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The Profile Characteristics and the Level of Job Satisfaction of the Scientists Working in SKRAU and RAJUVAS Bikaner, Rajasthan, India

Rishi Dev Jaryal^{a*#}, Arvind Kumar Jhajharia^{a†} and Shiwani Bhadwal^{b#}

^a Department of Agricultural Extension and Communication, Swami Keshwanand Rajasthan Agriculture University, Bikaner, India.

^b Department of Agricultural Economics, Extension Education ABD Rural Sociology, CSK Himachal Pradesh Agriculture University Palampur, Palampur, India.

Authors' contributions

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

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ABSTRACT

Human Resource Management is an integral part of any organization pertaining to the management of human capital and their relationship with the enterprise. Its major objective is to pool together an effective organization of its employees who staff the organization and motivating each one of them to contribute their best to the success of the organization. In an enterprise, every single individual is important to it. Therefore, it becomes necessary to pay attention towards the feeling that an employee has towards his or her organization. For an organization to succeed, its employees must feel happy and satisfied at work. This is one of the most neglected aspects and not many studies have been done in order to elicit the attention towards how satisfied the employees of an organization are. This study takes into consideration two agricultural organizations: 1. Swami keshwanand Rajasthan Agricultural University (SKRAU) and 2. Rajasthan University of Veterinary and Animal Sciences (RAJUVAS) both located in the city of Bikaner in Rajasthan for assessment of Job satisfaction imperative to ascertain whether or not the scientists working under these universities are happy with their work environment. As respondents, 67 scientists from SKRAU and

[#] M. Sc. Student;

[†] Assistant Professor;

*Corresponding author: E-mail: rishijaryal0@gmail.com;

53 scientists from RAJUVAS were selected by proportionate random sampling constituting a total of 120 respondents. Ex-post facto research design was used. An Interview schedule was prepared and the results of the study concluded that majority of the respondents were males, belonged to Middle age group, had Ph.D. as their highest educational qualification, medium level of annual income, medium level of job experience rural background, were married, living in nuclear families and in govt. quarters. Majority of them used own vehicle as the mode of transport and were Assistant Professors. Their job satisfaction was assessed in terms of three aspects: general determinants, administrative determinants and supportive determinants. Majority of the scientists were having medium level of satisfaction followed by high and low levels respectively.

Keywords: *Ex-post facto; proportionate random sampling; job satisfaction.*

1. INTRODUCTION

Unequivocally, one of the most important factors to impact our lives is the standard of living. Everyone wants to live their life happily and work environment plays a key role in deciding the extent to which a person feels happy and lives a good life. If a person gets a good working environment, he feels motivated and respects his workplace even more. And this reflects in his job performance. Thus, our work-life influences the quality of our lives. Human capital is the most important resource for any organization and the management of this very important resource in unequivocally very important. Considering this, we need to understand that one's satisfaction with their job will yield in better human resource development and management. It is the prime responsibility of any organization that her employees are satisfied [1,2]. Job satisfaction is the most important factor which the productivity of an organization depends on. Haprock was the first to talk about job satisfaction when he described it as a combination of psychological, physiological and environmental circumstances that cause a person to say "I am satisfied with my job." It is the key ingredient that leads to recognition, income, promotion, and achievement of other goals that lead to a feeling of fulfillment [3]. Job satisfaction is related to many factors that are important for human resource management, such as performance, counterproductive behavior, turnover, and employee health [4]. Also, in a country like India, where we are talking about doubling farmers' income and improving their living standards, we first need to focus on the sort of environment persisting in the agricultural universities which are determined to bring about these changes but generally, this aspect is neglected. Human resource management in organization, especially in agricultural organizations in India is an overlooked facet of these organizations [5-7]. This study takes into account the management of

human capital in two agricultural organizations. We considered two educational institutions i.e Swami Keshwanand Rajasthan Agricultural University (SKRAU) and Rajasthan University of Veterinary and Animal Sciences (RAJUVAS) both located in Bikaner, Rajasthan. RAJUVAS was also an integral part of SKRAU until 2013 when it got separated and declared as an autonomous university. These universities are determined to bring about revolution in Indian agriculture through research, education and extension and the credit mainly goes to the scientists working under these universities who are working relentlessly to attain the same objective. They are responsible for building future agricultural experts through teaching and improving the existing agricultural situation through research and extension. So, it becomes increasingly important to have a knowhow of these personnel and their working environments so that they remain motivated in the avenue of agricultural development. Thus, the study holds immense importance on knowing which factors contribute to the job satisfaction of the scientists of these universities. The results of this study would be helpful for the top-level officials to understand and formulate development programmes keeping in view what the employees working under them feel about it and how to increase the efficiency in order to fulfil the objectives.

2. METHODOLOGY

The two agricultural universities viz. Swami Keshwanand Rajasthan Agricultural University and Rajasthan University of Veterinary and Animal Sciences located in the city of Bikaner were taken as the locale of the study. These two universities were selected on purpose as SKRAU is the oldest agricultural university in Rajasthan and RAJUVAS is the one and only university in the state devoted to Veterinary and Animal Husbandry. Both the universities are located in

close proximity to each other thus making it feasible for the researcher to have easy collection of the data. 67 scientists from SKRAU and 53 scientists from RAJUVAS were selected as respondents of the study through proportionate random sampling constituting a total of 120 respondents. The study employed Ex-post facto research design as the phenomenon of job satisfaction was studied as a consequence of certain independent variables which could not be manipulated anymore. The data were collected through an interview schedule which was assessed by 17 experts working in the field of agricultural extension. The schedule elicited information about the personal profile of the respondents and the level of job satisfaction. The variables depicting the personal profile were categorised into different categories and scores were assigned to each category. Age, Annual income and Job experience were categorised on the basis of Mean and Standard Deviation. The statements to ascertain Job satisfaction level were categorised into three

aspects viz. general determinants, administrative determinants and supportive determinants containing a total of 49 statements. The responses were assigned as Fully Satisfied (FS), Satisfied (S) or Dissatisfied (DS) containing scores 3, 2 and 1 respectively. The data were then tabulated and analysed using different statistical tools like arithmetic mean, standard deviation, percentage, frequency, rank, mean percent score, etc. Mean Percent Scores were obtained by multiplying total obtained scores of the respondents by hundred and divided by the maximum obtainable score under each practice. Formula of MPS is given as:

$$MPS = \frac{\text{Total score obtained}}{\text{Maximum obtainable score}} \times 100$$

The measurements of variables taken to ascertain the personal profile of respondents are shown in the tables below:

Table 1. Variables to elicit personal profile

1.	Age	Schedule developed by researcher
2.	Gender	Procedure followed by Kumar (2020)
3.	Educational status	Procedure followed by Gopika (2014) used with modification
4.	Annual income	Schedule developed by researcher
5.	Background	Scale developed by Hosur (1977) used with modification
6.	Marital status	Procedure followed by Kumar (2020) used with modification
7.	Family type	Scale developed by Trivedi (1963) used with modification
8.	Accommodation	Procedure followed by Gurjar (2018) used with modification
9.	Mode of transport	Procedure followed by Sabar (2015) used with modification
10.	Job experience	Schedule developed by researcher
11.	Designation	Procedure followed by Sabar (2015) used with modification
12.	Job satisfaction	Procedure followed by Srinath used with modification (1987)

Table 2. Categorization of age

S.No.	Category	Range
1.	Young	Below 40 years (<Mean-SD)
2.	Medium	Between 40-56 years (Mean±SD)
3.	Old	More than 56 years (>Mean+SD)

Table 3. Categorization of annual income

S.No.	Category	Range
1.	Low	<Mean-SD
2.	Medium	Mean±SD
3.	High	>Mean+SD

Table 4. Categorization of job experience

S.No.	Category	Range
1.	Low	Below 4 years
2.	Medium	Between 4-22 years
3.	High	More than 22 years

Table 5. Job Satisfaction of the respondents

S. No.	Category	Range
1.	Low	<Mean-SD
2.	Medium	Mean±SD
3.	High	>Mean+SD

3. RESULTS AND DISCUSSION

The responses were taken from 120 respondents and the data was analysed. There were 11 variables considered to know about the personal profile of respondents and a total of 49 statements to find out their level of job satisfaction. The personal profile of these respondents and their level of job satisfaction has been summarised in the form of a table shown in the subsequent section.

As it is clear from Table 6, maximum respondents belonged to Medium age group i.e. 40-56 years of age. Medium age group consists of 63.30 per cent of the total teachers. The next most prevalent group is the Young age group which consists of 20.80 per cent of the total

teachers. The rest of teachers belong to Old age group constituting 15.80 per cent of the total sample of respondents. The results are in agreement with Gurjar [8] who found out that majority of the teachers working under SKNAU, Jobner belonged to middle age group (55.00%) whereas Pavitra and Manjunath [9] found out that majority of the respondents of their study belonged to old age group.

The Table 7 explicitly depicts that out of the 120 respondents, majority represents the males. The frequency of male teachers is 90 or 75.00 per cent of the total whereas the female are 30 in number which constitutes 25.00 per cent of the total. The findings of Kumar [10] and Jini [11] had the similar results.

Table 6. Distribution of respondents according to Age

S. No.	Age group	Frequency (f)	Percentage
1.	Young (<40 years)	25	20.80%
2.	Medium (40-56 years)	76	63.30%
3.	Old (>56 years)	19	15.80%
Total		120	100.00%
Mean=47.85		S.D.= 8.13	

Table 7. Distribution of respondents according to Gender

S. No.	Gender	Frequency	Percentage
1.	Male	90	75.00%
2.	Female	30	25.00%
Total		120	100.00%

Table 8. Distribution of respondents according to educational status

S. No.	Educational status	Frequency	Percentage
1.	MSc.	14	11.67%
2.	PhD	106	88.33%
Total		120	100.00%

The above Table 8 reveals that out of 120 teachers, majority consists of respondents with PhD as the highest qualification. 106 out of 120 are qualified with a PhD degree which makes 88.33 per cent of the total. The results are on the same line of those of Edilberto and Andal [12].

The Table 9 depicts that 94 respondents are receiving an annual salary between Rs. 7 Lakh to 17 Lakh which has been classified as Medium income group. It constitutes 78.33 per cent of total respondents. This is followed by Low income group which contains 12.51 per cent of the respondents followed by High income group which carries 9.16 per cent of the total respondents. The results bear a similarity to those of Gurjar [8] and Kumar [10].

Table 10 indicates that majority i.e. 63.33 per cent of the respondents have had Rural background. It is followed by respondents who have had semi-urban background and constitute

30.00 per cent. The rest 6.67 per cent respondents fall in the category of having an urban background. The results are similar to the findings of Gopika [13] who found that majority of Assistant Horticulture Officers i.e. 53.75 per cent were having a rural background. The results are also similar to the findings of Tamagle [14] regarding background of PDOs.

The Table 11 reflects that out of the 120 respondents, majority i.e. 98.33 per cent falls under married category. The rest of the respondents constituting 1.67 per cent make the unmarried category. The findings are similar to the findings of Kumar [10].

It is clear from the Table 12 that 75 out of the 120 respondents have a nuclear family which corresponds to 62.50 per cent of the total. The rest of the respondents i.e. 37.50 per cent are having a joint family. The results are in contrast to those of a study by Lavanaya [15].

Table 9. Distribution of respondents according to Annual Income

S. No.	Income group	Frequency	Percentage
1.	Low (<7 LPA)	15	12.51%
2.	Medium (7-17 LPA)	94	78.33%
3.	High (>17 LPA)	11	09.16%
Total		120	100.00%
Mean= 11.86		S.D.= 4.91	

Table 10. Distribution of respondents according to Background

S. No.	Background	Frequency	Percentage
1.	Rural	76	63.33%
2.	Semi-urban	36	30.00%
3.	Urban	08	06.67%
Total		120	100.00%

Table 11. Distribution of respondents according to marital status

S. No.	Marital status	Frequency	Percentage
1.	Married	118	98.33%
2.	Unmarried	02	01.67%
Total		120	100.00%

Table 12. Distribution of respondents according to family type

S. No.	Family type	Frequency	Percentage
1.	Nuclear	75	62.50%
2.	Joint	45	37.50%
Total		120	100.00%

Table 13. Distribution of respondents according to their accommodation

S. No.	Accommodation	Frequency	Percentage
1.	Rented	2	1.66%
2.	Govt. Quarter	68	56.65%
3.	Own home	50	41.66%
Total		120	100.00%

The Table 13 shows that majority of the respondents live in govt. quarters of the university and they consist of 56.65 per cent of the total followed by 41.66 per cent who own their own home in city. The rest 1.66 per cent of the respondents live in the rented accommodation.

next category was of the Professors who formed the second majority constituting 35.83 per cent followed by Associate Professors constituting 8.33 per cent of the total. The results are similar to Tewari [17] who found that majority (60.00 per cent) of the teachers were Assistant Professors.

The Table 14 gives us clarity about the job experience of the respondents. The majority of the respondents have medium job experience constituting 66.70 per cent of the total, followed by 25.00 per cent having high job experience which is ultimately followed by 8.30 per cent of respondents having low job experience. The results are in line with those of Kandwal and Kaur [16] who ascertained that majority of the scientists in PAU and CSKHPKV had a medium level of job experience.

The Table 16 shows that majority of the teachers working in SKRAU and RAJUVAS have a medium level of job satisfaction. 67 teachers i.e. 55.80 per cent of them were classified under medium level of job satisfaction. 42 teachers i.e. 35.00 per cent of the teachers are highly satisfied with their jobs followed by 11 teachers i.e. 9.20 per cent who were dissatisfied or having low satisfaction with their jobs. The results are also similar with Kadam et al. [18] who found out that the overall job satisfaction of the faculty members was moderate whereas the results are discordant with those of Debnath and Saravanan [19] who found that most of the AOs had low level of job satisfaction.

The data in the Table 15 depicts that majority of the respondents were Assistant Professors and they make up to 55.83 per cent of the total. The

Table 14. Distribution of respondents according to their Job experience

S. No.	Job experience	Frequency	Percentage
1.	Low(<4 years)	10	08.30%
2.	Medium(4-22 years)	80	66.70%
3.	High(>22 years)	30	25.00%
Total		120	100.00%
Mean= 13.4		S.D.=9.1	

Table 15. Distribution of respondents according to their designation

S. No.	Designation	Frequency	Percentage
1.	Asst. Professor	67	55.84%
2.	Assoc. Professor	10	08.33%
3.	Professor	43	35.83%
Total		120	100.00%

Table 16. Distribution of respondents on the basis of level of job satisfaction

S. No.	Job satisfaction group	Frequency	Percentage
1.	Low	11	09.20%
2.	Medium	67	55.80 %
3.	High	42	35.00%
Total		120	100.00%
Mean= 116.9		S.D.=14.9	

It was elicited by presenting a number of statements to the respondents and the responses to them were presented as a Likert-type scale on a continuum of 3 points which were Fully Satisfied, Satisfied and Dissatisfied. The statements were also categorised into three categories: General determinants, Administrative determinants and Supportive determinants. The total scores for individual statements were obtained and Mean Percent Scores were calculated and on that basis ranks were given to the statements. As evident from Table 17, amongst all the statements regarding the general determinants, 'Feeling of accomplishment' was accorded 1st rank which means that majority of the respondents consider this to be the major general determinant of job satisfaction. It might be attributed to the fact that as self-realization needs are on the top of needs hierarchy, scientists feel more satisfied by the accomplishment of the given assignments. Prestige about one's job is an

important factor in being satisfied. The scientists are least satisfied with the 'Work culture in the university' which might be due to lack of coordination and cooperation among the staff members of both the universities. Of all the statements concerning the administrative determinants, 'Recognition and respect by the students' was accorded 1st Rank by the respondents. The scientists are least satisfied with the opportunities for research abroad. This might be because of the lack of funding available with the universities. Then, amongst all the statements categorized as supportive determinants, 'Creation of a positive difference in others' life' was accorded Rank 1 by the respondents. They gave lowest rank to the statement 'Availability of trained technical staff'. This might be because of the pending filling of vacant positions of Lab Assistants or the like. The statements presented before respondents and their MPS and ranks are given in the following tables:

Table 17. Determinants of job satisfaction

S. No.	General determinants	MPS	Rank
1.	Place of posting	89.77	4
2.	Feeling of self-esteem and self-respect from your job	90.27	3
3.	Prestige of job inside or outside of department	98.33	2
4.	Feeling of accomplishment	98.61	1
5.	Opportunity for challenges in the job	86.66	6
6.	Work environment in the university	82.50	11
7.	Guidance and support from the seniors	86.11	7
8.	Applicability of your talent and personal abilities	80.55	14
9.	Scope to prove merit and excellence in the university	84.16	9
10.	Work load	70.27	20
11.	Work culture in the university	69.16	21
12.	Feedback system and value of the feedback	81.11	13
13.	Feeling of being productive at workplace	73.61	18
14.	Feeling of happiness while being at workplace	85.55	8
15.	Balance between professional and personal life	83.61	10
16.	Interest in the given work	88.89	5
17.	Impact of work on health (physical and mental)	80.00	16
18.	Ability to maintain a balance between work and health	81.38	12
19.	Diversity in the assignments	73.88	17
20.	Degree of autonomy of work in the department	80.28	15
21.	Clear future prospects	72.77	19
	Administrative determinants	MPS	Rank
1.	Professional growth in the university	71.50	18
2.	Appreciation gained by seniors and colleagues	81.38	10
3.	Recognition and respect by students	98.61	1
4.	Opportunities for research in India	81.66	9
5.	Opportunities for research abroad	65.83	21
6.	Opportunities to express professional development needs	79.72	12
7.	Opportunity for timely promotion	71.18	19
8.	Opportunities to receive various scientists' awards	71.66	17
9.	Organization of various extension activities in the department/university	82.77	4

S. No.	General determinants	MPS	Rank
10.	Feeling of Job Security	83.33	3
11.	Fairness of university authority	72.50	15
12.	Timely exposure through workshops, seminars, webinars etc.	75.83	13
13.	Timely pay fixation	84.16	2
14.	Pre-service or in-service or refresher trainings	82.70	5
15.	Policies and procedures of university in relation to your job	81.94	7
16.	Freedom and flexibility in work	82.50	6
17.	Time to time support and guidance from administration	72.22	16
18.	Opportunities to participate in extension programmes organized by the university	81.90	8
19.	Adaptability of the department and university to change	80.83	11
20.	Even distribution of work among the staff	66.11	20
21.	Providing enough guidance as members of advisory committees of scholars	74.44	14
Supportive determinants		MPS	Rank
1.	Availability of trained technical staff	60.27	7
2.	Availability of supportive colleagues and cooperation from them	75.27	5
3.	Facilities provided by university (Residential, medical etc.)	77.22	4
4.	Working relationship with colleagues	87.77	2
5.	Participation in decision making	71.38	6
6.	Creation of a positive difference in others' life (farmers, students and co-workers)	93.33	1
7.	Equal treatment by seniors without any biasness	80.83	3

MPS= Mean Percent Score

4. CONCLUSION

As far as personal profile of the respondents is concerned, majority of the respondents belonged to medium age group (63.30%), were males (75%), had their highest qualification as Ph.D. (88.33%), were earning a medium level of annual income between 7 LPA-17LPA (78.33%) and basically belonged to a rural background. It was also found out that majority of the respondents was married, living in nuclear families in government quarters. Also, Majority of the respondents was found to be having a medium level of job experience (66.70%) and most of them were working as Assistant Professors (55.84%). Talking about their level of job satisfaction, it was ascertained that majority (55.80%) of the scientists working in the selected universities were having a medium level of job satisfaction followed by high and low levels respectively. Most of them felt satisfied because of their 'feeling of accomplishment', 'Recognition and respect by the students' and 'Creation of positive difference in others' life'. Only 9.20 per cent of the respondents were totally dissatisfied by their job attributing to lack of congenial work culture in the university, less opportunities for research in abroad and unavailability of technical staff in the departments. The study indicated that the selected universities need to work upon some areas such as improving the work culture,

increasing research opportunities abroad by signing MoUs with foreign universities to increase the level of job satisfaction from medium to high.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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