Job Satisfaction among Employees in a Manufacturing Company in North Malaysia

Zahayu Md Yusof[1], Masnita Misiran[2] and Nurul Hanis Harun[3]

[1,2,3] School of Quantitative Sciences, UUM College of Arts and Sciences, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah Darul Aman, Malaysia.

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ABSTRACT---- *Job satisfaction is among the stringent challenge faced by managers, in particular to manage employees. Previous studies have demonstrated unusually large impact on job satisfaction especially on the motivation of workers. As the level of motivation has an impact on productivity, it will affect the performance of business organizations. Thus, the goal of this study is to determine the significance difference in job satisfaction between male and female, single and married, ages and experiences in group of respondents by using the independent t-test and ANOVA. The result showed that there is a significance difference between male and female worker, and between single and married workers. The finding shows significance different when ages of groups of respondent were considered and no significance different in a group of worker that is based on experience. This article aims to provide medium among employers and employees to find common ground for the satisfaction level to ensure a harmony environment of working.*

Keywords--- job satisfaction, gender, marital status, respondent age, working experience
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1. INTRODUCTION

Job satisfaction and excellence performance in workplace has been vastly studied in the literature and is deemed important in a work place from the early days [1, 2] until present [3, 4]. Satisfaction in job will influence motivation among worker. Thus, it will affect the quality of job, job turn over and company's productivity. Job satisfactions have been defined in many ways by different researchers. [5] introduced definition of job satisfaction as a cognitive, affective and evaluative reactions or attitude. He also stated that job satisfaction is a pleasure or positive emotional state resulting from the appraisal of one's job or experience. There are also several researches that have been conducted studies to see the gender difference in job satisfaction [6].

[7] in his study of administrative staffs in South West Nigeria Universities listed salary as one of important factor to job satisfaction between male and female. [8] explore factors affecting job satisfaction in two automotive industries in Malaysia. They found out that the environmental condition especially temperature, humidity, noise and lighting also affecting job satisfaction. Another important factor on job satisfaction is leadership. Leadership was hypothesized to influence team organizational citizenship behavior either directly or indirectly through job satisfaction [9]. They found that both transformational leadership and empowering leadership positively influenced job satisfaction. [10] examined the impact of job stress on employee job satisfaction for the telecommunication sector in Pakistan. They claimed that the term stress is basically from physical science where it means the force upon an object to cause damage, bending or breaking. They showed that individuals under excessive stress tend to find their jobs less satisfying. In Malaysia, a study on job satisfaction has also become in a limelight. Some works regarding this issue have been addressed by [11, 12].

This article focuses on selected manufacturing workers and their job satisfaction. Main objective for this research is to investigate the job satisfaction in one of the manufacturing company in North Malaysia.

2. METHODOLOGY

2.1 Research Design

In this research, a sample of 40 workers consisting of 20 male and 20 female from one of the manufacturing company in North Malaysia is selected. This proportion is selected in a balance gender to reduce bias is the analysis. Employees come from homogenous background residing in Kedah. The company manufactured freezer equipment as their core business, and has small number of employees.

2.2 Method of Data Selection

The method used is stratified sampling. Stratified sampling is a probability sampling procedure in which simple random subsamples that are more or less equal on some characteristic are drawn from within each stratum of the population. By using stratified sample, more efficient sample can be collected. Random sampling error will be reduced since each group is internally homogeneous yet comparative differences are identified between groups. The sample reflects the population accurately on the basis of the criterion used for stratification. The selected variable should increase homogeneity within each stratum and increase heterogeneity between strata. Thus, in this work, the sample is separated into two subgroups or stratum that is male and female. The sample sizes for each stratum is non-proportional stratified sample, meaning that the sample sizes for each stratum is not allocated in proportion to the population sizes. Each stratum has an equal size which is 20 samples for male and 20 samples for female. For each stratum, a simple random sampling is used to collect the data means that in each stratum will have an equal chance of being included in the sample.

2.3 Instruments/ Technique Used

Data is collected by distributing questionnaire. Closed ended question is used where respondents have specific limited alternative response and they are required to choose the closest response to their own viewpoints. Self-administered questionnaire is used where the respondents take the responsibility for reading and answering the questions. By adopting questionnaire as means to gather information, responses are gathered in standardized way. This practice promotes more objective compare to other methods. Besides, it is also quick and easy to collect information from respondent, which are the workers.

2.4 Questionnaire Design

This work involves in primary data. Primary data is used when the research objectives cannot be achieved by secondary data. All the primary data are collected by distributing questionnaire. In the questionnaire, 5 demographic questions and 14 questions are posed related to salary, working environment, stress, leadership and job satisfaction. The questionnaire ended with overall job satisfaction among the workers. Interval scale is used since this technique can identify the job satisfaction level for the workers. Numerical scale is using 7 numbers which is from very dissatisfied to very satisfy with *1: very dissatisfied* and *7: very satisfied* to represent the agreement of respondents regarding their opinion in the questionnaire.

2.5 Pilot Test and Reliability of Analysis

In order to conduct this study, pilot test and reliability test is conducted on the questionnaire to determine the extent to which the items in questionnaire are related to each other. Reliability refers to random error in measurement. Reliability also indicates the accuracy or precision of the measuring precision. If a problem in some item is identified, it should be excluded from the scale. To conduct reliability test, a set of data with 12 sample size is used. By using SPSS, the output is shown in Table 1.

Table 1: Reliability Test

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.854	.857	16

From Table 1, the overall Cronbach's alpha value is 0.854 and the Cronbach's alpha based on standardised items value is 0.857. As a cutting point, the value of Cronbach alpha obtained should be at least 0.70 for any research using the survey method [13]. Thus, we can say that the scale is reliable.

In Table 2, majority of *Cronbach's alpha if item deleted* values are no greater than the overall Cronbach's alpha value which is 0.854. However four items are greater than 0.854, which are ENVIRONMENT1, ENVIRONMENT2, ENVIRONMENT4 and STRESS1 with 0.862, 0.859, 0.860 and 0.863. It still acceptable as the increase is very low. In conclusion, the reliability is significance in our questionnaire. Hence, it will be use in order to collect the data among the workers in one of the manufacturing company in North Malaysia.

2.6 Statistical Analysis

A descriptive analysis is used for the demographic information of respondents. It is used to describe basic characteristic or summarizes the data in a straightforward and easy to understand manner. The data for gender, races and marital status are summarized by using pie chart. Bar chart can also be use to describe the age, worker experience and job satisfaction for male and female. On the other hand, inferential statistics is used to make inferences from a sample to entire population.

Table 2:   Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SALARY1	56.83	187.061	.777	.829
SALARY2	56.67	190.424	.712	.833
SALARY3	57.08	191.720	.666	.835
SALARY4	57.50	191.909	.673	.835
ENVIRONMENT1	57.00	211.091	.195	.862
ENVIRONMENT2	56.50	208.636	.251	.859
ENVIRONMENT3	56.92	190.992	.737	.832
ENVIRONMENT4	55.83	216.697	.154	.860
STRESS1	56.42	217.174	.127	.863
STRESS2	56.33	211.152	.296	.854
STRESS3	57.67	192.970	.653	.836
STRESS4	56.58	202.083	.548	.842
LEADERSHIP1	56.50	208.818	.348	.851
LEADERSHIP2	56.67	207.879	.393	.849
LEADERSHIP3	56.83	186.515	.789	.828
LEADERSHIP4	56.17	203.061	.456	.846

3.   DATA ANALYSIS AND FINDING

3.1 Descriptive Statistical Analysis

The descriptive analysis of demographics for responses has summarized into Table 3.

Table 3: Demographic of Response

Characteristic	Frequency	Percentage, %
Total, N	40	100
Gender		
Male	20	50
Female	20	50
Races		
Malays	30	75
Chinese	6	15
Indians	4	10
Marital Status		
Single	24	60
Married	16	40
Ages (years)		
16-26	17	42.5
27-37	15	37.5
38 and Above	8	20
Working Experience		
1 month-3 years	21	52.5
3 years-6 years	5	12.5
6 years and Above	14	35

Job Satisfaction		
Yes	22	55
No	18	45

The following pie chart and bar chart shows the percentage of gender of respondents, races, marital status, ages of the respondents, years of respondents and job satisfaction for the respondents. These chart is clearly to give us a briefly review for the data.
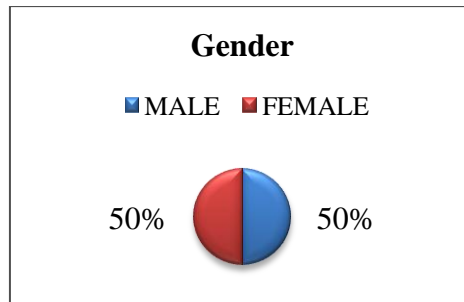

Figure 1: Percentage of Respondents for the Gender

The Figure 1 above shows the percentages of gender for respondents. The sample sizes for male and female is same which is 20 samples because it is divided into two strata for the stratified random sampling. Therefore, the percentage for male and female is same which is 50 %.
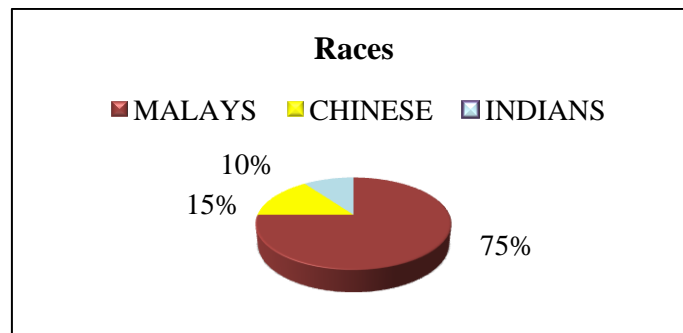

Figure 2: Percentage of Respondents for the Races

The Figure 2 above shows the percentages of races for respondent. Based on the pie chart above, we can conclude that the largest population of the respondents is Malays, 75%, or 30 out of the total 40 respondents. The second largest population of respondents is Chinese, 15%, or 15 out of the total 40 respondents. Next, there are only 10%, or 10 out of the total 40 respondents which is Indians.
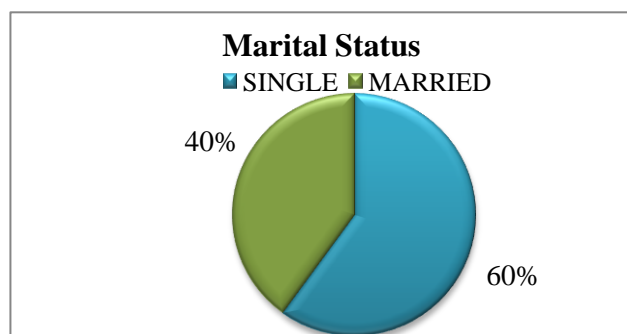

Figure 3: Percentage of Respondents for the Marital Status

The Figure 3 above shows the percentages of marital status for the respondent. Based on the pie chart above, we can conclude that the largest population of the respondents is single, 60%, or 24 out of the total 40 respondents. The minority population of the respondent is married, 40%, or 16 out of the total 40 respondents. This chart briefly explains that the single respondent is the majority population in the company.
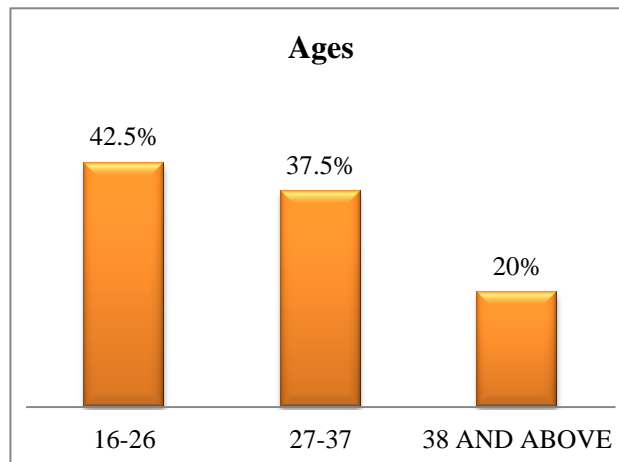

Figure 4: Percentage of Respondents for the Ages

The Figure 4 above shows the percentages of the ages of worker for respondents. There are three groups for the ages which are 16 years-26 years old respondents, 27 years-37 years old respondent and lastly 38 years old and above respondents. The results shows majority of respondents are between 16 years old and 26 years old with 42.5%, or 17 out of the total 40 respondents. The second highest respondents are in the group of ages 27 years and 37 years which is 15 respondents and the percentages is 37.5%. Lastly, the respondents from the group of ages 38 years and above only represent by 20% or 8 respondents from the total of 40 respondents. This bar chart clearly explain that majority of the population in this company are still young which is from the group of ages less than 26 years old.
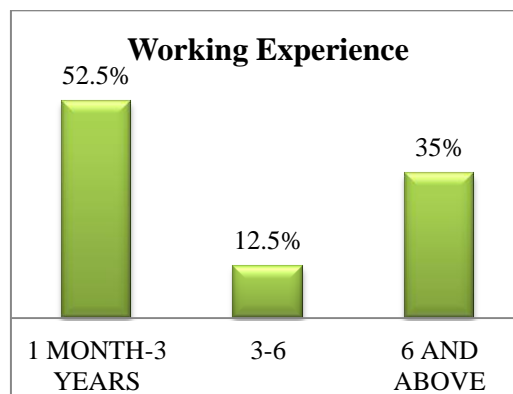

Figure 5: Percentage of Respondents for the Working Experience

Based on the Figure 5 above, there are three groups for working experience which are from 1 month until 3 years, from 3 years until 6 years and lastly for 6 years and above. The results shows majority of respondents are having working experience from 1 month until 3 years. The percentage for this group is 52.5%, or 21 out of the total 40 respondents. This is related to the fact that majority the population are below 27 years old. Second largest is for the group of working experience 6 years and above with 14 respondents out of the total 40 respondents. The percentage for this group is 35%. The lowest population is for the group of working experience from 3 years until 6 years with the percentage of 12.5% equal to the 5 respondents out of the total 40 respondents.
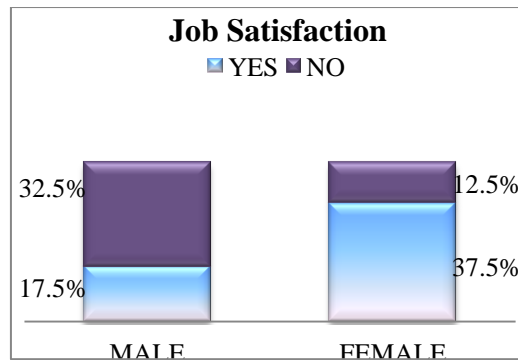
Figure 6: Percentage of Respondents for the Job Satisfaction

The Figure 6 above shows the job satisfaction for male and female in this company. For the male, 17.5% respondents or 7 out of the total 40 respondents satisfied with their job. On the other hand, 32.5% respondent or 13 out of the total 40 respondents are not satisfied with their job. For the female, 37.5% respondents or 15 out of the total 40 respondents are satisfied with their job in the company. On the other hand, 12.5% or 5 out of the total 40 respondents are not satisfied with their job. The overall result shows that female have higher satisfaction than male.

3.2 Inferential Statistical Analysis

Independent samples *t*-test is apply to test the difference between means of male and female and means of single and married respondents for job satisfaction The results showed that there is a significance difference between the group of male and female. There is also significance difference between the groups of single and married respondent for job satisfaction in one of manufacturing company in North Malaysia.

We are also interested to determine whether there exists statistically a significance difference in means between two or more groups. ANOVA was used in order to determine whether there is a significance difference in means for the respondent's ages and working experience to job satisfaction.

Table 4: ANOVA Respondent's Ages for job satisfaction

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.075	2	11.038	4.008	.027
Within Groups	101.900	37	2.754		
Total	123.975	39			

Table 4 showed that *F* value is 4.008 and *p*-value is 0.027 which is significance at the level of significance 0.05. Therefore, H_O is rejected and there is sufficient evidence to claim that some of the means of respondent's age are different from each other.

Table 5: Multiple Comparison in job satisfaction

Multiple Comparisons

Dependent Variable: JOB_SATISFACTION

	(I) AGES	(J) AGES	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	16-26	27-37	.200	.588	.938	-1.24	1.64
		38 AND ABOVE	-1.750*	.712	.048	-3.49	-.01
	27-37	16-26	-.200	.588	.938	-1.64	1.24
		38 AND ABOVE	-1.950*	.727	.028	-3.72	-.18
	38 AND ABOVE	16-26	1.750*	.712	.048	.01	3.49
		27-37	1.950*	.727	.028	.18	3.72
LSD	16-26	27-37	.200	.588	.736	-.99	1.39
		38 AND ABOVE	-1.750*	.712	.019	-3.19	-.31
	27-37	16-26	-.200	.588	.736	-1.39	.99
		38 AND ABOVE	-1.950*	.727	.011	-3.42	-.48
	38 AND ABOVE	16-26	1.750*	.712	.019	.31	3.19
		27-37	1.950*	.727	.011	.48	3.42

*. The mean difference is significant at the .05 level.

Table 5 shows which groups differed from each other. There is a significance difference in job satisfaction between group of age 16 years to 26 years and 38 years and above. There is also a significance difference between the group of age 27 years to 37 years and 38 years and above.

Table 6: Homogeneous Subsets for Respondent's Ages

	AGES	*N*	Subset for alpha = .05	
			1	2
Tukey HSD(a,b)	27-37	15	3.80	
	16-26	17	4.00	
	38 AND ABOVE	8		5.75
	Sig.		.953	1.000

Table 6 summarizes the results of the multiple comparisons procedure. The means listed in each subsets column are not statistically reliably different from each other. There are two subsets column which is the groups of age 27 years to 37 years and 16 years to 26 years which are not statistically reliably different from each other but statistically different from the means of respondent's age 38 years and above. This is consistent with the fact that the null hypothesis of the ANOVA is rejected.

Table 7 gives the mean, standard deviation, standard error, 95% confidence interval for mean, minimum and maximum for worker's experiences. There were 21 respondents for the group of worker experienced between 1 month until 3 years, 5 for the group of 3 years until 6 years and 14 respondents has experience of 6 years and above. The means for the job satisfaction are 4.38, 3.60 and 4.38.

Table 7: Descriptive analysis for worker experience

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1 MONTH-3 YEARS	21	4.38	1.884	.411	3.52	5.24	1	7
3-6	5	3.60	.894	.400	2.49	4.71	2	4
6 AND ABOVE	14	4.36	1.906	.509	3.26	5.46	1	7
Total	40	4.28	1.783	.282	3.70	4.85	1	7

Table 8: Test of Normality for worker's experiences

WORKER'S EXPERIENCES		Kolmogorov-Smirnov(a)			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
JOB SATISFACTION	1 MONTH-3 YEARS	.153	21	.200(*)	.927	21	.119
	3-6	.473	5	.001	.552	5	.000
	6 AND ABOVE	.211	14	.090	.894	14	.094

An assessment of the normality of data is a prerequisite for parametric testing. There are two main methods of assessing normality which is by graphic and numerical. This work will utilize Shapiro-Wilk test since the sample sizes is less than 50. From the Table 8, the group for worker's experience is significance since the significance value is less than 0.05. That means the data for this group is not normally distributed. The assumption for the normality is deviated.

Hence, the normality assumption cannot be fulfilled since the sample for the group of worker experience between 3 years and six years is not normally distributed. Therefore, Kruskal-Wallis test is used because the distributions of the data do not have to be a normal distribution. The Kruskal-Wallis test is a nonparametric test to compare three or more unpaired groups.

Table 9: Ranks of Worker Experience

WORKER'S EXPERIENCES		N	Mean Rank
JOB SATISFACTION	1 MONTH-3 YEARS	21	21.29
	3-6	5	14.50
	6 AND ABOVE	14	21.46
	Total	40	

Table 10: Test Statistics

	JOB SATISFACTION
Chi-Square	1.571
df	2
Asymp. Sig.	.456

Table 9 illustrated the mean ranks *for 1 month to 3 years*, *3 years to 6 years* and *6 years and above* is 21.29, 14.50 and 21.46, respectively. Table 10 showed the significance value that is 0.456 – that is more than 0.05, thus suggesting the null hypothesis failed to be rejected. Therefore, we can conclude that there is no significance difference among the group of worker experience. There is no need to check for multiple comparisons since no difference can be detected among these three groups.

4. CONCLUSION

The findings of this research can act as medium for the employers and employees to determine the level of satisfaction in order to enhance company's growth and development. Based on the significance factors, company can plan for the smart optimal strategy to become more competitive. This knowledge may influence work productivity, work effort, employee absenteeism and staff turnover. This work suggests significance difference between single and married workers. Leadership factor is the also most significance to job satisfaction. The result also showed that there is a significance difference for the group of worker's age which is between the group of 16 years old to 26 years old and the group of 38 years old and above. There is also significance difference between the group of 27 years old to 37 years old and the group of 38 years old and above. In addition, the result showed that there is no significance difference between the groups of worker's experience. However, a thorough study based on a population regarding the job satisfaction among employees in this company should be conducted to ensure a verified analysis in order to improve efficiency and productivity in this organization.

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