

A NOTE ON JOB SATISFACTION LEVEL OF SCIENTISTS AND LOGISTIC PERSONNEL IN ANTARCTIC EXPEDITION

D. Dutta Roy and N.C. Deb

Indian Statistical Institute

Abstract

Recently attention was paid to assess different psychological phenomena of Indian scientists in Antarctic expeditions. Prior studies were conducted to assess personality traits of Antarctic expeditioners (Dutta Roy, 1992), differential patterns of state anxiety level of scientists across their journey, stay in and return from the Antarctica (Dutta Roy and Deb, 1996). Scientists and logistic personnel visit Antarctica with defined assignments. During their work in Antarctica, a barren land, they may face some troubles in performing the job, that may result in some changes to their job satisfaction level. Since, no studies paid attention to the job satisfaction of Antarctic expeditioners, present study aimed at determining patterns of job satisfaction level of both scientists and logistic personnel.

Introduction

Job satisfaction

The term job satisfaction was brought to limelight by Hoppock (1935). He reviewed 32 studies on job satisfaction conducted prior to 1933 and observed that it is a combination of psychological, physiological, and environmental circumstances that cause a person to say, "I am satisfied with my job". It refers to one's satisfaction with phenomenological experience on job. It assesses the difference between individual's expectation and what actually individual receives. Such definition indicates the variety of variables that influence the satisfaction of the individual. In Antarctic expedition, availability of adequate equipment to perform job, competencies of supervisors, interpersonal relationship among co-workers, opportunity to learn new things determine job satisfaction level of the scientists and logistic personnel.

Job satisfaction of scientists and logistic personnel

Job satisfaction varies with the technology (routinised and non-routinised) used in performing job. Persons working in routinised jobs are less satisfied than those in non-routinized jobs as they find that the job is boring and possesses nothing new to learn. In routinised job, the activities to be made are predetermined and predefined as a result, the job holder may arrange adequate equipment beforehand, due to prior experience. This reduces their anxiety in performing the job satisfactorily. Usually the job performance of logistic personnel is more routinised and predetermined than that of the scientists. Scientific job is innovative in nature. Prior arrangement for all equipments and knowledge related to scientific work is relatively less possible in scientific jobs. This may lower their job satisfaction level.

Hypothesis

In considering the above, it was hypothesised that there would be significant difference in levels of job satisfaction between scientists and logistic personnel.

Methods

Sample

Data were collected from scientists (n=12) and logistic personnel (n=7) during their expedition to Antarctica. Participants were selected following random sampling procedure. Average logistic personnel were younger (Mean = 33.86, SD=5.34) than the scientists (Mean = 39.17, SD = 6.45).

Tools

Likert type five point standardised rating scale with eight items was used for job satisfaction. Item total correlation indicated no significant relationship of two items (item no. 1 and 2) with total score. Scores on these two items were not used in final analysis of data. In considering the six items, the total score ranged from 6 to 30. Total score higher than 18 indicates higher level of job satisfaction. Reliability coefficient of the questionnaire was determined through Cronbach's. coefficient alpha. Here alpha value was 0.74, indicating higher internal consistency among set of the items.

Results and Discussion

Overall Job satisfaction level

Table-1 shows that both scientists and logistic personnel perceived higher level of job satisfaction (Mean = 25.16, SD = 3.48). Both groups felt that the co-workers were friendly.

Table 1: Mean difference in job satisfaction between scientists (sc) (n=7) and logistics personnel (lp) (n=12)

SI no.	Item	Total group mean	Total group sd	sc mean	sc sd	lp mean	lp sd	t
1	All in all, I am satisfied with my job	4.21	0.92	3.92	1.00	4.71	0.49	2.33*
2	I am given a chance to do the things I do best	4.37	0.60					
3	I am free from the conflicting demands the other people make of me	3.31	1.00					
4	I receive enough help and equipment to get the job done	4.05	1.03	3.75	1.14	4.57	0.53	2.13*
5	My supervisor is competent in doing the job	3.89	1.10	3.50	1.47	4.57	0.53	2.73**
6	My co-workers are friendly	4.47	0.51	4.33	0.49	4.71	0.49	1.64
7	I am satisfied the way I am treated by the people I work with	4.21	0.71	4.25	0.89	4.14	0.38	-0.37
8	I am satisfied with the chances I have to learn new things	4.31	0.88	4.08	1.00	4.71	0.49	1.85
9	Revised total score (n=6)	25.16	3.48	23.83	3.70	27.43	1.51	2.99**

*p<0.05 **p<0.01

Note: Mean above 3.00 indicates high level of satisfaction,

(Mean=4.47,SD=0.51), they were happy with the way of treatment in Antarctica.

(Mean=4.21,SD=0.71), felt that they were satisfied with chances they have received to learn new things. (Mean=4.31,SD=0.88).

Job satisfaction of scientists and logistic personnel

Supporting the hypothesis, it was noted that job satisfaction of scientists (Mean = 23.83, SD = 3.70) was significantly [$t(17)=2.99$, $p<0.01$] lower than that of logistic personnel (Mean = 27.43, SD = 1.51). This may be due to different job patterns of both groups. Scientists' job is less routinised. Prior requirement for equipment may not be possible for them. Possibly, due to this reason, they were less satisfied with available equipments (Mean = 3.75, SD = 1.14) than that of logistic personnel (Mean = 4.57, SD=0.53). Getting adequate knowledge from the supervisor is important for job satisfaction. Results show that scientists were less satisfied with competency of supervisors (Mean = 3.50, SD = 1.17) than that of logistic personnel (Mean = 4.57, SD = 0.53).

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