Mean Score and Correlation Research on Job Satisfaction at ABC Factory

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Abstract— Job satisfaction issue had been discussed widely in organizational behavior field. An employee with a high job's satisfaction shows a superior quality of work and production compared to the one who does not. Our paper aims to study the job satisfaction among workers at ABC factory. A set of questionnaire consists of two parts, which are background of respondent and job satisfaction components were distributed among 80 employees. The questionnaire consists of three main components which are work environment, productivity, and organization can be classified by 25 questions. Two statistical analysis applied to evaluate the collected data which are the mean score analysis and the correlation. The findings of the survey are then compared to define the level of job's satisfaction and its contributing factors among workers in ABC factory.

Keywords:: Job's satisfaction, mean score analysis, productivity, working environment.

I. INTRODUCTION

Nowadays, enlightening the worker productivity, providing a suitable working environment and good relationship between organizations in job satisfaction are major concerns of industry, especially in developing countries. Job satisfaction is a good indicator to boosts factory in attracting and retaining employees. Job satisfaction means "the degree to which employees are content with the job that they perform" [1]. Adverse environment and inappropriate management systems lead to reduce worker productivity and increase production cost. In recent years, the important factor in measuring employee productivity is employees who feel comfort with their profession, determined by the environment and the conditions in their workplace. In order to deal with the undercurrents of their business life, employers need to readjust themselves. A stumpy performance and industrial health illnesses occurs when people are working under inconvenient conditions. This will cause high level of absenteeism and increase the turnover rates among the employees [2]. Improving the conditions in their workplace somehow will improve the employees' engagement or disengagement such complaints and absenteeism; meanwhile it will surely help to increase the productivity of the employees [3]. This study

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applies mean score and t-test to analyze the data collected among employee at ABC factory. There are five sections of this paper as follows. We begin with the introduction parts, followed by the related literature review. Next section explains the methodology, the results and the discussions and the last part is the conclusion.

II. LITERATURE REVIEW

Job satisfaction has been widely defined. A paper on a nurse's job satisfaction [4] suggested that job satisfaction is different from time to time according to current state or situation. It means we might hate our job at the beginning, however as time flies, our perception towards our job will also change and will improve our job satisfaction. This also supported by [5] who suggested that economic cycles can also affect the job satisfaction among workers and [6] which define job satisfaction as a study in organizational behavior with a different perception based on individual's experience. Industrial 4.0 which had taken place now, has created an intense of job's security among workers. The competition among workers are very high nowadays to secure their jobs.

To have a great level of job satisfaction, several factors need to be considered for both employee and employer sides such as the company demand, client's needs, environment situation and many more. As job satisfaction increases, the skills of the employee will also increase [6] which also create a highly motivated employee for the respected organization. This is the main reason why job satisfaction is very vital to every employee. Lots of factors contributing to job satisfaction have been revealed based on the recent research.

A paper by [4] did not identify individual factors such as age, gender, and education level related to job satisfaction. It is in contrast with [10] which suggested that the main factors to increase the level of job satisfaction is the role of the supervisor or leader of the group and their level of education. In [7] they suggested that a caring culture that comprehends the community relations, judgment's power, and mutual way of communication will help increase the job satisfaction among workers.

There are different levels of measurement between civil servant and private servant. A civil servants feel more valued by society, they are more likely to have higher levels of public service motivation, which will contribute to higher



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level of individual job satisfaction as compared to private servants who are most likely try to meet the company demand most of the time [8]. In addition, in [9] suggested that a different generation show a different demand on job satisfaction. They suggested that for a company to hire Gen Y workers, a more likely home-based working environment and techno-savvy equipment must be prepared since Gen Y expect the organization to be fortified with present machinery and clear direction by a company as Gen Y demand immediate feedback on their performance. This also supported by [10] that social media will also help to increase the level of job's satisfaction.

A working environment with a good relationship among workers, employer and employee, a home based workplace, an ergonomic workplace will motivate workers to work every day. It supports by [11], besides salary, job satisfaction will increase if the working environment is better. There are some factors contributing to the level of job satisfaction based on previous study, however we decide to focus on the productivity, working environment and organization.

III. METHODOLOGY

This study employed a dataset primarily collected among employees at ABC factory. A total of 80 employees were chosen as respondents of this study across various departments and different positions to answer the questionnaire to cover the major aspects of satisfaction on their jobs adopted from [12]. This is 4 Likert scale questionnaire where 1 is Strongly Dissatisfied (SD), 2 is Dissatisfied (D), 3 is Satisfied (S) and 4 is Strongly Satisfied (SS). The respondents were conveniently chosen once they are available to participate, delighted, eligible at the right time and place. A finding by [12] in a study done to investigate job satisfaction using exploratory factor analysis (EFA) identified three variables or components factors with regard to factors affecting job satisfaction, which are productivity, work environment and organization. Reliability test has been performed for each component by calculating Cronbach's Alpha value, and all components scored a value of greater than 0.6 which indicated each component has a reliable measure of consistency. Thus, this study was performed to investigate the employees' satisfaction level towards those three variables.

In the analysis part, a descriptive analysis using mean score was calculated by calculating the mean of each item within each variable using IBM SPSS version 25 in order to see the level of employees' productivity, satisfaction on work environment and organization. Then, a bivariate analysis is performed among those three variables to see the relationship between two variables such as productivity with work environment, productivity with organization and work environment with organization based on the proposed research model in Fig. 1.

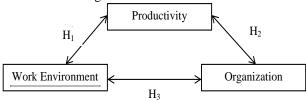


Fig. 1: Correlation of productivity, work environment and organization

Then, this study extended to investigate the correlation between three variables such Productivity, Work environment and Organization towards Job satisfaction. Fig. 2 shows the proposed research model.

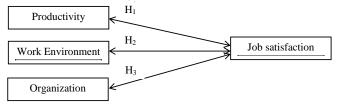


Fig. 2: Correlation of productivity, work environment and organization on job satisfaction

IV. RESULTS AND DISCUSSION

A. Mean score of productivity

Based on Table 1, there are eight questions regarding the employees' productivity that concerned on clear goal and target setting, problem solver, productivity, able to sacrifice, quick response and action, and clear about the job scope. It showed that ABC Factory's employees had a high level of satisfaction on productivity. Most of them stated that they clearly defined quality goals, trained as good problem solver, always aims to achieve target quotas and goals, very productive, always try hard to respond quickly to fulfil customers' needs, have a purer path for career development and task necessities as well. However, it showed moderate level in solving a particular problem to make the customers satisfied.



Table 1: Score mean of productivity

	Item of Organization	SD (1)	D (2)	S (3)	SS (4)	Score Mean	Level
1.	I have all the equipment to perform my job.	1	10	60	9	2.96	Moderate
2.	How pleased are you with your participation in	0	2	69	9	3.09	High
	resolutions that mark your effort.						
3.	Are you satisfied with the information you receive	0	5	65	10	3.06	High
	from your superior about any scenario happen in						
	the company?						
4.	Are you satisfied with your prospect to get a better	1	3	56	20	3.19	High
	job in this company?						
5.	Fruitful time consumed occupied on the tasks	0	2	59	19	3.21	High
	allocated to me.						
6.	The whole quality of service that I deliver	0	1	66	13	3.15	High
7.	Considering the whole thing, how pleased are you	1	4	57	18	3.15	High
	with your career?						

Note: SD=Strongly dissatisfied, D=Dissatisfied, S=Satisfied and SS=Strongly satisfied.

B. Mean score of satisfaction towards work environment

According to Work Environment as shown in Table 2, there are nine items asked that are related to the work environment. The results identified that good working environment provides better employees in term of performance and quality of works. Moreover, they had good respectful practice to preserve company good name and relationships among workers. Besides, they are also delighted

on commitment given by the supervisors and senior manager, goal setting and communication opportunity. In directly, it drives the workers to work hard and fully utilized their skills and abilities for individual and company good performance. However, there is a moderate level of satisfaction on company's support and motivation in keeping employees informed about matters affecting the company.

Table 2: Mean score of satisfaction towards work environment

	Item of Work Environment	SD (1)	D (2)	S (3)	SS (4)	Score Mean	Level
1.	I feel very heartened to come up with fresh and improved ways of doing things.	0	1	47	32	3.39	High
2.	The Company keep us inform about the company current situation all the time if we might get affected about it.	1	13	62	4	2.86	Moderate
3.	I recognize why it is so vital for (Company name) to value multiplicity (to identify and admiration the value of variances in race, gender, age, etc.	0	0	28	52	3.65	High
4.	My skills and abilities are applied widely at my job.	0	1	46	33	3.40	High
5.	My supervisor's shows a very good commitment to quality works.	0	3	52	25	3.28	High
6.	Senior managers noticeably prove an obligation towards quality.	1	1	61	17	3.18	High
7.	Are you satisfied with the information you receive from your superior about the situation in your division?	1	5	67	7	3.00	High
8.	The ABC Factory clearly talks about its goals and policies to me	0	4	58	18	3.18	High
9.	I obtain adequate chance to intermingle with other employees on a proper level.	0	5	60	15	3.03	High

Note: SD=Strongly dissatisfied, D=Dissatisfied, S=Satisfied and SS=Strongly satisfied.

C. Mean score satisfaction towards organization

According to Table 3, overall there are seven items classified under Organization component. The results described the workers had high satisfaction with decisions made by the organization because it allows some opinions from workers. It also showed that workers were satisfied with current information disseminated by the organization

and the company opportunity for better position as well. In addition, the workers had high pleasure with the time given to finish their job. However, they had moderate satisfaction on organization related to the tools and resources provided to make their works running smooth. Overall, it was found that the entire worker had satisfied with their job.



Table 3: Mean score of satisfaction towards organization

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	Item of Organization	SD (1)	D (2)	S (3)	SS (4)	Score Mean	Level
1.	I have all the equipment to perform my job.	1	10	60	9	2.96	Moderate
2.	How pleased are you with your participation in resolutions that mark your effort.	0	2	69	9	3.09	High
3.	Are you satisfied with the information you receive from your superior about any scenario happen in the company?	0	5	65	10	3.06	High
4.	Are you satisfied with your prospect to get a better job in this company?	1	3	56	20	3.19	High
5.	Fruitful time consumed occupied on the tasks allocated to me.	0	2	59	19	3.21	High
6.	The whole quality of service that I deliver	0	1	66	13	3.15	High
7.	Considering the whole thing, how pleased are you with your career?	1	4	57	18	3.15	High

Note: SD=Strongly dissatisfied, D=Dissatisfied, S=Satisfied and SS=Strongly satisfied.

D. Correlation analysis

Correlation analyses were carried out to examine the strength of the relationships between independent variables which are Productivity, Work Environment and Organization. Based on Table 4, it was revealed that Productivity has significant positive relationship with Work

Environment (r=0.312, p <0.05) same goes between Productivity and Organization (r=0.411, p < 0.05). There was also a significant correlation between Work Environment and Organization (r=0.488, p <0.05). Therefore, the hypotheses proposed in this study (H1 to H3) are accepted as shown in Fig. 1.

Table 4: Correlation of productivity, work environment and organization

		Productivity	Work Environment	Organization
Productivity	Pearson Correlation	1	0.312	0.411
	Sig. (2 tailed)		0.005**	0.000***
Work Environment	Pearson Correlation	0.312	1	0.488
	Sig. (2 tailed)	0.005***		0.000***
Organization	Pearson Correlation	0.411	0.488	
	Sig. (2 tailed)	0.000***	0.000***	1

Note: *** Correlation is significant at 0.05 level (2 tailed)

Table 5 displays the correlation results obtained between the predictors and response variable. It was found that there are significant correlation between Productivity and Job Satisfaction (r=0.279, p<0.05), Work Environment and Job

Satisfaction (r=0.302, p <0.05), and Organization and Job Satisfaction (r=0.411, p <0.05). Therefore, the hypotheses proposed in this study (H1 to H3) are accepted as shown in Fig. 2.

Table 5: Correlation of productivity, work environment and organization on job satisfaction

		Productivity	Work Environment	Organization
Job satisfaction	Pearson Correlation	0.279	0.302	0.411
	Sig. (2 tailed)	0.012***	0.007***	0.000***

Note: *** Correlation is significant at 0.05 level (2 tailed)

V. CONCLUSION

Three main aspects are being investigated in our research regarding the job satisfaction among workers in ABC factory which are the productivity, the working environment and the organization. The mean score analysis had shown a very positive level of satisfaction among the workers of ABC Factory towards the productivity level, their working environment, and also the organization.

This shows that all the workers of ABC Factory are satisfied with their current environment at their workplace. The correlation analysis also shows a significant correlation between all the variables. In conclusion, we can

say that the job satisfaction among ABC Factory are very high due to their satisfaction off their productivity level, working environment and their organization.

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