

## Factors Influence on Job Satisfaction of Graduate Employees in Sri Lanka's Manufacturing Industry

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### **Abstract**

*It is important to have a satisfied workforce in an organization to build up a successful organization. Hence, the study aims to identify the factors that affect job satisfaction among graduate employees in Sri Lanka's manufacturing industry. The sample population of the study was all the graduate employees of the main five sub-sectors in Sri Lanka's manufacturing Industry. The sample (n=156) was selected from the sample population by using the stratified sampling method. Primary data was collected through a questionnaire. Initially, the study applied factor analysis and chi-squared test to derive the objective of the study. The factor analysis revealed five factors that influence job satisfaction among graduate employees. They are 1- Company Policies and Supervision, 2- Working Conditions, 3- Work Itself, 4- Recognition and Advancement, 5- Job Security, and Human Relationships. Additionally, the chi-square test is used to identify the demographic factors that affect the employees' job satisfaction. The results showed that the degree obtained by the employees had a significant impact on their job satisfaction.*

**Keywords:** Graduate Employees, Job Satisfaction, Manufacturing Industry

### **1. Introduction**

The concept of job satisfaction has become a broad and dominant approach since human relationships are more favored. It includes a complex number of variables, conditions, feelings, and behavioral tendencies (Singh & Jain, 2013).

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Job satisfaction is defined as employees' attitudes and feelings about their work or favorable attitudes toward the job. Job dissatisfaction means unfavorable attitudes toward the job (Ayaga & Stephen, 2014). Personality, person-environment fit, job characteristics, psychological contract, organizational justice, work relationship, and stress are some elements that influence attitude towards work (Aries & Rizqi, 2013). Aziri (2011) identifies three important features of job satisfaction which include fair treatment and concern for workers by the organization, the functioning and activities of the organization, and indicators of organizational activities. As claimed by Singh and Jain (2013) job satisfaction is a part of life satisfaction. Moreover, they reveal that a person's level of satisfaction is influenced by factors such as pay and benefits, perceived fairness of the promotion system within a company, quality of working conditions, leadership, social relationships, and the nature of the job itself.

Moreover, Employees who have satisfaction with their workplaces show positive attitudes in their homes (Chimanikire et al., 2007). Moreover, it contributes to the establishment of a psychologically healthy society. Therefore, the current study based on identifying the factors that contribute to the job satisfaction of graduate employees in the manufacturing industry of Sri Lanka.

Graduates bring knowledge and ideas to an organization, and they are inclined to learn and possess flexibility, adaptability, and the ability to deal with change. Additionally, they have logical, analytical, critical thinking, problem-solving, and synthetic skills, which have a significant impact have on innovation (Harvey & Mason, 1996). Moreover, Ranasinghe and Herath (2015) have explained that employers expect graduates to be well prepared for work, to possess effective communication, to share their skills, and to appreciate their place in a wider organization. Furthermore, it is crucial to identify the factors that influence the job satisfaction of graduate employees in order to enhance the job performance of such skilled and beneficial employees.

As per the annual report of the University Grants Commission of Sri Lanka-UGCSL (2016), the total graduate output in 2015 is 29,545. State universities were considered only to calculate that amount. According to Nedelkoska et al., (2018) Science and Engineering Professionals, Managers, Production

Managers, Business and Administration Professionals, Teaching Professionals, Business and Administration Professionals, ICT Professionals, Science and Engineering Technicians, Numerical and Material Recording Clerks, Chief Executives, General, Keyboard Clerks, ICT Technicians, Legal, Social and Cultural Professionals, Customer Services Clerks, Health Professionals, Personal Service Workers, and Sales Workers were identified as the most common professions for graduates in Sri Lanka by Nedelkoska, O'Brien, and Stock (2018).

Employees of the industry sector are divided into operatives and other employee groups (DCSSL, 2018). All paid employees who directly engage in the production or related activities of the company are identified as the Operatives. And all paid employees except those covered as operatives such as Managers, Directors, Laboratory and Research workers, Clerks, and Typists are the professions that are included in the “other employee” category. Others work as proprietors and active partners of a company (DCSSL, 2018). According to DCSSL (2018) and Nedelkoska et al., (2018), more than 246,357 graduate workers are employed in Sri Lanka's manufacturing industry. It represented 2.94% of the total workforce in Sri Lanka.

Therefore, the study is mainly designed to identify the factors that affect graduate employees' job satisfaction and to identify the effect of age, gender, experience and the degree of employees on their job satisfaction in the manufacturing industry of Sri Lanka.

## **2. Literature Review**

Many studies on job satisfaction were done focusing on different communities such as agriculture, commerce, health, and education. Chatzoglou, Vraimaki, Komsiou, Polychrou, and Diamantidis (2011) have indicated that the job satisfaction of accountants is most affected by job characteristics. But, internal work motivation does not influence job satisfaction of accountants. As per the final results of this study, both organizational commitment and professional commitment affect the job satisfaction of accountants. Moreover, they suggested mainly focusing on employee commitment levels of both organization and their profession regarding job satisfaction.

According to Parvin and Kabir (2011), the job satisfaction of pharmaceutical employees is encouraged by salary, efficiency in work, fringe supervision, and

co-workers' relationships. Rad and Moraes (2009) identified similar results that supervision and co-workers influence job satisfaction in the healthcare sector. Moreover, different factor like job identity also creates job satisfaction.

The study conducted by Marzuki et al., (2012) identified different factors that influence job satisfaction from different work categories such as permanent workers, temporary workers, main office staff, and project staff of a construction company in Indonesia. The results of the study indicated that job satisfaction among permanent workers was influenced by two key factors: salary and career. Furthermore, job satisfaction of temporary workers was found to be influenced by factors such as assistance from superiors, security, and quality of work. Additionally, factors such as career and pension will increase the level of job satisfaction of the main office staff. In the case of the project staff, their job satisfaction was influenced by the significance of work, control, supervision, and quality of work. Eker et al., (2007) stipulated that the work environment, administrative workload, academic workload, promotion and evaluation, and research fund are also influence on job satisfaction of academicians.

Moreover, previous researchers have identified the influence of demographic factors on job satisfaction. According to Ghafoor (2012), age, experience, education qualification and gender have caused to job satisfaction of academic staff of private and public sector universities in Pakistan et al., (2006) have mentioned that the job satisfaction of healthcare professionals is affected by job experience. Anywise Amarasena et al., (2015) have revealed that teaching experience, gender, age, highest level of education, marital status and number of children of staff members had no significant effect on the job satisfaction of academic staff of universities in Sri Lanka. These findings may indeed differ from previously mentioned finding due to the incompatibility of the communities on which the studies are based.

### **3. Methodology**

The target population of the study was graduate employees of Sri Lanka's manufacturing industry. The study focused on the main five sub-sectors within the manufacturing industry as the sample population. The sample (n=156) was selected by using the stratified sampling method. The study used primary data to obtain the objective of the study. The questionnaire was used to collect primary data. There were 150 responses received back with a 96% response

rate. The study used descriptive analysis, exploratory factor analysis and Chi square test as the data analysis methods of the study.

The study used 29 items with a Likert-type scale to derive the factors that affect to job satisfaction of graduate employees in the manufacturing industry of Sri Lanka. Initially, the study calculated the mean values of job satisfaction of each employee according to the Likert scale data. And the mean values were rounded to the nearest whole number. Considering rounded values, the study has transformed the continuous variable into an ordered categorical variable. The impact of demographic variables as age, gender, experience and the degree of the employee on job satisfaction is identified by Chi square test.

#### 4. Analysis and Findings

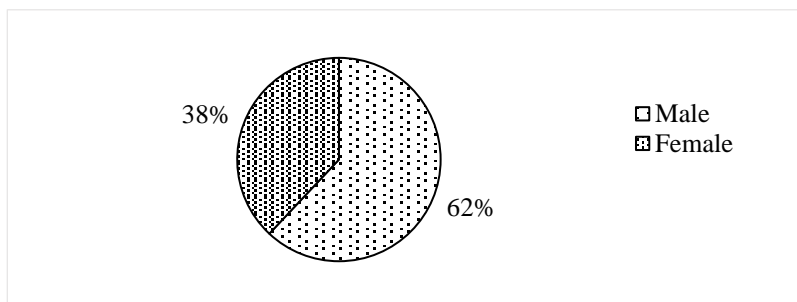
##### 4.1 Reliability Test

The study used Cronbach’s alpha to assess the internal consistency of the multiple Likert-type scale. Table 1 shows the reliability test statistics. As per Table 1, Cronbach’s Alpha statistics = 0.937 > 0.7 and it indicates a high internal consistency (Peiris, 2018).

##### 4.2 Demographic Characteristics of the Sample

Figure 1 illustrates the distribution of male and female employees in the sample. The data reveals that male employees accounted for the majority, comprising 62% of the sample. In contrast, female employees represented 38% of the sample, indicating a lower proportion compared to males. It is notable that male employees had a higher contribution, comprising more than half of the total sample size.

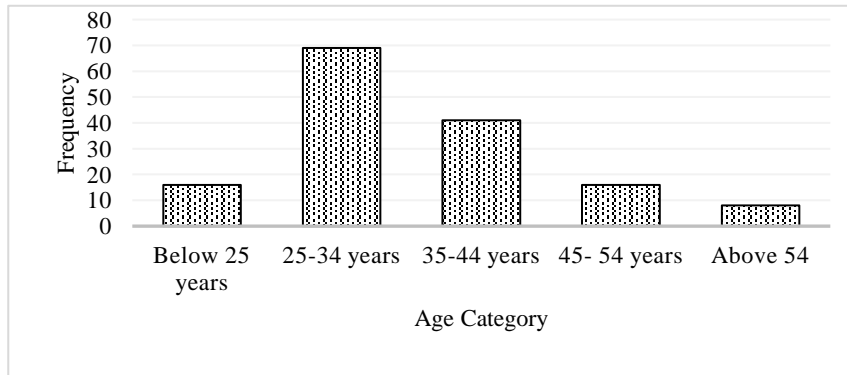
Figure 1: Gender Composition of the Sample



Source: Sampling Survey, 2022

Figure 2 shows the frequency distribution of each age category within the sample. The highest frequency of the age category is “25-34 years” which consists of 69 employees. On the other hand, the "above 54 years" age category has the lowest frequency, with only 7 employees. The “Below 25 years” and “45-54 years” age categories have the same frequencies while the “35-44 years” age category consists of 41 employees.

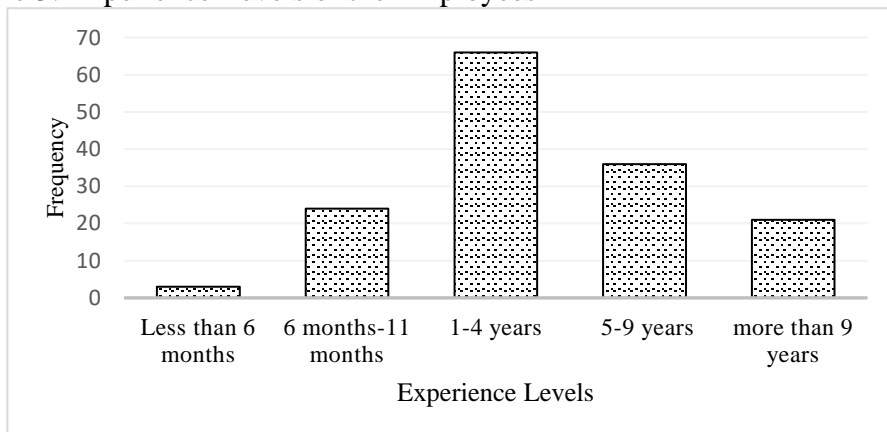
Figure 2: Age Composition of the sample



Source: Sampling Survey, 2022

According to Figure 3, most of the employees in the sample have an experience level of 1-4 years. A significant number of employees also fall within the "5-9 years" experience range. There are 21 employees who possess “more than 9 years” experience and there are 24 employees who are having “6 months -11 months” experience.

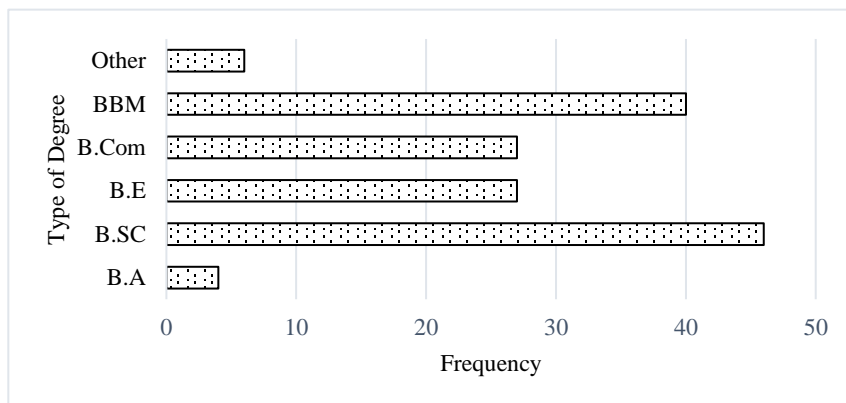
Figure 3: Experience Levels of the Employees



Source: Sampling Survey, 2022

According to Figure 4, majority of the employees of the sample hold a Bachelor of Science (B.Sc.) degree. Conversely, the lowest amounts of employees have obtained a Bachelor of Arts (B.A) degree. Bachelor of Commerce (B. Com) and Bachelor of Engineering (B.E) degrees were obtained by the same number of employees. Additionally, 40 employees hold a Bachelor of Business Management (BBM) degree. Furthermore, 6 employees have not obtained any of the above degrees. They have degrees outside of the mentioned categories, such as PQHRM (MBA), Postgraduate Diploma in Marketing, NDT Polymer Engineering, Associate of Science (A.S.), and APE. Moreover, according to the sampling survey (2020), B.SC, BBM, B.E, and B.com degree holders have more chances to engage with the manufacturing industry of Sri Lanka.

Figure 4: Degrees Obtained by Employees



Source: Sampling Survey, 2022

Table 1: Descriptive Analysis of Overall Job Satisfaction

Demographic Variable	Category of the variable	Job Satisfaction	
		Mean	Std. Deviation
Gender	Male	2.0114	0.3316
	Female	1.9861	0.2746
Age	Below 25 years	2.0458	0.2634
	25-34 years	1.9988	0.31042
	35-44 years	1.9651	0.3292
	44-55 years	2.1545	0.2765
	Above 54 years	1.7897	0.1089
Experience	Less than 6 months	2.3519	0.3337
	6 months-11 months	2.0078	0.3530

	1-4 years	1.9301	0.2557
	5-9 years	2.0591	0.3090
	More than 9 years	2.0741	0.3688
Degree	B.A	1.9340	0.5375
	B.SC	2.0420	0.3595
	B.E	2.0010	0.2105
	B.Com	1.8863	0.2270
	BBM	1.9906	0.2732
	other	2.3356	0.3501

Source: Sampling Survey, 2020

### 4.3 Identifying Demographic Factors affecting on Job Satisfaction

Table 2: Chi square Test Results of Demographic Variables and Job Satisfaction

Hypothesis	Chi-Square Value	P value	Decision
H <sub>0</sub> : There is no significance impact of age on job satisfaction.	2.21	0.331	H <sub>0</sub> is accepted
H <sub>0</sub> : There is no significance impact of gender on job satisfaction.	8.60	0.377	H <sub>0</sub> is accepted
H <sub>0</sub> : There is no significance impact of experience on job satisfaction.	11.20	0.191	H <sub>0</sub> is accepted
H <sub>0</sub> : There is no significance impact of the degree on job satisfaction.	21.93	0.015	H <sub>0</sub> is rejected

Source: Sampling Survey, 2020

According to Table 2, the results indicate age, gender, or job experience do not have a significant impact on employees’ job satisfaction. However, the type of degree obtained by employees shows a significant impact on job satisfaction. Therefore, the findings suggest that the degree attained by employees plays a significant role in determining their level of job satisfaction.

### 5. Factor Analysis

Since KMO=0.924>0.5 and the P-value (sig) of Bartlett's Test=0.000<0.05 the study can have Factor Analysis for data (Williams, Ohsman & Brown, 2010).

According to Table 3, the five components are mainly identified as 1- Company Policies and Supervision, 2- Working Conditions, 3- Work Itself, 4- Recognition and Advancement, 5-Job Security and Human Relationships. The study has identified these factors as the factors which are affecting graduate employees’ job satisfaction.



Hence, the five common factors can be written as follow,

$$\text{Factor 1} = 0.223Z_9 + 0.138Z_{10} + 0.280Z_{11} + 0.181Z_{12} + 0.334Z_{13} + 0.302Z_{14} + 0.118Z_{17} + 0.166Z_{20}$$

$$\text{Factor 2} = 0.255Z_{22} + 0.251Z_{24} + 0.274Z_{25} + 0.401Z_{26} + 0.317Z_{27}$$

$$\text{Factor 3} = 0.276Z_5 + 0.305Z_6 + 0.214Z_7 + 0.328Z_8$$

$$\text{Factor 4} = 0.413Z_1 + 0.397Z_2 + 0.267Z_3 + 0.164Z_4$$

$$\text{Factor 5} = 0.167Z_{15} + 0.367Z_{16} + 0.204Z_{18} + 0.183Z_{19} + 0.374Z_{20} + 0.300Z_{21}$$

Table 3: Rotated Component Matrix (Extraction Method: Principal Component Analysis)

Attributes	1	2	3	4	5
Seeing results of work.	.245	.088	.125	<b>.793</b>	.221
Work praised.	.094	.211	.285	<b>.803</b>	.115
Idea accepted by the company.	.236	.177	.439	<b>.666</b>	.081
Received advancement.	.261	.114	.544	<b>.546</b>	.097
Varied job.	.060	.025	<b>.643</b>	.379	.385
Creative (challenging) job.	.228	.244	<b>.685</b>	.303	.157
Opportunity to do a whole job--all phases.	.152	.180	<b>.560</b>	.336	.370
Growth in skills, or status	.341	.344	<b>.669</b>	.136	.010
Allowed to work without supervision.	<b>.559</b>	-.002	.449	.018	.183
Effective organization of work.	<b>.543</b>	.355	.370	.342	.067
Beneficial personnel policies.	<b>.710</b>	.282	.223	.132	.126
High company status.	<b>.571</b>	.221	.340	.141	.240
Supervisor competent.	<b>.765</b>	.175	.083	.192	.252
The supervisor delegated work well.	<b>.700</b>	.244	.099	.153	.103
Friendly relations with the supervisor.	.437	.150	.283	.272	<b>.441</b>
The supervisor is willing to listen to suggestions.	<b>.483</b>	.447	-.003	.281	.291
The supervisor gave credit for the work done.	.167	.437	.040	.341	<b>.531</b>
Cooperation of people you worked with.	.374	.333	-.069	.383	<b>.496</b>
Good working relationship with subordinates.	<b>.551</b>	.249	.158	.170	.416
Received wage increase.	.192	.264	.178	.078	<b>.686</b>
Amount of salary.	.398	<b>.591</b>	.290	.065	.075
Tenure or other objective signs of job security.	.185	.326	.439	-.046	.615
Community and other outside situations.	.252	<b>.624</b>	.101	.241	.288
Work in social surroundings.	.255	<b>.665</b>	.107	.032	.337

Good physical surroundings.	.137	<b>.756</b>	.195	.107	.138
Having a given status.	.180	<b>.704</b>	.164	.185	.290
The supervisor went to bat for you with management.	.200	.179	.151	.158	<b>.655</b>

Rotation Method: Varimax with Kaiser Normalization.

Source: *Sampling Survey, 2022*

## 6. Conclusion and Suggestions

According to the study, 1-Company Policies and Supervision, 2- Working Conditions, 3- Work Itself, 4- Recognition and Advancement, 5-Job Security, and Human Relationships are the factors that have been identified as affecting graduate employees’ job satisfaction. Moreover, the satisfaction is changed by the degree obtained by employees. As per the current study other variables could not influence on employees’ job satisfaction.

Company policies and supervision mean the administration side of the organization. Hence the employees more consider the behavior of the administration. Employees always expect the positive actions from the administration of the company. If a company needs a more loyal employee, they have to make sure the employees satisfy with their company policies and supervision.

Working conditions is another factor that is identified by the study. As per the Bakotic and Babic (2013) workers under difficult working conditions are dissatisfied with their job. The current study also implied that management should more concern to improve working conditions of the company in order to improve employees’ satisfaction.

Work Itself is another factor that is revealed by the study as a factor of job satisfaction. That means the nature of the job or the task that employees have complete also influences employees’ job satisfaction. Recognition and advancement are other influential factors of job satisfaction and if employees are received enough recognition and advancement they will satisfy with their job and the organization.

Job security and human relationship also giving impact employees’ job satisfaction. The status and stability of the organization was the most influential fact during the Covid-19 pandemic. Hence if the employers can ensure the job security of employees, they will be highly satisfied with their

job. Moreover, all the employees have to deal with different people in the organization as co-workers, supervisors, and administrators. However, employees have close relationships with co-workers and supervisors than others. Hence, these people can make the workplace the worst place or the best place.

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