

The Role of Motivation on Employee Performance in Engineering Students

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Abstract- This paper gives the analysis of the relationship between Good salary, Job satisfaction, Promotions/Expectation, Working Hours, Good Working Conditions, Equal treatment of employees and Good Communication Skills by the students of the department Electronics and Communication Engineering, Mechanical Engineering and Mechatronics Engineering of Maharaja Engineering College, Avinashi, Tamilnadu by using self-designed questionnaires containing 10 attributes. The sample size was 323 so 323 questionnaires were distributed and only 40 were selected. Analysis was done using Microsoft excel and the result concludes that there is a significant positive relationship between students' motivation and their career growth. Job satisfaction, Equal treatment of employees, and Good salary were selected by the above Engineering students. Hence it may be concluded that the motivation is the very important factor in estimating the behavior of the individual.

Keywords- Job Security, Good salary, Good Communication Skills, Engineering Students, Organizational Behavior, Attributes, Motivation

I. INTRODUCTION

Significance of Motivation

Motivation is one of the important functions of the management without which organizational objectives are difficult to achieve. It is an integral part of the management process and every manager must motivate his subordinates to create in them the will to work. Motivation is necessary for the better performance. The importance of motivation is briefly given below. [1]

- Motivation creates a willingness of workers to do their work in a better way.
- Motivation is the basis of co-operation to get the best results out of the efforts of the men on the job. Proper utilization of human resources possible since it inspires employees to make best possible use of different factors of production.
- Higher motivation leads to job satisfaction and hence labor absenteeism and turnover are reduced.

- A proper motivation scheme promotes a closer relationship between organization and workers. [2-3]
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- High motivation helps to reduce resistance to change. By providing proper motivation, all the members will try to be as efficient as possible. [4-5]

1.1 Herzberg two factor Theory

Herzberg found 2 factors that influence employee motivation and satisfaction.

- Motivation Factors-Simply put these are factors that lead to satisfaction and motivate employees to work harder. Examples might include enjoying your work feeling recognized and career progression.
- Hygiene factors-These factors can lead to dissatisfaction and lack of motivation if they are absent. An example includes salary, company policies, benefits, relationship with managers and co-workers.
- While motivator and hygiene factors both influenced motivation they appeared to work completely independently of each other.
- Motivator factors increased employee satisfaction and motivation, the absence of these factors didn't necessarily cause dissatisfaction and motivation but their absence caused an increase in dissatisfaction.

1.2 Maslows Hierarchy of Needs

The hierarchy is made up of five levels.

- Physiological-These needs must be met in order for a person to survive such food, water and shelter.
- Safety-Including personal and financial security and health and well being
- Belonging-The need for friendship.
- Esteem - The need to feel confident and respected by others.
- Self-Actualization-The desire to achieve everything you can and become the most that u can be.

1.3 Special Motivational Techniques

Various theories of motivation suggest that several factors influence the performance of employees. But some of the factors are more predominant as compared with others. Some of the major motivational factors are identified as given below.

1.3.1 Money

Money is one of the important motivational factors. It may be in the form of wages, incentives, bonuses, the company paid insurance or any other things that may be given to people for performance. [9]

The Manager should remember the followings when money is a kind of motivator.

1. Money is likely being more important to people who are raising a family. Money is an urgent means of achieving a minimum standard living.
2. Various enterprises make wages and salaries competitive within their industry and their area to attract and hold people.
3. Money not only satisfies physiological and security needs but is also a source of status and prestige in society.
4. Management should ensure that individual workings in the same category are given the same or nearly the same salary and wages within the organization as well as the other organization in the surrounding areas.
5. Even if a company is committed to the practice of comparable wages and salaries, a well-managed firm need never be bound to the same practices with respect to bonuses i.e., the bonuses for managers should be based on their individual performance and outcomes.

1.3.2 Participation

Research on motivation reveals that majority of workers are capable of creativity and self-control. Their consultation and participation in work-related issues have a favorable effect on their motivation and performance. Such participation reflects a genuine faith in human nature and provides dignity to labors. Participation is also a means of recognition. It appeals to the need for affiliation and acceptance. Further, it gives people a sense of accomplishment. [10]

1.3.3 Quality of Working Life

One of the most important and interesting approaches to motivation is the quality of working life. Good physical

working conditions such as right temperature, adequate lightning, proper ventilation, noise free atmosphere have positive effects on the motivation and performance of workers. [11]

II. RESEARCH METHODOLOGY & DATA COLLECTION

2.1 Data Survey

Several references were utilized, for this article. The books and articles were found using the search engines and databases available at Maharaja Engineering College and the Internet. From a review of the literature, a survey questionnaire was developed to collect data for the study from the engineering students of the department of Electronics and Communication Engineering, Mechanical Engineering and Mechatronics Engineering of Maharaja Engineering College. The survey questionnaire developed included a list of ten attributes. During the study period, 75 surveys were administered to students who represent the target population of this article. These typed questionnaires were all hand-delivered to participants and 50 were selected. The relevant explanation for the questionnaire is given to the students. The questionnaire asked participants to rank the surveys ten questions according to how important each is in motivating them as future employees to perform best at work. The most important attribute was ranked 5 and least important ranked 1. All attributes were to be ranked and no rank could be used more than once. The participants were as well asked to indicate their; Name, Department, Gender, Age, Class, e-mail Id.

2.2 Data Analysis

After data were collected on all the attributes, excel computer program was used to present the results. The collective rank order was determined by entering the ranking given to each of the 20 attributes in the survey questionnaire. After entering the rankings given to each attribute by each student, the total or sum of all the rankings for that attribute was totaled. This system of data analysis was found to be more appropriate as different participants gave a different ranking for the same attribute. The research for this article could be considered as a field research as it is carried out among engineering students who happen to constitute the future work force. Furthermore, to ensure both internal and external validity believes to have used the most accurate and up-to-date literature. The right and relevant questions asked in the survey, the most feasible data collection method used, and the tools used to analyze the data are also considered to be accurate and produce valid results, the overall validity of this

article is considered to be high. Finally, the aim of this article is to determine attributes that motivate Engineering students at present.

III. PRESENTATION OF DATA AND DISCUSSION OF RESULTS

Questionnaires were issued to Electronics and Communication Engineering students of Maharaja Engineering College. The received data along with the rank assessment summary is given below in Table 1 and the Ranks Assigned to Attributes by III & IV Year Electronics and Communication Engineering Students for Summary Sheet – 1 is shown in Figure 1.

Table 1: Consolidated rank assigned to the attributes of Electronics and Communication Engineering Students

S.No	STUDENTS→ ATTRIBUTES↓	% Weight of Assigned to Attributes				Ranks
		III YEAR	IV YEAR-P 1/2	IV YEAR-P 2/2	Average	
1	Good Salary	11.02	10.52	10.28	10.61	1
2	Job Satisfaction	10.43	9.95	10.51	10.30	4
3	Satisfying Goals	9.85	9.62	9.70	9.72	8
4	Working Hours	8.79	9.05	9.01	8.95	10
5	Good Working Conditions	9.14	10.18	10.16	9.83	7
6	Job Security	10.08	10.75	10.85	10.56	2
7	Opportunity for honest feedback	9.96	9.50	8.89	9.45	9
8	Equal treatment of employees	10.32	10.52	10.39	10.41	3
9	Rewards for achievements	9.73	10.07	10.28	10.03	6
10	Good Communication Skills	10.67	9.84	9.93	10.15	5
TOTAL		100.00	100.00	100.00	100.00	

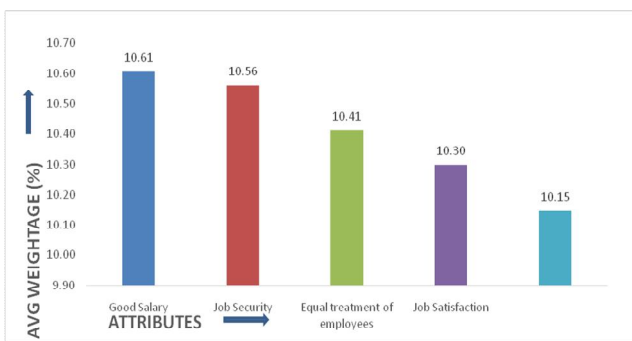


Figure 1 Ranks Assigned to Attributes by Electronics & Communication Engineering Students for summary sheet-1

Electronics and communication Engineering students have selected Good Salary as first rank, Job Security as second rank and equal treatment of employees as third rank and job satisfaction as fourth rank and clear communication as fifth rank.

Questionnaires were issued to Second year, Third year and Final Year Mechanical Engineering students of

Maharaja Engineering College. The received data along with the rank assessment summary is given below in Table 2

Table 2: Consolidated rank assigned to the attributes of Mechanical Engineering Students

S.No	STUDENTS→ ATTRIBUTES↓	% Weightage Assigned to Attributes						Average	Ranks
		III YEAR-P 1/3	III YEAR-P 2/3	III YEAR-P 3/3	IV YEAR-P 1/3	IV YEAR-P 2/3	IV YEAR-P 3/3		
1	Good Salary	9.72	10.70	9.50	10.27	9.33	9.71	9.87	7
2	Job Satisfaction	10.75	10.45	10.27	10.27	9.68	10.53	10.32	3
3	Promotions/ Expectation	10.10	10.20	9.88	9.54	9.80	10.18	9.95	6
4	Working Hours	8.94	7.84	7.19	9.54	9.45	8.77	8.62	10
5	Good Working Conditions	9.46	10.82	9.88	11.00	10.51	10.06	10.29	4
6	Job Security	9.72	10.57	11.04	9.78	10.27	9.94	10.22	5
7	Opportunity for honest feedback	10.36	9.70	11.17	10.39	10.04	10.53	10.36	2
8	Equal treatment of employees	11.66	11.94	11.94	9.29	10.39	10.53	10.96	1
9	Rewards for achievements	9.46	9.20	10.14	9.66	10.39	9.82	9.78	8
10	Good Communication Skills	9.84	8.58	8.99	10.27	10.15	9.94	9.63	9
TOTAL									

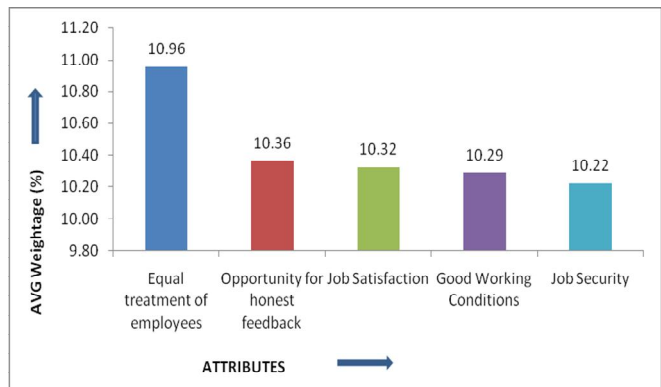


Figure 2 Ranks Assigned to Attributes by Mechanical Engineering Students for summary sheet-2

Mechanical Engineering students have selected Equal treatment of employees as first rank, Opportunity for honest feedback as the second rank and Job Satisfaction as third, good working conditions as fourth and job security as their fifth.

Questionnaires were issued to Mechatronics Engineering students of Maharaja Engineering College. The received data along with the rank assessment summary is given below in Table 3

Table 3: Consolidated Ranks Assigned to Attributes by the Students of Mechatronics Engineering

S.No	STUDENTS→ ATTRIBUTES↓	% Weightage to Attributes			Ranks
		IV MTS P 1/2	IV MTS P 2/2	Average	
1	Good Salary	9.89	10.13	10.01	7
2	Job Satisfaction	10.85	10.36	10.60	1
3	Promotions/ Expectation	10.37	10.36	10.36	4
4	Working Hours	8.22	8.69	8.46	10
5	Good Working Conditions	10.97	9.80	10.38	3
6	Job Security	10.01	10.36	10.18	6
7	Opportunity for honest feedback	10.37	10.02	10.20	5
8	Equal treatment of employees	9.18	10.02	9.60	9
9	Rewards for achievements	9.65	9.91	9.78	8
10	Good Communication Skills	10.49	10.36	10.42	2
TOTAL		100.00	100.00	100.00	

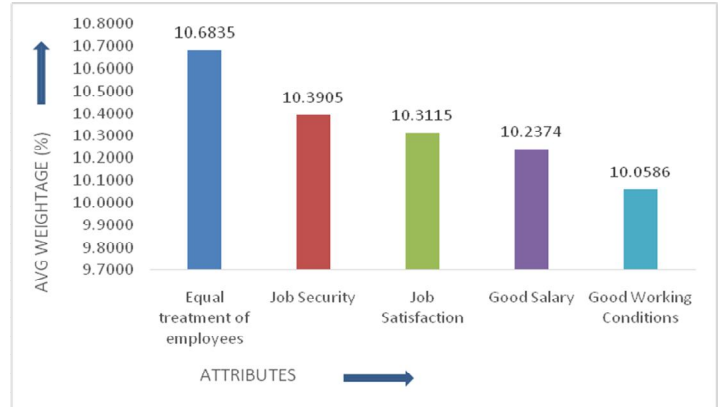


Figure 4 Comparison chart for the Ranks Assigned to Attributes by the Students of EEE, MECH & MTS Departments

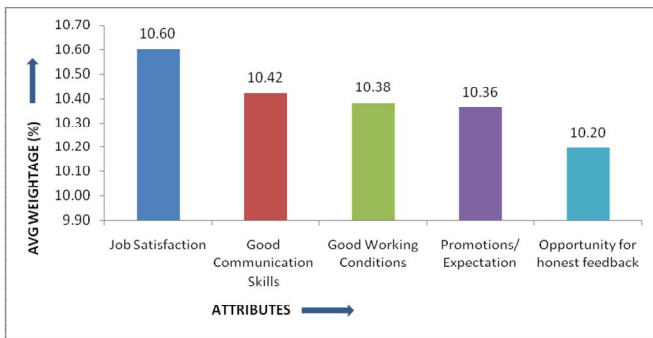


Figure 3 Ranks Assigned to Attributes by Mechatronics Engineering Students for summary sheet-2

Mechatronics engineering students have selected job satisfaction as first rank, Good Communication Skills as second rank, Good Working Conditions as third rank, Promotions / Expectation as fourth and Opportunity for Honest Feedback as fifth.

Table 4. Comparison of Ranks Assigned to Attributes by the Students of ECE and MECH & MTS

S.No	STUDENTS→ ATTRIBUTES↓	% Weight Assigned to Attributes				Ranks
		MECH	ECE	MTS	Average	
1	Good Salary	9.87	10.61	10.24	10.2374	4
2	Job Satisfaction	10.32	10.30	10.31	10.3115	3
3	Promotions/ Expectation	9.95	9.72	9.84	9.8352	9
4	Working Hours	8.62	8.95	8.78	8.7844	10
5	Good Working Conditions	10.29	9.83	10.06	10.0586	5
6	Job Security	10.22	10.56	10.39	10.3905	2
7	Opportunity for honest feedback	10.36	9.45	9.91	9.9085	6
8	Equal treatment of employees	10.96	10.41	10.68	10.6835	1
9	Rewards for achievements	9.78	10.03	9.90	9.9020	7
10	Good Communication Skills	9.63	10.15	9.89	9.8881	8
TOTAL		100.00	100.00	100.00	100.00	

IV. CONCLUSIONS

The students of the department of Electronics and Communication Engineering , Mechanical Engineering and Mechatronics Engineering have selected Equal treatment of employees as First , Job security as second and job satisfaction as third and Good salary in fourth place and Good working conditions as fifth . It is concluded that the long-term survival of any organizations depends largely on the motivation of its employees. Therefore organizations should be willing to continuously and on regular basis, undertake employee’s surveys such as this one in order to understand what their employees expect from their current job. The result of such exercises could prove useful for the organization. Finally, the results of this study and those presented and discussed in this article could be useful in helping. Organizations determine what motivates employees today and in the foreseeable future.

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