & Kumar, 2010). Failure to recognize these roles, differences and inequalities affects the effectiveness of agricultural development. Thus, closing the gender gap in agriculture is essential to ensure higher productivity and food security in the nation. In rural societies and particularly in farming communities, the differences and inequalities between farm woman and farmer have been observed in assigned responsibilities, activities undertaken, access to and control over resources, as well as decision-making process. Many strategies are framed and policies drafted to combat these differences to utilize the full potential of farming community. Gender equity doesn't equate one gender with another; instead, it attempts to facilitate equal opportunities for all genders to overcome their historical and social disadvantages by ensuring fairness and justice in the distribution of resources to all genders. Therefore, it is essential to take measures that help to uplift the lagging gender of

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society through measures based on gender equity. Thus, it is equally essential to have some idea about how these gender equity measures are considered by farming community. Thurston (1946) defined attitude as the degree of positive or negative affect associated with some psychological object like symbol, phrase, slogan, person, institution, ideal or ideas towards which people can differ in varying degrees.

Interest in gender and attitudes toward gender equity continues to provide a strong impetus for research and theory building. It is difficult to capture this complexity because most measures of gender are based on a dichotomous approach that merely set women and men in opposition and assumes that people believe that differences between them are normal and natural. Individuals' beliefs about gendered behavior in society are useful for determining people's thinking about equity among women and men, as well as relationships between gender attitudes and other variables of interest. Presently, there are very limited instruments for measuring attitude towards gender equity and therefore this attempt was made to develop a scale to measure attitude of farm families towards gender equity and this is first of its kind in agriculture discipline.

METHODOLOGY

The study was conducted in 2022 using exploratory sequential design with an instrument development model. The study design consisted of instrument development and analysing validity and reliability of developed scale using appropriate statistical methods. The methodology adopted by Pandya (2004); Mittal & Kaur (2021); Sharma & Mudgil (2021); Singh et al., (2021); Gupta et al., (2022); Kumar et al., (2022); Gautam et al., (2022) was followed. For developing statements for scale development after conducting a in-depth literature review, a list of indicators was circulated among 50 extensionists and their opinions were obtained on 10 point continuum to know its appropriateness for the study. The indicator wise frequencies were converted in to a master sheet. Weighted mean and standard error were calculated for each indicator. The values thus obtained were arranged in ascending order. Out of 19 indicators, those having less than 90 per cent value were omitted. In this way, 06 indicators were finalized for the study. With these selected 6 indicators, 94 statements regarding the attitude of farm families toward gender equity were identified. After consulting with experts and discussion among research committee members, items were discarded, revised, and mixed. They were also examined and edited based on criteria suggested by Edward (1957). Thus, a scale with 60 items was included in the study.

Further, the summated rating scale method developed by Likert (1932) was used in the development of the measuring instrument. Item analysis was carried out on 100 subject respondents and their response was taken on five point continuum. It was found that some of the subject have responded very carelessly, misunderstood the directions and not be aware about the concept under present study. Hence, 20 schedules were eliminated. Lastly, 80 schedules were kept for the construction of attitude scale. The score of the respondents was obtained by adding up all scores in the items in the scale. Based on total summated scores, respondents were arranged in descending order. Respondents with highest total score (top 20%) and lowest total scores (bottom 20%) were made into two groups. The two groups provided the criterion group in terms of which item analysis was carried out. The '*t*' test was applied to measure the extent to which a given statement differentiates between the high and low groups

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{{S_H}^2}{n_H} + \frac{{S_L}^2}{n_L}}}$$

Whereas,

X_H = the mean score on a given statement for the high group

X_L = the mean score on the same statement for the low group

X_H^2 = the variance of the distribution of responses of the high group to the statement

S_L^2 = the variance of the distribution of responses of the low group to the statement

n_H = the number of subjects in the high group

N_L = the number of subjects in the low group

If $n_H = n_L = n$

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\sum(X_H - \bar{X}_H)^2 + \sum(X_L - \bar{X}_L)^2}{n\,(n-1)}}}$$

Where,

$$\sum(X_H - \bar{X}_H)^2 = \sum {X_H}^2 - \frac{(\sum X_H)^2}{n}$$

$$\sum(X_H - \bar{X}_H)^2 = \sum {X_H}^2 - \frac{(\sum X_H)^2}{n}$$

The split-half technique was used to measure the reliability of the constructed scale. The 16 statements were divided into two equal halves with 8 odd numbered and 8 even numbered statements. These were administered to 30 farm families (30 men + 30 women) in the non sample area. Each of the two sets was considered as separate scales having two sets of scores. Co-efficient of reliability between the two sets of scores was calculated by Rulon's formula (Guilford, 1954), Content validity test approach was used to test the validity of developed instrument. This was accomplished by giving the established dependable attitude scale to 27 judges in the field of agricultural extension for feedback and suggestion

RESULTS AND DISCUSSION

Selection of item for final scale was done after calculating the 't' value for all items, the items with t-values equal to or greater than 1.75 were finally selected and included in the attitude scale. This selection was based on the criteria that statements with higher 't' value had higher discriminatory power to provide distinguishing attitudinal difference among farmers and farm women It was observed from Table 1 that 16 statements were found to be having values more than 1.75. According to Edwards, the t-value above 1.75 of any item has high discriminating power which could be placed in the final attitude scale. Therefore, the attitude scale consisted of 16 (9 equitable and 7 non equitable items) which were finally included in the scale. Items not classified by the majority of respondents as either positive or negative with regard

Table 1. Final standardized scale to measure attitude of farm families towards Gender Equity

S.No.	Statements
1	Men have more farm experience
2	Separate budget allocation for both
3	Political participation is gender neutral
4	Discrimination among children in family
5	Social groups give space to grow
6	Gender equality is threat to values
7	Saving and expenditure gives equity
8	Family decisions are managed by women.
9	It is shameful when men engage in domestic work.
10	Sensitize for equal inheritance of property
11	Shared responsibility decreases burden of both
12	Gender equity is women oriented
13	Extension services are primarily based on equity
14	Man's ego disregards women's opinion.
15	One can justify keeping a part of income.
16	Ideal decisions for family are to be discussed.

to the attitudinal object were eliminated from consideration for use in the final scale.

The observed split half model reliability coefficient was 0.861, according to the reliability data for the developed attitude scale. The reliability coefficient revealed that the attitude scale devised had a high internal consistency which is the most important aspect of attitude scale creation because it demonstrates the scale's robustness. As the scale was developed with the help of 27 judges who reviewed all of the revised statements and the experts' recommendations were implemented into the scale. As a result, the content validity of the current scale was met. The scale was finalized considering the 16 items as shown in Table 1 to assess the attitude of farm families toward the gender equity. These statements were structured in such a way that positive and negative words appeared at random to avoid bias answer. Against each of 16 item there are five columns representing a five-point continuum of agreement or disagreement to the item as followed by Likert (1932). The points on continuum are strongly agree, agree, undecided, disagree and strongly disagree with respective weight of 5, 4, 3, 2 and 1 respectively for favorable (equitable) item and with weight of 1, 2, 3, 4 and 5 respectively for unfavorable (non equitable) item. The attitude score of each respondent can be calculated by summing the scores obtained by her/him on all the items. The maximum obtainable score according to the present attitude scale is 80, whereas minimum obtainable score is 16.

CONCLUSION

The developed scale is a comprehensive, valid, and reliable instrument for assessing attitude of farming community toward gender equity. It can be effectively utilized to determine the attitude across varied dimension of gender equity covering varied horizons of responses. As it is a novel instrument, it can be used in forthcoming researches in varied ways. Acknowledging the gender inequalities persisting in rural communities especially of developing nations, the information obtained from this scale would help administrators and policymakers to make unbiased decision on planning programmes or projects to assess the gender equality. Effective gender equity means can be framed and implemented that would show better acceptance and adoption by the society. This scale with few modifications can also be applied in different fields outside agriculture. Furthermore, through the results obtained one can plan and implement strategies to mitigate gender bias in farming and rural community to lead towards a world providing equal opportunities and position to both genders.

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