



Association of Socio-Psychological Factors on Decision Making Process of Kvk Officials in Odisha

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Article History	Abstract
Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 18 Nov 2023	<p><i>The role of research and extension system in delivery of appropriate technology to the farmers has been looked at as the most important input for furthering agricultural production. Therefore, considering the requirement of developing the capacity of the farmers and reducing the time lag between technology generation and technology application at farmer's field; the idea of establishing KVK under the leadership of Dr. Mohan Singh Mehta appointed by ICAR in 1973 took place. The present study is an exploratory survey design undertaking 125 respondents comprising of Sr. Scientist & Head, Scientists, Program Assistants and Farm managers selected randomly from 33 KVKs across the state. The findings of the study revealed that majority of the respondents (56.80%) were middle aged, 64 per cent of them were male officials and (68.00%) of the sample reported to experience moderate level of Job Satisfaction, Job Autonomy and Organizational Stress. Further, Organizational Climate (76.00%) and the Level of Job Management (72.00%) of the KVK was also reported to be moderate. The average gap in participation was maximum in identifying the problem/needs (38.40%) and policy decisions (39.40%) among the all the different stages of decision-making and types of decision-making respectively. Further, it was observed that Professional Experience, Organizational Stress, Job Autonomy and Level of Job Management was strongly associated with extent of Participation in different types of Decision-making. The findings also revealed that Level of Job Management was found to be associated with participation in different stages of decision-making.</i></p> <p>Keywords: Krishi Vigyan Kendra; Decision-making; Participation; Organizational Stress; Job Autonomy</p>
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1. Introduction

Agricultural development, which aims to optimize income and minimize resource utilization and impacts on environment, strongly influenced by farming resource attributes and agricultural livelihood strategies. However, quantifying the impacts of these factors on agricultural sustainability remains a challenge [1]. The last few decades have changed the face of Indian Agriculture, leading to an unprecedented change in production and productivity enhancement branding the country as an agriculturally surplus state for many commodities. But concomitantly, a contrasting situation of decreased availability of per capita land holding, marginalized resources and reduced investment on agriculture has posed challenges before the agriculture development stakeholder. A periodic method, supported by functions of innovation systems framework, was used to examine activities of officials and organizations in several case studies. The major findings were based on: **1)** Complex agricultural innovations need a collaborative approach for successful innovation and diffusion process. The need of, collaboration differs from farm-level (individual learning) to a national & global level with issues of skill training. In addition to it, a scale is required before the commercial sector that can operate it effectively. **2)** The presence, and limitations, of private (commercial) interests and their position as a

key knowledge base in precision farming widens the need for public research and extension organizations to promote collaborative & innovative programs with the help of technology & vocational institutions [2].

Krishi Vigyan Kendra's (KVK), also known as 'farm science centers', have been claimed as one of the major institutional innovations of the NARS (National Agricultural Research System) in India. KVKs act as knowledge and resource hubs that are fully funded by the central government and mandated to work on technology assessment and refinement. Apart from these, KVKs organize several demonstrations to provide technological backstopping to state agencies at the district level. Extension agencies globally face the twin challenges which are of finance and manpower. However, some extension agencies manage these challenges and achieve larger impacts by converging their efforts with others. This paper is purely about such an attempt taken by a KVK in the eastern part of India, demonstrating how institutional convergence can enhance innovation and impact. [3]

In this entire process of development, technology development has always taken the center stage. And at the same time empowering the farmers with advanced agriculture knowledge, skill and other information is the focus of extension system for proper technological development. Keeping in mind the present view, the need for developing the capacity of the farmers and reducing the time lag between technology generation and technology application at farmer's field; on the recommendation of Education Commission (1964- 66); and recommendation by the committee under the leadership of Dr. Mohan Singh Mehta appointed by ICAR in 1973, the evolution of the idea of establishing Farm Science Centre (Krishi Vigyan Kendra) took place. Krishi Vigyan Kendra's are being considered as the cutting edge of research system and operate as a front-line extension research unit. The activities of KVK include on-farm testing to identify the location specificity of agricultural technologies under various farming situations; frontline demonstrations to establish the production potential of improved agricultural technologies on the farmers' field; and training of farmers and extension personnel to update their knowledge and skills. Besides, KVK works as a knowledge and resource center of agricultural technologies for supporting farmers in improving their agricultural production and livelihood.

It bows without saying that extension institution is the only vehicle for fostering change in agriculture and rural development. Agricultural extension over the years has been used as a tool for facilitating agriculture and rural development. During the last few decades, Indian agriculture has undergone unparalleled change in production and productivity enhancement branding the country as an agriculturally surplus state for many commodities. At the same time, a contrasting situation with regards decreased availability of per capita land holding, marginalized resources and reducing investment on agriculture has posed challenges before the agriculture development stakeholder.

In the entire process of agriculture development, technology development takes the center stage. The role of research and extension system in delivery of appropriate technology to the farmers has been looked at as the most important input for furthering agricultural production. In the technology development process, Research system, Extension system (iii) Farmer system play unique as well as overlapping role in generation of need-based technologies and ensure application in the farmer's field. Now a day's decision making issues involve incomplete assessments under hierarchical criteria due to limited knowledge and experience of decision makers, which necessitate multifarious challenges including information filling, consensus reaching and other preferences.[4] As per the study the older people, contribute their everyday decision-making abilities seem to be under enhancing inspection ,& come up with low psychological health and low subjective well-being.[5]

The primary drivers for carrying out a first-hand empirical investigation on the psychological, behavioral, and personal elements influencing financial decision making are the current gap in the literature and the falsity of earlier conclusions. Humans strive to accomplish contradictory or diverse goals, which drive them to become preoccupied with higher order cognitive processes. Decision-making behavior is thus governed by any one or all of the goal frames, which include hedonic, gain, and normative. These multiple goals are then categorized as goal frames [6].

2. Materials And Methods

Study Area:

The study has been covered in all the 30 districts of Odisha, covering 33 KVKs (both State and ICAR funded).

Sample and sampling technique:

A sample size of 125 KVK officials from the three levels of administration i.e., Upper level -17, Middle Level- 68, Lower Level- 40 respectively were selected as respondents. The primary data were collected using a pretested schedule to find out its applicability for recording the data. The pretesting was carried out with 12% of the sample i.e., fifteen respondents to understand the decision-making abilities of the KVK Officials and how it is associated with their socio-psychological characteristics.

Preparation of interview schedule:

As per the objectives set for the study, one set of interview schedule was prepared. The schedule contained both open and close ended questions to measure the variables under study.

Pre-testing of schedule:

Pretesting of schedule was made to find out its applicability for recording the data. After development of schedules, pretesting was carried out with 12% of the sample i.e. fifteen respondents.

Collection of information:

The final schedule was sent to the respondents selected for the study by e-mail. Follow up mail and telephone calls were made to ensure proper response from the sample.

Statistical tools used in the study:

The data collected from the respondents were scored, tabulated and analyzed to draw valid inferences using suitable statistical tools such as percentage, mean score, standard deviation, rank order and significance tests as were found appropriate for the study. The tabular analyses were carried out to examine the Stages of decision-making process and the Types of decision making. Further, to examine its association with different socio-psychological characteristics, Chi-Square had been done.

3. Results and Discussion

The socio-psychological characteristics were defined on the basis of personal, social and psychological characters of the KVK Officials. The respondents were categorized and their frequency and percentage were calculated for further analysis. As per the findings of **Table-1**, it is revealed that 56.00 per cent of the respondents aged between 36-55years, followed by 43.20 per cent in the young age group.

The findings further revealed that 64.00 per cent of the Officials were Male, which shows most of the KVK to be male dominated in the State. About (64.00%) of the respondents are Post graduates, followed by 28.80 per cent of Ph.D. holders and 7.20 per cent of Graduates. The officials 41.60 per cent of had more than 10 years of professional experience followed by 36.00 per cent who have less than 5 years of professional experience.

The study found that more than half (68.00%) of the respondents experienced medium level of job satisfaction. Even though there exists a significant group of respondents who showed high level of job satisfaction, still (12.80 %) respondents revealed to have low level of job satisfaction, which revealed that most of the officials had experienced moderate level of sense of accomplishment.

Organizational stress can have a profound effect on employees' motivation and productivity in the workplace. As revealed from the findings (56.00%) of the respondents were found to be under medium level of organizational stress followed by 30(24.00 %) respondents in high organizational stress category. However, 25(20.00 %) of the respondents have expressed to be under low organizational stress category. This indicates KVK staffs in general to tune of 76.00 per cent were not under heavy organizational stress.

In the present-day work culture, operational flexibility synonymously called as job autonomy plays a vital role in deciding how the employees deliver in an organization. As per the findings, majority (63.20%) of the respondents have expressed to avail medium level of autonomy whereas 27 (21.60 %) respondents availed high level of autonomy. However, only 19 (15.20 %) respondents have expressed that the job autonomy allowed to them in Krishi Vigyan Kendra's is low.

The findings on types of training attended by the respondents were classified into two major categories. It was seen that technology-oriented trainings attended by the respondents inside the state showing highest mean score (1.52), followed by technology-oriented training outside the state (MS=1.22). The respondents were found to be relatively less participative in management-oriented trainings as compared to technical trainings.

Organizational climate is considered as one important psychological parameter which may influence the decision-making pattern in any organization. The findings reveal that, majority (76.00%) of the

respondents perceived a moderately favorable level of organizational climate to prevail in KVKs whereas, 20 (16.00%) perceived the prevailing organizational climate to be less favorable. In total, 84.00 per cent of the respondents opined a moderate and highly favorable organizational climate prevailing in KVK.

For the present study extent of participation of different level of management have been studied with respect to nine stages delineated in the decision-making process. The findings revealed that majority (72.00%) of the respondents were having medium level of participation in the different stages during the process of decision making followed by 15.20 per cent in high participation category and 12.8 per cent in low. Otherwise saying a sharp majority (87.20%) were having medium to high level of participation whereas only 12.80 per cent were having participation to a lower extent.

Decision making is a process that starts with identification of the task or problem in hand and ends with review of the final output and feedback obtained with implementation of the plan. After analysis of the steps suggested by various authors, discussion with experts and more importantly with KVK functionaries, a series of nine sequential steps were identified which is generally followed in KVKs for decision making.

An examination of the data placed on **table-2** revealed that, the gap in participation of different level of managers in different stages of decision making were found to vary between a lowest value of 14.20 per cent with respect to review of task and process by the upper-level managers to as high as 44.00 per cent in case of lower-level managers in examining alternatives. The average gap in participation in different stages of decision making was revealed to be highest in case lower-level managers 35.60% followed by that of middle level managers 33.20% and upper-level managers 28.20% in Krishi Vigyan Kendras. The overall gap in participation of all level of managers in all stages of decision making pooled together was found to be 32.20 per cent, which implies that there is still a considerable level of gap in participation by the scientists and technical staff in different stages of decision-making.

On examination of the data placed on **table3** it was revealed that, the gap in participation varied between as low as 20.00 per cent in case of upper-level managers in taking financial decisions to as high as 44.00 per cent in case of the lower-level managers in taking policy and administrative decisions. The overall gap in participation of respondents in different types of decision making was found to be 32.99 per cent there by indicating a fact that there is scope for strengthening participation of different levels of managers in different types of decision making in KVKs.

The chi square test value placed on **table-4** revealed the followings regarding relationship of independent variables under analysis with the extent of participation in different stages and types of decision making.

- a. While examining the relation of age, sex, educational level, training attended and job satisfaction the chi square test was revealed to be non-significant. This inferred that these variables were neutral for extent of participation in different stages as well as in different types of decision-making. The chi square test was found to be significant (at 5% level) for professional experience when analyzed for participation in different types of decision making whereas the variable was observed to be neutral for participation in different stages of decision-making.
- b. The chi square test value placed in table 4.3.5 were revealed to be significant (at 5 % level) for psychological variables like organizational stress and job autonomy in deciding the extent of participation in different types of decision making whereas the chi square values for these two variables were found to be non-significant explaining that these variables were independent of participation in different stages of decision-making.
- c. The data under chi square test ($\chi^2=18.001$ and $\chi^2 = 10.54$) while examined for level of management was found to be significant explaining a strong relation between level of management and extent of participation both in different stages and types of decision making.
- d. The non-significant values indicated against the variables like age, sex, educational level, training attended and job satisfaction indicated these variables to be neutral to the extent of participation in decision making, whereas the variables like professional experience, organizational stress, organizational climate, job- autonomy and level of management had significant relationship with extent of participation in different types of decision making.
- e. Level of management has been found to have significant association with extent of participation both in different stages and different types of decision making.

Table.1: Socio-psychological Characteristics of the KVK officials

Sl.no	Socio-psychological Characteristics	Categories	Scores	
			Frequency	Percentage
1.	Age	Young (18-35 years)	54	43.20
		Middle (36-55 years)	71	56.80
		Old (56 years and above)	Nil	0.00
2.	Sex	Male	80	64.00
		Female	45	36.00
3.	Educational Level	Graduate	9	7.20
		Post graduate	80	64.00
		PhD.	36	28.80
4.	Professional Experience	<5 years	45	36.0
		Between 5 to 10 years	28	22.4
		>10 years	52	41.6
5.	Level of Job Satisfaction	Low	16	12.80
		Medium	85	68.00
		High	24	19.20
6.	Organizational Stress	Low	25	20.00
		Medium	70	56.00
		High	30	24.00
7.	Job Autonomy	Low	19	15.20
		Medium	79	63.20
		High	27	21.60
8.	Types of Training Attended	Outside Odisha	Technology oriented	1.22
			Management oriented	0.32
		Inside Odisha	Technology oriented	1.52
			Management oriented	0.54
9.	Organizational Climate	Less Favourable	20	16.00
		Moderately Favourable	95	76.00
		Highly Favourable	10	08.00
10.	Level of Participation	Low	16	12.80
		Medium	90	72
		High	19	15.20

Table.2: Extent of participation of different levels of management in stages of decision making

Sl. No.	Stages of decision-making process	Extent of participation by						Average Mean Score	Average gap in participation (%)
		Upper-Level managers		Middle Level managers		Lower-Level managers			
		M.S	Gap in participation (%)	M.S	Gap in participation (%)	M.S	Gap in participation (%)		
01.	Recognizing need / Problem	3.06	38.00	3.18	36.40	2.93	41.40	3.08	38.40
02.	Analysis of the problem	3.30	34.00	3.13	37.40	3.00	40.00	3.11	37.80
03	Setting Objectives	3.47	30.60	3.22	35.60	3.33	33.40	3.29	34.20
04	Identifying Alternatives	3.29	34.20	3.14	37.20	3.05	39.00	3.14	37.20
05	Examining Alternatives	3.35	33.00	3.21	35.80	2.80	44.00	3.10	38.00
06	Selecting the Alternative	3.71	25.80	3.21	35.80	3.08	38.40	3.23	35.40
07	Formulating Supporting Plan	3.76	24.80	3.43	31.40	3.33	33.40	3.44	31.20
08	Implementation of the Plan	4.12	17.60	3.85	23.00	3.75	25.00	3.86	22.80
09	Review of task and Process	4.29	14.20	3.71	25.80	3.70	26.00	3.78	24.40

Over all mean/ gap in participation	3.59	28.20	3.34	33.20	3.22	35.60	3.34	33.20
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Table-3: Extent of participation of different levels of management in different types of decision making

Sl.no.	Type of decision making	Upper-Level managers		Middle Level managers		Lower-Level managers		Average mean score	Average gap in participation (%)
		M.S	Gap in participation (%)	M.S	Gap in participation (%)	M.S	Gap in Participation (%)		
01.	Policy Decisions	3.64	27.20	3.01	39.72	2.80	44.00	3.03	39.40
02.	Technical Decision	3.71	25.80	3.22	35.60	3.03	39.50	3.22	35.60
03	Administrative Decision	3.71	25.80	3.16	36.78	2.80	44.00	3.12	37.60
04	Financial Decision	4.00	20.00	3.10	37.96	3.15	37.00	3.24	35.20
05	Decision in Resource Allocation	3.76	24.80	3.37	32.66	3.13	37.50	3.34	33.20
06	Decision for Institutional development	3.94	21.20	3.21	35.90	3.03	39.50	3.25	35.00
07	Decision for inter institutional linkages and collaborations	3.76	24.80	3.29	34.12	3.55	29.00	3.44	31.20
Over all mean / gap in participation		3.79	24.20	3.19	36.20	3.07	38.64	3.23	35.40

Table 4: Association between selected socio personal and psychological variables with extent of participation in different stages and different types of decision making. (Chi Square test values for selected socio personal and psychological variables)

Variables	χ^2 value	
	Extent of participation in different stages of decision making	Extent of participation in different types of decision making
Age	7.273	4.651
Sex	0.969	1.359
Educational level	3.595	7.068
Professional Experience	6.608	9.652**
Trainings attended	3.686	7.083
Organizational climate	2.470	17.720*
Level of job satisfaction	6.577	4.745
Level of management	18.001*	10.54**
Organizational stress	9.300	10.690**
Job autonomy	5.198	10.088**

4. Conclusion

A multi-disciplinary team of scientists working in each KVK (Krishi Vigyan Kendra) take a responsibility of analyzing farm problems across the district, select suitable technology options and undertake activities such as technology assessment, refinement, validation, demonstration and at the same time developing the capacity of the farmers for use of these technologies. The appropriateness of each decision taken in KVK for problem identification, programmed planning and implementation has a strong bearing in deciding their efficiency in the technology developing process. From the above study we get to know that the level of management in KVK was found to have significant association with extent of participation both in different stages as well as in different types of decision making. The revelation of the study supports to imply that the scientific manpower in KVKs of Odisha is having moderately high education level, professional experience and commitment towards the organization. They have adequate knowledge on different aspects of management of KVK, moderately favorable organizational climate, avail quite a good deal of job autonomy and job satisfaction in KVK. In Krishi Vigyan Kendra's the decision-making process is more inclined to a democratic type, where in consultation with colleagues, other stakeholders are given due importance rather than using own wish and will for taking any decisions. Elderly utmost people frequently witness multiple care transitions. These watch transitions are critical and stressful moments for both aged people and their informal caregivers likewise and can have a negative effect on long- term issues. Greater attention needs to be paid to the involvement of aged people and their informal caregivers in the process of decision- timber when it comes to transitional care [7].As per the extending study about controllers' different roles, we

develop new insights into how controllers collaborate with line managers and thereby shape strategic decision-making quality. The introduction of the concept on cognitive flexibility as a vital characteristic of the controller-manager collaboration and speculate that the business partner role is positively related to cognitive flexibility in controller-manager collaboration, whereas the watchdog and scorekeeper roles are expected to have a negative association [8]. However, the extent of participation of different management level in different stages and types of participation indicates a scope for improvement. The level of participation and effectiveness of decision-making process can be strengthened by strengthening the resources including manpower in KVKs, focusing more on mandatory activities, complete delegation of authority to KVK level. Moreover, the KVKs also need to develop an internal mechanism to strengthen staff participation, coordination among staff members with organization of monthly meetings, decentralization of decision-making process and giving optimum focus on need as well as existing resources while making any decision.

References:

1. Ananth PN, Barik NK, Babu SC, Dash AK, Sundaray JK. Can institutional convergence force agricultural development in pluralistic extension systems: a case of Krishi Vigyan Kendra (the farm science center) in India. In *Agricultural Extension Reforms in South Asia 2019* Jan 1 (pp. 141-165). Academic Press. <https://doi.org/10.1016/B978-0-12-818752-4.00007-2>. [3]
2. Baker, D., Bridges, D., Hunter, R., Johnson, G., Krupa, J., Murphy, J., & Sorenson, K. 2002. *Guidebook to Decision- Making Methods*, WSRC-IM-2002-00002, Department of Energy, USA.
3. Bhasir, BP. 2016. subject matter specialist and organizational effectiveness of Krishi Vigyan Kendras, College of veterinary and Animal sciences, Kerela, India.
4. Christo, B. and Pienaar, J. 2006, South Africa Correctional Official Occupational Stress: The Role of Psychological Strengths, *Journal of Criminal Justice*, 34(1): 73-84.
5. Dhanakumar, V.G., 1999, An analysis of decision making process and organizational effectiveness. *Journal of Rural Development*, 18(1): 65-81.
6. Dkhar. Sao et al. 2018. An explorative study on the Organizational climate of KVKs, College of post graduate studies, Central agriculture university, Imphal, Meghalaya *Operational Research*, 154, 573-584.
7. Eastwood C, Klerkx L, Nettle R. Dynamics and distribution of public and private research and extension roles for technological innovation and diffusion: Case studies of the implementation and adaptation of precision farming technologies. *Journal of rural studies*. 2017 Jan 1;49:1-2. <https://doi.org/10.1016/j.jrurstud.2016.11.008>. [2]
8. Fourné SP, Guessow D, Margolin M, Schäffer U. Controllers and strategic decision-making: The role of cognitive flexibility in controller-manager collaboration. *Management Accounting Research*. 2023 Mar 1:100840. <https://doi.org/10.1016/j.mar.2023.100840>. [8]
9. Gass, S. I., & Rapcsák, T. 1998. A note on synthesizing group decisions. *Decision Support Systems*, 22, 59-63.
10. Godara, A.K., V.P.S. Yadav, S.P. Singh and S.K. Mehta. 2006. Productivity of extension scientists in Krishi Vigyan Kendras. *Indian Research Journal of Extension Education*, 39(3 & 4):167-172.
11. Goel, S.K. and Rajneesh, S., 2001, Decision making. Management techniques: Principles and Practices, *Deep and Deep Publications*, New Delhi, pp. 88-114.
12. Guo, Kristina L. 2008. "DECIDE: a decision-making model for more effective decision making by health care managers". *The Health Care Manager*. 27 (2): 118-127.
13. Harrison, F. 1994. *The Managerial Decision Making Process*. Boston: Houghton Mifflin.
14. Hersey, P., Blanchard, K.H. and Johnson, D.E., 2001, Management of organizational behaviour. Prentice – hall of India, New Delhi.
15. Jagdale, U. D. 2004. Contribution of farm scientists from Mahatma Phule Krishi Vidyapeeth, Rahuri in transfer of technology. Unpublished Ph.D. thesis, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, Maharashtra, India.
16. Johnson, S.J. 2001, *Occupational Stress Among Social Workers and Administration Workers within a Social Services Department*, unpublished *Journal of Occupational and Organizational Psychology*, 76, 27-52
17. Kraun L, De Vlieghe K, Vandamme M, Holtzheimer E, Ellen M, van Achterberg T. Older peoples' and informal caregivers' experiences, views, and needs in transitional care decision-making: A systematic review. *International Journal of Nursing Studies*. 2022 May 31:104303. <https://doi.org/10.1016/j.ijnurstu.2022.104303>. [7]
18. Kumar P, Islam MA, Pillai R, Sharif T. Analysing the behavioural, psychological, and demographic determinants of financial decision making of household investors. *Heliyon*. 2023 Jan 21:e13085. <https://doi.org/10.1016/j.heliyon.2023.e13085> [6]
19. Peng W, Zheng H, Robinson BE, Li C, Li R. Comparing the importance of farming resource endowments and agricultural livelihood diversification for agricultural sustainability from the perspective of the food–energy–water nexus. *Journal of Cleaner Production*. 2022 Dec 20;380:135193. <https://doi.org/10.1016/j.jclepro.2022.135193>. [1]
20. Qin J, Liang Y. Consensus driven preference analysis model for incomplete group decision making with the multiple criteria hierarchy process. *Computers & Industrial Engineering*. 2023 Mar 1;177:109024. <https://doi.org/10.1016/j.cie.2023.109024> [4]

21. Srivastava S, Chauhan S, Muhammad T, Simon DJ, Kumar P, Patel R, Singh SK. Older adults' psychological and subjective well-being as a function of household decision making role: Evidence from cross-sectional survey in India. *Clinical Epidemiology and Global Health*. 2021 Apr 1;10:100676. <https://doi.org/10.1016/j.cegh.2020.100676> [5]