



CORRELATION ANALYSIS OF INDEPENDENT VARIABLES WITH KNOWLEDGE AND ADOPTION OF HOME-SCIENCE TRAINING PROGRAMMES

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Abstract: Correlation analysis of 14 independent variables were put together to assess the correlation coefficient with the knowledge and adoption of home science training programmes. The results revealed that before training the variable, contact with extension agency had positive and significant correlation with knowledge at 0.05 per cent level of significance. However, after training the variables i.e. education, annual income, occupation, social participation, source of information, contact with extension agency & mass media exposure were found to be positively and significantly correlated with knowledge at 0.05 per cent level of significance after training about home-science training programmes.

The results showed that the variable contact with extension agency was found positive and significant with adoption at 0.05 per cent level of significance before training. But after training most of the variables i.e. education, annual income, cosmopolitaness, opinion towards home-science training programmes, source of information, contact with extension agency and mass media exposure were found positively and significantly correlated with adoption at 0.05 per cent level of significance.

Key words: Correlation analysis, training programme.

Introduction: Women have to fulfill multifarious responsibilities as housewife, homemaker, mother and supporter of family economy. The majority of rural women are mainly engaged in home and farm operations. However, a rural woman has not been able to make her rightful contribution to the social progress. There is urgent need to expand knowledge on all aspects, particularly with regard to women's role in society^[1]. Training is the more commonly used device that imparts knowledge and skill to the trainees.

Realizing the significance of the full participation of women in developmental activities, much attention was given to motivate rural women in socio-economic development

through extension work in the form of home-science training programmes^[2].

Methodology

The present study was carried out during in Bilaspur district of Chhattisgarh State. Out of total 158 home science trainees. 125 home science trainees were selected for the study. The data were collected through personal interview schedule and analyzed by using appropriate statistical methods correlation were applied for the interpretation of the data.

Pearson's Coefficient of Correlation: The technique used to find out the relationship between two variables. The formula used was as follows:

$$r = \frac{N \Sigma xy - \Sigma x \Sigma y}{\sqrt{N \Sigma x^2 - (\Sigma x)^2 \cdot N \Sigma y^2 - (\Sigma y)^2}}$$

where, r = Correlation coefficient
x = Score of independent variable
y = Score of dependent variable
N = Number of observation

Results and Discussion

To determine the relationship of selected independent variables with knowledge and adoption, the correlation analysis was worked out and results are presented in Table 1. The results revealed that before training the variable contact with extension agency had positive and significant correlation with knowledge at 0.05 per cent level of significance. However, the variable size of family was found to be negative and significantly correlated with knowledge at 0.01 per cent level of significance. Whereas, age, education, caste, type of family, land holdings, annual income, occupation, social participation, cosmopolitanism, opinion towards home science training programmes source of information and mass media exposure were found to be non significant with knowledge of home science aspects. In case of after training the variables *i.e.* education, annual income, occupation, social participation, source of information, contact with extension agency, mass media exposure were found to be positively and significantly correlated with knowledge at 0.05 per cent level of significance. However, cosmopolitanism and opinion towards home science aspects were found to be positively and significantly correlated with knowledge at 0.01 per cent level of significance. While age, caste, size of family,

type of family and land holding were found non-significant relationship with knowledge of the respondents about home-science training programmes. As regard to adoption before training, the variable *i.e.* contact with extension agency was found positive and significantly correlated with adoption at 0.05 per cent level of significance. However, the size of family was found negatively and significantly correlated with adoption at 0.05 per cent level of significance. Whereas, the rest of independent variables *i.e.* age, education, caste, type of family, land holdings, annual income, occupation, social participation, cosmopolitanism, opinion towards home science training programmes, source of information and mass media exposure were failed to establish any significant relationship with adoption. While, after training most of the variables *i.e.* education, annual income, cosmopolitanism, opinion towards home science training programmes, source of information, contact with extension agency and mass media exposure were found positively and significantly correlated with adoption at 0.05 per cent level of significance. However age, caste, size of family, type of family, land holdings and occupation were found to be non-significant relationship with adoption of home-science training programmes.

Table: 1 Correlation analysis of independent variables with knowledge and adoption of home-science training programmes.

Variable code	Independent variables	Level of knowledge		Extent of adoption	
		Before training	After training	Before training	After training
X1	Age	-0.0197 ^{NS}	-0.0020 ^{NS}	0.0406 ^{NS}	0.1472 ^{NS}
X2	Education	0.380 ^{NS}	0.2317*	0.1513 ^{NS}	0.1895*
X3	Caste	-0.0958 ^{NS}	0.0690 ^{NS}	-0.0717 ^{NS}	-0.0540-NS
X4	Family size	-0.2601 [*]	-0.1561 ^{NS}	-0.2761*	-0.0446 ^{NS}
X5	Nu. Of family members	-0.1725 ^{NS}	-0.0832 ^{NS}	0.1383 ^{NS}	0.0888 ^{NS}
X6	Land holding	0.0177 ^{NS}	0.0132 ^{NS}	0.0488 ^{NS}	0.2044 ^{NS}
X7	Annual income	-0.0844 ^{NS}	0.2085*	-0.0088 ^{NS}	0.1909*
X8	Occupation	0.0740 ^{NS}	0.2065*	0.1716 ^{NS}	0.0609 ^{NS}
X9	Social participation	0.0591 ^{NS}	0.1838*	0.1054 ^{NS}	0.2929**
X10	Cosmopolitanism	-0.0236 ^{NS}	0.2518**	0.0788 ^{NS}	0.2175*
X11	Opinion	0.0161 ^{NS}	0.2720**	0.1172 ^{NS}	0.1953*
X12	Source of information	0.0839 ^{NS}	0.1982*	0.1543 ^{NS}	0.1939*
X13	Contact with extension agency	0.1983*	0.2353*	0.1958*	0.2063*
X14	Mass media exposure	-0.0560 ^{NS}	0.1993*	0.0738 ^{NS}	0.1989*

**Significant at 0.01 level of probability; NS= Non significant; *Significant at 0.05 level of probability

Correlation analysis of 14 independent variables were put together to assess the correlation coefficient with the knowledge and adoption of home science training programmes.

The results revealed that before training the variable, contact with extension agency had positive and significant correlation with knowledge at 0.05 per cent level of significance. However, after training the variables *i.e.* education, annual income, occupation, social participation, source of information, contact with extension agency & mass media exposure were

found to be positively and significantly correlated with knowledge at 0.05 per cent level of significance after training about home-science training programmes.

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