

CHAPTER 3

METHODOLOGY

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CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

Job design is the division of the total task to be performed into units, departments and divisions, and to provide for their proper integration. It is an important factor in determining the motivation, satisfaction and performance of employees at work.

Design is concerned with the ways and means in which the functions of the organisation are divided, differentiated and integrated to produce the whole that is more than the sum of its components.

The present study is to test the model of Hackman and Oldham in connection with the job design technique. Respondents' perceptions about the core characteristics of their jobs were considered. The instrument also provides scale for measuring motivation and satisfaction with various aspects of the job.

In short, job design is a relationship between workers motivation and production. Motivation may be in the form of financial incentives or non-financial incentives. Financial incentives are in the form of monetary terms like, pay, overtime,

promotion, etc. Whereas, the non-financial incentives are in form of awards, rewards, status, higher responsibility, challenging job, etc. These kinds of motivators try to improve the worker's skills and yield more output. Thus, it leads to higher productivity and overall development of worker.

3.2 STATEMENT OF PROBLEM

Job design techniques have certain relationship with motivation of the employees and hence they reflect the performance of the employees. Further, the job characteristic is also related to the level of satisfaction of employees towards their jobs. To analyse the job characteristic, Ronan's scale has been used in the present study. In addition, Hackman and Oldham questionnaire is used for studying the job design.

The statement of the present investigation is as under.

'A STUDY OF JOB DESIGN APPROACH - AN EMPIRICAL VALIDATION'.

3.3 OBJECTIVES OF THE STUDY

The objectives and the rationale of the present study is to assess the job design characteristic advocated by Hackman and Oldham. Further, an attempt is made to assess the job design characteristics.

The present study was undertaken to fulfil the following objectives.

- [1] To assess the skill variety in the job, variety means, the degree to which job requires employees to perform a wide range of operations in their jobs.
- [2] To assess the autonomy, task identity, task significance, feedback and challenge in various jobs.
- [3] To compare the above said job dimensions across the occupational level.
- [4] To compare the job dimensions developed by Hackman and Oldham across different levels of occupation.
- [5] To evaluate the job characteristic, both intrinsic and extrinsic factors.

3.4 HYPOTHESES

Based on the above mentioned objectives, the researcher has formulated the following hypotheses.

- [1] The dimension of the job design such as skill variety, task identity, task significance, autonomy, feedback and challenge vary.

- [2] There is relationship between job design and job characteristic.
- [3] There is a variation of job design dimensions, such as skill variety, task identity, significance, autonomy, feedback, and challenge within the organisation.

3.5 RESEARCH TOOLS

A] Job Design

In order to measure the job characteristic, the Job Diagnostic Survey developed and validated by Hackman and Oldham (1975) was used by the researcher. The questionnaire assesses the following dimension :

- (a) Skill variety
- (b) Task identity
- (c) Task significance
- (d) Autonomy
- (e) Feedback
- (f) Challenge

(a) Skill variety : The degree to which a job requires employees to perform a wide range of operations in their work or the degree to which employees must use a variety of equipment and procedures in their work is skill variety.

(b) Task identity : Task identity is the extent to which the employees do the entire or the whole piece of work and can clearly identify the results of their efforts.

(c) Task significance : This is the extent to which the job substantially makes an impact on the lives of the workers either in the immediate organisational environment or in the external environment.

(d) Autonomy : Autonomy is the degree to which the given job provides significant independence and discretion to the individual in scheduling his work and determining the procedures to be used in carrying out the same.

(e) Feedback : It is the degree to which an individual gets direct and clear information about his effectiveness of the performance on the job.

(f) Challenge : Hackman and Oldham have not used the dimension of challenge in their organisational study. But the researcher has taken this dimension for the purpose of the present study. Accordingly, challenge means learning new things from the job by the employees in terms of difficulties and ways of overcoming them while doing the job.

Job Diagnostic Survey has been used by Rupande Padaki (1984) in his study related to job characteristic and work motivation entitled, " A Test of Job Design Model".

B] Job Characteristic Scale

Job characteristic scale was earlier developed by Ronan (1970). The original scale constitutes more number of items, but in the present study only seventeen items have been used by the researcher. The model of Omer Bin Sayeed and Rajaram Vishwanathan (1983) has been modified and tested in Indian context. In their study, on job characteristic in relation to organisational effectiveness in two organisations, the reliability of the scale has been established. The split half reliabilities of job characteristic scale are 0.8 to 0.85 and 0.74 in a manufacturing organisation and 0.92 and 0.86 in a non-manufacturing organisation. It shows that the scale is reliable in the Indian context as well.

3.6 ADMINISTRATION AND SCORING

As a part of the study, the researcher has used Hackman and Oldham's developed questionnaire and Ronan's scale. Both the scales have been administered by the researcher on a seven point scale.

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Hackman and Oldham questionnaire was considered in the present study from the following dimensions, skill variety, task identity, task significance, autonomy, feedback and challenge. The questionnaire includes 23 questions. The question numbers 5, 9, 11, 12, 16 and 17 were used in the reverse scale.

In the Hackman and Oldham questionnaire the seven point scoring scale has following meaning.

1. Strongly Agree
2. Agree
3. Slightly Agree
4. Neutral
5. Slightly Disagree
6. Disagree
7. Strongly Disagree

The questionnaire booklet comprised of job characteristic scale developed by Ronan (1970). The researcher used seventeen items for his present study. Both intrinsic and extrinsic factors of job characteristic were considered. The ratings were obtained from the respondents on the following seven point scale, based on the preference.

1. Low Preference
2. Slightly Low Preference
3. Poor Preference

4. Medium Preference
5. Moderate Preference
6. Very Moderate Preference
7. High Preference

3.7 DATA COLLECTION

A formal introductory letter was taken from the Principal of Chatrapati Shahu Central Institute of Business Education and Research, Kolhapur, by the researcher, explaining the purpose of the research and a request to help him in seeking required information. With this letter the researcher approached the Dean of Davanagere Cotton Mills Limited, Davanagere and got the permission.

The Job Design Model was studied thoroughly by the researcher. The researcher then approached the workers of the above said Mill with the help of the questionnaire using the Hackman and Oldham and Ronar's scale for assessment.

A cyclostyled questions was administered to the respondents with the help of the Labour Welfare Officer. Since workers were uneducated; the researcher translated the questionnaire into their Kannada language and personally explained the meaning of certain statements from the questionnaire. Interestingly, some workers sought clarification of their doubts and extended cooperation.

3.8 SAMPLE

The sample for the present study comprised of the shop-floor workers. The samples were drawn from the Davangere Cotton Mills Limited, from various departments.

3.9 SIZE OF THE SAMPLE

The methodology adopted for collecting the required data from the respondents comprised of drawing the samples from all the departments. Hence, the researcher contacted the Heads of the Departments and administered the questionnaire individually in each department. The composition of the total sample of 202 workers is displayed below.

Drawing	6
Bleaching	13
Machine Shop	10
Winding	22
Grey Warehouse	10
Folding	19
Dyeing	17
Printing	20
Spinning	50
Autoloom	35

3.10 STATISTICAL ANALYSIS

The data collected from the administration of the questionnaire was analysed with the help of statistics. Mean and standard deviations were calculated for each of the dimensions, departmentwise. The correlation statistics was also applied to understand the relationship between different dimensions of job characteristics and job design.

The 't' test was tabulated to know the difference between the job dimensions under study in different departments of the organisation.

Based on the aforesaid computer analysis, necessary tables were prepared on each dimension for an indepth analysis and interpretation, of the quantitative data collected from administration of the designed questionnaire.

3.11 SUMMARY

The object of the present study is to assess 'A Study of Job Design Approach - An Empirical Validation', in the Davangere Cotton Mills Limited, Davangere, by using pretested questionnaire formulated by Hackman and Oldham, and Ronan.

The study covers various core dimensions in the organisation related to the job of employees such as skill variety, task identity, task significance, autonomy, feedback and challenge. The study also covers the job characteristic scales involving job intrinsic and extrinsic factors of the workers.

For collecting the data, the abovesaid questionnaire were administered on seven point scale to 202 employees from 10 departments of the Mill.

The researcher has analysed and tabulated the data with the help of computer programs into various statistical mean, standard deviation, 't' test and correlation of the two scales.

R E F E R E N C E S

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