Job Competence of Agricultural Extension Officers in Telangana State

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

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ABSTRACT

The research was conducted in the Nalgonda district of Telangana state with the aim of assessing the job competence and job satisfaction of Agricultural Extension Officers. A total of 120 Agricultural Extension Officers were selected for the study from different Mandals within Nalgonda district. Data was collected to analyse the profile and job competence levels of agricultural extension officers. Two rating techniques were employed in evaluating the job competence level of agricultural extension officers which were Self-rating and Superior rating. The study results revealed that 55.84% of Agricultural Extension Officers rated themselves that they had a medium level of job competence, while in case of superior rating, 57.50% of Agricultural Extension Officers had medium level of competence at a similar level. The overall finding on job competence indicated

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that 65% of agricultural extension officers were at a medium level of competence. In terms of Self-rating, agricultural extension officers demonstrated higher competence in communicative ability, initiative, empathy, and technical knowledge dimensions with a mean index. On the other hand, according to Superior rating, agriculture extension officers exhibited greater competence in initiative, communicative ability, empathy, and judgement dimensions with the mean index. The study emphasizes exploring job competence levels, various competence dimensions, and the relationship of independent variables with job competence among agricultural extension officers.

1. INTRODUCTION

Human resource management plays an important role in preparing Agricultural Extension Officers to meet the rapid changes in rural situations such as such as shifts in agricultural practices, technological advancements, changes in community demographics, economic transformations, or alterations in government policies affecting rural areas and developing the performance of the Agricultural Extension Officers working. The Agricultural Department needs a skilled Agricultural Extension Personnel who is capable of handling all the activities of agriculture in rural areas. Agricultural Universities play a pivotal role in training skilled human resources, including Subject Matter Specialists, Scientists, and Extension Officers.

The primary role of Agricultural Extension Officers (AEOs) is to disseminate new technologies or recommended practices to farmers, teach and demonstrate skills and practices, motivate farmers to adopt recommended practices, and communicate farmers' production problems to agricultural research stations. A high level of competence is a crucial skill and quality essential for effective performance by Extension Personnel in their roles.

Job competence refers to the ability, knowledge, skills, and proficiency that an individual possesses to perform tasks, duties, or responsibilities associated with a specific job or role. It encompasses the capability to effectively apply one's understanding of the job, use relevant skills, and produce desired outcomes. and it is an integral part of human resource management. To improve Agricultural Extension Officers' job competence, it is necessary to understand their levels of job competence to identify the factors that contribute to enhancing their job competence for the effective performance of their assigned duties. Competencies are one of the most effective tools and approaches that organizations can use to place employees in the appropriate position within the organization. The competencies are more concerned with the performance of employees and organizations. Once the workers are in the proper position, the organization has the opportunity to plan for future career development. When competencies are clearly defined, workers become more effective, and job timeliness is reduced. Agricultural extension workers are individuals who are in charge of achieving the goals of the extension system. The main goal of identifying competencies is to clarify the essential behavioral standards and specific tasks required by employees, as well as to determine the extent to which these standards are met by the employees.

In the agricultural department, the job competence of agricultural extension officers is evaluated primarily to meet organizational goals such as promotions, transfers, and determining training needs. It is extremely difficult for employees to improve their level of competence unless they are well informed about their competence levels and their strong and weak points [1].

The agricultural extension officers are grassroots level workers in the agriculture department who directly work with farmers. The primary role of agricultural extension officers is to help farmers make better decisions in farming and transfer technologies so that agricultural extension officers should have more competent skills in making the farmer's life better.

2. METHODOLOGY

The study was conducted in the Nalgonda district of Telangana state. Nalgonda district is divided into three revenue divisions, namely Nalgonda, Miryalguda, Devarkonda, which consists of 31 Mandal. The disproportionate random sampling method were used in selecting 120 Agricultural Extension Officers from all mandals of Nalgonda

district who were working in the Agriculture Department. Data on the job competence of agricultural extension officers were gathered using a scale developed by Reddy [2], with slight modifications. This scale comprises 10 dimensions measured on a 5-point continuum, ranging from "a great deal" to "not at all." Scores of 4, 3, 2, 1, and 0 correspond to these levels, respectively. The study employed this scale to assess and evaluate the job competence of agricultural extension officers. To analyze the overall job competence levels of the agricultural extension officers, two types of rating techniques were used: one is self-rating techniques, which means ratings provided by agricultural extension officers themselves, and superior rating techniques, which means ratings taken by superiors of agricultural extension officers. The overall job competence level of agricultural extension officers was found out based on the following formula: -

$$(OJC) = (\text{Self-rating score of respondent} + \text{Superior rating score of respondent})/2$$

The overall job competence determines the competence levels of the respondents and eliminates potential biases from their perspective. The Agricultural Extension Officers were categorized separately based on the mean and standard deviation of the scores of self-rating, superior rating, and overall job competence into low, medium, high.

The statistical tools used in the study were mean and standard deviation. Mean index was used in the ranking of job competence dimensions. Coefficient of correlation was adopted to find out the relationship of selected independent variables with the job competence levels of agricultural extension office.

3. RESULTS AND DISCUSSION

Fig. 1 indicates that Agriculture Extension Officers are categorized into low, medium, high competence levels. It was observed that 16.66 per cent, 20 per cent, and 27.50 were categorized into low level of job competence according to the Self-rating, Superior rating, and overall job competence, respectively. A medium level of job competence was noted among 55.84%, 65%, and 57.50% of respondents categorized based on Self-rating, Superior rating, and overall job competence, respectively. The high level of competence of respondents are 27.5 per cent, 15 per cent, 15 per cent were

categorized according to the Self-rating, Superior rating, and overall job competence, respectively. The results were supported by Kusumalatha, and Gowda [3].

It was concluded that the majority of the agricultural extension officers had a medium level of job competence. This might be due to the lack of more experience as agricultural extension officers as they were recently recruited and lack of time to improve their skills due to the busy with the other department works.

3.1 Dimension-wise Analysis

The data shown in Table 1, indicate the mean index of self-rating and superior rating obtained by Agricultural Extension Officers with respect to the different dimensions of job competence. The communicative ability and initiative were determined to have the highest mean score index in the case of self-rating and the reverse in the case of superior rating, followed by empathy, technical knowledge, guidance, adaptability, judgement, mental ability, creativity, and self-development, respectively, in the case of self-rating, while empathy, judgement, guidance, technical knowledge, creativity, mental ability, adaptability, and self-development, respectively, in the case of superior rating.

It was concluded that communicative ability and initiative were found to be dominant in the case of self-rating and superiors rating. This might be due to the posting of Agricultural Extension Officers in their native place, as they were familiar with the local language and took the initiative in coordinating the farmers in organizing meetings and implementing schemes easily. The trend was observed by Debnath et al. [4].

In the case of self-rating, self-development and creativity obtained the lowest mean score index. This could be attributed to Agricultural Extension Officers facing challenges in dedicating ample time to enhance their capabilities amidst rising work pressure, extensive documentation tasks, and a shortage of appropriate training programs, hindering their ability to perform duties with efficiency and effectiveness.

Self-development and adaptability obtained the lowest mean score index in the case of superior rating. This could be attributed to the work pressure faced by Agricultural Extension Officers, limiting the time available for their self-development, coupled with a lack of extensive
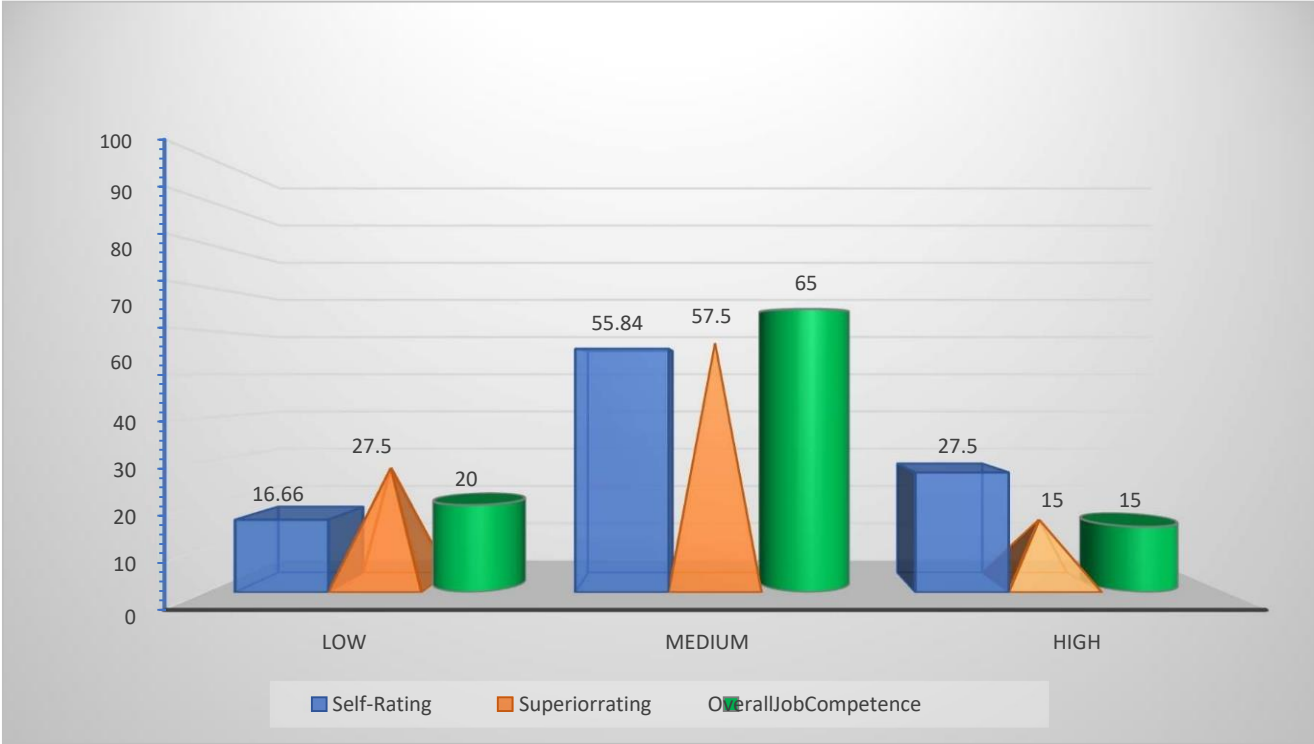
Fig. 1. Distribution of agricultural extension officers according to the self-rating, superiorrating and overall job competence

Table 1. Dimensions-wise analysis of job competence

Sl. No.	Dimension of job competence	Self-rating(AEO)		Superior-rating(MAO)	
		Meanindex	Rank	Mean index	Rank
1	Technical knowledge	82.53	4	76.49	6
2	Guidance	81.18	5	76.66	5
3	Communicative Ability	87.56	1	79.89	2
4	Adaptability	80.59	6	73.40	9
5	Self-Development	76.28	10	68.09	10
6	Creativity	78.75	9	76.25	7
7	Empathy	83.57	3	78.75	3
8	Mental Ability	78.75	8	75.83	8
9	Initiative	86.73	2	83.22	1
10	Judgment	80.76	7	77.25	4

experience in the job. As a result, Agricultural Extension Officers may not be fully acclimated to field situations, impacting their ability to provide information and address field problems effectively. From the results, we can conclude that there is still a need to improve the Agricultural Extension Officers to adapt to the field situations and self-development.

3.2 Relation Analysis

Table 2 indicates that the age, education, job experience, training received, achievement motivation, job commitment, and mass media exposure of Agricultural Extension Officers had a positive and highly significant relationship with their job competence. Additionally, the level of aspiration had a positive and non-significant relationship. On the other hand, Job stress showed a negative and significant relation.

3.2.1 Relationship between Socio-personal variables with job competence

The positive and significant relationship of the Age, Education, Job experience, and Training received with job competence may be due to the following probable reasons. An increase in the age of the Agricultural Extension Officers provides many opportunities to develop their knowledge and practical skills by learning through hands-on experience, enabling them to deliver their duties efficiently and effectively. Agricultural Extension Officers with more educational qualifications exhibit better technical knowledge, conceptual understanding, practical skills, and an understanding of various difficult situations in performing their duties.

Having more job experience for Agricultural Extension Officers helps them to be more familiar with the duties and responsibilities assigned by the Department of Agriculture. They can relate their experience in handling present difficult situations, which, in turn, helps in delivering their duties efficiently. Agricultural Extension Officers who have undergone more training have sharpened their skills, gained more practical knowledge, and filled the Agricultural Extension Officers with the expertise needed to fulfill the roles of agricultural extension officer jobs.

The relationship of age and experience with job competence yielded similar results as observed by Nwaogu and Abiodum [5].

The health of Agricultural Extension Officers showed a positive yet non-significant correlation with their job competence. This could be attributed to the presence of various organizational factors, distinct from health, that influence an individual's job competence skills. This pattern was noted by Jayasingh [6].

3.2.2 Relationship between psychological variables with job competence

The Table 2 shows that the achievement motivation and job commitment of Agricultural Extension Officers had a positive and highly significant relationship with the job competence. This might be due to the Agricultural Extension Officers who had high levels of Achievement Motivation trying hard to find out how and how the desired things can be achieved. The respondents who had committed to their job remain energetic in delivering their duties and gaining the competent skill to discharge their duties efficiently and effectively. This promotes high job competence skills. These trends were observed by Vijaybabu [7], Raut (2006), and Bagate [8].

Table 2. Relationship between independent variables with job competence

Sr. No	Characteristics	Coefficients ofcorrelation'r'
A	**Socio-personal variables**	
1.	Age	0.317**
2.	Education	0.286**
3.	Job experience	0.261**
4.	Training received	0.465**
5.	Health	0.082
B	**Psychological variables**	
6.	Job stress	-0.229*
7.	Level of aspiration	0.123
8.	Achievement motivation	0.423**
9.	Job commitment	0.281**
C	**Communication variables**	
10.	Mass media exposure	0.263**

*Correlation is significant at the 0.05 level
**Correlation is significant at the 0.01 level

The job stress of Agricultural Extension Officers had a negative and significant relationship with their job competence. This indicates that when Agricultural extension officers have high work pressure, it gives them less time to improve their knowledge and skill, which in turn will show the effect on their job competency. Similar observations were observed by Ferguson et al. [9].

The level of aspiration of Agricultural Extension Officers had a positive and non-significant relationship with job competence. This may be due to the high level of aspiration of Agricultural Extension Officers not being matched with competence levels.

3.2.3 Relationship between communication variables with job competence

The Table 2 indicates that mass media exposure of Agricultural Extension Officers had a positive and significant relationship with job competence. It can be concluded that mass media exposure exists a positive and significant relationship with job competence. This may be due to the Agricultural Extension Officers who have high mass media exposure obtaining more information and developing particular problem-solving skills, which leads to increased competency levels to deliver their services to farmers.

4. CONCLUSION

The study findings indicate that Agricultural Extension Officers exhibited a medium level of overall job competence, which could be associated with a lack of extensive experience and training. In light of these results, extending training periods may enhance the awareness and proficiency of extension personnel in modern agricultural information.

The analysis of job competence dimensions reveals that agricultural extension officers demonstrated strong skills in communication and initiative. Consequently, assigning agricultural extension officers to their native places is likely to improve rapport with farmers and facilitate effective communication in their native language. This, in turn, can benefit farmers and enhance the transfer of agricultural technology.

The agricultural extension officers were least competent in their self-development. Therefore, the agricultural department should provide sufficient time and restrict them to their assigned duties in agriculture to ensure the effective performance of their duties.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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