A STUDY OF MOTIVATIONAL FACTORS OF THE INDUSTRIAL WORKERS: IN RELATIONSHIP TO AGE, EDUCATION LEVEL AND HIERARCHICAL POSITION

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ABSTRACT

The present study deals with the study of motivation of employees and its relationship to some other relevant variables. The study was conducted on the workers of JCT Electronics Ltd., Vadodara, in May, 2011. This paper tries to find out the Motivation level of the respondents and figures it out into three different categories of Low, Moderate and High. Further, it tries to establish the relationship if any that exists between Motivation as a dependent variable and Age, Experience and Education level of the employees as independent variables. Data of both types i.e., primary and secondary has been used for the study. Secondary data has been collected through company's Documents, Manual and its website, the Primary data is collected from 70 employees belonging to different educational backgrounds, hierarchical positions and age groups through a questionnaire that contains factors that have been taken from McClelland's achievement needs theory, Herzberg's two factor theory, Latham and Locke's goal theory, and Hackman and Oldham's job characteristics model, which are different in approach, yet complimentary. The instrument employs 11 questions on a 5 point likert based scale. The responses from the respondents were then subjected to statistical tests.

The results show that Motivation level of respondents is quite good, though there is scope of improvement as there were respondents with low level of motivation. Further, motivation seems to be unrelated with the different independent variables. It can be inferred from the results that factors responsible for motivating employees seem to be present in the environment of the organization.

KEYWORDS: Motivation, Age, Position in Hierarchy, Education Level

INTRODUCTION

Dessler (2001) thought of motivation as the intensity with which a person desires to engage in some activity. From what we have discussed and defined above some issues are brought to mind that answers with what energizes and starts human behavior, how those forces are aimed and sustained as well as how they help in improving the performance.

Employee motivation can be deliberated through several wide-ranging approaches like reinforcement theories, process theories and content or need based theories. However, the term employee motivation is a intricate and complex term to define; therefore a specific definition of this concept is subtle as the concept comprises the distinctiveness of individual and situation in addition to the perception of that situation by the individual (Ifinedo 2003; Rosenfeld & Wilson 1999).

An organization's dynamism, of any kind, comes through the motivation of its employees, although their capability plays just as decisive a role in determining their work performance as their motivation (Lewis, Goodman & Fandt 1995). Golembiewski (1973) views motivation as the level of willingness of an organization to follow some selected goal and involves the grit of the nature and locus of the forces inducing the degree of readiness.

To Kelly (1974), motivation is like the forces that maintain and change the direction, quality and intensity of behavior. According to Hoy and Miskel (1987), employee motivation is the composite forces, needs, tension states, drives, or other means that start and continue voluntary activity directed towards the achievement of personal goals.

REVIEW OF LITERATURE

Adeyinka Tella, C.O. Ayeni and S. O. Popoola (2007) worked on the topic Work Motivation, Job Satisfaction, and Organizational Commitment of Library Personnel in Academic and Research Libraries in Oyo State, Nigeria. The findings of this study reveal that a correlation exists between perceived motivation, job satisfaction, and commitment, although correlation between motivation and commitment was negative. No difference was observed in the perceived motivation of professional and non-professional library personnel. Moreover, findings also show that differences exist in the job satisfaction of library personnel in academic and research libraries, and that no relationship exists in the organizational commitment of library personnel based on their years of experience.

Donald P. Moynihan and Sanjay K. Pandey (2007) worked over the topic "Finding Workable Levers over Work Motivation": Comparing Job Satisfaction, Job Involvement, and Organizational Commitment. The authors examine the effect of individual attributes, job characteristics, and organizational variables on three aspects of work motivation: job satisfaction, organizational commitment, and job involvement. They find that managers have varying degrees of influence over these different aspects of work motivation, with greatest influence over job satisfaction and least influence over job involvement. A number of variables are important for work motivation, including public service motivation, advancement opportunities, role clarity; job routine ness, and group culture.

Motivation basically has two dimensions (**Anonymous, 2010**), one being "making employees work better, more efficiently and effectively" from the point of view of managers, the other being "enabling employees to do their jobs in the best way with enjoyment and desire" from the point of view of employees.

Motivation and Job Satisfaction has been considered to be affected by economic variables and this fact cannot be denied but are not sufficient enough to have a prolonged effect. However, it is seen that appeal to the motivating economic tools and expecting from them more than needed does not seem to result in success very much. Therefore, in planning rewarding, encouraging economic tools should be employed in accordance with employees' needs. In fact, there are ways of increasing employees' work motivation and satisfaction other than monetary tools (**Moncrief, 2010**).

Yasemin Oraman (2011), worked to evaluate the effective dynamics of work motivation and job satisfaction of textile employees. It analyzes the effectiveness of psycho-social, economic, organizational and managerial tools over individuals' motivation in terms of maintaining the motivation and job satisfaction of the employees in the business. He came out with the conclusions that economics tools by employee are positively and significantly related to the level of motivation increase perceived by the employee. Second regression model plays an important role in determining the level of job satisfaction except economic and psychosocial tools and has a positive effect on increasing employee motivation with implementations carried out to increase employee satisfaction at work.

Ishfaq Ahmed and Talat Islam (2011) worked on the two of the job related attitudes i.e., job satisfaction and motivation of the faculty members of the institutes of higher education. They considered three facets of motivation or job satisfaction i.e. compensation, recognition and working conditions. For this study 269 faculty members were selected from five universities of Pakistan. Findings of the study specify the positive and significant relationship among working conditions, recognition and compensation on motivation. Further more motivated employees were found to be satisfied with their job.

RESEARCH METHODOLOGY

Statement of the Problem

There has been a lot of study in the area of Motivation, still it remains unexplored to some extent and yet a general understanding has not been developed when it comes to studies conducted at different times and in different work environment. One of the greatest challenges organizations face today is how to manage turnover of work force that may be caused by migration of a lot of industrial workers, especially, those who are low motivated. Therefore, it has become an important area of research that how to reduce turnover and absenteeism and improve performance of an organization. Furthermore, motivated employees make it easier for the companies to reach the best possible result as compared to having demotivated employees (**Hein 2009**). Thus, if employees are motivated, it helps the company perform better and strive for high quality. This point of view emphasizes the importance of the study of Motivation and its relationship to some other relevant factors.

With this background in mind we can say that our present study is very crucial and holds lots of importance for organizations as well as employees.

Objectives

The present study aims at exploring the relationship between Motivation of the employees in an organizational set-up and some crucial factors (age, position in the hierarchy and education level). The objectives of the study are enumerated below:

- To find out the relationship between motivation and age of the employees.
- To find out the relationship between motivation and position of the employees in the hierarchy level.
- To find out the relationship between motivation and the education level of the employees.

Hypotheses

- There is no significant relationship between motivation level and the age of the employees.
- There is no significant relationship between motivation level and the position of the employees in the hierarchy.
- There is no significant relationship between motivation level and the education level of the employees.

Research Design

In the present study, Motivation has been treated as a dependent, while, age, position in hierarchy and education has been individually taken as independent variables. Mathematically, relationship between Motivation and the independent variables can been represented as:

 $\mathbf{M} = \mathbf{f}(\mathbf{A}), \mathbf{M} =$ Motivation, $\mathbf{A} =$ Age

M = **f** (**EL**), **M** = Motivation, **EL** = Education Level

 $\mathbf{M} = \mathbf{f}(\mathbf{H}), \mathbf{M} =$ Motivation, $\mathbf{H} =$ Position in the Hierarchy

The dependent variable has been split into three levels: Low, Moderate and High with respect to the score obtained from the respondents. The scores can range from a minimum of 11 to a maximum of 55. 11 to 26 are considered here to be low, 27 to 41 as moderate and 42 to 55 as high. On the hand all the independent variables have been treated differently. Age has been split into three groups 20-30 years, 31-40 and 40 above groups. Position in hierarchy has been

split into three groups, namely, operator, technician and supervisor. While the education level has also been split into three groups: primary education and below, up to senior secondary and graduate and above.

Data Collection

As the research is descriptive in nature the study mainly relies on primary data which has been collected from the workers of JCT Electronics Ltd., Vadodara. The primary data was collected through questionnaire and personal interview of the factory workers and staff (at Vadodara plant) with a sample size of 70.

The secondary data was collected from the company documents and internet.

Tool

Questionnaire was used as a tool for the measurement of motivation of the respondents. Four motivational theories were used as a theoretical framework. It consists of McClelland's achievement needs theory, Herzberg's two factor theory, Latham and Locke's goal theory, and Hackman and Oldham's job characteristics model. All of these four theories contribute with different, yet complementary, aspects of how to motivate employees. Questionnaire consists of 11 questions and all are 5-point likert scale based questions and the responder had to tick any one from the 5-point responses ranging from 1 to5. Response 5 gets 5 marks and 1 gets 1 mark. Thus each individuals score will range from a maximum of 55 to a minimum of 11.

Sample

The researcher collected data from 70 workers who belonged to different Age group (20- 30yrs, 31-40 and 40 above) and with different Education Level (primary and below, up to secondary, and graduate and above) and different position in the hierarchy (Operators, Technicians and Supervisors).

Sample Profile

Age (Years)	Respondents	Percentage
20-30	21	30
31-40	27	31.5
40 above	22	38.5

Table 1: Age-Wise Category of the Respondents

Table 1 clearly indicates that the respondents were almost equally distributed among the three age groups. Though, employees above 40 showed a little bit of deviation. It can be inferred from the above table that most of the respondents (70%) were richly experienced.

Education	Respondents	Percentage
Primary school and below	18	26
Secondary school	31	44
Graduate and above	21	30

Table 2: Education Level-Wise Category of the Respondents

Table 2 shows the categorization of the respondents on the basis of their education-level. It can be inferred from the table 2 that 26% of the employees are very low educated that is primary or below while 44 are educated up to senior secondary level and the remaining 30% are at least graduates or having education above it. This shows that 70% of the respondents were either senior secondary or below it, that is, the education level was not very high.

Position in Hierarchy	Respondents	Percentage
Operator	28	40
Technician	25	36
Supervisor	17	24

Table 3: Hierarchy-Wise Category of the Respondents

Table 3 describes that out of 70 respondents 40% were operators, while 36% were technicians and the remaining 24% were the supervisors.

Motivation Level	Low	Moderate	High
No. of respondents	16	20	34
%age	23%	28.5	48.5

Table 4: Motivation Level-Wise Category of all the Respondents

Table 4 clearly indicates that 70% of the respondents were either moderately or highly motivated, while the remaining 23 were at a low motivation level.

DATA ANALYSIS

Relationship of Motivation to Age, Education Level and Position in the Hierarchy

Table 5: Relationship between Level of Motivation and Age

Level of Motivation Age	Low	Moderate	High	Total
20-30	7	8	6	21
30-40	6	5	16	27
40 above	6	8	8	22
Total	19	21	30	70

It can be inferred from table 4 that almost 85% of the employees belonging to the age group 20-40 fall in the category of moderately to highly motivated group. Out of this, a total of 68% employees belong to the highly motivated group, while the rest fall in the moderately motivated group. On the other hand employees who were 40 above, 72% were found to be highly or moderately motivated, out of which 50% were highly and the rest 22% were moderately motivated. If we talk of employees who were low on motivation, then 14% of employees from 20-40 years of age group fall into this category and on the other hand 27% of the employees from the group of 40 above fall in this category.Chi-square test was applied on this data and its value came out to be 0.253298. The critical value of chi-square at degree of freedom 4 was found to be 9.49. Since, the calculated value comes out to be less than the critical value; we accept the null hypothesis which states that there is no relationship between the level of motivation and age of the respondents.

Table 6: Relationship between Level of Motivation and Position in the Hierarchy

Level of Motivation Category	Low	Moderate	High	Total
Operator	5	9	14	28
Technician	5	5	15	25
Supervisor	5	5	7	17
Total	15	19	36	70

Table 5 shows the distribution of the respondents on the basis of their category (position in hierarchy level) against their level of motivation (Low, Moderate and High). At the operator level 50% of the employees were found to be

highly motivated, 32% to be moderately and 18% to be lowly motivated. At the technician level, 60% were found to be highly motivated, while, 20% each belonged to the moderately and low motivated level. In the 3rd group consisting of supervisors, only 41% respondents were found to be highly motivated, 29.5% to be moderately and rest 29.5% to be lowly motivated.

To find out the relevance of the second hypothesis we applied chi-square test and we found out the calculated value to be 0.712281. When we checked out the critical value it was found to be 11.1 at 4 degree of freedom. Calculated valve being less than the critical one makes it clear that the null hypothesis stands true, i.e., there is no significant relationship between level of motivation and position of the employee in the hierarchy level of the organization.

Level of Motivation	Low	Madamata	High	Total
Education Level	LOW	Moderate	High	Total
Primary school and below	5	6	7	18
Secondary school	6	8	17	31
Graduate and above	5	6	10	21
Total	16	20	34	70

Table 7: Relationship between Level of Motivation and Education Level

Table 6 categorizes the respondents according to their education level against their level of motivation. Respondents who got education up to primary level or below had only 38% among them who were highly motivated respondents, 34% who were moderately and 28% who were lowly motivated. While, the respondents who got education above primary level and up to secondary level had among them 55% highly motivated respondents, 26% moderately and 19% lowly motivated respondents. In the last group which consisted of respondents who were either at least graduates or above graduates had among them 48% highly motivated respondents, 29% moderately and 23% lowly motivated respondents.

To establish the relationship between the variables chi-square test was applied and the value of the static came out to be 0.885223, which was found to be much less as compared to the critical value of 9.49 at degree of freedom equal to 4. Thus the third hypothesis also stands true that "There is no significant relationship between motivation level and the education level of the employees."

CONCLUSIONS

The results of the study show that Motivation as a dependent variable does not get affected by any of the independent variables which were under study. That is, Motivation is independent of the Age, Education Level and the Position in the Hierarchy of the respondents. The motivational scores (Table 4) of the respondents show that most of the respondents were either moderately or highly motivated. Hence, it can be inferred that irrespective of the independent factors of the study the motivation remains sufficiently high among the respondents; this means that the factors responsible for motivating the employees of an organization are mostly present in the working environment of the organization.

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