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Effectiveness of Home science Vocational Training Programmes imparted by KVKs (Krishi Vigyan Kendras)

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ABSTRACT

Vocational training programmes play a positive role in the empowerment of women. The present study was planned with a specific objective to study the effectiveness of vocational trainings in home science discipline as rated by women trainees of a Krishi Vigyan Kendra (KVK). Training effectiveness was evaluated on five levels, viz. coverage, utility, teaching quality, knowledge and skill acquired. It was found that a great majority of trainees had perceived training as moderately effective. Programme effectiveness scores did not differ significantly among the four training groups. Mass media exposure, information seeking behavior, attitude towards training and entrepreneurial behavior had significant relationship with training effectiveness.

Keywords: KVK ; Training programme ; Effectiveness ; Kerala

INTRODUCTION

Effective training programmes designed for the farm women in carrying out their income generating activities for better livelihood will go a long way in improving their productivity. With this in view, the Indian Council of Agricultural Research (ICAR) during the fifth five year plan, launched an innovative project for imparting training in agriculture and allied areas to the farmers, school drop-outs and field level extension functionaries in the country by establishing Krishi Vigyan Kendras (KVKs). Krishi Vigyan Kendra conducts many training programmes exclusively for rural women with the aim to make them competent in performing various activities related to Homescience

and Agricultural Sciences. Hence, the present study was undertaken to find out the trainees' perceptions about effectiveness of vocational training programmes in Homescience discipline conducted by KVKs in Kerala.

METHODOLOGY

The study was conducted in the state of Kerala. Among the KVKs in the state, one KVK hosted by State Agricultural University (GKVK) and one KVK hosted by Non Governmental organization (NGO KVK) active in Homescience training for the past five years were chosen purposively for the study. To assess the effectiveness of trainings for rural women two vocational training programmes from home science discipline were selected

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from each institution based on frequency of training and number of women participants for in-depth study. Respondents comprised a randomly selected 300 women who had undergone fruit preservation training, bakery training and soap making from the two KVKs selected. The data was collected from trained women with the help of pre tested schedule by personal interview technique in an informal atmosphere.

The collected data were coded, compiled, tabulated, and analyzed in line with the objectives of the study. Qualitative data were converted into quantitative data by means of suitable scoring, wherever necessary. Descriptive statistics such as range, mean and standard deviation were used for describing the variables of the study. Pearson's Co-efficient of correlation was used to explore the relationships between any two concerned variables.

In this study, training effectiveness refers to perception of trainees about training in the following five dimensions, namely coverage, utility, teaching quality, knowledge gained and skill acquired.

At the initial stage, five major topics were identified from the content of selected training programme and were rated on a 3 point scale. On the basis of this scoring individual effectiveness of training topics and overall programme effectiveness indices were developed.

The individual effectiveness of training topics has been measured by training effectiveness index (TEI) developed by Desai

and Reddy (1987) to provide information on effectiveness of topic selected under training programme.

$$TEI = [D1/P1 + D2/P2 +Dn/Pn] X 100/N$$

D_i = Total scores obtained over all the respondents for the dimension of the i^{th} topic

P_i = Potential score obtainable on each dimension of the i^{th} topic where $i = 1,2,....., n$

N = total number of dimensions included in study.

Programme effectiveness index (PEI) is the standard to measure the programme effectiveness of training programme. The respondents were categorized into low, medium and high taking

mean and standard deviation of PEI as criteria.

$$PEI = \frac{(TEI_1 + TEI_2 + + TEI_n)}{n}$$

Where, summation $TEI_1, TEI_2, \dots, TEI_n$ = individual item effectiveness value of i^{th} topic.

n = total number of items included in the programme.

FINDINGS AND DISCUSSION

The results of dimensions of training showed that the maximum score was assigned to teaching quality by all training groups. The mean scores of coverage and utility were ranked second and third. The knowledge gained and skill acquired got lowest score and were ranked as fourth and fifth.

'Coverage' indicates how far the topic was covered or taught during training.

Table 1.
Rank order of dimensions of training

Sl. No.	Dimensions of training	Mean training effectiveness score for dimensions of training				Overall Mean	Overall Rank
		Bakery	Preservation G KVK	Preservation NGO KVK	Soap Making		
1.	Coverage	77.51 (II)	76.71 (III)	79.20 (I)	76.09 (IV)	77.38	II
2.	Utility	78.58 (II)	78.76 (I)	76.27 (III)	74.13 (IV)	76.94	III
3.	Teaching Quality	79.11 (II)	81.24 (I)	77.42 (IV)	78.67 (III)	79.11	I
4.	Knowledge acquired	73.42 (II)	74.75 (I)	71.82 (IV)	72.18 (III)	73.04	IV
5.	Skill acquired	70.40 (II)	72.53 (I)	69.60 (IV)	69.87 (III)	70.60	V

The results indicate that contents of each training programmes was well covered as the mean scores ranges from 76 to 79. Preservation group of NGO KVK got the highest score for this aspect followed by bakery group, preservation group of G KVK and soap making group. This high score may be due to several reasons like good selection of contents and their adequate coverage. The content of training might have been discussed with the trainees for improvement and modification before the training programme.

'Utility' means how the trainees perceived the topic as useful. The utility scores presented in Table 1 indicated that there is positive opinion towards utility. The

mean scores of utility ranges from 74 to 79 indicating less variability in this aspect. Preservation trainees of G KVK got the highest score for utility followed by bakery trainees, preservation trainees of NGO KVK and soap making trainees. The results show that while selecting content, its applicability, communicating compatability in practical situation and cost effectiveness may have taken into consideration. Priority might have been given to improved practices tested at trainee's situation of the various components involved in determining organizational effectiveness, component of human element had contributed much. Teaching quality was ascertained based on trainees' perception of competence in imparting the content of

training programme. This aspect got the highest mean score for all training groups (77-81). Preservation trainees of G KVK got the highest score for teaching quality followed by bakery trainees, soap making trainees and preservation trainees of NGO KVK. Trainers of KVK were postgraduates in their particular discipline and hence they are efficient in demonstrating the skill effectively to trainees.

Any training effort brings forth impact at different levels and it can be evidenced by knowledge gain, skill acquired and adoption. Knowledge gain seemed to have scored fourth place only when mean scores were considered as a whole (71-75). Preservation trainees of G KVK got the highest score for knowledge gain followed by bakery trainees, soap making trainees and preservation trainees of NGO KVK. This may be attributed to the small duration of training which the participants

underwent and in this small duration of less than one week training the trainees may not be able to grasp all aspects of training content.

Extent of skill acquisition was ascertained totally on the basis of trainees' opinion expressed. It is evident that preservation group of GKVK got the highest score for this aspect followed by bakery trainees, soap making trainees and preservation trainees of NGO KVK. This dimension when compared to other dimensions of training got the least score. This might be due to the fact that the training module was for short duration and trainees did not get ample opportunity to learn and practice the skill by self-performance.

All these findings indicate that the effectiveness of each training programmes was high and there was less variation in the effectiveness of individual content than the training programmes. The trainees had expressed positive opinion about the different

Table 2.
Comparison of dimensions of training among Training groups

Sl.No.	Training Groups	Mean training effectiveness score for dimensions of training				
		Coverage	Utility	Teaching Quality	Knowledge gained	Skill Acquired
1.	Bakery	77.51 (III)	78.58 (II)	79.11 (I)	73.42 (IV)	70.40 (V)
2.	Preservation (G KVK)	76.71 (III)	78.76 (II)	81.24 (I)	74.75 (IV)	72.53 (V)
3.	Preservation (NGO KVK)	79.20 (I)	76.27 (III)	77.42 (II)	71.82 (IV)	69.60 (V)
4.	Soap Making	76.09 (II)	74.13 (III)	78.67 (I)	72.18 (IV)	69.87 (V)
	F value	1.34	1.50	0.77	2.12	0.34

Figures in parantheses indicate rank

aspects of training programmes. The results implied to accord more priority to skill practice during training session. For improving the quality of training programmes, there should be close link between KVK and trainees. This will not only facilitate selection of relevant topics for training programmes but will also make them conversant about the performance of practices and its relevant problems experienced in the field so that KVK may further improvise their training programmes. This finding confirms to the study by Borker et al. (1991).

Comparison of dimensions of training among Training groups

Teaching quality, utility, coverage, knowledge and skill acquired were ranked in that order as more effective as perceived by bakery trainees.

In case of preservation trainees of G KVK, teaching quality, utility, coverage, knowledge gained and skill acquired were ranked sequentially as more efficient as perceived by them.

Coverage, teaching quality, utility, knowledge gain and skill acquired were ranked in order of efficiency as perceived by beneficiaries of NGO KVK.

In case of soap making trainees, teaching quality got the highest index followed by coverage, utility, knowledge gain and skill acquired as more efficient as perceived by them.

ANOVA was applied to compare the mean score of selected dimensions among the four training groups.

The results in Table 2 reveal that the dimensions of training did not differ

Table 3.
Classification and distribution of respondents according to mean Programme Effectiveness Index (PEI)

Sl. No.	Category	Mean Score	Frequency (Percent)				
			Bakery N-75	Preservation G KVK N-75	Preservation NGO KVK N-75	Soap Making N-75	Total N-300
1	Low	<64.18	6 (8)	9 (12)	9 (12)	9 (12)	33 (11)
2	Medium	64.18- 85.96	58 (77.33)	55 (73.33)	56 (74.67)	58 (77.33)	228 (76)
3	High	>85.96	11 (14.67)	11 (14.67)	10 (13.33)	8 (10.66)	39 (13)

Mean-75.07

SD -10.89

(Figures in parantheses indicate percentages)

Table 4.
Comparison of Programme Effectiveness Index (PEI) among different groups

Sl. No.	Training groups	PEI	F	CD
1.	Bakery	75.80	0.8692	3.494
2.	Preservation (G KVK)	76.80		
3.	Preservation (NGO KVK)	74.86		
4.	Soap making	74.19		
	Overall PEI	75.07		

significantly among the four training groups. This may be due to the fact that the dimensions were influenced more by the organizational setup of KVK especially coverage of subject, relevance to training topic and teaching quality.

Classification and distribution of respondents according to mean programme effectiveness index (PEI)

The programme effectiveness index (PEI) values were calculated from TEI scores of topics of training programme to measure the training effectiveness. The respondents of study were classified into low, medium and high group based on mean and standard deviation of overall programme effectiveness index and presented in Table 3

A perusal of data from Table 3 reveal that a great majority of trainees (76 percent) had perceived training as of medium effectiveness, where as 11 percent had felt training as less effective and 13 percent had felt training as highly effective. The findings of the study were in agreement with the results obtained by Medhi *et al.* (2017)

Comparison of Programme Effectiveness Index (PEI) among different groups

An in depth analysis of PEI made in Table 4 evidenced that each training programme was effective since PEI score was high ranging from 74 to 77. The mean programme effectiveness score of training programmes was worked out to be 75.07, which was quite high and reveals good training exercise done in this direction. Comparison of programme effectiveness score of each training revealed that preservation training of G KVK stood first with the programme effectiveness score of 76.80. This was developed by bakery trainees (75.80), preservation trainees from NGO KVK (74.86) and soap making trainees (74.19).

Analysis of variance (ANOVA) was applied to compare the programme effectiveness index among the four training groups. The results reveal that the PEI scores did not differ significantly among the four training groups. It could be inferred from the findings that PEI of trained women was dependent on the setup of KVK and almost same facilities are available irrespective of type of KVK as both are sponsored by ICAR.

Table 5.
Relationship between selected variables and training effectiveness

Sl.No	Characteristics	r
1.	Age	-0.0485
2.	Caste	-0.0552
3.	Educational status of respondent	0.0265
4.	Educational status of family	0.0514
5.	Land holding	0.0275
6.	Annual income	-0.0584
7.	Occupation	0.0455
8.	Social participation	0.0294
9.	Contact with extension agency	0.0331
10.	Mass media exposure	0.1920**
11.	Information seeking behavior	0.1658**
12.	Level of aspiration	-0.0417
13.	Attitude towards training by KVK	0.1266*
14.	Entrepreneurial Behavior	0.1596**

* Significant at 5 percent level

** Significant at 1 percent level

There is no particular curriculum for training methods to be followed by trainers of KVKs, but impart training by using appropriate method based on existing situation.

Relationship between selected variables and training effectiveness

Results reveal that except for mass media exposure, information seeking behavior, attitude by trainees towards by KVK and entrepreneurial behavior, none of the selected variables had any significant relationship with training effectiveness. The variables age, educational status of respondent and her family, land holding, annual income, occupation, social participation, contact

with extension agency, level of aspiration, showed insignificant correlation with training effectiveness.

Mass media exposure, information seeking behavior and entrepreneurial behavior had significant positive relationship with training effectiveness at 1 percent level of significance and attitude of trainees towards training by KVK was significant at 5 percent level of significance.

The high mass media exposure and information seeking behaviour ought to have inculcated a confidence in trainees that they can benefit from attending training and also created a better awareness among trainees

about activities of KVK and this might have resulted in receiving training in effective way.

The data presented in Table 5 show positive and significant relationship between attitude towards training by KVK and training effectiveness. A favorable mental disposition towards training by KVK necessarily improves the entrepreneurial behavior of a person. Unless one has a favorable attitude towards the positive aspects of self-employment over and above its negative aspects, his entrepreneurial behavior will be lower. When entrepreneurial behavior increases, trainees are more likely to accept and adopt training practices and thereby training effectiveness increases.

CONCLUSION

It can be concluded from the above results that majority of the respondents (trainees) were satisfied with the coverage, utility, teaching quality, knowledge gained and skill required in relation to training programme provided by KVK. The overall programme

effectiveness index was very high which shows the effectiveness of training programmes provided by KVK. But there were some areas of concern where progress was limited like in the skill acquisition, in limited time. Therefore, there is a need include these factors with suitable changes in training curriculum by the scientists for benefitting the farm women in particular & farming community in general.

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