



JOB SATISFACTION OF SCIENTISTS IN THE ANIMAL SCIENCE RESEARCH INSTITUTES OF ICAR*

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Abstract

The study analyzed the job satisfaction of the scientists in the four south zone animal science research institutes of ICAR. The Job Satisfaction Survey scale (JSS) in the summated rating scale format, developed by Spector (1994) was adopted for this purpose. The nine facet scale comprised of 36 items with four items in each facet. The component facets were pay, promotion, fringe benefits, supervision, contingent or performance based rewards, operating conditions, co-workers, nature of work and communication. The scale was administered among the scientists who were requested to indicate their degree of agreement or disagreement towards the items. Out of the eighty three scientists working in the institutes, seventy two responded. The findings revealed that more than three fourth of the respondents were satisfied with their job and none expressed dissatisfaction. The entire scientific community studied was satisfied with the nature of their work, while, majority was dissatisfied with operating conditions.

Key words: Job satisfaction, scientists, ICAR, animal science research institutes

It is widely accepted that job satisfaction is a critical factor in the retention, persistence and progress of academia, especially, in the changing landscape of the Research and Development (R and D) sector. According to Tack and Patitu (1992), the study of faculty satisfaction rates is essential because dissatisfaction with any aspect of a faculty position could result in decreased output and quality of work. Though employee job satisfaction has always been a favourite area of investigation among social science researchers, dearth of such studies in public sector R and D organizations is perceptible.

The Indian National Agricultural Research System (NARS), spearheaded by the Indian Council of Agricultural Research (ICAR), is one among the reputed systems of the world in terms of its talented pool of scientists, infrastructure and vision. The research ecosystem in the agricultural and animal sciences institutes of ICAR has kept evolving incessantly, against the backdrop of emerging challenges and paradigm shifts. Though the job satisfaction of the scientific think tank has much to do with the system's productivity, studies in this regard are practically nil. The

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study assumes significance in this context.

Materials and Methods

The study was conducted among the scientists in the four south zone animal science research institutes of ICAR. The institutes comprised of the National Research Centre on Meat (NRCM), Hyderabad, Telangana; Directorate of Poultry Research (DPR), Hyderabad, Telangana; National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI), Bengaluru, Karnataka and National Institute of Animal Nutrition and Physiology (NIANP), Bengaluru, Karnataka. Out of the eighty three scientists working in the institutes, seventy two responded.

In the study, 'Job satisfaction' implied the mental disposition of the respondents with respect to various aspects of their job. The Job Satisfaction Survey scale (JSS) in the summated rating scale format, developed by Spector (1994) was adopted to assess the respondents'

attitude towards different aspects of the job. The nine facet scale comprised of 36 items with four items in each facet. The component facets were pay, promotion, fringe benefits, supervision, contingent or performance based rewards, operating conditions, co-workers, nature of work, and communication. Among the items, seventeen were positive statements and nineteen negative. The respondents were requested to indicate their degree of agreement or disagreement towards the items. Accordingly, the items were rated on a six point continuum *viz.*, disagree very much, disagree moderately, disagree slightly, agree slightly, agree moderately and agree very much with scores of one, two, three, four, five, and six respectively for positive statements. For negative items, the scoring pattern was reversed. The sum of scores assigned to all the items by each respondent constituted his or her job satisfaction score. The score for each of the nine facets ranged from 4 to 24; whereas, the total job satisfaction scores ranged from 36 to 216.

Based on the job satisfaction scores obtained, the respondents were categorized as follows.

Category	Subscale/facet score	Total score
Satisfied	16 to 24	144 to 216
Ambivalent	Between 12 and 16	Between 108 and 144
Dissatisfied	4 to 12	36 to 108

Further, the item mean scores were worked out using the formula,

$$\text{Mean score of the item} = \frac{\text{Score of the item}}{\text{Number of respondents}}$$

Also, the mean scores of the facets were calculated using the formula,

$$\text{Mean score of the facet} = \frac{\text{Sum of scores of all the items under the facet}}{\text{Number of items in the facet}}$$

Subsequently, the facets were ranked based on the mean scores.

Results and Discussion

Table 1. Distribution of respondents based on overall job satisfaction

n=72

Sl. No.	Category	Frequency (f)	Per cent (%)
1.	Dissatisfied (36- 108)	0	0
2.	Ambivalent (between 108 and 144)	16	22.22
3.	Satisfied (144- 216)	56	77.78
	Total	72	100.00

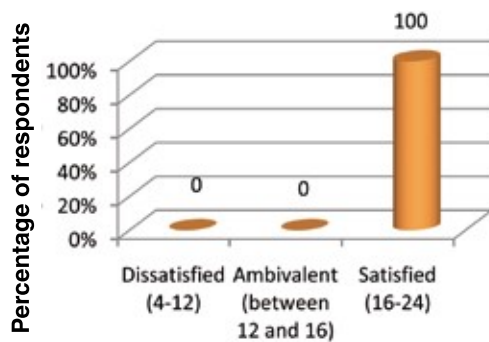
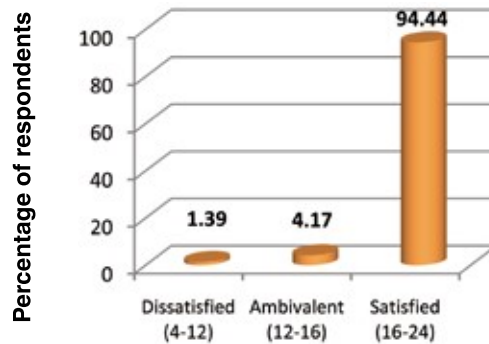
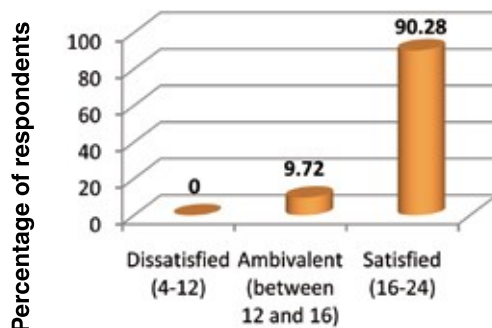
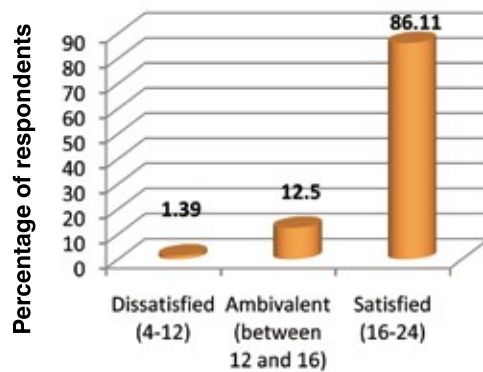
Table 2. Respondents' job satisfaction in various facets

SI. No.	Facets of job satisfaction	Mean score	Rank
1	Nature of work	5.38	I
2	Pay	4.97	II
3	Communication	4.92	III
4	Coworkers	4.88	IV
5	Supervision	4.79	V
6	Promotion	4.60	VI
7	Fringe benefits	4.52	VII
8	Contingent rewards	4.07	VIII
9	Operating conditions	2.90	IX

About job satisfaction, a substantial number of respondents (77.78 per cent) were satisfied with their job, while, 22.22 per cent were ambivalent. None were dissatisfied.

As for scientists' job satisfaction, the facet/domain of 'nature of work' scored first with a mean score of 5.38 followed by pay (4.97), communication (4.92), coworkers (4.88), supervision (4.79), promotion (4.60), fringe benefits (4.52), contingent rewards (4.07) and operating conditions (2.90) (Table 2).

The present study has come out with salient findings on the job satisfaction of the scientific community in the NARS, across different dimensions of their job. It is a welcome finding that more than three fourth of the respondents were satisfied with their job as such. Furthermore, none expressed dissatisfaction with the job. This might be attributed to the faculty's perception of the workplace as a congenial one endowed with a rich work culture. Hossain and Islam (1999) reported that perceptions of quality of work life

**Fig.1.** Distribution of respondents based on satisfaction with the nature of work**Fig. 2.** Distribution of respondents based on satisfaction with pay**Fig. 3.** Distribution of respondents based on satisfaction with communication**Fig.4.** Distribution of respondents based on satisfaction with coworkers

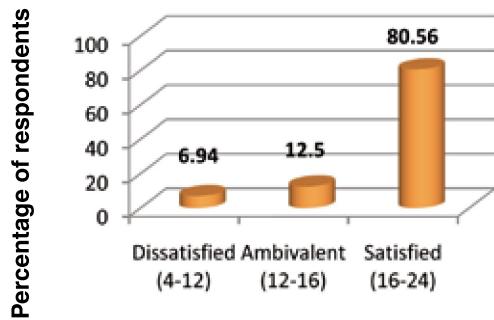


Fig. 5. Distribution of respondents based on satisfaction with supervision

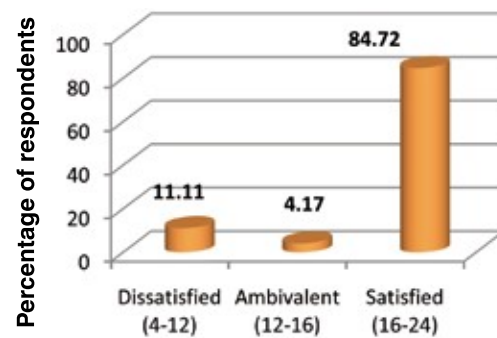


Fig. 6. Distribution of respondents based on satisfaction with promotion

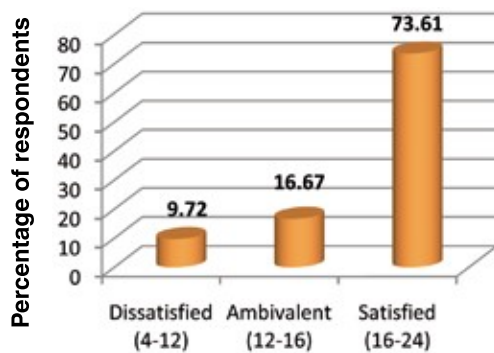


Fig.7. Distribution of respondents based on satisfaction with fringe benefits

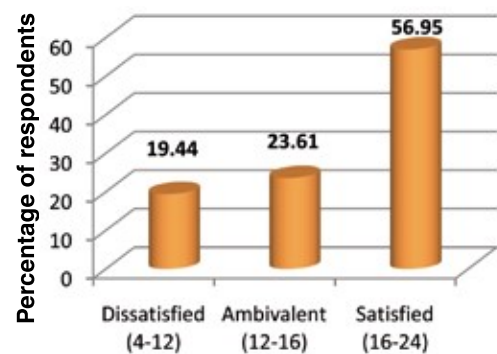


Fig.8. Distribution of respondents based on satisfaction with contingent rewards

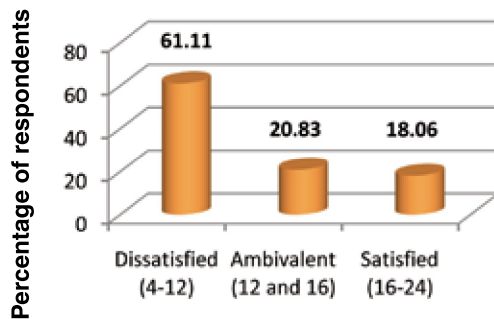


Fig.9. Distribution of respondents based on satisfaction with operating conditions

and job satisfaction were significantly higher among the employees of small organizations than those in the large ones. The power of an amiable workplace in enhancing organizational effectiveness and productivity has been reported by many researchers (Sharma and Sharma, 1989; Srivastava, 2008; Tewari, 2009).

It is heartening to note that the entire scientific community studied was satisfied

with the nature of their work. Since nature of work is undoubtedly the key factor of satisfaction with one's job and career as such, the hundred per cent satisfaction of the faculty in this regard displays a highly appreciable and healthy trend. Perhaps, the nature of work itself might have been the major source and propelling force of intrinsic motivation among the faculty. Reportedly, the faculty enjoyed spending profound time in innovative research and product development, especially, on collaborative and interdisciplinary scales. Many studies have observed that greater time spent on research positively impacts faculty output and job satisfaction (Fox, 1992; Marsh and Hattie, 2002).

In terms of the pay received too, a remarkable majority expressed satisfaction. The finding could naturally be attributed to a highly paid and secure job. It is noteworthy that almost all the respondents were satisfied with

the communication ambience that prevailed in the institutes. The researcher could observe that the scientists were well informed about the mandate and activities of the organization. The institutes were bestowed with well-established inbuilt systems for flow of command, information exchange and project vetting. Forums like research advisory committee, institute management committee and institute research council served as platforms that probably minimised ambiguity regarding roles and assignments. Several studies have observed positive relationship between organizational communication and job satisfaction (Orpen, 1997; De Ridder, 2004; Abugre, 2011). Soonhee (2002) reported that job-associated factors such as clarity of job and social interactions at work also motivated employees to work, along with extrinsic needs.

Liu (2001) observed that faculty members who expressed higher satisfaction with research were more likely to complete tenure and had much greater support from their peers. The predominantly high level of satisfaction with co-workers, indicative of strong colleague affiliations is a noteworthy finding in this context. At a busy service desk, social support from colleagues, with expressions of personal caring, empathy and general friendliness can greatly improve outlook towards work and job satisfaction (Munde 2013).

The results reveal that majority was satisfied in the realm of supervision too. This implied that the faculty enjoyed high morale under their supervisors in the organizational hierarchy. Supervision offers satisfaction owing to the supervisor's ability to provide emotional and technical guidance and support (Robbins, 2003). A substantially high proportion of scientists with satisfaction in the promotion aspect might be ascribed to the existence of a well-planned career advancement program with ample opportunities to surge in the career trajectory. The studies by Santhapparaj and Alam (2005) demonstrated positive and significant effect of promotion on job satisfaction.

The satisfaction reported with fringe benefits is reflective of an organizational welfare policy with adequate and equitable

benefit packages for employees. The staff could be pleased and encouraged by granting inputs appropriately according to outputs (Rahimi *et al.*, 2013). Relatively less proportion of scientists expressed satisfaction with contingent rewards compared to the other dimensions of job satisfaction. This shows that although the scientists were satisfied with the monetary benefits, they presumably lacked appreciation and recognition for the work done. Jehanzeb *et al.* (2012) advocated that rewards must strategically be readjusted to achieve the organizational goals, to boost employee's motivation to carry out their job better and enhance satisfaction.

Concern stems from the finding that, a significantly higher percentage of scientists were dissatisfied with the operating conditions. Even as passionate about the research work, the scientists were desperate about the cumbersome clerical procedures, paper work and red tape delays at various phases of project vetting and implementation. In the scientists' opinion, the hurdles were mainly attributable to the bureaucratic mediocrity and politics prevailing in the organization.

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