

SCALE TO MEASURE ATTITUDE OF WOMAN RESEARCH SCHOLARS TOWARDS THE USE OF COMPUTER FOR THEIR EMPOWERMENT

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ABSTRACT

Considering immense potentiality of computer in the development of overall personality of woman research scholars through making their research, management, education and extension related activities more meaningful and effective; there is a need to have positive feeling of them towards application, use and potentials of computer. Realizing this, researchers felt need to develop a scale to measure attitude of woman research scholars towards the use of computer for their empowerment. To develop and standardize the attitude scale, researchers used 'Scale product method' which combines the Turnstone's Technique (1928) of equal appearing interval scale for selection of items and Likert's Technique (1932) of summated rating for ascertaining the response on the scale as proposed by Eysenck and Crown (1949). The scale contains total 10 statements viz.(1) I am sure that Computer affinity accelerates girl scholars to know various job opportunities, (2) I accept that Computer affinity helps girl scholars to develop overall personality, (3) I am sure that Computer affinity gives confidence to girl scholars to be a good research manager, (4) I consider that Computer affinity is a need of hours for girl scholars to be a good value addition processor of agricultural product, (5) I believe that each girl student should learn computer, (6) I think that inclination with computer is bad activity for girl students, (7) The computer motivates me in self-learning, (8) I don't think any girl can reach on the top with the help of computer, (9) The computer improves the quality of work and (10) I feel that Computer is demoralizing girl students at work. The co-efficient of reliability was calculated by the Rulon's formula (Guilford, 1954), which came to 0.94. The responses can be collected on five points continuum viz. strongly agree, agree, undecided, disagree and strongly disagree with respective weights of 1, 2, 3, 4 and 5 for the unfavourable statements no 6,8 and 10 and with the respective weights of 5, 4, 3, 2, and 1 for remaining favourable statements.

INTRODUCTION

In present age of information and technology, computer has been considered as an important tool to carry out almost any possible tasks. Starting from very small work to amazing task, the computer has become a part and parcel of the life. In the field of education, research and development also it has significant potential to straighten effectiveness of academicians, researcher scholars and officeholders. Many experts have suggested that to develop agriculture as whole, there is need to encourage women to

work as agricultural educationists, researchers and extension educationists to motivate, empower and accelerate effectiveness of farmwomen in agricultural development. The association of woman research scholars to harness maximum advantages of facilities available on computer needs to be encouraged by the academic institutions. To understand woman research scholars' attitude towards the use of computer for their empowerment was felt needed by researchers to motivate young and energetic woman research scholars to obtain utmost benefits of ICT.

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METHODOLOGY

Attitude refers to the “degree of positive or negative feelings associated with some psychological object” (Thurston 1946). In this study attitude is conceptualized as positive or negative feelings of woman research scholars towards the use of computer for their empowerment. To measure this, researchers have developed and standardized the attitude scale. Among the techniques available, researchers have used ‘Scale product method’ which combines the Turnstone’s Technique (1928) of equal appearing interval scale for selection of items and Likert’s Technique (1932) of summated rating for ascertaining the response on the scale as proposed by Eysenck and Crown (1949). To develop the attitude scale following procedure was used.

1 Item collection

The items of attitude scale are called statements. At the initial stage of developing the scale, 51 statements reflecting feelings of the woman research scholars about the usefulness of computer for their empowerment were collected from relevant literature and discussion with experts of extension personnel. To decide relevancy, a list of the statements was sent to 50 judges. They were requested to give response in terms of ‘relevant’ or ‘non-relevant’ for each statement included in the list. The responses for all the statements were collected personally and their relevancy in percentage was calculated. Primarily 40 statements which were found relevant to include in the attitude scale by more than 90 per cent of the experts were selected for the further procedure. Thereafter these statements were edited according to the criteria suggested by Edward (1957). From the 51 primarily selected statements, 40 unambiguous and non-factual statements were selected.

2 Judge’s rating of attitude statements

In order to judge the degree of importance of each statement more critically, a panel of other judges was selected and their opinion was collected

in terms of relevance of each statement on the five points equal appearing interval continuum from ‘Fully Agree’ to ‘Fully Disagree’. 75 slips of the selected statements were handed over to the experts working in Department of Extension Education, Extension Education Institute, Directorate of Extension Education, Department of Statistics, Department of Economics, IT centre and other centers of Anand Agricultural University. Out of 75 experts, 50 experts returned list of the 40 statements with their judgment, which was considered for the next step of analysis.

3 Determination of scale and quartile value

The five points of the rating scale were assigned score ranging from 1 for fully disagreement and 5 for fully agreement. Based on judgment, the median value or scale value and the Q value for the statement were worked out. The inter-quartile range ($Q = Q_3 - Q_1$) for each statement was worked out for determination of ambiguity involved in the statements. Only those statements were selected whose median values were found greater than Q value. Thurston and Clave (Edwards, 1957) described criteria in addition to Q as a basis for rejecting statement in scales constructed by the method of the equal appearing interval. Accordingly, when a few items had the same scale values, the item having lowest Q values were selected. Based on the scale values or say median and Q values, 10 statements were finally selected to constitute attitude scale.

The selected 10 statements for final format of the attitude scale were randomly arranged to avoid response bias. Against each of 10 statements, there were five columns, representing a five point continuum of agreement or disagreement to the statements as adopted by Likert (1932). The five points continuum were strongly agree, agree, undecided, disagree and strongly disagree with weight of 5, 4, 3, 2 and 1, respectively for favourable or positive statements and with weight of 1, 2, 3, 4 and 5, respectively for unfavourable or negative statements. The final format of the scale is presented in below table. Among the selected

10 statements, statement no.6, 8 and 10 were negative while, others were positive statements.

Table1 : Statements finally selected to constitute attitude of woman research scholars towards the use of computer for their empowerment

No.	Statement	SA	A	UD	DA	SDA
1	I am sure that Computer affinity accelerates girl scholars to know various job opportunities.					
2	I accept that Computer affinity helps girl scholars to develop overall personality.					
3	I am sure that Computer affinity gives confidence to girl scholars to be a good research manager.					
4	I consider that Computer affinity is a need of hours for girl scholars to be a good value addition processor of agricultural product.					
5	I believe that each girl student should learn computer.					
6*	I think that inclination with computer is bad activity for girl students.					
7	The computer motivates me in self-learning.					
8*	I don't think any girl can reach on the top with the help of computer.					
9	The computer improves the quality of work.					
10*	I feel that Computer is demoralizing girl students at work.					

SA=Strongly Agree, A=Agree, UD=Undecided, DA=Disagree SDA=Strongly Disagree

4 Reliability of the scale

The split-half technique was used to measure the reliability of the scale. The 10 statements were divided into two equal halves as two separate sets with 5 odd numbered and 5 even numbered statements in order. These were administered to 25 respondents. Each of the two sets was treated as separate scale and obtained two scores for both the sets from the 25 respondents. Co-efficient of reliability between these two sets of score was calculated by Rulon's Formula (Guilford 1954), which was 0.94.

5 Validity of the scale

The validity of the scale was examined for content validity determining how well content were selected by discussing it with specialists of extension and academicians. Thus, the present scale satisfied the content validity.

6 Scoring system

The selected 10 statements for the final format of the attitude scale are randomly arranged to avoid response biases, which might contribute to low reliability and detract from validity of the scale.

The responses can be collected on five points continuum viz. strongly agree, agree, undecided, disagree and strongly disagree with respective weights of 5, 4, 3, 2, and 1 for the favourable statements and with the respective weights of 1, 2, 3, 4 and 5 for the unfavourable statements.

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