

ID011 – After Sales Service Quality as Antecedents of Customer Satisfaction

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Abstract

One of the crucial part in customer service industry is the customer satisfaction after sales service. The purpose of this study is to investigate the relationship between after sales service quality (delivery, installation, warranty, member card) towards customer satisfaction. Besides, this study seeks to identify the correlation between customer satisfactions after sales service toward customer loyalty. This study is conducted at Kemudi Timur Sdn Bhd, one of the electrical suppliers in Kota Bharu, Kelantan. The target population for this study is the customers who visited that company. Data is gathered by distributing 150 questionnaires to respondents that serve as customers at Kemudi Timur Electronic Sdn Bhd and only 120 questionnaires are returned (96% return rate). Data gathered analyzed using Statistical Package for Social Sciences (SPSS) for reliability, pearson correlation and multiple regression. There are five hypotheses are constructed and only three hypotheses are supported and another two hypotheses are rejected in this study.

Keywords: *after sales service; customer service; customer loyalty*

1. INTRODUCTION

In this modern day, seller and buyer relation is not just end in buying and selling process. It has evolved beyond it, becoming more complex than before to maximize the benefit to the buyer as well as the seller. Satisfied customer over a product will build trust over the seller and will lead to another purchase in the future (Posselt & Eitan, 2005). In order to maintain the customer satisfaction, one of the current issues that had being raise is the after sales service. After sales service can be defined as a “set of activity that took place after sale of product that act as supporting service to customers toward the sold product” (Saccani et. al, 2007; Rigopoulou et. al, 2008). After sales service, allow seller to gain competitive advantage over other sellers. Besides, customer satisfaction relates to attract new customers whereby a satisfy customers will attract new other customers (V. Nivethika, 2015) through after sales service.

1.1 Problem statement of the study

Seller has develops multiple ways in order to satisfy customers. After sales service was introduced in business system and had been practice since 19th century. However, many profit organization still do not have a clear picture on the importance of after sales service. Therefore, the researcher has conducted the study at Kemudi Timur Electronic Sdn Bhd in Kota Bharu, Kelantan. The business activity for this company is supplying and selling

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electrical product to customers such as television, washing machine, refrigerator and others. The researcher is aware about the issue regarding after sales service in this company. Therefore, the researcher undertakes some investigation arising problem on how far the after sales service helps customers satisfy. Few identified problems from the company that the researcher had acknowledge are the warranty after sales service, the installation quality of the installation workers and the delivery quality of the delivery workers to the customers. For that reason, the researcher will find out the relationship between the after sales service and customer satisfaction and at the same time, the researcher will find out the relationship between customer satisfaction after sales service and the customer loyalty. Therefore, the objectives of this study are as below:

- RO1: To investigate the after sales service quality towards customer satisfaction.
- RO2: To examine the most influencing after sales service qualities towards customer satisfaction.
- RO3: To identify the relationship between customers satisfactions' after sales service with the customer loyalty.

1.2 Literature review

1.2.1 After sales service

After sale service are known by many difference names. Some called after service as “product support activities”, “product support services” (Shaharudin et.al, 2011), “field services, “after-sales support, “technical support, or event “services”. All these names are can be found in articles and journal which referring to the after sales service. After sale service has emerged since 19th century. Many study were been conducted to understand the after sale service even further. All this research and other factors such change in business environment and technologies has change people view on after sale service (Muhammad et al, 2011).

1.2.1(a) Delivery quality

Delivery system helps customers to transport brought product easier. Rigopoulou et.al, (2008) state that delivery holds the key to the after sale service in influencing the customers. It shows how important it is to organization. The delivery may look simple, but it can give huge impact on customers buying decision and satisfaction. There are two main points in delivery service that are speed and reliability (Choudhary et.al, 2011). The meaning of term speed in delivery is ability to deliver the item fast, on time as promise. While the meanings term reliability is ability to send the item at right quantity, at the right placed and to the right customer. Delivery and customer satisfaction is believed to have relation. According to Shaharudin et.al, (2009) and Choudhary et.al, (2011) deliver service well-connected and enhanced customer satisfaction.

Some organization doesn't have own transportation use in delivery service. Instead, they use others third party organization to perform the delivery service to customers. It requires high mutual trust because it involves the company name. Choosing the best third parties is important because they will act as the company representative for the seller company. The representative must be able to perform as the seller organization standard.

1.2.1(b) Installation quality

Installation service is one of the after sale service offered by an organization to their customers. It becomes one of the important key in influencing the customers' satisfaction (Rigopoulou et.al, 2008). Shaharudin (2009) mention installation is one of seven elements customer support. Installation service requires installer to install customers brought item at customer doorstep. This activity will enhance the satisfaction of customer (Shaharudin et. al., 2009). Irini R. (2008) also believe installation and deliver is important to enhance customer satisfaction. Kumar Mishram (2014) did mention after-sales service is important because it helps to ensure that customers are satisfied with their purchases and in case of any difficulty installing or setting up equipment, they can receive help.

Accuracy in time of installation, proper information, flexibility of meeting date and time as well as installer kindness, friendliness and politeness are the example of quality activities and behavior. It will bring up the good image and friendliness, Rigopoulou et.al, (2008). This will affect the company sales turn over. Installation service allow company to create bond with the customers. A good installation service will result satisfy customers and bring good image to the organization. A good installation can reduce the chance of damage and error while convincing to customers that there is no error, reliable and valuable.

1.2.1(c) Warranty quality

Warranty allows continuous relation between seller and buyer within the warranty period. According to Shaharudin et. al, (2009), warranty is the agreements between two parties (seller and buyer) that allow buyer to claim rectify failure of item within the warranty period. The warranty claim include the seller or manufacture to repair or replace failed item in the event the product failed to meet its purpose (Shaharudin et. al, 2011). Shaharudin et. al, (2009) mention that warranty is an insurance policy and repair contract. Thus, the seller or manufacture needs to bear the cost of repair and replace. To protect the seller from irresponsible customer, any warranty claim must subject to term and condition of the agreement.

Customers intend to believe the longer the warranty coverage, the more quality the product is (Oumlil, 2008). This can be prove in Shaharudin et.al (2011) study by identify the customers more satisfy when their risk of failure item is reduce by warranty. The longer the warranty, the more satisfy the customer (Shaharudin et. al., 2009). The reason why many company implied the warranty coverage and event offer extension to the warranty period in able to gain competitive advantage, (Shaharudin et. al, 2009).

1.2.1(d) Member card

Customers' loyalty and customers satisfaction has strong connection. Muriithi, (2011) mention customers loyalty can be influence by customer satisfaction. Loyal customers can be achieving by building customers trust toward the company (Sun and Lin, 2010). Thus, the relation between customers and seller must never be end.

Most of people often only reassemble member card as loyalty card or one of the loyalty program by an organization. Recently organization use member card to attract customers to spend more at their organization. People see it as "free lunch" "free money" or "found money" (Zineldin et al., 2014). These attracted customers to spend more with the organization and create chance of repurchase intention in future. Organization also can be benefit by gaining competitive advantages over other competitor where customers buy more from their store. Point collecting from purchasing items or point redemption has influence customers to spend more (Zineldin et al., 2014). People mostly miss look by the main objective in implementation of member card service is to retain the bond between customers and seller. Creating bond with customers allow manager to understand more on customers need and wants.

1.2.2 Customer satisfaction and after sales service

Implementation of after sale service to the business policies none of others reasons is to get the customer satisfaction. The organization will able to retain customers and attract new customers from the satisfy customers. This will result them high turnover, higher productivity and profit to the organization. According to the Choudhary et.al, (2011), customer loyalty and organization financial stability have closed connection with the customer satisfaction. Thus, Choudhary et.al, (2011), indicates that in order to an organization to success, they must set customer satisfaction as their basic objective.

Besides that, Shaharudin et.al (2011) did mention that organization can generate more profit while they delivering the after sales service compared to product sold without it. This show how important the after sale service in business industry. According to Maghsoudlou et. al,

(2014) explain after sales service can be describe as all the supporting activities to the product-centric transaction. Meanwhile Shaharudin et. al, (2011), describe it as all activities that support customers purchase product and Vitasek (2005) explain it as service after the product is delivered.

1.2.3 Customer satisfaction and customer loyalty

Past studies have shown there were relations between customer satisfaction, customer loyalty and profitability, (Maghsoudlou et. al., 2014). According to Zakaria et. al, (2014), loyalty can be define as a feeling to make repurchase with the organization or other behavioural respond due to feeling of attachment to the brand, manufacture, product, service, or other factors on a favourable attitude. Attitude can be explained such politeness, kindness, and friendliness of the organization toward customers.

It is important to satisfy customer as it can retain the customers. A loyal customer ensure and secure the next product purchase in the future beside they less sensitive toward price change, less marketing expenditure, and increase organization profit, (Zakaria et. al, 2014). Nevertheless, Zakaria et. al, (2014) explain loyal customer act as marketing tool by providing and recommending it to others people. In directly these loyal customer become free agents to market organization product as well reduce the organization marketing cost in attracting new customers. Zakaria et. al, (2014) also mention these loyal customers can reduce the organization effort in promoting them because they already familiar with the product and require less information.

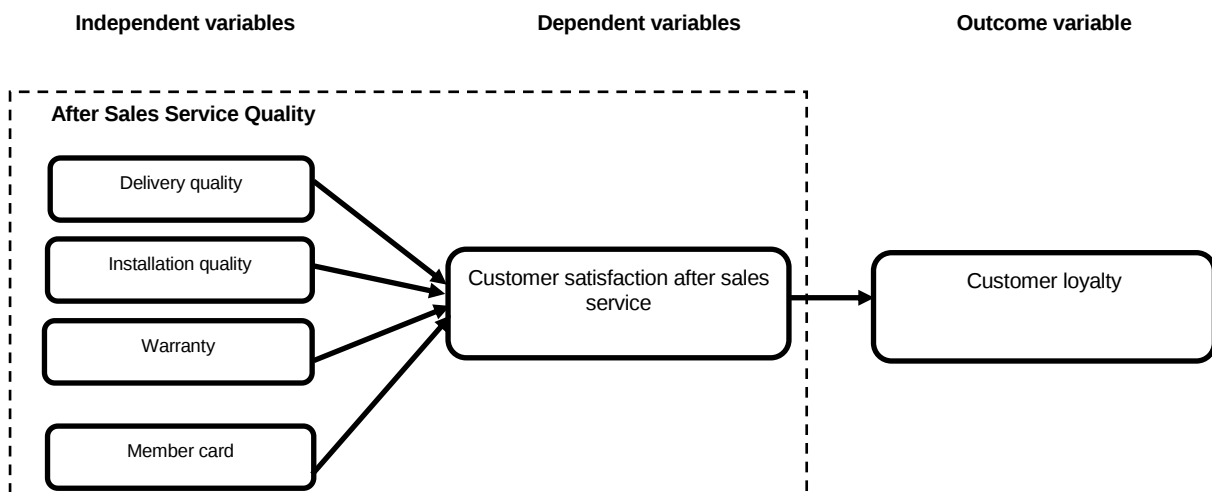


Figure 1: Theoretical framework

The above theoretical framework was adapted from Shaharudin et. al, (2011) and new independent is added in the dimension of after sales service quality. There are four dimension of after sales service quality is used in this study that includes installation, delivery, warranty, and member card. The dependent variable for this study is the customer satisfaction after sales service and outcome for this theoretical framework is the customer loyalty.

2. METHOD AND MATERIAL

The researcher used correlation study in this research. The population for this study is customers at Kemudi Timur Sdn Bhd. The respondent is the customers that purchased product from Kemudi Timur Sdn Bhd main branch in Kota Bharu. Therefore, the population for this study is unknown. Under the non-probability sampling, researcher chose to use convenience-sampling method. Convenience sampling is the least time consuming of all

technique. According Bagozzi & Yi, (2012) the sample size should be more than 100 for accuracy. It means the greater numbers of sample, the higher the accuracy of data.

The questionnaire consists of five-point Likert Scale range from the lowest of strongly disagree to highest of strongly agree to measure each variable. The questionnaire consists of four (4) sections that are part A, part B, part C and part D. The first section focuses on independent variable items that include installation, delivery, warranty, and member card. For section B, focuses on dependent variable of the customer satisfaction. Section C focuses on the outcome variable for this study that is the customer loyalty. Section D includes demographic background of respondents. Results from this research were analyzed by using SPSS.

Therefore, there are five hypotheses were constructed for this study as below:

- H₁: There is a significant relationship between delivery quality and customer satisfaction.
- H₂: There is a significant relationship between installation quality and customer satisfaction.
- H₃: There is a significant relationship between warranty and customer satisfaction.
- H₄: There is a significant relationship between member card and customer satisfaction.
- H₅: There is a significant relationship between customer satisfaction and customer loyalty.

3. ANALYSIS AND RESULTS

3.1 Reliability

The reliability analysis indicated the items in the set are correlated to one another. The result of Cronbach's Alpha for each variable as shown in table 3.1 as below:

Table 3.1 The Cronbach's Alpha result

Variables	No. of Items	Cronbach's Alpha (Pilot test)	Cronbach's Alpha (Actual test)
Independent Variables			
Delivery Quality	5	.802	.146
	4	-	.796
Installation Quality	5	.424	.834
Warranty	5	.832	.845
Member card	3	.366	.114
	2	-	.783
Dependent Variable	5	.804	.845
Outcome Variable	3	.878	.827
Overall	26		

Table 3.1 shows the result of the reliability test for the pilot test and actual test. The closes the Cronbach's alpha value to 1.0, the better the result is. In the pilot test, the independent variables such delivery and warranty is reliable by 0.802 and 0.832. While independent variable such installation quality and member card are not reliable by 0.424 and 0.366. This result has forced the researcher to change the question so it will increase the Cronbach's alpha value. The Cronbach's alpha value for dependent variable and outcome variables can be classified in as very good because of the value is 0.804 and 0.878

In the actual test, the result for independent variables is not reliable for delivery and member card by 0.146 and 0.114. These cause the researcher to delete items that have the highest value in table of Cronbach's alpha deleted. The deliver quality has changed from 5 items to 4 items only. The item for member card also changes from 3 items to 2 items only. The result has change; with both of the variables Cronbach's alpha value has increase respectively to 0.796 and 0.783. For the dependent variable and outcome variable, each of them can be considered as very good result by value of 0.845 and 0.827.

4. DISCUSSION

From table 4.1, demographic background of respondents consists of gender, marital status, race, age and frequency.

Table 4.1: Respondent's demographic profile

		Frequency	Percent
Gender	Male	62	51.7
	Female	58	48.3
	Total	120	100
Age	20 And Below	11	9.2
	21-25 Years	17	14.2
	26-30 Years	28	23.3
	31-35 Years	26	21.7
	36-40 Years	20	16.7
	41-45 Years	6	5
	46-50 Years	8	6.7
	51 And Above	4	3.3
	Total	120	100
Race	Malay	101	84.2
	Chinese	14	11.7
	Indian	3	2.5
	Others	2	1.7
	Total	120	100
Marital Status	Single	38	31.7
	Married	77	64.2
	Single Parents	5	4.2
	Total	120	100
Frequency	1-2 Times	43	35.8
	3-4 Times	41	34.2
	5-6 Times	18	15
	More than 6	18	15
	Total	120	100
Product Brought	Sound And Vision	47	39.2
	Household Product	73	60.8
	Total	120	100

Based on the table 4.1, it can be concluding from the 120 respondent, 68 of them are male while 58 of them are female. The different is small which the male respondent are 51.7 % and the female are 48.3 only. For the age category, most of the questionnaire is answer by age 26-30 years old with frequency of 28. For the race category, the majority of the questionnaires are answered by the Malay with 101(84.2%), Chinese with 14(11.7), Indian with 3(2.5), and others race with 2(1.7). Married respondent outnumber others marital status respondent with 77 respondent percentage of 64.2, single 38 with percentage 31.7, and single parent 5 respondent with 4.2 percent.

From the table, the result show that 35.8% of the respondent were 1-2 times buyer at the store with 43 respondent, 34.2% of the respondent were 3-4 time buyer at the store with 41 respondent, and respondent with frequency of buying 5-6 time and more than 6 times were shared the same number of percentage with 15.0 respectively and the frequency of 18 respondent. The household product lead the type of product brought by the customers over the frequency of 73 respondent with percentage of 60.8 compare to sound and vision product 47 respondent with the frequency of 39.2.

Correlation Analysis

Table 4.2 Pearson correlation analysis

	Delivery quality	Installation quality	Warranty	Member card	Customer satisfaction
Delivery quality					
Installation quality	.711**				
Warranty	.637**	.658**			
Member card	.513**	.575**	.600**		
Customer satisfaction	.638**	.729**	.757**	.576**	

Customer loyalty	.504**	.557**	.651**	.445**	.641**
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** . Correlation is significant at the 0.01 level (2-tailed).
 **. Correlation is significant at the 0.01 level (2-tailed).

The correlation between customers satisfaction and delivery quality is 0.638. It indicated there was strong relationship between customers satisfaction and delivery quality. The correlation between customer satisfaction and installation quality is 0.729 that also represent strong relationship. The correlation between customer satisfaction and warranty was 0.757 that represent also strong relationship. The correlation between customer satisfaction and member card is the lowest compare to others variables which is 0.576 represent moderate relationship. Besides that, there was also a strong significant relationship between customer satisfaction and customer loyalty that is 0.641.

Regression Analysis

Table 4.3: Summary of regression analysis between dependent variable and independent variables

Summary			ANOVA		
R	R Square		F		Sig.
.821 ^a	.674		59.317		.000 ^b
Dimension	Standardized coefficients			Collinearity statistics	
	B	t	Sig.	Tolerance	VIF
(Constant)		1.172	.244		
Delivery quality	.078	.967	.335	.442	2.265
Installation quality	.342	4.072	.000	.402	2.489
Warranty	.435	5.517	.000	.456	2.192
Member card	.079	1.122	.264	.579	1.726

The table 4.3 show regression analysis on the data gathered. The regression analysis is important so we be able to formulate the regression function. SPSS were used to run the data. R-square value or also known as coefficient of determination will explain the portion of variance with the dependent variable (customer service) which comes from independent variables (delivery quality, installation quality, warranty and member card). The result show 67.4% of the customers satisfaction can be explain by the variables of after sales service delivery quality, installation quality, warranty, and member card. The others 32.6% remaining comes from others factor that not include in the study. It requires further research. The R value is 82.1% indicates the variance shared by the independent variable and dependent variable. It is the multiple of multiple correlation coefficients between all of the predictor variables and the dependent variable.

The F-value indicated whether the model is acceptable or not. The value was 59.317 and it was acceptable due to the value was greater than 1. The marginal significant was (Sig. V = 0.000). The sig-value which is associated with this F value was very small (0.000). The β show the most influence independent variables toward the discuss dependent variable. The β value for delivery quality is ($\beta = 0.078$), installation quality ($\beta = 0.342$), warranty ($\beta = 0.435$) and member card ($\beta = 0.079$). It can be conclude that the highest factors that influence customers satisfaction is warranty.

The table above also shows the collinearity statistic result. It consists of tolerance value and VIF value. The tolerance value of more than 0.2 mean that there is no duplication for each variable in which the respondents did not feel confused between the variable. There is no similarity between the variable which enable the respondents to clearly distinguish them. A tolerance under 0.2 usually means that the variable has correlated with their independent variable and should not be included. All of the variable has more than 0.2 which are deliver quality by 0.442, installation quality by 0.402, warranty by 0.456 and member card by 0.579.

Table 4.4: Summary of regression analysis between dependent variable and independent variables

SUMMARY			ANOVA		
R	R Square		F		Sig.
.641 ^a	.411		82.215		.000 ^b
Dimension	Standardized coefficients			Collinearity Statistics	
	B	t	Sig.	Tolerance	VIF
(Constant)		5.046	0.000		
Customer loyalty	0.641	9.067	0.000	1.000	1.000

Meanwhile, the table 4.4 show the regression analysis between the dependent variable (customer satisfaction) and the outcome variable (customer loyalty). The result showed 41.1% of the customer loyalty explained by the dependent variable (customer satisfaction). The others 58.9% remaining may come from others facto that not include in the study. The R that indicates the variances shared by the customer satisfaction and customer loyalty was value 64.1%.

The F value will determine whether the model is acceptable or not. It required the F value to be greater than 1 to accept the model. The value was 82.215 that is greater than 1. The sig-value that is associated with this F value was also small (0.000). The β values was ($\beta = 0.641$). Since this table analysed between the customer satisfaction and customer loyalty only, the tolerance and VIF value was 1. The value was higher than 0.2 that means there was no duplication with others a variable.

Hypothesis testing summary

Items	Hypothesis	Results
H ₁	There is a significant relationship between delivery quality and customer satisfaction.	Rejected $p = 0.335$ ($p > 0.05$)
H ₂	There is a significant relationship between installation quality and customer satisfaction.	Supported $p = 0.000$ ($p < 0.05$)
H ₃	There is a significant relationship between warranty and customer satisfaction.	Supported $p = 0.000$ ($p < 0.05$)
H ₄	There is a significant relationship between member card and customer satisfaction.	Rejected $p = 0.264$ ($p > 0.05$)
H ₅	There is a significant relationship between customer satisfaction and customer loyalty.	Supported $p = 0.000$ ($p < 0.05$)

5. CONCLUSIONS AND RECOMMENDATIONS

Based on the result of the research, there were significant relationship between installation and warranty and the customer satisfaction. It was proved in the hypothesis testing with both of the hypothesis supported. This show installation and warranty service play important role customer satisfaction toward the after sales service. They more concern on the installation service as well as the warranty service that are provided. Thus, the service provider should pay more attention on both of the variables compare to others. The company should improve their installation service such charging it free or improve the installation personnel by giving more training on installation process to improve their skill. The warranty service can be improve by extend it to longer period. The service provide also can introduce a new mechanism such online warranty service instead of warranty cad, so customer that lost their warranty card still can claim their warranty service. Last but not least, it is recommend to the service provider practise good after sales service management to enhance the effectiveness and efficiency of after sales service itself.

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ID012 – Relationship between Academician Leadership Power Base and Student Performance at Higher Learning Institution

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Abstract

In organization, power is important to reward or punish employees. Leader or academician usually uses their power to instruct their subordinates or students to accomplish their tasks to achieve their goals. The objective of this paper is to identify the leadership power base that includes referent power, reward power, expert power, coercive power, and legitimate. Another objective of this paper is to identify the relationship between independent variable of emotional intelligent that may contribute to the relationship of student's performance. Population of students were 1308 obtained from Faculty of Economy and Science Management and were identified as sample of 297 respondents. However, researchers manage to obtain 150 questionnaires from the Faculty. Convenient sampling technique was used in a study whereby respondents were identified from three courses from Faculty of Economy and Science Management in UniSZA Gong Badak Campus, Terengganu.

Keywords: *student's performance; power; emotional intelligent*

1. INTRODUCTION

Power involved in organizational changes and leader or lecturer use power to manage employees to accomplish organizational goals. According to Ivancevich et al. (2011), power is defined as the capability to get someone to do something and involves a relationship between two people. Normally, student's attitude and performance are effects by the type of power bases used by the lecturer. The student's perceptions, attitudes, emotions and behaviors are influenced by the power bases used by the leader or lecturer in dealing with the student (Manz & Gioia, 1983). Some leaders use a different power bases in dealing with their student to achieve organizational goals.

Lecturer or leader in an organization needs to alert on the presence of numerous sources of power in the class and how they directly influence the academic performance on students. The main challenge for the lecturer or leader is on how to utilize the suitable power to ensure of student's performance. Different bases of power yield different reactions from students and as the lecturer employed a range of powers, a perception on the lecturer's behavior is formed. Lee & Low (2012), suggested that the type of lecturer employed in managing their students has an extensive impact on the student overall feelings and attitudes towards work or assignment and their relationship with their lecturer.

1.1 Problem statement of the study

Based on the observation, students at higher learning institution affected in their performance of study because of academician's leadership power base of their lecturer. Students who are

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affected because of the leadership power base from their lecturer that may contribute to negative effect and positive effect whereby it depends on how the lecturer uses their leadership power base on students.

The problem that may give effects to student's performance at higher learning institutions is factor of academician's leadership power bases. Regards to academician power, performance of students may become low and increase depending on the use of power by academician. According to Ahmad et al. (2016), in the study field, work or assignment pressure, anxiety, student's stress and the student's performance are related to various factors of leadership power bases. Some of the power bases will directly give an impact and harm student's performance. Either the level of power bases is higher or lower; it directly will give an ultimate impact or effects to student's performance in a negative or positive way (Ahmad et al, 2016).

1.2 Literature review

Student's performance

According to Helen and Susan (2008), in order to improve the performance of students, academician focus on the individual and collective understandings skill and commitments of lecturer. Hence, performance can be described as an action of students that give a good achievement of studies or achieve the organizational goal (Vratskikh et al., 2015). Ying (2012) described that performance management is important as a process to ensure students focus and contribution to achieve the firm's mission indispensable for a business organization.

Referent power

Referent power is defined as superior or academician that inspire students or subordinates and voice their desires and hopes (Uysal et al., 2016). The referent power can be easily seen in the charismatic academician or leader presence makes others feel comfortable. According to mosaic paper, referent power is referred to the person's ability that influence students or others because of their loyalty, respect, administration, affection, friendship and desire to be associated with the person.

Reward power

Ibrar and Khan (2015) noted that the objective of reward power for lecturer is to attract their student to study hard, increase and motivate student to achieve a high level of performance in academic and others performance in their skill. Reward is something or anything that represent by some leader or lecturer that may value their student and students are willing to offer in exchange for their contributions (Ibrar & Khan, 2015). Rewards are important because low rewards can create an unpleasant environment and it will diminish the student or employee effort in their study or performance.

There are two type of rewards that includes extrinsic and intrinsic rewards which known as financial and nonfinancial reward. Deeprase (2014) stated that to increase student or employee performance, financial is not a good motivator for a reward and the absence of it is de-motivator. Rewards play an important role in creating and sustain commitment among students for a better performance (Wang, 2004).

Expert power

Lunenburg (2012) described expert power as individual's ability to influence people's behavior because of the recognized knowledge, abilities and skills. Expert power is seen as a functional area but not when outside the area. People or academician have a power such as Computer specialists, tax accountants, and economists because of their expertise in that field (Lunenburg, 2012). According to Luthans (2011), the follower must perceive the power holders to be trustworthy, credible and relevant in well-defined expert are perceived to have expertise.

Coercive power

Coercive power is a negative power whereby leaders or academician punished their subordinates or students that refuse or low in performance of job or assignment. Coercive power can be defined as a person's ability to influence subordinate's behavior through punishment or creating a perceived threat to do the job (Lunenburg, 2012). The most organization have a clearly defined the policies on employee treatment.

Legitimate power

Legitimate power is an authority power that granted from a formal position in an organization. It that means, the student must follow and obligated the academician leader directions and must respect to the work activities. Legitimate power is person's authority to make direction decisions with the acceptance of students on the direction (Mcshane & Von Glinow, 2012). Leaders with legitimate power responsible in giving orders to students within their scope of work and responsibility. Le Roux (2012) explained that people with legitimate power has a power to control their resources, to reward and to punish subordinates. Hence, with the legitimate power, academician or leader able to give instructions to subordinates.

Emotional intelligent

One of the leadership power base for leader is emotional intelligent and it is important for leader or academician for their leadership skill and power based. Emotional intelligent is referred to the capacity of recognizing the own feeling, in motivating ourselves, managing our emotions and relationships with students. Hina and Naheed (2013) describes that successful leader or academician controls their emotion. Leader with highly emotional intelligent is a superior leader. The valuable leadership of academician is the ability to understand and control emotions at workplace and able to associate with emotional intelligent may influence the ability to manage people or students (Quang et al, 2015).

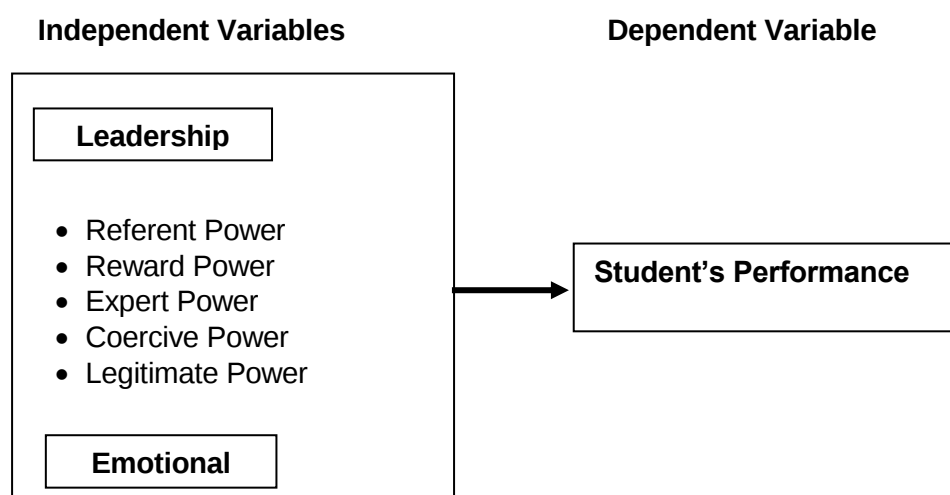


Figure 1: Theoretical framework on student's performance

The above theoretical framework was adapted from Rahim Leader Power Inventory (1988) which student's performance is dependent variable to this research and independent variables are leadership power base and emotional intelligent.

2. METHOD AND MATERIAL

This research was done in higher learning institution in University Sultan Zainal Abidin (UniSZA). Respondents were identified from Faculty of Economy and Science Management. Convenient sampling technique were used in this research whereby total of population 1308

respondents were taken from course of Bachelor in Risk Management and Takaful, Bachelor in Islamic Finance and Bachelor in Account. By referring from Krejcie and Morgan (1970) table, the sample size were 200. Total of 297 sample questionnaires were distributed to degree students of these three courses UniSZA Gong Badak campus, Terengganu.

The questionnaire consists of five-point Likert Scale range from strongly disagree to strongly agree to measure each variable. The questionnaire consists of three (3) sections that are part A, part B and part C. The first section focuses on independent variable items which include referent power, reward power, expert power, coercive power, legitimate power and emotional intelligent. For section B, focuses on dependent variable that is student's performance. Section C includes demographic factors of respondents such as gender, material status, race, age and course. Results from this research were analyzed by using SPSS.

3. ANALYSIS AND RESULTS

Based on the population of 1308 respondents obtained from Faculty of Economy and Science Management, 297 respondents were identified as sample by referring Krejcie and Morgan (1970) table. However, return rate of sample size were 75% that were 150 respondents.

Referring to the table below, population of the respondents were 1308 and the sample size were 297. Researcher manage to obtain 150 respondents that represents only 75% of the sample size. Survey return rate was summarized in table show below:

3.1 Reliability

The reliability analysis indicated the items in the set are correlated to one another. The result of Cronbach's Alpha for each variable as shown in table 3.1 as below:

Table 3.1 The Cronbach's Alpha result

Variables	Cronbach's Alpha (Pilot Test)	Cronbach's Alpha	N of items
Student's performance	.834	.879	5
Referent power	.783	.844	5
Reward power	.893	.886	5
Expert power	.821	.877	6
Coercive power	.936	.945	5
Legitimate power	.681	.714	5
Emotional intelligent	.874	.880	5

4. DISCUSSION

The purpose of this research is to identify the relationship between leadership power base, emotional intelligent and student's performance. From table 4.1, demographic factors of respondents consist of gender, marital status, race, age and course.

Table 4.1: Respondent's demographic profile

No	Profile	Description	Frequency	Percentage (%)
1	Gender	Male	51	34.0
		Female	99	66.0
		Total	150	100
2	Marital status	Single	149	99.3
		Married	1	0.7
		Total	150	100
3	Race	Malay	136	90.7
		Chinese	4	2.7
		Indian	9	6.0
		Others	1	0.7
		Total	150	100

4	Age	18-20 years old	24	16.0
		21-23 years old	95	63.3
		24-26 years old	29	19.3
		27 years old and above	2	1.3
		Total	150	100
5	Course	Bachelor in Risk Management and Takaful	47	31.3
		Bachelor in Islamic Finance	44	29.3
		Bachelor in Account	59	39.3
		Total	150	100

Results from this paper showed that 99 respondents (66%) were female and 51 (34%) respondents were male. Majority respondents were single 149 respondents (99.3%) compared to married 1 respondents (0.7%) respectively. Majority respondents were malay with 136 respondents (90.7%), chinese (2.7%), indian (6%) and others (0.7%). The highest age of respondents were age between 21 to 23 years with the percentage of 63.3% (95 respondents)

For the age category, the majority and the highest of the respondent are age 21-23 years with percentage of 63.3% that is 95 respondents. This is follow by the respondents whose ages are 24 until 26 years old and 18 until 20 years old with the percentage 19.3% (29 respondents) and 16.0% (24 respondents). The minority of the respondents is age of 27 years old and above with only 2 respondents which percentage is 1.3%.

Lastly, for the course, it shows that the 39.3% respondents are student from Bachelor in Account with 59 respondents and follow by the student from course Bachelor in Risk Management and Takaful with percentage is 31.3% that is equivalent 47 respondents. Another is from course Bachelor in Islamic Finance with 44 respondents that recorded the percentage of 29.3%.

Descriptive Analysis

This paper described the descriptive analysis, which covers question part A, and part B. For descriptive analysis, results of median, mode, standard deviation and skewness for each variable are explained based on the below table.

Table 4.2: Descriptive statistic result

	N		Mean	Median	Mode	Std. Deviation	Skewness
	Valid	Missing					
Referent power	150	0	3.4960	3.6000	4.00	.88408	-.685
Reward power	150	0	3.6760	3.8000	4.00	.76839	-.563
Expert power	150	0	3.8233	3.8333	4.00	.72974	-.536
Coercive power	150	0	3.4213	3.4000	3.00	1.02378	-.295
Legitimate power	150	0	3.2613	3.2000	2.80	.75758	.646
Emotional intelligent	150	0	3.4000	3.4000	3.00	.85389	-.212
Student's performance	150	0	3.8000	3.8000	3.80	.76430	-.326

Table above shows the value of mean, median, mode, standard deviation for the variables including student's performance, referent power, reward power, expert power, coercive power, legitimate power and emotional intelligent. The total number of questionnaires in data set are recorded under the column labelled N (150 respondents). From this table there is one value for each variable are missing.

The average answer for each variable is recorded in the Mean column. The value of the mean for student's performance is 3.8000. Meanwhile the mean for independent variables of referent power is 3.4960, reward power with 3.6760, expert power with 3.8233, coercive power with 3.4213, legitimate power with 3.2613 and lastly emotional intelligent with 3.4000. From this data, the researcher found that most of the respondents agreed with all variables in the questionnaire.

Next, the Median column refers to the respondent who is in the centre of the group. The value of median for referent power, reward power, expert power, coercive power, legitimate power, emotional intelligent and student's performance recorded the median values of 3.6000, 3.8000, 3.8333, 3.4000, 3.2000, 3.4000 and 3.8000 respectively.

The Mode column indicates the value which received the highest frequency as selected by the respondents. The Referent Power, Reward Power and Expert Power shared the same value of mode which is 4.00 whereas the Coercive power and Emotional Intelligent also share the same value of mode which is 3.00. Next value of mode for Legitimate Power is 2.80 and value of mode for Student's Performance is 3.80.

The dispersion or variability of answer given by the respondents can be assessed by examining the value of Standard Deviation for each variable. Hence, the more the variety of answer given by the respondents the larger the value of standard deviation will be. In contrast, if the respondents tend to give relatively the same answer, the standard deviation will be quite low. The standard deviation for referent power, reward power, expert power, coercive power, legitimate power and emotional intelligent are 0.88408, 0.76839, 0.72974, 1.02378, 0.75758 and 0.85389 respectively. Besides the standard deviation for student's performance is 0.76430.

Correlation analysis

The purpose of correlation analysis is to determine the relationship between independent variables and dependent variable. Association between all variables need to be tested to ensure that all independent variables are related to dependent variable. For this study, the relationship of independents such as referent power, reward power, expert power, coercive power, legitimate power and emotional intelligent are tested with Pearson Correlation Analysis to examine the strength of association with dependent variable of student's performance. Thus, the hypothesis developed can be supported. Table 4.3 below shows the result of Pearson Correlation analysis

Table 4.3 Pearson correlation analysis

	Referent Power	Reward Power	Expert Power	Coercive Power	Legitimate Power	Emotional intelligent
Referent power						
Reward power	.708**					
Expert power	.499**	.687**				
Coercive power	.616**	.794**	.553**			
Legitimate power	.279**	.244**	.329**	.249**		
Emotional intelligent	.664**	.910**	.627**	.834**	.309**	
Student's performance	.623**	.802**	.825**	.671**	.432**	.733**

** Correlation is significant at the 0.01 level (2-tailed).

The correlation between referent power and student's performance in this study is ($r=0.623$, $p<.01$, 2-tailed) which represents a strong positive relationship. The correlation between reward power and student's performance in this study is ($r=0.802$, $p<.01$, 2-tailed) which represents a very strong positive relationship. The correlation between expert power and student's performance in this study is ($r=0.825$, $p<.01$, 2-tailed) which represents a very strong positive relationship. The correlation between coercive power and student's performance in this study is ($r=0.671$, $p<.01$, 2-tailed) which represents a strong positive relationship. The

correlation between legitimate power and student's performance in this study is ($r=0.432$, $p<.01$, 2-tailed) which represents a moderate positive relationship. The correlation between emotional intelligent and student's performance in this study is ($r=0.733$, $p<.01$, 2-tailed) which represents a strong positive relationship. Indeed, as the footnote says, the results are significant at .01 levels. This could also be interpreted as "the level of confidence is 99%" ($1 - .01=.99$).

Regression analysis

Multiple regression analysis is used to examine the established functional relationship between the dependent variable of student performance with the series of independent variables consists of academician leadership power bases which are referent power, reward power, expert power, coercive power, legitimate power and emotional intelligent. From the regression analysis result, we can formulate the regression function. Table 4.4 below shows the model summary.

Table 4.4: Summary of regression analysis between dependent variable and independent variables

Summary			ANOVA		
R	RSquare	F	Sig		
.904 ^a	.817	106.434	.000 ^b		
Dimensions	Standardized coefficients		Collinearity statistics		
	B	T	Sig.	Tolerance	VIF
Referent power	.058	1.121	.264	.481	2.081
Reward power	.460	4.602	.000	.128	7.825
Expert power	.462	9.130	.000	.499	2.005
Coercive power	.091	1.373	.172	.294	3.405
Legitimate power	.174	4.420	.000	.829	1.206
Emotional intelligent	-.144	-1.464	.145	.132	7.580

Note: ^aPredictors (constant), Referent Power, Reward Power, Expert Power, Coercive Power, Legitimate Power and Emotional Intelligent

From the table 4.4 above, R^2 is the proportion of variance in the dependent variable (student performance) which can be predicted from the series of independent variables (referent power, reward power, expert power, coercive power, legitimate power and emotional intelligent). This value indicates 81.7% of the variance in student performance can influence referent power, reward power, expert power, coercive power, legitimate power and emotional intelligent. The remaining 18.3% of the model will be explained by other factors. The R value is the multiple correlation coefficients between the predictor variables and dependent variable. In this model, the value is 90.4%, which indicates there is a deal of variance shared by the independent variable and dependent variables. Moreover, the F-value for ANNOVA in the table is 106.434 and its marginal significant (Sig. V= 0.000). The sig-value which is associated with this F-value is very small which is 0.000.

Further analysis through regression, produces standardizes measures (Beta value) of the strength for each independent variable (Referent Power, Reward Power, Expert Power, Coercive Power, Legitimate Power and Emotional Intelligent) association with student performance. β or Beta value is used to determine among the independent variables which one is the most influence variable to dependent variable. Among the five independent variables; Referent Power ($\beta=0.58$), Reward Power ($\beta=0.460$), Expert Power ($\beta=0.462$), Coercive Power ($\beta=0.091$), Legitimate Power ($\beta=0.174$) and Emotional Intelligent ($\beta=-0.144$). The Expert Power has the highest Beta value which indicates the most influential factor towards student's performance.

The table above also shows the collinearity statistic result. It consists of tolerance value and VIF value. The tolerance value of more than 0.2 mean that four is no duplication for each variable in which the respondents did not feel confused between the variable. There is no similarity between the variable that enable the respondents to clearly distinguish them. A

tolerance under 0.2 usually means that the variable has correlated with their independent variable and should not be included. It can be concluded that the tolerance value of this study is more than 0.2 with referent power is 0.481; expert power is 0.499, coercive power is 0.294 and legitimate power is 0.829, while the other two variables of the tolerance score is less than 0.2 with reward power is 0.128 and emotional intelligent is 0.132.

Hypothesis testing summary

Items	Hypothesis	Results
H ₁	There is a relationship between referent power and student's performance.	Rejected p = 0.264 (p>0.05)
H ₂	There is a relationship between reward power and student's performance.	Supported p = 0.000 (p<0.05)
H ₃	There is a relationship between expert power and student's performance.	Supported p = 0.000 (p<0.05)
H ₄	There is a relationship between coercive power and student's performance.	Rejected p = 0.172 (p>0.05)
H ₅	There is a relationship between legitimate power and student's performance.	Supported p = 0.000 (p<0.05)
H ₆	There is a relationship between emotional intelligent power and student's performance.	Rejected p = 0.145 (p>0.05)

5. CONCLUSIONS AND RECOMMENDATIONS

The main purpose of this research is to determine the relationship between academician's leadership power bases and student's performance. The result shows that the reward power, expert power and legitimate power has a significant relationship toward student's performance. It can be concluded that student's performance of Universiti Sultan Zainal Abidin students can increase if academician use their expert power. From this research also, researcher found that student's performance increases when there is a reward to students. In motivating students to learn and to ensure student's performance in their studies, academician in Universiti Sultan Zainal Abidin should create a reward system. Reward system in higher learning institution may contribute to a good result, appropriate behavior and performances of students. Future research study also can be done on large sample size to improve the understanding of leadership power bases among students and employees of higher learning institution.

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ID029 - A Study on Service Quality and Customer Satisfaction: A case of Public Transportation Service in Kuala Terengganu, Terengganu Malaysia

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Abstract

Customer satisfaction and organizational performance have widely been documented and discussed by past researchers. However, studies that focus on customer satisfaction and service quality and their connection with public transportation services especially in the East Coast Region are rather limited. Therefore, this study aimed to examine the relationship between service quality and customer satisfaction on public transportation services in the said region. SERVQUAL was used to measure service quality. A total of 300 survey questionnaires were distributed using convenience sampling in Kuala Terengganu and data were analyzed using Pearson Correlation Analysis and Multiple Regression Analyses. The study found that reliability, assurance and empathy are significantly related to customer satisfaction.

Keywords: *customer satisfaction; service quality; tangible; responsiveness; reliability; assurance; empathy*

1. INTRODUCTION

Terengganu, one of the states in Malaysia, is currently progressing rapidly. With its slogan, “*Budaya Cantik, Negeri Menarik*” which can be translated into, Beautiful Culture, Attractive State, Terengganu has become one of the holidays gate away to 5.5 million tourists in 2017 (Terengganu Times, 2017). Its main city, Kuala Terengganu, has also become one of the main attractions of tourism in Malaysia. Therefore, public amenities such as public transports need to be upgraded since foreign tourists especially rarely bring their own private vehicles. Idris and Kumaran (2014) also had indicated that efficient public transport is important for the tourism industry.

This research emphasized on customer satisfaction and service quality in the sphere of public transportation at the state of Terengganu in Malaysia. It is vital for public service providers to offer satisfactory services for customers to use their services recurrently and give positive publicity through good testimonials. However, satisfaction can only be achieved through quality services. Researchers had defined quality services as the delivery of services or products that meets the expectations and satisfaction of customers within the stipulated time frame. These satisfied and content customers would become loyal customers and continue to be loyal to the brand (Munusamy, Chelliah and Hor, 2010).

1.1 Problem statement

Public transportation encompasses express buses, stage buses, school buses, rental cars, and freight transportations. There have been many complaints on the qualities of public

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transportation in Malaysia (Bernama, 2016). When the Malaysian national survey was conducted, public transportation was identified to be of paramount importance to the public since it was placed at second after food price (NST, 2013). Among the complaints that had been mentioned since 30 years ago were lack of punctuality, poor conditions of the vehicles, poor drivers' attitudes and lack of the transportation providers' accountability towards customer's safety (Siti Haryati, Noor Malinjasari and Norudin, 2008). Although, many complaints on public transportation services had been recognized, it was found that out of 402 complaints received, only 115 complaints or 28.6 percent were solved in 2010 (Public Complaints Bureau, 2010). The issues on poor public transport services in Terengganu had been studied in 2008 and it was discovered that the level of customer satisfaction on public busses in Terengganu was only at 38.69 percent (Siti Haryati, Noor Malinjasari and Norudin, 2008). This study was supported by similar study in 2017. In that study, although customer satisfaction for public transport had increased to 63.0 percent, it still leaves room for improvement (Noor Malinjasari et al, 2017). These two studies, however, only focused on Dungun District.

The Terengganu Structure Plan, 2006-2020, clearly stated that public transport services do not comprehensively cover all areas in Terengganu as operations were very limited in the remote areas in the state. In addition, the public transportation terminal station facilities in all districts had not been able to support the public transport services nor can it support the tourism activities (Structure Plan Terengganu State, 2006-2020). Even though Kuala Terengganu is in the heart of Terengganu, its public transportation service is also poor. This is supported by Ir Rosli Othman, the Chairman of Public Work and Public Transport, Terengganu State statement who affirmed that public transportation services in Terengganu were poor (Sinar Harian, 2014). Therefore, this study was conducted to study the relationship between customer satisfaction and service quality of public transport in Terengganu particularly in Kuala Terengganu using SERVQUAL. Also, the study was undertaken to examine the dimension of service quality that had the most significant impact on the satisfaction of public transportation users in Kuala Terengganu.

1.1.1 Public transport

Good public transportation is an indicator of any developed nations (Halizan, Azli and Mohd Faiz, 2015). As Malaysia aims to become a developed country, its public transportation sector has continuously being upgraded through huge allocations of resources (Halizan, Azli and Mohd Faiz, 2015). Nevertheless, measuring customer satisfaction on public transportation services is rather challenging and subjective as services are intangible (Selvanathan et al., 2016). Therefore, services need to be operationalized in order to be gauged. A few researchers had attached dimension such as, customer perceptions and customer complaints to asses service quality (Munusamy, Chelliah and Hor, 2010; Selvanathan et al., 2016). Subsequently, these findings were supported by other researchers (Ray, Barney and Muhanna., 2004) that affirmed that the rate of customer complaints correlate with service quality measurement using SERVQUAL model. The choices of public transport as a preferred mode of travel by travelers in the city are mainly influenced by the quality of transport operator services (Noor Malinjasari et al, 2017; Halizan, Azli and Mohd Faiz, 2015).

As nations and technology progress, users begun to demand for faster and more reliable services, easier access terminals, lower floor carriage unit, cheaper and safer services as well as more dependable drivers (Siti Haryati, Noor Malinjasari and Norudin, 2008). Lucidly, transport operators are responding to such demands with the objective to increase their customers, and corporate image. The quality of services by the transport operators can be established using various attributes such as service coverage, services reliability, frequency of services and hours of services, (Noor Malinjasari et al., 2017; Siti Haryati, Noor Malinjasari and Norudin, 2008; Halizan, Azli and Mohd Faiz, 2015).

1.2 Literature review

1.2.1 Customer satisfaction

Customer satisfaction had always been measured by how the customer's perceived and viewed the goods and services being offered by an organization (Halizan, Azli and Mohd Faiz, 2015; Munusamy, Chelliah and Hor, 2010; Selvanathan et al, 2016; Radhita, Michael and David, 2017; Noor Malinjasari et al., 2017). In public transport sector, customer satisfaction was defined as how the services attract customers (Agus, Barker and Kamdampully, 2007). There were many studies on customer satisfaction including its benefits to organizations and how it could ensure the success and longevity of businesses (Radhita, Michael and David, 2017; Selvanathan et al, 2016; Munusamy, Chelliah and Hor, 2010). Companies that were able to satisfy customers' needs would have higher economic returns (Agus, Barker and Kamdampully, 2007). Most researchers defined customer satisfaction as an individual feeling that is whether the individual feels good when comparing between his or her initial expectation towards a performance and the performance that he or she actually experienced (Radhita, Michael and David, 2017; Selvanathan et al, 2016; Munusamy, Chelliah and Hor, 2010). In general, customer satisfaction had been linked to the five attributes of service quality (Agus, Barker and Kamdampully, 2007; Munusamy, Chelliah and Hor, 2010; Selvanathan et al, 2016; Radhita, Michael and David, 2017).

1.2.2 Service quality

Individuals and organizations defined quality according to their own classification, characteristics, opinions, expectations and measurement (Radhita, Michael and David, 2017; Noor Malinjasari et al, 2017; Selvanathan et al, 2016; Munusamy, Chelliah and Hor, 2010). In the Islamic context, quality was being identified through words like, *hasanat*, *toyyibat*, *al-khair*, *al-haq*, and *al-ihsan* as mentioned in few Hadiths and in the Holy Quran. Service quality can be delineated as services that were deemed suitable and effective to achieve goals and efficient from the technical and economic aspects (Siti Haryati, Noor Malinjasari and Norudin, 2008). Service quality was also expressed as customer assessment of organizational excellence as a whole (Ancarani and Capado, 2001; Agus, Barker, and Kamdampully, 2007; Munusamy, Chelliah and Hor, 2010; Selvanathan et al, 2016; Radhita, Michael and David, 2017).

As yet, service quality was heavily dominated by the work of Parasuranam et al (1988) that drew the concept through five important attributes or elements; i) tangible ii) reliability, iii) assurance, iv) responsiveness and v) empathy. These elements were translated to instrument known as SERVQUAL which has been modified various times to increase the accuracy in data analysis. Firstly, the tangible aspect of SERVQUAL referred to physical facilities like ensuring the public transportation to be in its best condition. Secondly, reliability was defined as the ability to perform the services offered or promised accurately. It means that the staff on duty had to honor their promises by giving excellent services as being stated in the customer charter. This include ensuring proper drivers' qualification and work etiquette as well as developing bus schedule to facilitate the customers, in terms of their travelling comfort, safety, trust on the services provided, confidentiality and flexibility of travelling to accommodate their praying time (Agus, Barker and Kamdampully, 2007; Munusamy, Chelliah and. Hor, 2010; Ojo et al, 2014; Selvanathan, et al, 2016; Radhita, Michael and David, 2017; Noor Malinjasari et al, 2017). Thirdly, assurance meant that the organization could assure that the staff on duty is knowledgeable, gracious, and able to convince customers and create a sense of security while using their services. In order to achieve assurance, employees need to have good communication skills and be credible, efficient, well-informed and courteous. Fourthly, responsive meant that the staff can offer prompt services to customers, follow flexible schedules, entertain customers with fairness, and be efficient in offering the services according to customers' wants and needs (Agus, Barker and Kamdampully, 2007; Munusamy Chelliah and. Hor, 2010; Ojo et al, 2014; Selvanathan, et al, 2016; Radhita, Michael and David, 2017; Noor Malinjasari et al, 2017). Lastly, empathy

indicated that the staff on duty could understand how the customer feels by offering services that could satisfy the customers. This element measures if staff can offer the services that were significant to customers' needs as well as be sympathetic, respectful, and compassionate to customers' grievances (Agus, Barker and Kamdampully, 2007; Munusamy Chelliah and. Hor, 2010; Selvanathan, et al, 2016; Radhita, Michael and David, 2017; Noor Malinjasari et al, 2017).

1.2.3 Customer satisfaction and service quality of public transport

The relationship between customer satisfaction and service quality had been extensively studied (Olurunniwo et al, 2006). The empirical study found that there is a positive relationship between customer satisfaction and service quality (Andaleeb dan Conway, 2006). Companies that had good service quality could satisfy their customers. Most of the research that linked customer satisfaction and service quality using SERVQUAL were done in industries like banking, healthcare, retail, education, and food industry (Al Tamimi dan Al Amiri, 2003; Radhita, Michael and David, 2017). Even though there were critiques on SERVQUAL, many researchers still believe the reliability of the instrument (Al Tamimi dan Al Amiri, 2003; Olurunniwo et al., 2006; Andaleeb dan Conway, 2006; Ancarani dan Capado, 2001; Agus, Barker dan Kamdampully 2007; Munusamy, Chelliah and Hor, 2010; Selvanathan, et. al., 2016; Radhita, Michael and David, 2017). Service quality on public transportation in Malaysia had always being associated with lower customer satisfaction. For example, in 2016 customer satisfaction level was only 20.0 percent as stated by Datuk Dr. J Loga Bala Mohan, Deputy Minister of Ministry of Federal Territory (Bernama, 2016). The low utilization of public transportation were because of the buses were not being punctual and reliable, untidy and unattractive terminal, the use of complex transit route, not being customers oriented, lacking of empathy, drivers driving above the speed limit, and not giving priority to customer safety .(Siti Haryati, Noor Malinjasari and Norudin, 2008; Rohana, Ismah and Che Anizalana, 2012; Na'asah, Katiman and Rosniza Aznie, 2014; Harifah, Na'asah and Jerry, 2014; Radhita, Michael and David, 2017; Noor Malinjasari et al, 2017).

The performance of transport operators or service providers can influence the level of customer satisfaction (Halizan, Azli and Mohd Faiz, 2015; Noor Malinjasari et al, 2017). Efficient transportation services would make customers satisfied with the money that they had invested for getting the service. The customers' perceptions and their level of satisfaction could also be influenced by their emotional reactions based on their experiences when they were using the transportation services. If the transportation service could satisfy them, they would use it in the future and if the transport service was a disappointment, they would avoid using it in the future (Harifah, Na'asah and Jerry, 2014; Halizan, Azli and Mohd Faiz, 2015; Radhita, Michael and David, 2017). Public transportation services that are punctual, trustworthy, reliable and empathetic, hold excellent services through the staff at the counter tickets and has conducive terminal facilities, good drivers and comfortable units of carriage conditions could give satisfaction to the customers (Noor Malinjasari et al, 2017; Siti Haryati, Noor Malinjasari & Norudin, 2008). Based on the above literature, the SERVQUAL theoretical framework can be shown in Figure 1.

SERVQUAL being formulated by Parasuraman et.al (1988) using five dimensions as in Figure 1.

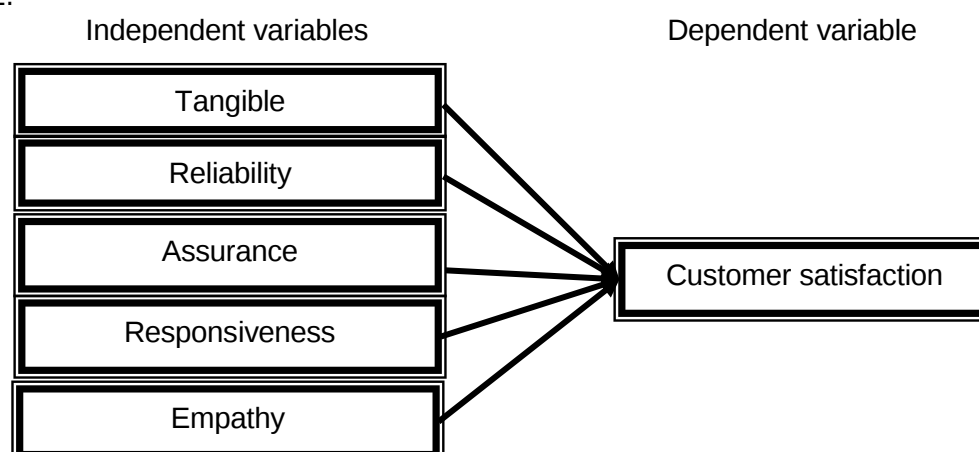


Figure 1: Theoretical framework

Based on figure 1, seven hypotheses were developed:

- H1: There is a significant relationship between tangible and customer satisfaction.
- H2: There is a significant relationship between reliability and customer satisfaction.
- H3: There is a significant relationship between assurance and customer satisfaction.
- H4: There is a significant relationship between responsiveness and customer satisfaction.
- H5: There is a significant relationship between empathy and customer satisfaction.
- H6: Reliability is the most dominant factor on customer satisfaction**

** As many studies found out that reliability was the most significant variable, for example (Munusamy, Chelliah and Hor, 2010; Selvanathan and et al, 2016, Noor Malinjasari et al, 2017)

2. METHOD AND MATERIAL

The data collection method was through survey questionnaire that had been distributed randomly to customers that came to bus terminal in Kuala Terengganu. 300 questionnaires had been distributed using convenience sampling between October to November 2017. Convenience sampling was used because it was difficult to determine customers in public sector as they are not always using the services (Wisniewski, 2001). Therefore, the same rule applied to public transport sector. The questionnaire had been distributed through face to face method and respondent were given four to 10 minutes to answer the survey questionnaire. Respondent were also encouraged to ask if they do not fully understand the instructions and the questions. As this research was still in its preliminary stage, the respondents were selected randomly at the convenience of the researcher. Overall, respondents took 5-10 minutes to answer the questionnaire. In sum, all 300 survey questionnaires were completed.

2.1 Data collection method

The instrument had been divided into three sections and adapted from model on service quality (Ojo et al, 2014). The first part consisted of demographic questions including age, gender, race and whether they are public transport users or not. The second part of the instrument were designed using five Likert scale where 5 is strongly agree, 4 agree, 3 neutral, 2 disagree and 1 is strongly disagree. Five dimensions of service quality were the independent variables whereas customer satisfaction is the dependent variable. The aim was to gather respondent feedback on SERVQUAL in the public sector. All the data were

then analyzed using SPSS 21. Pearson Correlation and Multiple Regression Analysis were used to measure the relationship between the dependent and the independent variables. Multiple Regression Analyses was also used to find the most dominant dimension of service quality in predicting customer satisfaction. All the information and identity of the respondents were treated as confidential and being used for learning purposes only.

3. ANALYSIS AND RESULTS

3.1 Demographic data

Based on table 1, majority of the respondents are in the age range of 21-30 years old (52.1 percent), followed by respondents in the age range of below 20s (21.0 percent) and people in the age range of 31-40 years old (12.3 percent). The rests are in the age range of 51 - 60 years old (6.3 percent) and more than 60 years old (0.3 percent). This proves that compared to other age groups, youths and teenagers prefer to use public transport. Majority of the respondents are Malay (93.7 percent), followed by Chinese (2.7 percent), Indian (2.0 percent) and others like Eurasian and foreigners (1.6 percent). The race of the respondents was in line with Terengganu's demographic profile. As for the gender, more than half of the respondents are females. The last part of the demographic profile showed that, 79.0 percent of the respondents are public transport users.

Table 1: Descriptive analysis and demographic data

Age	Frequency	%	Race	Frequency	%	Public Transport User	Frequency	%
Below 20s	63	21.0	Malay	281	93.7	Yes	237	79.0
21-30 years old	156	52.1	Indian	6	2.0	No	63	21.0
31-40 years old	37	12.3	Chinese	8	2.7	Gender	Frequency	%
41-50 years old	24	8.0	Others	5	1.6	Male	103	34.3
51 -60 years old	19	6.3				Female	197	65.7
>60 years old	1	0.3						

3.2 Reliability test

Since the survey questionnaire was personally distributed to the customers, the response rate was 100.0 percent. The reliability test was then being conducted to test the relevancy of the questions asked in the survey. Table 2 showed that all variables were reliable at Cronbach Alpha of more than 0.8. According to Hair et al, (2003), the Cronbach Alpha that is higher than 0.7 can be considered good and acceptable.

Table 2: Reliability test

Variables	Cronbach Alpha
Tangible	0.877
Reliability	0.781
Assurance	0.898
Responsiveness	0.897
Empathy	0.865
Customer Satisfaction	0.856

3.3 Pearson correlation analysis

Pearson Correlation Analysis was used to measure the relationship between the independent variables and the dependent variable. Table 3 showed that there were moderate to strong positive relationships between service quality variables namely tangible, reliability, assurance, responsiveness and empathy with customer satisfaction.

Table 3: Pearson correlation analysis between independent and dependent variables

Dependent/Independent Variables		Tangible	Reliability	Assurance	Responsiveness	Empathy
customer satisfaction	Pearson correlation	0.588**	0.637**	0.641**	0.589**	0.635**
	Sig (2 tailed)	0.000	0.000	0.000	0.000	0.000

** (2 tailed) correlation is significant at 0.01 level (2 tailed)
N= 300

3.4 Multiple regression analysis

This analysis was conducted to measure the relationship of service quality dimensions and customer satisfaction. The research model had a tolerance value of more than 0.10 and variance inflation factor (VIF) of less than 10. This indicates that this study has no multicollinearity problem. Table 4 shows that there was a significant relationship between three service quality dimensions namely reliability, assurance and empathy with customer satisfaction. The model was significant at $p \leq 0.05$ level ($p=0.0000$).

The coefficient of determination (R^2) was 0.524 which means 52.4 percent of customer satisfaction could be explained by the service quality elements. The most dominant service quality dimension is reliability with a Beta value of 0.322.

Table 4: Multivariate regression analysis between service quality and customer satisfaction

Model			Standard coefficient	t	Significant
	Beta	Standard Deviation			
Tangible	0.053	0.069	0.053	0.773	0.440
Reliability	0.322	0.066	0.324	4.991	0.000
Assurance	0.182	0.064	0.193	2.826	0.005
Responsiveness	0.107	0.064	0.111	1.673	0.095
Empathy	0.142	0.066	0.147	2.140	0.033

$R^2 = 0.532$; adjusted $R^2 = 0.524$ F value = 66.795 P ≤ 0.05

From this analysis, it can be concluded that only H2, H3, H5 and H6 were supported in this study.

4. DISCUSSION

The study had achieved its main objective which was to analyze the relationship between dimensions of service quality and customer satisfaction. Only three service quality dimensions namely reliability, assurance and empathy had positive significant relationships with customer satisfaction. For the second objective, the researcher had identified that the most dominant dimension of service quality that helped in predicting customer satisfaction is reliability. This shows that reliability has the most significant impact on customer satisfaction on public transportation.

The transport service providers in Kuala Terengganu need to improve their services as there were many complaints from their customers. Among the complaints were the absence of staff at the ticket counter when the customers wanted to buy the tickets, the buses not being punctual and inefficient staff in handling customer's woes. The complaints proved that there were rooms for improvement. There were many literatures that highlighted customer satisfaction is significant in gaining customer loyalty. The research also showed that service quality plays a major role in influencing customer satisfaction and choices.

The results of the findings established that public transportation providers in Terengganu need to emphasize on three dimensions of service quality namely reliability, empathy and assurance in order to improve their customer satisfaction. To be reliable, public bus operators need to honor their promises as being stated in the customer charter. This include ensuring proper drivers' qualification and work etiquette as well as adhering to bus schedule,

and ensuring workers' comfort and safety. (Agus, Barker and Kamdampully, 2007; Munusamy, Chelliah and Hor, 2010; Ojo et al, 2014; Selvanathan, et al, 2016; Radhita, Michael and David, 2017; Noor Malinjasari et al, 2017). On the other hand, public service operators could be empathetic by being sympathetic, respectful, and compassionate to customers' grievances (Agus, Barker and Kamdampully, 2007; Munusamy Chelliah and Hor, 2010; Selvanathan, et al, 2016; Radhita, Michael and David, 2017; Noor Malinjasari et al, 2017). Whereas the service provider can provide assurance to customer by assuring that the staff on duty is knowledgeable, gracious, and able to create a sense of security while using their services.

Workers attitude could have long and short term impact towards organization capabilities in satisfying the customers' needs and wants. The workers that are reliable and empathetic could create positive perceptions on the customers. (Agus, Barker and Kamdampully, 2007; Munusamy, Chelliah and Hor, 2010; Selvanathan, et al, 2016). Similarly, service providers should develop a front desk service system that offers friendly customer services that consisted of staff with good interpersonal skills and knowledgeable to ensure high satisfaction among the customers (Lentell, 2001; Agus, Barker and Kamdampully, 2007; Munusamy, Chelliah and Hor, 2010; Selvanathan et al, 2016; Noor Malinjasari et al, 2017).

Although tangible and responsiveness are not significantly related to customer satisfaction there is no harm for the public transport operators to also improve on these aspects of service quality. The improvement of these two aspects could be an added value service for the public transport users and may help in reducing complaints and feeling of dissatisfaction towards public service operators. For example, providing a clean and conducive environment would likely give a more positive impression towards the public transport operators (Agus, Baker and Kadampully, 2007). The same goes to providing a more efficient and flexible service to customers (Ojo, et al. 2014)

There are limitations to this study. Firstly, this research only concentrated on two variables, namely service quality and customer satisfaction. Secondly, this research only employed a sample size of 300 respondents is limited to those using public transport services in Kuala Terengganu only. Third, the research did not use perception expectation gap analysis to complement service quality findings. Lastly, since the research was still in its preliminary stages, it could not explain in depth the relationships between service quality and customer satisfaction.

5. CONCLUSIONS AND RECOMMENDATIONS

As a conclusion, customer satisfaction plays a vital role in the acceptance of any services or products in the market. Service quality is important to meet customers' needs and expectations. Therefore, organizations ought to improve its service quality in order to develop long and trusting relationships with its customer. Understanding service quality enable organizations to understand the standard placed by the customers on the services provided. The state of Terengganu can benefit tremendously through the improvement of its service quality dimensions particularly in term of reliability, assurance and empathy on its public transportation services for not only can it increase customer satisfaction, but also portray positive image thus attracting more tourists to visit the state. This is impeccable with the launched of Visit Terengganu 2018.

For future research, this study proposed for a larger sample size and a broader research scope that encompasses all land and districts in Terengganu with a minimum sample size of 1000 respondents. The future research could also identify the factors that could contribute to the discrepancy in the satisfaction of public transport users in big cities and small towns. Qualitative analysis could also provide a different point of view and in-depth analysis of the

relationship between service quality and customer satisfaction. The future research could also add the gap analysis of the SERVQUAL model.

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ID031 – A Study on the Influence of Transformational Leadership, Working Environment and Emotional Intelligence on Employees' Performance

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Abstract

This study examined factors that influenced employees' performance at a government office in Kelantan. Three independent variables had been chosen, namely, transformational leadership, working environment and emotional intelligence. 140 survey questionnaires were distributed to respondents and data were analyzed using SPSS version 21. Pearson Correlation and Multiple Regression Analysis were applied to analyze the relationship between the variables. The results indicated that emotional intelligence and working environment influences employees' performance. The study recommended for bigger sample size. The study also suggested using longitudinal study for future research.

Keywords: employees' performance; transformational leadership; working environment; emotional intelligence.

1. INTRODUCTION

The most important asset of an organization is employees as they contribute directly to organizational performance. Employees performance can be defined as activities and productivities executed by employees which are in line with the organizational goals (Zainab and Khairunnisa, 2015). According to Zainab and Khairunnisa (2015), employees' good performances would increase the organization's productivity hence give a positive impact to the nations. However, weak performance by the workers could portray an ineffective organizational administration since organizational culture and management style were also being identified as factors that influenced employees' performance (Azlinda Jaini, 2013).

1.1 Problem statement

Being in a competitive and globalized era, organizations need employees who are high achievers (Pawirosumarto, Sarjana and Muchtar, 2017). Employees' performance becomes an important variable in organizations because it could help organizations to have a strong foundation in industries (Pawirosumarto, Sarjana and Muchtar, 2017). This statement was supported by other literatures that stated organizations that put emphasis on their performance could help them to survive in a turbulent environment (Watanabe and et al, 2017; Rivai, 2004). Therefore, employees' performance is important to ensure organizational survival.

This study examined the factors that could contribute to employees' performance among workers in a government office in Kelantan. The researchers observed the office between August and October 2017. Based on the observation, it was found that some workers were

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lacking in competitiveness. They were found to be lack of enthusiasm and passion in their job. The working environment was less conducive and the services offered were not very satisfactory based on complaints being lodged by customers.

Business entities placed heavy emphasis on employee's performance in order to gain better financial advantages. Although, government agencies are not monetary oriented, employees performance could affect the performance of the organizations too. In non-profit oriented organizations, employees' performance could relate directly to customers satisfaction. This is because employees' behavior through good performance would reflect on their services towards the customers and vice versa.

Many organizations placed little significance on work environment however it could be a crucial factor in predicting job performance. Spector (1997) observed that most businesses ignore the working environment within their organization resulting in an adverse effect on the performance of their employees. Other than that, many research show that IQ only explained 4-10 percent of achievement at work (Sternberg, 1996). Another 80 percent comes from emotional intelligence (Neely-Martinez, 1997) while the remaining comes from intellectual intelligence. This showed that emotional intelligence is very important in predicting employees' performance. Furthermore, a major concern for practicing managers and leadership researchers in the past several decade was about searching and identifying the behaviour that could increase the effectiveness of leadership (Stogdill & Bass, 1981)

Therefore, based on this argument, the study aimed to analyze employee's performance in the context of transformational leadership, emotional intelligence and working environment. There were limited studies that examine the relationships between these variables (Chandrasekar, 2011; Opperman, 2002; Mahfuza and Juraifa, 2016; Purnama, 2017; Mangkunegara and Miftahuddin, 2016; Rivai, 2004). This study also aimed to understand employees' performance in the government sector. The objectives of the study are twofold:

- To examine the relationship between transformational leadership, emotional intelligence, working environment and the employees' performance;
- To identify the most important determinant of employees' performance among transformational leadership, emotional intelligence and working environment.

1.2 Literature review

1.2.1 Employees' performance

Employees' performance can be defined as the actions that contribute towards effective behaviors which are consistent with the organizational objectives (Zainab and Khairunnisa, 2015). Purnama (2017) defined employee's performance as individual who carried out their work and responsibilities effectually at the workplace. He further stated that employees' performance was affected by individual's ability, level of the work done and organizational support. Rivai (2004) and Watanabe et al (2017) further supported that performance was a result of a person's ability, desire and environment. Mangkunegara and Miftahuddin (2016) measured employee performance in terms of attendance, target work, responsibilities, initiative and teamwork whereas Purnama (2017) measured employees' performance in terms of quality, quantity, efficiency and accuracy. In this study, employees' performance is measured through tasks completion, employees' responsibilities, and also job quality and accuracy.

1.2.2 Transformational leadership

Burns (1978) in Mangkunegara and Miftahuddin (2016) study viewed transformational leadership as a process where leaders and employees entice one another to achieve higher order values in terms of morality and motivation. Weiping, Xianbo and Jeongbin (2017) defined transformational leader as leaders who can transform the followers thinking in such a way that

they adapt the vision of the organization and set it as their own. The leaders can transform and motivate employee performance to overcome their own interest and go for collective goals. Bass and Ronald (2006) defined transformational leadership as leaders who can make their followers trust, admire and respect them. Bass and et al (2003) noted that there were three ways that leaders could transform their followers; i) by increasing their awareness of task importance and value; ii) by making them set priority on team and organizational goals rather than personal interest and iii) actively seek their higher order needs. He stated that transformational leadership inspire followers to have new ideas to face challenges and solve problems and ultimately achieve organizational goals with the followers has a certain degree of independence in making decisions. Mangkunegara and Miftahuddin (2016) and Weiping, Xianbo and Jeongbin (2017) identified eight dimensions of transformational leadership; namely, i) articulating a vision, ii) idealize influence, iii) inspirational motivation, iv) providing appropriate model, v) fostering the acceptance of group goals vi) setting high performance, vii) providing individualized support and lastly viii) consideration and intellectual stimulation. While various scholars argued on what they perceived as the most critical factors of transformational leadership, they all agreed unanimously that transformational leadership indeed has relationship with employee performance (Bass and et al, 2003; Bass and Ronald, 2006; Mangkunegara and Miftahuddin, 2016; Weiping, Xianbo and Jeongbin, 2017). This study would operationalize transformational leadership through the leader's characteristics such as inspirational, motivator, intellectual stimulator, respectful, team coordinator and high performer.

1.2.3 Working environment

Working environment can be defined as a composite of three major sub-environments; the technical environment, the human environment and the organizational environment (Opperman, 2002). Technical environment referred to tools, equipment, technical infrastructure and other physical or technical elements. It created the elements that enabled employees to perform their responsibilities and activities efficiently. Human environment referred to the interactions between employees and peers, supervisors, subordinates, team members and management. Human environment was designed to encourage informal interaction in the workplace and aimed to produce productivity through exchange of ideas and knowledge sharing. Organizational environment included system, procedures, practice, values and philosophies and management that tend to have control over of the whole environment (Opperman, 2002). Previous studies measured working environment using wages, working hours, opportunity advancement and two ways communication (Lane and et al, 2010; Nina Munira and Mohammad, 2013; Watanabe and et al, 2017). When working environment is not conducive, employee performance would be affected, thus, the image of the organization might be diminished since employee performance could reflect organization effectiveness. (Chandrasekar, 2011). He later discussed that organizations needed to create a working environment that encourages employees' productivity in order to increase their profit or satisfy their customers. Better outcomes and increased productivity were results of better workplace environment (Opperman, 2002; Chandrasekar, 2011; Lane and et al, 2010; Nina Munira and Mohammad, 2013; Watanabe and et al, 2017). Therefore improving the working environment would have a positive impact on employee performance. Hence, this study focused on the elements of longer working hours, freedom of work and making decisions, providing tools and technical to measure working environment.

1.2.4 Emotional intelligence

Keri et al (2017) and Mohammad et al. (2012) noted the challenges to define and measure emotional intelligence. They mentioned that arguments in defining and measuring emotional intelligence has led to three streams of research; i) emotional intelligence ability, ii) self-reported emotional intelligence ability and iii) self-required trait emotional intelligence. Traits emotional intelligence tended to share variance with personality while ability emotional intelligence signified cognitive abilities (Keri and et al, 2017). Ivan et al. (2016) and Mayer, Salovey and Caroso, (2000) defined emotional intelligence as the capacity to reason about emotions and enhance thinking. It included the ability to accurately perceive emotions, to

assess and generate emotions so as to assist thought, to understand emotions knowledge and to reflectively regulate emotions so as to promote emotional and intellectual growth. Woolfook et al. (2006) in Mafuzah and Juraifa (2016) and Zeidner, Robrt and Matthews (2008) study defined emotional intelligence as the ability to process emotional information accurately. Emotional intelligence had also been defined as the ability in recognizing one's feeling, being self-motivated and can manage emotions and relationships effectively (Mafuzah and Juraifa, 2016). Therefore based on the definitions by previous studies, emotional intelligence is the ability of an individual to manage his/her own feeling, being sensitive to other's feeling, being self-motivated and be able to handle relationship effectively. Hugg (2004), Noorazzila & Ramlee (2013) and Wisker & Poulis (2014) established strong linkages between emotional intelligence and employee performance and the study was supported in studies by Mafuzah and Juraifa, 2016; Ivan and e al, 2016; Keri and et al, 2017. The dimensions recognized as emotional intelligence included self-regulator, self-awareness, self-motivation and relationship management (Mafuzah and Juraifa, 2016). In this study, emotional intelligence is being measured by two dimensions specifically, relationship management and self-awareness. Based on the literature, the study had proposed a conceptual framework as below:

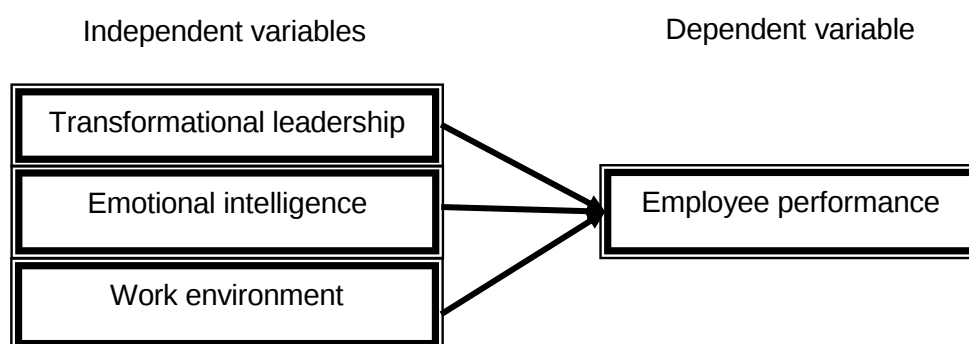


Figure 1: Conceptual framework

Based on Figure 1, four hypotheses had been developed:

H1: There is a significant relationship between transformational leadership and employees' performance.

H2: There is a significant relationship between emotional intelligence and employees' performance

H3: There is a significant relationship between work environment and employees' performance

H4: The most important determinant of employees' performance is working environment

2. METHOD AND MATERIAL

The data collection method was through survey questionnaire that had been distributed randomly to workers at one of the government agencies in Kelantan. The total population was 226 people and the sample size was 140 respondents based on Cohen Table (1992). For this study, the researchers had to utilize convenient sampling even though the population was known due to time constraint and unavailability of some staff when the questionnaires were distributed. The survey had achieved 100% response rate.

2.2 Data collection method

The instrument was divided into two sections and the questions were adapted from various models (Peng, 2014; Wong Law, 2002; Owens, 2015; Raziq and Maulabakhsh, 2015; Podsakoff and et al, 1990). The first section consisted of demographic questions including age, gender, education levels and lengths of their services. The second section of the instrument were designed using five Likert scale where 5 is strongly agree, 4 agree, 3 neutral, 2 disagree and 1 is strongly disagree. Transformational leadership, working environment and emotional intelligence were the independent variables while employee performance was the dependent variable. The data were analyzed using SPSS 21. Pearson Correlation Analysis and Multiple Regression Analysis were carried out to measure the relationship between the independent variables and the dependent variable. Multiple Regression Analysis was also used to identify the most dominant variable that influences employee performance. All the information and identity of the respondents were treated as confidential and being used for learning purposes only.

3. ANALYSIS AND RESULTS

3.1 Frequency analysis

Table 1: Demographic profile

Profile	Frequency	Percent	Profile	Frequency	Percent
Gender			Job Grade		
Male	68	48.6	S44	1	0.7
Female	72	51.4	S41/DG41	9	6.4
Age			W32	1	0.7
20 - 29	36	25.7	S29/N29	10	7.1
30 - 39	91	65.0	J29	3	2.1
40 - 49	8	5.7	N22	1	0.7
50 and above	5	3.6	N19/S19	112	80.0
Education			A19	1	0.7
Master	2	1.4	H11	2	1.4
Degree	69	49.3	Years of working		
Diploma	38	27.1	< 1 year	15	10.7
STPM	5	3.6	1 – 10 years	84	60.0
SPM	16	11.4	11 – 20 years	27	19.3
Certificate	10	7.1	More than 20 years	14	10.0

N = 140

Table 1 shows that more than half of the respondents were female (51.4%) and majority of the respondents were between 30 - 39 years old (65%). Almost half of the respondents had a first degree qualification (49.3%) and majority of the respondents were in the N19 job grade (80%). Table 1 also indicated that majority of the respondents had been working in the company for 10 years or less (70.7%).

3.2 Reliability analysis

Table 2: Reliability analysis result

Variable	Number of items	Cronbach's Alpha
Job performance	4	0.935
Emotional intelligence	6	0.857
Transformational leadership	6	0.933
Work environment	3	0.735

Table 2 showed that all variables in this study had the Cronbach's Alpha value of more than 0.70. This indicated that all items used to measure all the four variables were reliable and consistent (Hair, 2006).

3.3. Descriptive analysis

Table 3: Descriptive analysis result

Variables	N	Mean	Standard Deviation
Job performance	140	4.38	0.64
Emotional intelligence	140	4.12	0.50
Transformational leadership	140	4.17	0.62
Work environment	140	4.09	0.63

Table 3 indicated that on the average respondents tended to agree with the statement given for each variable with job performance recorded the highest mean at 4.38.

3.4 Correlation analysis

Table 4: Correlation analysis result

Variables		Emotional intelligence	Transformational leadership	Work environment
Job Performance	Pearson Correlation	.366**	.286**	.406**
	Sig. (2 tailed)	.000	.001	.000
	N	140	140	140

** Correlation is significant at the 0.01 level (2-tailed)

Pearson Correlation Analysis was used as a preliminary analysis to measure the relationship between the independent variables and the dependent variable. Based on Table 4, there were positive but weak relationships between employees' performance and the independent variables namely emotional intelligence, transformational leadership and working environment.

3.5 Multiple regression analysis

Table 5: Multiple regression analysis result – Employee performance as the dependent variable

	Beta Coefficients	t	Sig.	VIF	Hypothesis Supported?
(Constant)					
Transformational leadership	.000	-.004	.997	1.763	H1: No
Emotional intelligence	.263	2.208	.029	1.476	H2: Yes
Work environment	.299	2.743	.007	1.942	H3: Yes H4: Yes

$R^2=0.195$, adjusted $R^2=0.177$, F value = 10.970 $P \leq 0.05$

Multiple regression analysis was conducted to measure the influence of transformational leadership, emotional intelligence and working environment on employees' performance. The research model had a variance inflation factor (VIF) of less than 10. This indicates that no serious multicollinearity had been found in this study. The analysis concluded that there was a significant relationship between both emotional intelligence and working environment and the employees' performance. Conversely, there was no significant relationship between transformational leadership and employee performance. The model was significant at $p \leq 0.05$ level ($p=0.0000$). The coefficient of determination (R^2) was 0.177. This explained that 17.7 percent of employee performance could be explained by the independent variables

Next is standardizes measures (Beta Weights) which represent the strength of each dimension associated with employees' job performance. β is the value of the regression equation for predicting the dependent variable from the independent variables. The result of the three independent variables are work environment (β 0.299, $p<0.007$), emotional intelligence (β 0.263, $p<0.029$), transformational leadership (β 0.000, $p<0.997$). This result indicates that work environment has the highest Beta value thus represent the most critical factor in predicting employees' performance. From the analysis, it can therefore be concluded that only H2, H3 and H4 were supported in this study

4. DISCUSSION

Decisively, the study had achieved its main objectives to analyze the relationships between transformational leadership, emotional intelligence, working environment and employees' performance. The analysis had identified that working environment is the most critical factor in predicting employees' performance. Hence, organizations need to improve their work environment as conducive work environment would allow for more positive interactions between organizational members. The availability of the right tools, facilities, system, values and procedures would also enable employees to perform work more efficiently. In addition, extrinsic reward and resources investment can enhance employees' creativity in completing their tasks. (Zhou, Zhang, & Montoro-Sánchez, 2011),

Next, emotional intelligence also plays an important role enhancing employees' performance. Organizations need to enhance the emotional intelligence of their employees. This could be achieved by sending employees to seminars or asking them to engage in office activities that can encourage them to exercise their emotional intelligence. This is because, emotional intelligence can be changed, acquired and improved through education, training and coaching (D Goleman, 2006). Other than that, proper training on emotional intelligence are needed to help the employees gain knowledge and ability to translate their emotional intelligence into relational selling behaviour which can be useful for carrying out their job (D Goleman, 2006). This helps employees to better handle their job which can lead to the improvement of job performance.

Although transformational leadership was deemed important by other researchers (Bass and et al, 2003; Bass and Ronald, 2006; Mangkunegara and Miftahuddin, 2016; Weiping, Xianbo and Jeongbin, 2017), this study had proven otherwise. This could be because many of the respondents were in the N19 job grade and the transformational leadership is said to be more effective in professional work environment that relates to technical and scientific matters as found out in Silverthorne (2001) study. This could also be explained by House's Path Goal Theory of leadership which suggests that there is no single leadership style which is best in all situations. Instead it all depends on the employee characteristics and characteristics of the work environment. As in this case, supportive leadership could be a more suitable leadership as this working group may have external locus of control and low perceived ability and they may perform a rather simple and routine tasks. A study by Elgelal and Noermijati, (2015) and Mwongeli (2016) also found that transformational leadership is not significantly related to employees' performance.

5. CONCLUSIONS AND RECOMMENDATIONS

This study had attempted to identify the factors that might influence employee performance in the government sector in Malaysia. This study however, had some limitations. It only focused on three independent variables, thus was unable to investigate the impact of other environmental variables and their influence on shaping employee performance. The study also focused on one particular government agency, so the results might be different if the study included all government agencies in Malaysia. The study also represented a relatively small sample in the sector; therefore the results required further investigation and verification. Since the sample size was relatively small, the future research should include a larger sample size and make comparison of the sample based on demographic backgrounds. Since data collection for this study was carried out at one specific point in time, the results might be true only for that particular moment, therefore, this study also suggest for longitudinal studies to be carried out. In addition, future research can include comparison study between various government agencies in order to allow them to benchmark in terms of their respective employees' performance.

As for conclusion, employees' performance was positively related to working environment and emotional intelligence. In order for the organization to be on top of its game, these two variables need to be further apprehended. As transformational leadership was found to be insignificant in this study, it is important for organizations to identify the leadership style that best suits their organizations based on the characteristics of their employees and their work environment.

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ID046 – The Impact of Employee Productivity and Work Quality towards Quality of Working Time in Banking Sector.

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Abstract

The purpose of this research is to evaluate the employee's productivity and performance which can give impact to the quality of working time in banking sector. Two research questions has been tested using observation forms. The total time taken will give a result by percentage which explains the performance of the employee whether it is productive or otherwise based on the organizations KPI in a period of one month. The data gathered from the observation forms were analyzed by the Statistical Package for the Social Science (SPSS) Version 23 using frequency analysis which resulted in the percentage of every day task for each employee. The finding and interpretation of the research are identified where the first research question answered based on the role of the employee. The customer service support department divided their employees according to their roles and expertise in certain task. The finding shows that the skill or ability of interacting and communicating are highly required for customer service support department. The second research question answered was based on overall data analysis which shows the time taken to complete the daily task for a period of a month. As a conclusion, all the tasks given were completed and the performance was above the KPI which is 80% and this contended to the quality of working in customer service of a banking sector.

Keywords: performance; productivity; working time; customer service; banking sector

1. INTRODUCTION

The service industry is a group of organizations that provide services or intangible products to the consumer market. Services mostly involve intangible products ranging from accounting, banking, cleaning, consulting, education, insurance, expertise to health care and transportation (Stickdorn, Schneider, Andrews, & Lawrence, 2011). The demand for services is on the rise as people are more focused on services such as health and education instead of material needs. A financial institution or bank is an organization that is commissioned by a state or federal government to handle all activities that involve any ingoing or outgoing money transactions. According to Mukherjee, A., Nath, P., & Pal, M (2002), a bank provides product and services as well as engages in financial intermediaries and management of risk. The main focus for most banking institutions is to provide excellent services to their customers and that includes providing a wide range of services such as dealing with complaints, suggestions, decisions and questions that are related to bank operations, service or product (Harris et al., 2016). Wuyts, Rindfleisch, & Citrin, 2015 also states that the customer service department assists customers on all issues that relates to the service provider.

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1.1 Problem statement of the study

Customers are top priority for all businesses especially in the service industry. In order to provide exceptional services to their customers, they need to hire employees that are not only productive but also have good attitude towards their work. According to Mukherj, Nath, & Pal (2003) efficiency of the banking service will result in increased performance and quality of the services in banks. The efficiency of an employee would determine the utilization of the working time. However, problems such as idleness, short break and personal time could undermine the employees' utilization of working time. Idleness is a period of time where a process is stopped for a short time during the process (Golding, Bosch, & Wilkes, 1995). Idleness will shorten the working time of the employee resulting in inefficient working time. In other words, the employee is not fully utilizing the working time per day to perform their task.

Another issue that could affect the employees' efficiency is their skill in customer service. Business managers' failure to retain dissatisfied customers lead to millions of dollars in lost revenue (Ortman, 2017). A better understanding of the financial relationship between dissatisfied customers, customer retention, and customer satisfaction will improve the performance of the businesses (Tatikonda, 2013). This is because, customer is a priority, and businesses mostly depend on the satisfaction of the customers.

Another factor that influences the effectiveness of services is the attitude of the employee. Based on the researcher's observation, the employee will spent time between 9 to 11 hours a day at their workplace. The attitude of the employee will eventually perform high idleness in their working period rather than fully utilize the time, (Golding, et al., 1995). However, most employees misunderstand the meaning of idleness and consider idleness as a rest.

This research is to study the time taken per activity for all employees in customer service support department in a prominent banking institution in Kuala Lumpur, Malaysia. The objectives of the paper is to study the skill or skills required for customer service support, to measure the time taken per activity within the eight (8) hour working period and to observe the attitude of employees during the working time. The researcher believe that the findings from this study will help the banking and financial institution to identify the factors that affect the performance of the workers and improve the services system in order to give maximum satisfaction to the customer.

1.2 Literature review

1.2.1. The quality working time

The quality of working time can be the tool of measurement for the performance of the employees in their working time. Working time has several effects towards the employee and is an important issue for companies because it gives impact towards the employees' performance (Golden, 2012). Moreover, working time is required to find the availability evidence regarding the effects of the working time. Working time can be divided into two which is hours of work and flexibility type of working. The differences between both hours work and flexibility is first hour working can measure the quality by the performance in short term whereas the working time is fixed every day, however for flexibility hour, the performance is difficult to be measured because it takes longer time period where the time is not fixed. Therefore, quality working time is important to be measured in order to achieve the performance target by organizations.

Other than that, working time can be in different pattern for various countries (Bentley & Kyvik, 2012). These articles explain that, working time depends on the countries and organizations that can suit into the employees' performance. Therefore, the quality of working time can affect the performance of the employee.

1.2.2. Employee productivity

According to (Bhatti & Qureshi, 2007), productivity can be defined as a measurement towards the performance which encompasses both efficiency and effectiveness. Therefore, it is a requirement for the company to acknowledge productive employees. High performing employees will result in effective organizations and will encourage employees' engagement towards the organization. Productive employees engage voluntarily in decision-making, setting targets and problem solving activities which result in a positive and higher employee performance (Hellriegel, Slocum & Woodman, 1998).

Furthermore, workforce productivity are also a critical factor in terms of strength and sustainability of a company (Koopman et al., 2002). However, the physical presence of the employee is not guaranteed as a productive employee. Furthermore, the productivity of the employee does not depend on the physical presence. According to Wanyama & Mutsotso (2010) employee productivity depends on the amount of time the employees are present for the job physically and mentality. In other words, it requires not only physical presence but also mental readiness in order for employees to perform the task given. The reason why organizations are required to address both physical and mental presence of the employees is to maintain high worker productivity or performance. This is because an organization's main target is to achieve performance in order to give satisfaction to the employees' health and morale (Ron and Ronald, 2002).

1.2.3. Employee work quality

Work quality can be defined in many terms from many views. According to (Fiedler, Hossfeld, & Tran-Gia, 2010), work quality involves perception, experience and expectations of employees towards their job. Furthermore, as we all know, quality is the tool to measure the performance of the organizations or employees. Therefore, according to (Holt & Jones, 1998), quality is required to be at the heart of all employees in terms of all the task and work given. Because of that, the work quality is important to all employees. However, quality is multi-faceted and statistics that can be stated by the user in order to have high quality on a single task given.

Work quality should also be evaluated towards the work fulfilment (Klupšas, 2007). This is because, all the evaluation should be measured such as the result, achievement of aims, and work fulfilment in order to provide high quality performance.

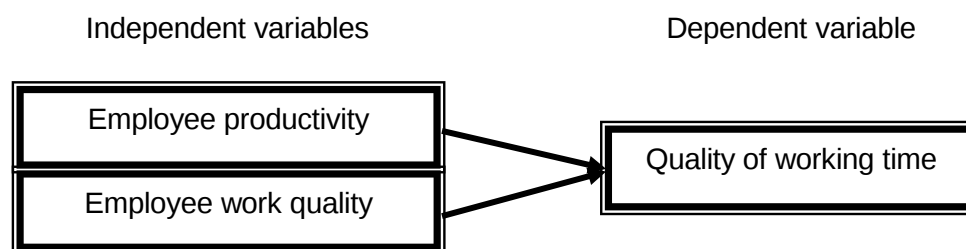


Figure 1: Theoretical framework

2. METHOD AND MATERIAL

2.1 Research design

In this study, the researcher use qualitative approach and observation method for data collection. The reason for using observation method is because the researcher is able to capture the context within which people interact. The researcher use deductive approach which is an approach that use the research question to group the data to be collected.

2.2 Data collection method

2.2.1 Sample size

According to (Altmann, 1974), there were sampling that can only be observe until the limits of the observer which is “Ad Libitum Sampling”. The researcher can only manage to observe up to 20 out of 200 respondents because of the limitation faced by the researcher. The “Ad Libitum sampling” is used by means of non-systematic sampling which resulted from unconscious sampling decisions. Therefore, the observer can only manage to record the most readily observed.

2.2.2 Sample technique

The researcher use qualitative research of data collection method by using the sample technique of purposive sampling. The observation form is open ended and less structured protocols. This is because the researcher use observations method which is required a flexible sampling for the data collection.

2.2.3 Tools and data analysis

Data analysis is the next step for the researcher to gain the result from the data collected from the observation form. Furthermore, the researcher is required to code, key-in and edit the data to produce result for the research. Therefore, the researcher use the Statistical Package for Social Science (SPSS) version 23 for windows to analyse all the information that had been collected. According to Zikmund (2003), descriptive analysis can be define as a method that is used by the researcher in order to convert the raw data into a form that make it easier to understand for interpretation by rearranging, ordering, and manipulating the data accordingly with descriptive information. In addition, descriptive statistical analysis also includes the frequencies and percentages in order to present the main characteristic. Furthermore, the descriptive analysis was also done in order to acknowledge the means of each task of the employee within 8 working hour per day. The result of this analysis will show the average time taken to complete the task given per day.

2.2.4 System data task

System data is the core information for the employee to perform their work. Every data, info, detail of customer, report are in the system that is already implemented in the organization. Therefore, the time taken for system data task is high. Based on the result, the most time taken in a month to perform the system data task within 8 hour of working time is 3,454 minutes.

2.2.5 Idleness

Idleness is the time where the employee is not productive during working time where the employee is doing personal matters. In other words, idle time should not be more than the rest time given for the employee to perform personal matters. 94.79% of productivity was recorded as the most productive time for employee for the whole month. From the percentage it shows that a new employee with one year experience possess full energy and high intention in learning and working to make sure the reputation improve from time to time. However, all the employee performance was in productive level which is more than 80%. Therefore, the idleness of all the employee was less than 20% that is categorize as good performance. The data has been analysed and the result stated that more than half of the employee in this bank achieve more than 90% of task completion in a month with 8 hour of working time.

3. ANALYSIS AND RESULTS

3.1 Result

This research is focused on observing the attitude, behaviour and action taken by the bank employee in order to find the result of the employee's performance. Therefore, the researcher

prepared an observation form for each of the respondent which represent the type of task for each of the employee. The task stated in the observation form which recorded as a result was Report, Filing, Attending Customer, and System Data while the other task such as Idle, Lunch and Conversation will be sum as Idle Time. All the data was recorded in (minute) for the time taken.

3.2 Report task

Report task is the task that is not stated as primary task for Customer Service Support department. Therefore, the time taken was in a small amount compared to the others. However, the remaining employee was used only from the total time taken of 750 minutes to 1,300 minutes per month on preparing the report within 8 hour of working time. Therefore, the average time taken for the employee to prepare a report is between 35 minutes to 57 minutes per day within 8 hour of working time.

3.3 Filing

Filing task is the task that only need to perform if there is extra time or at the end of the day within 8 hour of working time. This task is not a task that is related to the customer. Therefore it should take a small amount of time to be done. Based on the result, it shows that the most total time taken for a month to perform the filing task recorded is 1,540 and 1,430 minute. Therefore, the percentage was also recorded as the highest among the other tasks with 14.58% and 13.54%. Most of the respondents are performing filing task with average total time taken of 750 to 1,330 within 8 working hour. The percentage of filing task was recorded from 7.29% to 12.50%. Furthermore, the average was recorded from 35 to 60 minutes per day within 8 hour of working time.

3.4 Attending customer task

Attending customer task is the prime task for the employees at Customer Service Support Department. Therefore, the time taken is high and the result will show and explain more detail regarding the employee productivity and performance. Based on the result, the highest total minutes taken in a month recorded 5,324, 5,170, and 5,104 minutes in 8 hours of working time in order to attend to customers. The employees were spending most of the time completing this task because they are the employees who handle customer questions, problems and any other requirements.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Based on the research, the data have provided a result that can answer all the research questions. According to (Malakooti, Hashemi, & Tavakoli, 2014), the Key Performance Indicator (KPI) is the important system that is required to be implemented by all company especially banks. Based on the findings, it shows that all the research questions has been answered. The first question answered based on the role of the employee where the customer service support department has divided the employees according to their roles and expertise in certain task. Therefore the skill or ability of interacting and communicating were the best skill required for the customer service support. The second question answered was based on overall data analysis which shows all the time taken to complete the daily task for a period of a month. The result shows that all the tasks given were completed and the performance was above the KPI which is 80%. Therefore, it is explained that the time taken for each of the employee for all the task recorded an average of 433 minutes per day.

4.2 Direction for future Investigation

As a recommendation for future researcher, the researcher should take more time in observing the attitude and behaviour of the employee in order to get more accurate data. Moreover, there are more variables that can be used to observe employee performance such as

attendance, commitment and total leave taken. There are literature reviews which explain on the affections of these variables towards the performance and it will be interesting to explore more factors that can influence the employee performance in order to make an improvement for the company or employee.

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ID057 – Internal Service Quality towards Effective Service Operation: A Case Study of Islamic Cooperative Bank in Terengganu

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Abstract

The main objective of this research is to study the relationship between the internal service quality which consist of competence, assurance and cooperation with the effective service operation of Islamic cooperative bank located at Terengganu and to examine the most critical factor from the dimension of service quality that can contribute to effective service operation. There were 150 questionnaires prepared and distributed to the internal customer of Islamic cooperative bank who came from eight branches which are Jertih, Gong Badak, Kuala Terengganu, Marang, Kuala Berang, Kerteh and Kemaman. The SPSS software was used to key in for the data, analyzed, and generated the final result. The result proved that all the three independent variables have positive relationship and significant correlation with effective service operation; and competence is the strongest predictor that can contribute to the effective service operation of the organization. Thus, the management should focus and improve for the three internal service quality as these give significant effects for their service operations.

Keywords: *internal customers; service quality; competence; assurance; cooperation; financial institutions*

1. INTRODUCTION

With the emergence of new technology and idea, there are a lot of new products offered by the financial institutions such as bank and other financial bodies. The expansion of banking services was directly affected by current economic situation (Snehalkumar, 2013). The fierce competition in the banking industry, changes in business climate and unexpected customer demand for examples give a force to these conglomerates to develop for better product in order to keep competitive in the industry. Besides customer nowadays are getting smart and aware with the services that they are going to consume. A report released by Malaysian Communications and Multimedia Commission (MCMC) last year indicated that about 83.7% of Malaysian had accessibility to internet. The roles of social media such as *WhatsApp*, *Facebook* and *Twitter* also make the information or news can be spread out without any barrier. As a consequence, once a customer had a bad treatment or service during moment of truth, he or she might make this issue go for viral. At the end of the day, it will give a bad reputation for a service operation company. The bank also has no exception to face this kind of situation.

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Thus to win the hearts and minds of the customers, the organization firstly needs to make sure they have an effective service operation. An effective service operation able to predict the changes in needs of customers, concentrate in improving services capabilities and view the quality of internal service as tool to gain for competitive advantage (Azzolini and Shillaber, 1998). For example, the products or services are designed to be more accessible, customer-friendly and efficient to be used. Instead of queuing at the post office to pay for bills, customer can settle for their bills by clicking at the appropriate webpage of the bank that provide for internet banking service and it can be done in less than five minutes.

1.1 Problem statement of the study

An effective service operation becomes the main objective for every service organization. Effective service operation means that the service can be delivered to the customers at the right time, at the right place and at the first time. However it is very hard to be achieved since it required a full of commitment and participation of internal customers. If all internal customers in the organization able to realize their responsibilities and take initiative by adapting some values on their works, it is possible to achieve for this goal.

Same goes in banking organisation. Everyone in organization has a great responsibility to carry out their duties at their best. However, sometimes due to the forces stressed from internal or external side, the internal customers have neglected some of important elements of internal service quality which comprise of competence, assurance and cooperation. As the result, it will lead some of problems such as ineffective service delivery, customer dissatisfaction and more issues. According to the data released from the report it revealed that one of the branches in Terengganu has recorded 40% for waiting time were exceeding 10 minutes for August 2016 based on *Queue Management System* (QMS) for operation department. It is quite high in figure as the organization should not exceed for 10 minutes for the waiting time. There are several perspectives will be focussed and discussed in associated for this problem such as competency, assurance and cooperation among the internal customers of the organization.

1.2 Research objective

- i. To determine the relationships between competence, assurance and cooperation towards the effective service operation
- ii. To examine the most critical factor from the dimension of service quality that can contribute to effective service operation

1.3 Hypothesis

H₁: There is a significant relationship between competence of internal customer and the effective of service operation.

H₂: There is a significant relationship between assurance of internal customer and the effective of service operation.

H₃: There is a significant relationship between cooperation among internal customer and the effective of service operation.

1.4 Literature review

Service quality can be defined as a gap or discrepancy of quality of service provided by a service provider with the service performance perceived by the customer (Parasuraman et al.1988). The original dimension of service quality consists of reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding and tangibles (Parasuraman, 1988). Parasuraman also introduced the model of SERVQUAL which highlight the dimension of service quality such as tangible, empathy, assurance, reliability and responsiveness. Most of the scholar used these five famous points to link with

the subject of study of service operation. However it is not necessary to use the SERVQUAL concept at all time to carry out the research about service quality. Cronin and Taylor (1992) and Teas (1994) recommend for SERPERF (a service quality tool for measuring perception) and EP (Evaluated Performance) model respectively. Thus SERVQUAL model is not the only the best model that can be used for conducting the research on service quality.

In addition, the service quality of service organization can be measured by using two approaches either outside-in approach (OIA) or inside-out approach (IOA) (Abdusalam et. al, 2013). According to Abdulsalam et. al. (2013), OIA will evaluate service quality based on the perspective of the customer while IOA will measures the service quality on the perspective of service providers.

Internal customer is referring to those who working with the organization, facilitate the production process and involve with process of delivering the service meanwhile the external customer refers to people who buy and consume the product or service from an organization (Elsie, 2009).

1.4.1 Effective service operation

There are few practices that a service provider should concern to make sure that they will have an effective service operation. Firstly, the service provider should have a facility that can facilitate a systematic operation. A service organization should have modern equipment that will enhance for an effective service delivery process towards customer (Manuel, 2008). Based on the study carry out by Manuel 89% of respondent strongly agreed that business schools should have modern-looking equipment so the staff can provide an efficient service to students. In the case of banking sector, the service provider also need to emphasize on providing modern machinery and equipment (Uddin and Akhter, 2012). It is to ensure the facilities such as computer, ATM machine, CDM machine and many more will be functioning well and have relatively low in breakdown maintenance probabilities.

According to Olorunniwo and Hsu (2006) the perceived value and customer satisfaction are the important elements for the success of service organization. Furthermore, the usage of Queue Management System (QMS) can help for the organization to record and evaluate the waiting time of the customer before receiving for the service (Muaz, 2016, November 1). Meanwhile, the system of Customer Satisfaction (C-SAT) is used at the most of the financial institution at the India such as retail banking to access for the waiting time information which include staff interaction, infrastructure, service time and information availability (Sammep et al., n.d.). The data obtained then will be compared with the ideal figure that had been set up to determine whether the organization able to achieve for the target.

Meanwhile, the banking industry nowadays equipped with mobile application for banking, internet banking, SME banking, credit card, foreign currency account and many more (Uddin and Akhter, 2012). Most of the features operated in real-time and using online web-based orientation (Uddin and Akhter, 2012). Internet banking for example is such a system developed to enable financial institution customers, individual or businesses to access accounts, making transaction for business or obtain information on financial products or services through internet (Rajesh, 2007).

1.4.2 Competence

Competence refers to one's capabilities or abilities. According to Halil, Mehmet and Omer (2013) in the context organization competence is an underlying characteristic of a worker that could be a motive, trait, skill, aspect of one's image, social role or a body of knowledge which he or she use to be. This characteristic must be related to superior performance and demonstrate of particular talents which apply for required knowledge in order to perform for the job (Halil et. al, 2013). Thus, a good internal customer needs to have a competence character as a value added in performing the task associated. The success of any business sometimes

depends on their labour. According to Jayaram and Xu (2016), they proposed that the service company should focus more on hiring skilled worker and give sufficient training to them. Some business failed are not because of the management of the business solely but also due to lack of skilled worker. The usual characteristic shared by failed firm is also related on the availability of the technical skill.

1.4.3 Assurance

Assurance can be defined as knowledge and courtesy of internal customer and their ability to inspire trust and confidence (Prabha et al, 2010). The elements of assurance include security, eagerness and knowledge of employees. In addition, the organizational citizen behaviour (OCB) is an important factor to influence internal customer performance especially in banking sector (Lelei, Chepkwony and Ambrose, 2015). The element of OCB included altruism and courtesy. It is proven by the study carried by Lelei et. al. (2015) since the finding indicated that altruism and courtesy had positive and significant effect on internal customer performance and satisfaction.

1.4.4 Cooperation

Cooperation can be defined as a useful behaviour of contact internal customers to other members of their direct team or group of work (Victoria and Andreas, 2008). Besides teamwork can be defined as an identifiable set of behaviours, cognitions and attitudes that contribute to the team's overall functioning (Hsiang, 2002). According to Boakye (2015) in today environment every organization has emphasize the important of moving towards "team-based" approach by delegating a whole organization into specific group such as management teams, production teams, service team and many more.

The theoretical framework is developed using the dependent variables and independent variables. Dependent variable is the effective service operation which means that it is a primary item that researcher interested to make a study while for the independent variables are competence, assurance and cooperation.

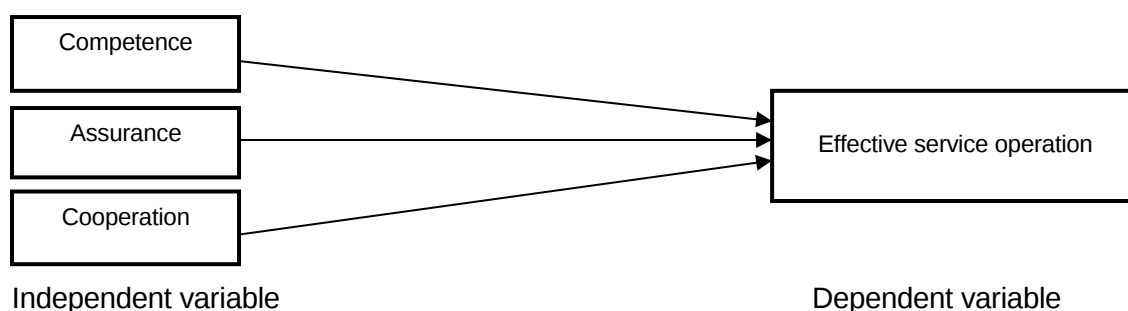


Figure 1: Theoretical framework on effective service operation

2. METHOD AND MATERIAL

This research is a quantitative and causal in nature. A set of questionnaire was developed based on previous works and distributed to a population of 170 internal customers in 8 districts which are Jerih (24 workers), Gong Badak (16 workers), Kuala Terengganu (42 workers), Marang (12 workers), Dungun (19 workers), Kerteh (13 workers), Kemaman (32 workers) and Kuala Berang (12 workers). By using a non-probability sampling which is convenience sampling in order to trigger the quick data collection technique, a sample size of 118 (Krejcie & Morgan, 1970) is required, however the researcher was able to get 150 completed questionnaires and valid for analysis after accounting for non-response bias. The data were analyzed by using Statistical Package for Social Science (SPSS) software.

Internal customers were requested to respond to a list of questions and rate eight items related to effective service operation, six items related to competence, six items related to assurance and six items related to cooperation. These scales were developed based on earlier studies from the literature. Items for all four constructs were rated on a five-point Likert scale.

3. ANALYSIS AND DISCUSSION

3.1 Demographic profile

Table 1 describes the demographic profile of the respondents in term of gender, age, marital status, position, working experience and department.

Table 1: Respondents' profile

Factor	Description	Frequency	Percent (%)
Gender	Male	85	56.7
	Female	65	43.3
Age	21-25 years old	44	29.3
	26-30 years old	42	28.0
	31-35 years old	27	18.0
	36-40 years old	15	10.0
	41-45 years old	13	8.7
	above 45 years old	9	6.0
Status	Single	50	33.3
	Married	100	66.7
Position	Management	16	10.7
	Executive	51	34.0
	Clerk	59	39.3
	Others	24	16.0
Years of experience	1-5 years	66	44.0
	6-10 years	48	32.0
	11-15 years	8	5.3
	16-20 years	7	4.7
	21- 25 years	18	12.0
	Above 25 years	3	2.0
Department	Operation	43	28.7
	Documentation	26	17.3
	Credit	66	44.0
	Others	15	10.0

3.2 Goodness of measure

Table 2 shows the reliability results of each variable involved in the study, which is very good. Since the Cronbach's Alpha values scored more than 0.70, thus it is considered highly reliable for further analysis (Sekaran, 2006), where items developed for each concept are consistent and stable.

Table 2: The Cronbach's Alpha result

Variables	Cronbach's Alpha	N of items
Effective service operation	0.881	8
Competence	0.899	6
Assurance	0.889	6
Cooperation	0.888	6

3.3 Correlation analysis

Table 3 shows the results for Pearson Correlation analysis. All relationships between competence ($r=0.562$), assurance ($r=0.597$), and cooperation ($r=0.583$) are significant at 0.01 towards effective service operation ($p=0.000$). Therefore hypothesis 1, 2, and 3 are supported and research objective 1 is answered. Assessing relationships among independent variables show that all r -values are less than 0.9. Since multicollinearity exists when the independent

variables are highly correlated ($r=0.9$ and above), thus the issue of measuring the same phenomenon in measuring the reliability is solved (Pallant, 2010).

Table 3: Pearson correlation analysis

		Competence	Assurance	Cooperation
Effective Service Operation	Pearson Correlation	.562 ^{**}	.597 ^{**}	.583 ^{**}
	Sig. (2-tailed)	.000	.000	.000
	N	150	150	150

^{**}Correlation is significant at the 0.01 level (2-tailed).

3.4 Multiple linear regression analysis

Table 4 indicates that 42.4% of the identified independent variables explain the variance effective service operation among internal customers at Islamic cooperative bank in Terengganu ($p=0.000$, $F= 35.757$). All independent variables were found to be significant in influencing the effective service operation namely: competence ($p=0.003$), assurance ($p=0.022$) and cooperation ($p=0.043$). On top of that, competence is the strongest predictor that can contribute to the effective service operation in the organization ($\beta=0.257$). Therefore the second research objective is answered.

The tolerance and VIF value for each independent variable indicates the multicollinearity assumption is not violated. It is because the tolerance values are more than 0.10 and the VIF values are less than 10 (Pallant, 2010). Pallant urges that if the results exceeded the recommended values, we should seriously consider removing one of the highly intercorrelated independent variables from the model.

Table 4: Multiple linear regressions

R ²	Adjusted R ²	F Statistic	Prob. of F statistic	Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
					B	Std. Error				Tolerance	VIF
0.424	0.412	35.757	.000 ^b	(Constant)	1.859	.267		6.968	.000		
				Competence	.206	.069	.257	2.986	.003	.534	1.873
				Assurance	.232	.101	.254	2.310	.022	.326	3.071
				Cooperation	.177	.087	.218	2.038	.043	.345	2.901

a. Dependent Variable: Effective Service Operation

4. CONCLUSIONS AND RECOMMENDATIONS

This paper aims to determine the relationship between competence, assurance and cooperation with effective service operation and to examine the most critical factor from the dimension of service quality that can contribute to effective service operation at the Islamic cooperative bank in Terengganu. These objectives derive to three hypotheses. All hypotheses were supported.

4.1 Recommendation

4.1.1 Competence

The management should arrange for a better training program in order to improve for their skills and knowledge. The training is purposely to improve for interpersonal skill, cognitive skill, technical skill and self-mastery skill. Interpersonal skill is deal with how to interact with other people, cognitive is the skills in mental and information processing that require for adequate knowledge, technical is useful for task required for machine or equipment whereas self-mastery is more to ability to give a quick response or feedback.

4.1.2 Assurance

The application of *Poka Yoke* can be implied by the front-liner employee when making eye contact with customer. It is to ensure the customer feel safe, increase in customer confidence and avoid doing careless mistakes during the moment of the truth. Moreover, the application of assurance value also important within the organization. This can be practised in the organization by giving voluntary assist to new employees, has positive attitude with everyone, tolerate in argument and discuss with teammates before take action that may affect them and try to find fault of others. (Lelei et al., 2015). If everyone in organization able to be positive and courteous each other, a harmony working environment can be sustained.

4.1.3 Cooperation

The management should pay attention to ensure everyone in organization can work as a team. Thus, the management should create a clear team objectives and goals to be achieved, so everyone in organization can be well-prepared. In order to achieve the objective, a leader should be respected by the subordinates, while every task done by subordinates should be appreciated by the leader (Muaz, 2016, November 1). Any argument raised should solved by a discussion. In fact, everyone in organization has the right to voice out for the opinion. The decision made by a discussion should be respected and tolerated. The cooperation among the internal customers can bring some benefits to the organization such as increase the output produced; reduce the operation time, the errors and mistake done by a worker and many more.

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ID067 – Organizational Culture Factors that Shape Employees' Performance in Group Procurement at an Oil and Gas Company

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Abstract

The main objective of this study is to examine the organizational cultural factors that stimulate better employees' performance in the group procurement department, at a well-known local oil and gas company in Malaysia. The factors investigated include workplace environment, employees training and career development, openness in communication and leadership. This research was accomplished by performing a field survey via the distribution of questionnaires to a select group of employees at the group procurement department. The total population at this division is 738. Using stratified random sampling a sample size of 254 respondents was collected that formed the sampling unit of this research. The Pearson's Correlation analysis results show that all independent variables are significantly related to employees' performance. However the Multiple Regression analysis establishes that only workplace environment, training and career development, and leadership can predict employees' performance. This research was unable to find support for the influence of openness in communication on employee performance. The strongest predictor among all independent variables is leadership. This study is able to provide valuable information to managers in managing organizational work culture. The researcher also provides some recommendation that can be useful in future research in order to create better improvements in managing employee's performance.

Keywords: employees' performance; organizational culture; workplace environment; training and career development; openness in communication, leadership

1. INTRODUCTION

The year 1980s witnessed a surge in the popularity to examine the concept of organizational culture as manager became increasingly aware of the ways that organizational culture can affect employees and the organizations. The pervasiveness of an organization culture requires that management to recognize the underlying dimension of their corporate culture and its impact on employee-related variables. According to Daft (2001) employee's performance is the ability of the worker to attain personal and organizational goals through resources, efficiently and effectively. All organizations want their employees to perform well in order to achieve the organizational vision and mission. Researchers have linked culture in the organization with many different aspects of organizational behaviors. According to Peter & John (2001), there is a relationship between organizational culture and employees' performance. Organizational culture has always been operating within organizations, however businesses have been placing less attention to it (Luthans, 2002). The goal of this study is to

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identify organizational cultural factors that not only related to employees performance but also factors that can stimulate better employees' performance in an established oil and gas company in Malaysia

1.1 Problem statement of the study

Employee's performance is subjected to many factors related to the work environment that is characterized by last minute or ad hoc assignments that can cause poor quality of work, stress, and frustration. Staffs are unable to fulfill their work within a short period of time and thus creating continuous work overloads when assignment does not match the available time. At other times verbal task instructions can be poorly registered and communicated when employees are busy or lack of focus due to poor interpersonal attention, which can contribute to errors and mistakes in work output. Additionally the lack leadership such as close supervision and guidance from managers or supervisors while work are being perform can cause lots of rework when faults are only found after job have been completed. All these norms in organizational culture will eventually affect employees' performance which can ultimately threat the performance of the organization.

1.2 Literature review

Employees' Performance: Employees' performance indicates the financial or non-financial outcome of the employee that has a direct link with the performance of the organization and its success. Good result in employees' performance will make the organizations more successful because it meets organization goals and objectives. According to Daft (2001), employees' performance means the ability of workers to attain personal and organizational goals through resources to meet the efficiency and effectiveness. Most of organizations want their employees to have good performance so that, the environment in the organization is more relax and not stressful. Prior researcher found a positive correlation between organizational culture and employees' performance (Yousef, 2000). Satisfied employees generally have good manner at work, work more effectively and efficiency and have positive attitude towards their performance on their job.

Organizational culture: The organizational culture guides the employees the manner how things should be done. Most of the time, people generally exercise verbal culture to express the pattern of individual behavior. In the study of organizational behavior, culture was considered as the most important factor in determining the success of an organization. According to Levey & Levey (2000), culture is the key to the success of an organization. Many research claimed that culture is fundamental to organizational success and they recommended that employees to deal with their work by shaping positive organizational culture which helped in the growth of the organization (Mohr & Zoghi, 2008).

Workplace environment: Workplace environment is one of the important factors that impact the performance of employees in organizations. Deci & Ryan (2000), stipulated that, management which fosters a supportive working environment typically display concern for employees' need and feeling, provides positive feedback an encourage them to voice their concern, to develop new skills and to solve work-related problems. Therefore, meaningful workplace environment that aids employees for focused work and interpersonal harmony is considered to be key determinants of employees' performance. According to Islam & Syed Shazali (2011), a good workplace environment leads to better services by organization and enjoy higher output. They reiterated that the workplace environment should comprise of a good work culture, working with good team, a good boss, good physical surrounding, job security, sustainable compensation package and availability of food and drinks at workplace. Workplace environment is expected to create a shared sense of destiny with others and to encourage employees to emotionally connect with one another. A positive workplace environment makes employees feel good about coming to work and this provides motivation to sustain them throughout the day.

Training and career development: Training can be defined as a planned intervention that is designed to enhance individual employees' performance (Liu, 2002). It is widely accepted that training is a key determinant of organizational performance and competitiveness, economic and growth. Organizations need employees that have skills and updated knowledge that improve performance and productivity to promote competitiveness, decrease absenteeism, and turnover and improve satisfaction (Aguinis & Kraiger, 2009). This is supported by Debra (2011) who stated that effective training and career development helps employees to become more aligned with their career growth and that make them potentially motivated. Successful training will make employees to perform better in their work because they can develop good personal attributes like conscientiousness, extroversion, and openness to experience.

Openness in communication: Luthans (2002) highlighted that, effective communication plays a very important role in industrial disagreement, communication and organizational divergences. According to Hua, Sher, & Pheng (2005), the objective of communication is to ensure that the receiver reacts in the way the sender expects. Most employees like to communicate to each other openly and freely. In addition, employees with good communication skills gather more information concerning job related employees' performance. According to Chmielecki (2015), effective communication is the lifeblood of a successful organization. Hence, successful organization comes from positive employees' attitudes that can be related to openness in communication.

Leadership: Leadership is the ability to evaluate and/or forecast a long term plan or policy and influence the followers towards the achievement of strategy (Jackson, 2017). Leaders' role is to assists, resource, and supports as other ways to empower employees so that employees contribute significantly to the organization (Chen, Tjosvold, & Liu, 2006). Authentic and supportive leadership is theorized to impact employee performance of followers in the sense of increasing their involvement, satisfaction and enthusiasm for work (Schneider, Macey, Barbera, & Martin, 2009). When employees perform at a high level the manager will feel more powerful and successful too as they know that their employees are performing well. Leader need to develop more positive attitudes and want to work with high performing employees, compared to the low performing ones.

1.3 Conceptual Framework

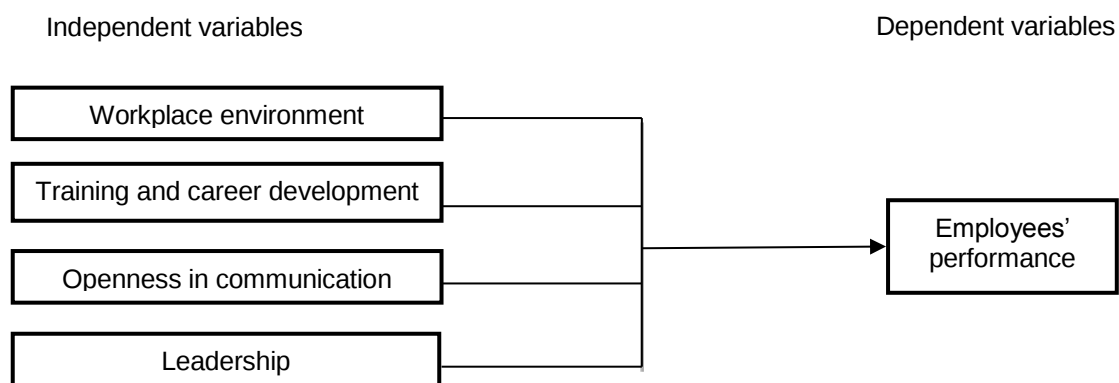


Figure 1: Conceptual framework

1.4 Hypotheses

The following directional hypotheses have been developed based on the research framework.

- H1: There is a positive relationship between workplace environment and employees' performance.

- H2: There is a positive relationship between training and career development with employees' performance.
- H3: There is a positive relationship between openness in communication and employees' performance.
- H4: There is a positive relationship between leadership and employees' performance.
- H5: Workplace environment, training and career development, openness in communication and employees' performance.

2. METHOD AND MATERIAL

This is a cross-sectional field study to test all hypothesis developed in the research, performed in a non-contrived setting (natural work environment) and the unit of analysis were individual employees at the procurement division of a large local oil and gas company in Malaysia. The total number of population at this procurement department is 738 employees from five divisions.

2.1 Data collection method

In this study, the researcher performed a survey-based study using stratified random sampling in data collection. Three channels of questionnaire distribution were employed to reach all identified respondents. The first method was through the division's official corporate intranet email, followed by the second method i.e. using WhatsApp application, both of which are linked to the online Google Doc Questionnaire Form, and the third method is where the researcher personally distributed the hard copies questionnaires.

A total of 254 completed questionnaires were returned amounting to 34.4% return rate. The researcher received 138 responses who responded via corporate official email, 93 respondents answered through WhatsApp application and the remaining 23 respondents answered using hard copy.

3. ANALYSIS AND RESULTS

3.1 Reliability analysis

Table 1 summarized the overall reliability test result for the study. From the table below, Leadership indicates the highest Cronbach's Alpha value which is 0.774 consists of 5 items. The next value for Cronbach's Alpha 0.772 is recorded for Training and Career Development consists of 5 items. As for Employees' Performance, the Cronbach's Alpha value was initially 0.386 consisting 6 items and having poor reliability. After the researcher removed 1 item from the highest Cronbach's Alpha if item deleted value, 0.705 which is states; "*I can complete my work on time*" the new result of Cronbach's Alpha for this variable raised to 0.711 showing better reliability. For Openness in Communication and Workplace Environment, both variables have 0.661 and 0.614 Cronbach's Alpha value respectively. These two variables have 4 items each and the reliability is moderate.

Table 1: Reliability test analysis

Variables	Cronbach's Alpha Value	No. of Items	Reliability
1. Employees' performance	0.711	5	Good
2. Workplace environment	0.614	4	Moderate
3. Training and career development	0.772	5	Good
4. Openness in communication	0.661	4	Moderate
5. Leadership	0.774	5	Good

3.2 Correlation

These tests were performed to answer hypothesis 1 to hypothesis 4. The correlation between workplace environment and employees' performance in this study is significant ($r = 0.641$, $p < 0.05$) which represents a strong relationship and therefore hypothesis 1 is supported.

Therefore, there is positive relationship between workplace environment employees' performance. Next, the correlation between training and career development with employees' performance in this study is also significant ($r = 0.764$, $p < 0.05$) which represent strong relationship and therefore hypothesis 2 is supported. It shows that, there is a positive relationship between training and career development with employees' performance. For the next variable is between openness in communication and employees' performance in this study is significant ($r = 0.673$, $p < 0.05$) which represents strong relationship and therefore hypothesis 3 is supported. Thus, there is a positive relationship between openness in communication and employees' performance. Last but not least, there is a positive relationship between leadership and employees' performance since the correlation analysis is significant ($r = 0.761$, $p < 0.05$) which represent strong relationship and therefore hypothesis 4 is supported.

The researcher can conclude that, all independent variables have strong relationship with employees' performance. This shows that employees' performance increase or decrease correspondingly with the change in workplace environment, training and career development, openness in communication and leadership. Hence, hypothesis 1 to 4 is supported. Indeed, as the footnote showed that the results are significant at the 0.01 level (1-tailed).

Table 2: Pearson's correlation analysis

Variables		Employees' Performance
Workplace environment	Pearson's Correlation	0.641**
	Sig. (1-tailed)	0.000
	N	254
Training and career development	Pearson's Correlation	0.764**
	Sig. (1-tailed)	0.000
	N	254
Openness in communication	Pearson's Correlation	0.673**
	Sig. (1-tailed)	0.000
	N	254
Leadership	Pearson's Correlation	0.761**
	Sig. (1-tailed)	0.000
	N	254

** Correlation is significant at the 0.01 level (1-tailed)

3.3 Regression analysis

This multiple-linear regression test is performed to answer hypothesis 5. The objective of this test is to ascertain the validity of the conceptual model as well as to measure the contribution of each independent variable on to the dependent variable.

The R value in the table 3 is the correlation value between all the predictor variables and the dependent variables. In this model, the R value is 82.5% which indicates that there is a great deal of variance shared by the independent variables and the dependent variable.

R-Square is the variance in the dependent variable (employees' performance) which can be predicted from independent variables (workplace environment, training and career development, openness in communication and leadership). This value indicates that 68.1% of the variance in employees' performance can be predicted from workplace environment, training and career development, openness in communication and leadership. The remaining 31.9% of the model is explained by other factors not included in the study.

The F-value for ANOVA in the table 3 is 132.910 and its marginal significant is (Sig.V = 0.000). The significant value which is associated with this F-value is very small (0.000). Since the F-value is more than 1 the null hypothesis need to be rejected. Thus it can be concluded that all the independent variables; workplace environment, training and career development, openness in communication and leadership can influence employees' performance. Therefore, hypothesis H5 is supported.

Further analysis through regression produces standardized measures i.e. the Beta Weights (β) of the strength of each dimension's association with employees' performance. β is the value for the regression equation for predicting the dependent variable from the independent variables. The result for each independent variable are as follows; workplace environment (β 0.130, $p < 0.05$) which is significant, training and career development (β 0.353, $p < 0.05$) also significant and leadership (β 0.410, $p < 0.05$) is also significant. Meanwhile, openness in communication (β 0.023, $p > 0.05$) is not significant to predict employees performance. It can be concluded that, leadership is the strongest predictor with the highest Beta output among all variables, followed by training and career development and workplace environment. Openness in communication has less chance to improve employees' performance because the p-value is not significant and the beta value is the lowest among others variables.

The table 3 below also depicts the collinearity statistics result that consists of tolerance value and VIF value. The tolerance value must be more than 0.1 while the VIF value must be less than 10 to indicate no multicollinearity problems. Here, the tolerance and VIF for workplace environment is 0.469 and 2.133. Training and career development represent 0.267 and the VIF is 3.741. For openness in communication, the tolerance and VIF are 0.341 and 2.929. 0.394 is the value of tolerance for leadership while 2.536 is for the VIF. Since all the variables' tolerance values is more than 0.1 and all the VIF values is less than 10, multicollinearity is not a threat in this study.

Table 3: Regression analysis

Summary			ANOVA		
R	R-Square	F	Sig.		
0.825 ^a	0.681	132.910	0.000 ^b		
Dimensions	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
Workplace environment	0.130	2.496	0.013	0.469	2.133
Training and career development	0.353	5.093	0.000	0.267	3.741
Openness in communication	0.023	0.374	0.709	0.341	2.929
Leadership	0.410	7.200	0.000	0.394	2.536

Note: ^aPredictors (constant), Workplace Environment, Training and Career Development, Openness in Communication and Leadership. Dependent variable: Employees' Performance

4. DISCUSSION

This research has explored and highlighted important organizational cultural factors that can improve employees' performance within the procurement division in a large local oil and gas company in Malaysia. The researcher applied the Pearson Correlation and Multiple Linear Regression analysis sequentially and found that all factors hypothesized and tested are related to the dependent variable. However, openness to communication has insignificant contribution in altering employees' performance in this study. This study has also found that leadership takes a pivotal role in enhancing employees' performance at this company.

Hypothesis 1 stated that there is a positive relationship between workplace environment and employees' performance. Therefore the result in this study supports similar finding as shown by (Anitha, 2014) among employees at school in India. Hypothesis 2 stated that there is a positive relationship between training and career development with employees' performance. Therefore the result in this study also supports similar findings by (Anitha, 2014). Hypothesis 3 stated that there is a positive relationship between openness in communication and employees' performance. Even though significantly related unfortunately openness in communication cannot influence employees' performance in this company. Therefore this result does not support previous studies, for example as performed by (Fakhar, 2014) among employees at software industry in Pakistan. Hypothesis 4 stated that there is a positive relationship between leadership and employees' performance. The result in this study thus

supports similar finding as shown by (Anitha, 2014). A summary of these findings is presented in table 4 below.

Table 4: Table hypotheses of employees' performance

Hypothesis		Results
1	There is a positive relationship between workplace environment and employees' performance.	Supported
2	There is a positive relationship between training and career development with employees' performance.	Supported
3	There is a positive relationship between openness in communication and employees' performance.	Supported
4	There is a positive relationship between leadership and employees' performance.	Supported
5	Workplace environment, training and career development, openness in communication and leadership can influence the employees' performance	Supported

5. CONCLUSIONS AND RECOMMENDATIONS

In this study, the researcher found there are many ways to improve the factors of organizational cultural that relate to employees' performance at group procurement department. Below are some recommendations for managers to focus in order to develop excellent performance in workplace.

Leadership: Since leadership is the highest factors that influence and the most significant with employees' performance compare among other variables, therefore management must pay attention more on leadership. The improvement in leadership will give great impact on employees' performance. Management need to focus more on this variable and spend money and time to provide leadership training and soft skills so that every leader can gain more knowledge about leadership skill. Thus, superior can assists their co-worker to handle problems and solve them together. Other than that, to become the good superior, they need to share vision, mission and objective to their co-worker on a certain task, so that, co-worker understand and know the clear path when doing the task.

Training and career development: It is to improve employees' skills and gain more knowledge so that employees can use this opportunity to get better pay from their company. Managers need to find suitable time to do training program like seminar or team building so that each employees can value teamwork and self-improvement. The participants include not only among colleagues but also include their superiors.

Workplace environment: Most employees spend their time at workplace. Some of them work form more than 8 hours per day. Other than that, employees also work during weekends due to overtimes or company policies. The researcher recommends that, every division need to optimize working conditions such as provide comfortable work station so that employees can work with good environment. Besides that, organizations need to supply good productivity tools such as upgraded information technology system to help employees accomplish their tasks more efficiency and effectively.

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ID069 – The Successful Implementation of 5S in the Workplace

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Abstract

The purpose of this paper is to identify the association between successful implementation of 5S practice at the workplace based on training, workplace environment and top management support and to determine the main factor of successful implementation of 5S. Three hypotheses were developed based on the literature and the model was tested using statistical method. The study focuses on the practice and observance of these three factors that will lead to the successful implementation of 5S. The data collected from 214 employees in the production department at manufacturer of motor vehicle parts and components through distribution of questionnaires. The analysis on the measurement model and structural model of Partial Least Square was used in this study. The findings indicate that all factors show a significant relationship towards successful implementation of 5S where training is highlighted as the most significant factor. Meanwhile, workplace environment and top management support are also affecting the successful implementation of 5S with a low positive and negative relation respectively. As a conclusion, top management should focus and provide the appropriate training in order to improve the knowledge and awareness of 5S among employees.

Keywords: successful implementation of 5S practice; training, workplace environment; top management

1. INTRODUCTION

5S practice is a simple and universal approach in lean manufacturing that has been widely used especially by many manufacturing companies all over the world. Abbreviated from the Japanese words *seiri, seito, seiso, seiketsu, shitsuke*, 5S practice was proposed by Takashi Osada in early 1980s to increase the efficiency and productivity of an organization in Japan (Heizer & Render, 2010). It is a useful practice for the organization in improving communication besides decreasing downtime, lead time, inventory, defect, injury and associated costs through the implementation of 5S (Tsuchiya, 2000).

This practice was introduced to be practiced at the workplace to achieve more consistent operational results besides can help in reducing the costs and to enhance human capability and productivity. According to Mohammad Rezai et al. (2015), 5S is a practice to increase quality and productivity by reducing waste through the organized workplace. This practice will change the environment of workplace by introducing a new culture of work to the employees. In order to maintain within continuously excellent based on performance and to be more

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competitive in the industry, many organizations allocated their resources aiming to run off waste from the manufacturing process and making operations more efficient by improving products and services, and lowering costs. The 5S practice is a good starting point to be opted by the organizations as a part of continuous improvement efforts.

1.1 Problem statement of the study

The successful technique in the organization to get high productivity of product and employees is by implementing 5S practice (Ahuja & Khamba, 2008). With the implementation of 5S practice, the organization will achieve many benefits such as quality working environment, safety and health, increase morale among workers, increase security, save time, reduce cost and automatically increase productivity and quality of employees (Wan Asri & Azman, 2011).

Although 5S is generally considered as a simple technique in a manufacturing process, but it is also can easily misinterpreted and poorly implemented. According to Rahman et al. (2010), this practice is very difficult to promote as a culture and practiced in the organization of manufacturing industry due to problems with lack of knowledge about 5S practice. From the interviews done with the person in charge of the 5S in the production department at manufacturer of motor vehicle parts and components, it reveals that this company did not put a good arrangement for their materials and tools at workspace and certain material still disorganized such as scrap or unused materials. Thus, in order to minimize waste at the workplace this company particularly needs to practice the 5S.

In accordance with that, by conducting this study, the association between successful implementation of 5S practice at the workplace based on training, workplace environment and top management support can be identified and the main factor of successful implementation of 5S also can be determined. Although 5S practice has been done addressed by many past researchers but it still neglect into successful implementation of 5S practice in industry particularly in the Malaysia. Other than that, this research might help employees to improve knowledge and quality of work when 5S practice has been implemented properly in the industry.

1.2 Literature review

1.2.1 Overview of 5S

5S is a philosophy for systematically achieving overall cleanliness and standardization at workplace that is motivating and pleasing the employee in the organization. The importance of 5S lies in the fact that it can help to reduce cost by maximizing effectiveness and safer working environment (Hirano, 1995; Ho, 1999; Liker and Hoseus, 2008; Likert, 2004). The concept of 5S highlights five important elements such as Seiri (sorting), Seiton (set in order), Seiso (sweep), Seiketsu (standardize) and Shitsuke (sustain). Most of the scholars used these five famous points to link to the subject of study of quality improvement (Pheng, 2001).

1.2.2 5S and workplace environment

According to Fabrizio and Tapping (2006) the 5S approach is a principle and a tool, which is used to organize and manage the workplace for improvement of the working environment. The 5S principles also can complement well with other quality improvement and quality assurance approaches such as the ISO standards in ensuring cleanliness and safety of working environment and hence building a good foundation toward total quality management (TQM) (Pheng's, 2001). In other word, 5S is a philosophy and a way of organizing and managing the workspace and work flow with the intent to improve efficiency by eliminating waste, improving flow and reducing process unreasonableness. It is for improvement of working environment. (JICA, n.d)

1.2.3 5S and top management support

Effective implementation of the 5S activity depends on the commitment of the top level management, training conducted for the organization in implementing the 5S practices, total involvement of the employees, function and background of the business and finally the publicity given to the 5S activity (Khamis et al., 2009). According to Dezdar and Sulaiman (2009), top management support also includes with involvement, commitment, awareness, participation, fund support and dedicated resources. Besides, the top management should provide resources for intense training and improvement (Randhawa, 2017). However, according to Ab Rahman (2010), effort and participation from top management is a key factor that determines the successful of the 5S practice.

1.2.4 5S and training

According to Arash and Norzima (2013), company expectation of a high level of productivity and high employee contribution are the reason for an organization to conduct training because it is vital strategy for a successful organization. From their research about The Impact of 5S Implementation of Industrial Organization's Performance for government and public sector in Malaysia, the results showed that, after implementing training in 5S system, performance level is increased from 1.8599 to 4.3282 which is 57% improvement. While those companies who have not given training and education of 5S causes there is increasing from 2.0508 and 4.2032 which is only 51% improvement. Thus, training has had a positive impact on overall performance improvement to organize. Moreover, based on the study of Development of 5S Practice Checklist for Manufacturing Industry, there is significant relationship between training and consciousness activity amongst the employees of 5S system with the critical success factors of 5S activities (Khamis et al., 2009).

As we have overviewed the underlying theory for each model's construct, training, workplace environment, top management support and the implementation of 5S, we develop each construct, discuss the relationship and list the associated hypothesis.

- H₁: Training is related to the successful implementation of 5s practice at workplace.
- H₂: Workplace environment is related to the successful implementation of 5S practice at workplace.
- H₃: Top management support is related to the successful implementation of 5S practice at workplace.

The theoretical framework is developed using the dependent variables and independent variables. Dependent variable is the successful implementation of 5S practice which means that it is a primary item that researcher interested to make a study while for the independent variables are training, workplace environment and to management support.

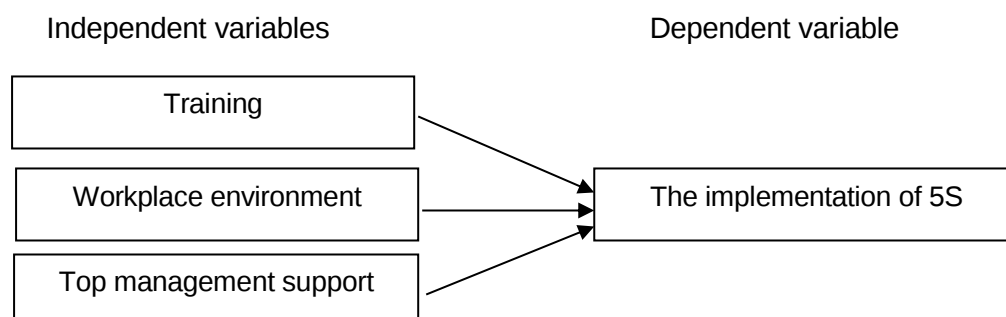


Figure 1: Theoretical framework

2. METHOD AND MATERIAL

In this study, a sample survey is undertaken involving a total of 214 respondents out of 478 employees from three different blocks of manufacturing department at manufacturer of motor vehicle parts and components in Terengganu. This sample size is based on the recommended sample size by Krejcie and Morgan (1970). The selection of the respondents is based on Proportionate Stratified Random Sampling with the number of respondents from each block is determined proportionately as shown in Table 1.

Table 1: Sample size distribution

Manufacturing department	No. of employee	Proportionate	Sample size
Block A	200	$\frac{200}{479} \times 214$	89.35
Block B	120	$\frac{120}{479} \times 214$	53.61
Block C	159	$\frac{159}{479} \times 214$	71.04
TOTAL	479		214

A questionnaire was adapted and adopted from Narawi, L. (2008) as the instrument for data collection. The questionnaire consists of six sections; demographic profile in Section A, dependent variable in Section B (Implementation of 5S), independent variables in Section C (Training), Section D (Workplace Environment) and Section E (Top Management Support). Section F is the recommendation to improve the implementation of 5S. All items in Section B, C, D and E are measured using the Likert scale from 1 (very disagree) to 5 (very agree). An open-ended question is used in Section F.

The data was analyzed using the Smart Partial Least Square (PLS) software to test the relationship between the indicator and their corresponding construct (measurement model) and also the relationship between constructs (structural model).

3. ANALYSIS AND RESULTS

At a measurement model level, PLS estimates items loading and residual covariance. It also important to evaluate the convergence and discriminant validity by checking the value of composite reliability and average variance extracted (Fornell, 1982).

3.1 The measurement model

Table 1 show that the assessments result of the measurement model. All the composite reliabilities and Cronbach's alphas for the entire construct are greater than 0.9 demonstrate that it is adequate (Gil-Garcia, 2005). Each construct variance extracted was above the recommended value of 0.5 as suggested by Hair et al (2016).

Table 1: Assessment of the measurement model

Variable construct	The composite reliability	Cronbach's Alpha	Average variance extracted/explained
Implementation of 5S	0.947	0.933	0.719
Training	0.976	0.972	0.855
Workplace environment	0.931	0.912	0.694
Top management support	0.936	0.922	0.678

Table 2: Discriminant validity (intercorrelation) of variable constructs

Variable construct	Implementation of 5S	Training	Workplace environment	Top management support
Implementation of 5S	0.848			
Training	0.421	0.925		
Workplace environment	0.783	0.702	0.833	
Top management support	0.557	0.776	0.743	0.824

Table 2 compares the square root of the average variance extracted (AVE) with the correlations among reflective construct. The values in matrix diagonal are greater in all cases than the off-diagonal values in their corresponding row and column suggesting good discriminant validity.

Table 3: Factor loading and cross loadings

Indicator	Implementation of 5S	Top management support	Training	Workplace environment
IMP1	0.878	0.327	0.666	0.502
IMP2	0.890	0.367	0.756	0.457
IMP3	0.908	0.306	0.651	0.442
IMP4	0.822	0.388	0.597	0.538
IMP5	0.930	0.361	0.713	0.478
IMP6	0.774	0.293	0.525	0.387
IMP7	0.712	0.446	0.691	0.502
TMS1	0.452	0.909	0.704	0.689
TMS2	0.403	0.918	0.609	0.737
TMS3	0.450	0.955	0.694	0.762
TMS4	0.394	0.930	0.674	0.707
TMS5	0.311	0.916	0.607	0.737
TMS6	0.333	0.930	0.641	0.678
TMS7	0.329	0.914	0.582	0.711
TRA1	0.650	0.672	0.878	0.693
TRA2	0.679	0.617	0.884	0.716
TRA3	0.707	0.389	0.815	0.480
TRA4	0.759	0.528	0.870	0.545
TRA5	0.568	0.690	0.805	0.625
TRA6	0.493	0.692	0.736	0.715
WPE1	0.507	0.591	0.606	0.814
WPE2	0.515	0.566	0.587	0.834
WPE3	0.511	0.607	0.659	0.871
WPE4	0.236	0.579	0.447	0.752
WPE5	0.483	0.695	0.673	0.836
WPE6	0.469	0.703	0.678	0.857
WPE7	0.371	0.775	0.568	0.795

The convergent validity is also tested by the examination of factor and cross loading of all indicator items to their respective constructs. Table 3 displays that all indicator loaded on their respective from 0.712 to 0.955 while all the cross loading with other constructs are considerably lower provide evidence for the constructs' discriminant validity. Finally, all model evaluation criteria have been met, providing support for the measures' reliability and validity.

3.2 The structural model

The structural model represents the relationships between construct that were hypothesized in the research model (Figure 1). At this level, PLS estimates path coefficient and correlation among the construct, together with the coefficient of determination (R-squares) interpreted in the same way as for regression analysis. The high value of R^2 indicate that the value of the construct can be well predicted through the PLS path model (Hair et al, 2016).

Figure 2 shows the result of structural model with path coefficient, t statistics and R^2 . The analysis revealed that this model explained 65% of the variation in implementation of 5S, suggesting that this model provided adequate explanatory power. The path between training and implementation of 5S was highly significant (beta=0.910, t value=15.258). It means that hypothesis 1 was supported thus can be considered as strong positively affected the implementation of 5S. The path between workplace environment and implementation of 5S was moderately significant (beta=0.127, t value=1.969) therefore indicated a positive relationship. Although the path between top management support and implementation of 5S was significant, the beta coefficient is negative that concluded an inverse relationship (beta=-0.317, t value=3.865). A good model fit is established with significant path coefficient, acceptably high R^2 and internal consistency being above 0.7 for each construct (Thompson et al. 1995). As a conclusion, this model is a good model since all the criteria are met.

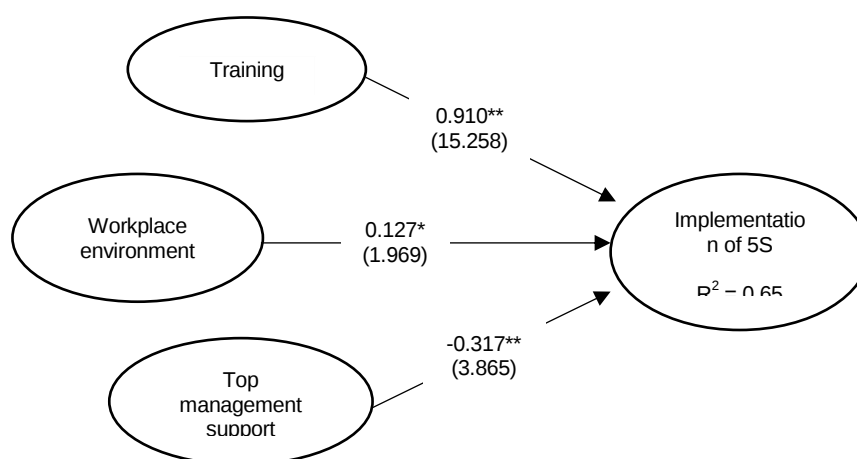


Figure 2: Result of Structural Model with path coefficient (associated t-statistics are in the parenthesis). *Indicates significance at 0.05 level. **Indicates the significance at 0.01 level.

4. DISCUSSION

Table 4 presents the hypotheses, relationship between construct, the path coefficient, t value and outcomes. The last column indicates whether the hypothesis was supported or not supported.

Table 4: Structural result

Hypotheses	Relationship	Path coefficient	t-value	p-value	Outcomes
H1	Training -> Implementation of 5S	0.910	15.851**	0.000	Supported
H2	Workplace environment -> Implementation of 5S	0.127	1.969*	0.049	Supported
H3	Top management support -> Implementation of 5S	-0.317	4.239**	0.000	Supported

The result suggests that all three hypotheses were supported since all relationship are significant. The study found that training had a strong positive effect while workplace environment had a moderate positive effect on the implementation of 5S. This indicates that, the implementation of 5S is more successful if the employees are given more training on 5S practice. As for workplace environment, the 5S implementation will be more successful if the employees are aware and responsive to 5S practice. The negative interaction between top management support and the implementation of 5S indicate that, with the increase of support from the top management, the implementation of 5S become less successful.

5. CONCLUSIONS AND RECOMMENDATIONS

This paper aims to identify the association between successful implementation of 5S practice at the workplace based on training, workplace environment and top management support. These objectives derive to three hypotheses and all were supported.

Special attention must be given to the top management since the result show the negative association between top management and implementation of 5S. These might be happened because employees were not given the accurate information about the roles and responsibility of top management in ensuring the successful implementation of 5S practice. Top management should find the communication medium to disseminate the information about the implementations of 5S. The management should establish roles and responsibilities for each team members, training for staff, regular communication, establish of effective feedback function and effective time bound action plan within the organization (Ishijima et al., 2014)

In order to enhance the knowledge of workers regarding to 5S implementation, training is very important. Training, education, skill development improves employees' abilities to give high contribution to the action (Ramus, 2002). Employees must have in-depth understanding of how the 5S works as well as in-depth training on the current implementation. The organization specifically top management should provide training consistently to all employees to improve their skills and knowledge.

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ID080 – Ergonomics Factors towards Job Stress at a Multinational Corporation Company in Malaysia

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Abstract

The study was conducted at a Multinational Corporation (MNC) Company, situated in Kuala Lumpur, Malaysia. Focusing to the job stress as the dependent variable, the parameter of the independent variables parsimoniously selected in a form of ergonomics factors which are work design, work process design, working hours, and workload. The objectives are to determine the level of job stress with regards to ergonomic factors among employees, to investigate the relationship between ergonomic factors and job stress among employees and to identify the contribution of ergonomic factors in explaining job stress among employees. Data was collected from 221 employees of the MNC Company. The results showed there are relationship between work design, work process design, working hours and work load towards job stress. Individually, three variables which are work process design, working hours and work load are significant factors that contribute to job stress among employees at the MNC Company in Malaysia. It is essential to promote ergonomics concept and practice by disseminating the applications to various industries so that both employers and employees benefits and become aware of those three variables that can help to improve workplace conditions, enhancing worker's occupational, safety and health, and reducing the level of job stress.

Keywords: ergonomics; work design; work process design; working hours; workload; job stress

1. INTRODUCTION

Ergonomics is a process of designing and arranging equipment, machines, processes for people, so that they are friendly fit to them. It is important of such things in the design of safe furniture and easy-to-use interfaces to machines. Ergonomics can be employed in an organization to meet the two goals of health and productivity of the organization. To avoid repetitive strain injuries, a good ergonomics design is very important. This is because it can lead to a long-term disability that can develop over time. Besides, ergonomics has been shown to increase the employee productivity, staff retention, increase wellbeing and reduce sickness levels of staffs. Therefore, compromising in ergonomics factors in day-to-day of works may lead to job stress that eventually may tarnish quality of working life.

1.1 Problem statement

Occupational stress is any uncomfortable situation that feels by individuals with capabilities and resources that they are unable to cope with the demand, stressful situations and events in the place of work (Alipour and Karimi, 2011). Stress at work caused by either good or bad

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experienced and to be the result of less job stress, a better working condition, employee efficiency and enhanced productivity is essential. Superior workplace environment coupled with the requisite tools, technology, policies, and strategies or organizational culture go a long way to motivate the employees' performance and resulting in increased productivity.

The MNC Company office ergonomics concept is the integration and application of scientific knowledge about people (human characteristic & behavior), facilities (equipment/machine, environment) and management system (procedures, risk assessment, training) to improve their interactions in the workplace. The managing of office ergonomics in the company is to ensure office workstation setup fits the worker and job task which continuously protect the health of workers from effects related to poor ergonomics, reduce or eliminate safety-related incidents and increase morale, work productivity, and efficiency which eventually reduce the stress level of the employees.

During preliminary data-gathering it was found that, the long-term of poor sitting posture, and the monitor of the personal computer is below an acceptable visual zone, lead to a number of the employees at the MNC Company suffered various degree of back, spine, neck, and stress-related ailments (The Manager, Personal Communication, September 2017). On top of that, the head-load or heat strain at some level, lead the body suffers discomfort that eventually experiencing stress and declining individual's productivity (The Secretary, Personal Communication, October 2017). Therefore, it is important to empirically assess whether or not that ergonomics factors impact the job stress among employees at the MNC Company so that pre-emptive measure can be planned or installed for better quality of working life with manageable job stress.

1.2 Research questions

- RQ1: What is the level of job stress with regards to ergonomics elements among employees at the MNC Company?
- RQ2: Does the ergonomics factors which are work design, work process design, working hours, and workload have relationship on job stress among employees at the MNC company?
- RQ3: How well work design, work process design, working hours, and workload explain the variance of job stress among employees at the MNC company?

1.3 Hypothesis

- H1: There is a relationship between work design and job stress among employees at the MNC Company
- H2: There is a relationship between work process design and job stress among employees at the MNC Company
- H3: There is a relationship between working hours and job stress among employees at the MNC Company
- H4: There is a relationship between workload and job stress among employees at the MNC Company
- H5: Work design, work process design, working hours, and workload are predictors in explaining the job stress among employees at the MNC Company

1.4 Scope and limitation of study

The study was conducted at a MNC Company, situated in Kuala Lumpur, Malaysia. Focusing to the job stress as the dependent variable, the parameter of the independent variables parsimoniously selected in a form of ergonomics factors which are work design, work process design, working hours, and workload. Ergonomics factors for this study is focused on the way in which the careful design of works and their related equipment that may help the workers to work better, quick and safe. Work design in this study is referred to the climate of the organization such as temperature and equipment. Whereas work process design is the procedures that must be followed by the workers in performing their task.

Working hours is the standard fulltime work week and working hours of jobs. Workload is the amount of work assigned to the worker or expected to be completed in specific time period. There were 221 employees handed completed questionnaire during field work.

2. LITERATURE REVIEW

2.1 Job stress

Stress has many definitions and most of the terms usually used to describe feelings of fatigue, distress, and inability to cope. In a simple word, stress is a type of illness that is caused by continuous stress that the body received. When the body is being hammered with continues and repetitive stress that our body cannot cope, it will give a negative impact on the body. Stress not just impact our body negatively but it also our action and response causing us to make incorrect decisions with no reasonable and practicable explanation. From past studies, it has been identified that stress has a big impact and this concerned both employees and employer. Stress can seriously affect a person work performance which eventually effects the organization.

In both organization and employee, occupational stress is a major problem which job stress can lead to various conditions such as illness, labour turnover, burnout, absenteeism, low morale thus can reduce a person efficiency and performance. Therefore, stress can be considered as one of the factors that can influence efficiency, healthcare cost and other results that relate with specific situations, individual perceptions towards workplace and characteristics of work environment (Stacciarini & Troccoli, 2004).

Stress in the workplace has become a big concern to all the managers and administrators. High level of stress may result in increased staff turnover, higher accident rates, more health problems and absenteeism. Stress and job burnout are closely related to a specific type of work. According to Lee and Ashforth (1996), it includes overload, variation in workload, role conflict and role ambiguity. Besides, a worker who has poor coping response, have a high level of stress and lack of job satisfaction which will negatively impact the organization.

According to Zafir Mohd Makhbul, and Durrishah Idrus (2009), if the employee perceives negatively towards his/her work condition, he/she could experience the job stress. Sutton and Rafaeli (1988), described physical workstation environments such as lighting, temperature, and work station design can impact job stress. Therefore, in order to reduce employee job stress, ergonomics issue must be taken into consideration with regards to designing a workstation and many more (Yeow & Sen, 2003; Mohamad Khan Jamal Khan, Nor Azimah Chew Abdullah, & Ab. Aziz Yusof, 2005).

2.2 The ergonomics factors

According to Kolgiri, Hiremath and Bansode (2016), ergonomics is a broad science with wide variety of working conditions which can impact on factors such as temperature, noise, lighting, heavy lifting, vibration, workstation design, machine design, repetitive motion, tool design, and chair design which can effect on the worker's comfort and health.

2.2.1 the relationship between work design and job stress

According to Tarcan, Ergin, and Metin (2004), one of the ergonomics factors that could impact the job stress is the work design and taking a good concern about ergonomics work area design will resulting in decrease on problems of job stress. They also pointed out that if the organization does not provide a good working environment to employees such as buying the furniture, best-fitting apparatus, and tools, the risk of becoming ill related to the workplace will be increased. As mention by Ikonne (2014), modern day offices are equipped with computer technology and, as a result, many employees use a computer workstation in the course of

their work. The layout of workers' desk, the way the computer is placed, the type of chair, and the space in which workers find themselves, all have influence on ergonomic conditions.

The design of workstation could directly or indirectly impact physiological and psychological of employees which eventually will effect on the organization productivity (Einar De Croon, Judith Sluiter , P Paul Kuijer, 2005). Improper equipment and poor workstation design could harbour the variety of problems. As mentioned by Lange, Taris, Kompier, Houtman and Bongers (2003), ergonomics related problems are decrease in performance and negative health issues, such as fatigue, burnout, muscle disorder etc.

Dempsey et al., (2004) in Zafir, Durrishah and Mat Rebi (2007) workplace design from an ergonomics perspective can minimize stress among employees and improve the output. Zafir and Durrishah (2009) found that workplace design was a stress-causing which lead to job dissatisfaction, complaints, and intention to quit among workers. Besides, having an ergonomics office equipment help reduce the risk of injury which eventually becomes a motivational factor which will help an employee to perform better. A research shows that in reducing the job stress issues in organizations, ergonomically designed workstation is a very important strategy (Zafir & Durrishah, 2009).

2.2.2 The Relationship between work process design and job stress

The way the organization design jobs and work systems and the way they manage due to poor work organization can cause to job stress. According to Ikonne (2014), workstation designs significantly affect working posture, which, in turn, contributes to physical symptoms. Work posture (sitting, standing or bending, twisting, carry, lifting) has been identified as one of the most important factors when considering workstation design. They also mention the chair must fit the worker as well as suit the tasks that the worker is doing. For example, it has been observed that poor chairs and/or bad posture can cause lower back strain, and a chair that is too high can cause circulation loss in legs and feet.

Previous study by Minter (1999) in Konz and Rys, (2002), mentioned that workplace stress level is higher than past generation due to some of the requirement of the job that needs to stand in a long time of period. The different nature of job between blue collar and white collar also has different job risk factors. According to Jiang, Liang and Zhao (2004), blue-collar workers are more likely to expose to the chemical substance, dust, physiological job stress and ergonomics problem so it is really significant and important for the evaluation on stress among white collar workers. Therefore, it shows that, the way the job is performed (work process design) may lead to job stress.

2.2.3 The Relationship between working hours and job stress

Working hours can be simplified as any period during which the worker is working and carrying out his activities or duties. According to Brett and Stroh (2003) in Marican and Sabil (2011), working hour is the amount of time spent by an individual to carry out a job or task. Marican & Sabil added that, typically, workers are physically bound to their work for five to nine hours per day.

According to Md Asran and Jailan (2016), workers who have a workload demands and work in a long hour are more likely to limit the time they could recover from the exertions involved and enjoy normal nonworking activities that help this process. The time outside of work and particularly leisure time is thus a way that can help the individual recover from the tiring excessive work or otherwise (Grandey & Cropanzano, 1999; Sonnentag, Binnewies & Mojza, 2010). It is expected that, working in long hours without taking any rest will increase the stress level and contribute to injuries.

2.2.4 The Relationship between workload and job stress

Workload has been identified in wide ranges of research that shows it affects the level of depression, anxiety, job satisfaction and others that relates to a person well-being (Hausser, Mojzisch, Niesel & Schulz-Hardt, 2010). Workers that involved in tough workload demand is likely to interfere or limit the time a person has to recover themselves from the exertions and enjoy non-working activities that help reduce problems such as anxiety depressions, job satisfaction, and others. The routine aspect of an individual workload will provide a negative effect on the well-being to the point that the demand being imposed or put on the workload is excessive, sustained and out of control (Doef & Maes, 1999). Borg and Riding (1993) defined workload as having to do with excessive task and too much responsibility. Having too much work to complete can create stress for an individual in two (2) ways. First, the person becomes tired and become less tolerant of others. Second, a person subjected to unreasonable work demands may feel perpetually behind schedule, a situation that itself is a powerful stressor (Dubrin, 1994).

Most of the stress occurs because of the increase workload and an increase economic pressure on individual, due to the failure to meet the social needs and the needs of work related stress (Rohaidah, 2015; Normarina, 2015; Ooi & Aziah, 2015). According to Kyriacou, (2010), Tajulashikin, Fazura and Mohd Burhan (2013), Umami Kalsom (2014), based on their research proved that workload is a major contributing factor towards job stress.

3. METHOD AND MATERIAL

The total number of employee at the MNC Company is 700, served as the population frame. As refer to Krejcie and Morgan (1970) in Sekaran (2006), if the population size is 700, the suggested sample size is 248 samples. Therefore 248 questionnaires were distributed to the respondents using convenience sampling procedure. However, only 221 completed questionnaires were returned, representing 89% of response rate. The 5-point Likert scale ranging from '1' (strongly disagree) to '5' (strongly agree) was used for dependent and independent items of questionnaire.

4. ANALYSIS AND RESULTS

4.1 Demographic profile

Table 1: Respondents' profile

No	Profile	Descriptive	Frequency	Percent
1	Gender	Male	74	33.5
		Female	147	66.5
2	Age	21 – 30 years old	88	39.8
		31 – 40 years old	74	33.5
		41 – 50 years old	26	11.8
3	Education level	Diploma	16	7.2
		Bachelor degree	188	85.1
		Master/PhD	12	5.4
		Others	5	2.3
4	Job title	Executive	105	47.5
		Manager	52	23.5
		Senior Manager	41	18.6
		General Manager	13	5.9
		Senior General Manager	10	4.5
5	Race	Malay	157	71
		Chinese	45	20.4
		Indian	16	7.2
		Others	3	1.4
6	Term of service	Less than 1 year	38	17.2
		1 – 5 years	60	27.1
		6 – 10 years	31	14.0
		11 – 15 years	51	23.1
		More than 15 years	41	18.6

7	Income	Less than RM3000	11	5.0
		RM3001 – RM6000	99	44.8
		RM6001 – RM12000	46	20.8
		RM12001 and above	65	29.4
8	Understand ergonomics	Yes	214	96.8
		No	7	3.2

Table 1 shows the respondents' profile. There are seven demographic elements described the 221 respondents comprehensively. It is important to highlight that 96.8% or 214 respondents stated that they understand what ergonomics is. Even though there are seven respondents stated that they do not understand what ergonomics is, they were eligible to answer the questionnaire because it was designed by using simple and understandable words.

4.2 Reliability Analysis

Table 2 Cronbach's Alpha of variables

Variables	Cronbach's Alpha	N of Items	Strength of Association
Job stress	0.694	6	Moderate
Work design	0.851	16	Very Good
Work process design	0.746	9	Good
Working hours	0.621	5	Moderate
Workload	0.675	9	Moderate

Table 2 shows the result of reliability test for each variable which is ranging from moderate to very good. Since the Cronbach's Alpha values scored more than 0.6 it is considered reliable for further analysis (Sekaran, 2006), where items developed for each concept are consistent and stable.

4.3 Job stress level among employees at the MNC Company

Table 3: Descriptive statistics level of job stress

	N	Mean	Std. Deviation	Min	Max	Score per scale				
						1	2	3	4	5
JS1: I feel relaxed because of my job.	221	3.52	.952	2	5	0	33	80	69	39
JS2: If I had a different job, my health would probably worsen.	221	3.35	.896	1	5	4	24	110	56	27
JS3: I seldom "take my job home with me" in the sense that I think about it when doing other things.	221	3.31	1.056	1	5	16	30	65	89	21
JS4: I always feel weak all over.	221	3.06	.959	1	5	7	59	84	56	15
JS5: Problems associated with work have not kept me awake at night.	221	3.29	.951	1	5	6	39	82	74	20
JS6: I feel calm before attending meetings in this organization.	221	3.36	.817	2	5	0	33	80	69	39
Valid N (listwise)	221									

Table 3 describes six items measuring the jobs stress level among employees at the MNC Company. The mean values for each item ranging from 3.06-3.52 (SD 0.817-0.95) elicited neutral responses. On top of that, the minimum answer given by the respondents elicited disagree (2) to strongly disagree (1) and the maximum answer is strongly agree (5). Therefore, it is worth to scrutinize the frequency score per scale for each item, because out of agree responses, about 10% to 30% are disagree responses.

4.4 The relationship between work design, work process design, working hours, and workload with job stress

Table 4 Pearson correlation

		Job Stress	Work Design	Work Process Design	Working Hours	Workload
Job stress	Pearson Correlation	1	.496**	.659**	.270**	.441**
	Sig. (2-tailed)		.000	.000	.000	.000
Work design	Pearson Correlation	.496**	1	.673**	.459**	.334**
	Sig. (2-tailed)	.000		.000	.000	.000
Work process design	Pearson Correlation	.659**	.673**	1	.412**	.309**
	Sig. (2-tailed)	.000	.000		.000	.000
Working hours	Pearson Correlation	.270**	.459**	.412**	1	.477**
	Sig. (2-tailed)	.000	.000	.000		.000
Workload	Pearson Correlation	.441**	.334**	.309**	.477**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

** Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=221

Table 4 shows the relationship between independent variables and dependent variable. There is strong relationship between work process design and job stress ($r=0.659$, $p<0.01$). Whereas moderate relationship exists among work design ($r=0.496$, $p<0.01$) and workload ($r=0.441$, $p<0.01$) towards job stress. Working hours ($r=0.270$, $p<0.01$) have weak relationship with job stress. All relationships are significant at 0.01, therefore hypothesis 1 until 4 are supported.

Assessing relationships among independent variables show that all r -values are less than 0.9. Since multicollinearity exists when the independent variables are highly correlated ($r=0.9$ and above), thus the issue of measuring the same phenomenon in measuring the reliability is solved.

4.5 The influence of work design, work process design, working hours, and workload towards job stress

Table 5 Regression equation and related statistics

Model 1	Standardized coefficients			Collinearity statistics	
	Beta	T	Sig.	Tolerance	VIF
Work design	.074	1.101	.272	.504	1.983
Work process design	.575	8.817	.000	.532	1.881
Working hours	-.148	-2.531	.012	.662	1.512
Workload	.309	5.640	.000	.752	1.329
Summary					
R	0.715 ^b				
R ²	0.512				
ANOVA ^a					
F	56.619				
Sig	0.000 ^b				

a. Dependent Variable: Job Stress

b. Predictors: (Constant), Workload, Work Process Design, Working Hours, Work Design

Table 5 indicates that 51.2% of the identified independent variables explain the variance of job stress among employees at the MNC Company ($p=0.000$, $F=56.61$). Therefore, hypothesis 5 is supported. Three independent variables are significant ($p<0.05$) which are work process design ($p=0.000$, $\beta=0.575$), working hours ($p=0.012$, $\beta=-0.148$) and workload ($p=0.000$, $\beta=0.309$).

The tolerance and VIF values for each independent variable indicates the multicollinearity assumption is not violated. It is because the tolerance values are more than 0.10 and the VIF values are less than 10 (Pallant, 2010). Pallant urges that if the results exceeded the recommended values, we should seriously consider removing one of the highly intercorrelated independent variables from the model.

5. DISCUSSION & RECOMMENDATIONS

Regardless the eagerness of discussing the inferential statistics in making decision, the important of descriptive analysis in helping manager to make decision is inevitable. In answering the research question regarding the level of job stress among employees at the MNC Company, it was found that the answers given by the respondents were varied. On top of 49% feel relaxed of their job, 15% fell nervous of their job; 21% often “take my job home with me” in the sense that I think about it when doing other things; 32% fell weak all over; 20% agreed that problems related to work have kept them awake at night; and 15% feel nervous before attending meetings. These descriptions showing that, job stress exists even though the responses did not reach more than 50%. It's not reaching the 50% and more because most answers fall under neutral scale (3). Therefore, it is strongly recommended to the top management to assess worker's happiness index because it will give a good hint whether their employees are experiencing manageable stress or not.

Work design, work process design, working hours, and workload, were empirically found that they have relationship and also influence the job stress. Even though, individually, work design is not significantly contribute to the job stress, all the four independent variables made up 51.2% influence on the job stress. It is essential to promote ergonomics concept and practice by disseminating the applications to various industries so that both employers and employees benefits and become aware of those three variables that can help to improve workplace conditions, enhancing worker's occupational safety and health, and reducing the level of job stress.

With the current of the job stress level it is good to study the current climate of the organization including temperature, ventilation, illumination, equipment, layout, standard operating procedures and many more ergonomics related issues. The commitment for installing a good ergonomics working environment for manageable job stress should come from both the managerial level and employees. According Ikonne and Chinyere (2014), no matter how well an enterprises or organization design a workspace, it is the responsibility of each employee to make sure they are using good ergonomics at their own workstation. All the fancy chairs, desks and equipment in the world are not going to help an employee who slouches or slumps awkwardly at their desk.

6. CONCLUSION

This study focusing on job stress by parsimoniously selected the four ergonomics factors which are work design, work process design, working hours, and workload. Three research questions were answered and five hypotheses were supported. It was found that work design, work process design, working hours, and workload have relationship and influence the job stress.

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ID086 – Increasing Performance of Higher Education through Partnership of Private Universities in Medan City

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Abstract

The purpose of this study is to determine the role of partnership in building competitive advantage and improving the performance of Private Universities in Medan City. University leaders will get important information in formulating Strategic Plan or Higher Education Operational Plan. Each Universities must manage a competitive advantage that can be different from one another. This study offers a resource utilization approach which is the implementation of partnership to build competitive advantage that will ultimately improve the performance of the University. This research is descriptive correlation research. This method is used to know the influence of partnership toward competitive advantage and performance of universities. The location of this research was conducted in Medan City, North Sumatera Province. Respondents in this study are 124 Head of the Study Programs at the Private Universities in Medan which is still active in 2017/2018. The number of universities that become research locus is as many as 11 universities. The university's selection is based on growth level criteria, where universities whose students are relatively stable or increase year by year. The sample selection was done by using Proportional Sampling and random sampling where each selected private university represented the number of respondents who were balanced and selected randomly. Descriptive Statistics and Inference are used to interpret and analyze data. Model analysis in this research is done by Structural Equation Modeling (SEM) with Partial Least Square (PLS) data processing device.

Keywords: performance; higher education; private university; partnership; Medan

1. INTRODUCTION

Universities are centers of higher education where the maintenance, coaching and development of science, technology or art is expected to improve the quality of life in society, nation and state. The ideal college has a good performance shown by the reputation or rank obtained by the College. One of the best indicators of good cultivation is the accreditation it has. This accreditation shows the competence of lecturers who teach, the adequacy of lecturers, the implementation of roles, facilities and administrative and academic systems are well organized.

But now the quality of education in Indonesia is still relatively lower compared with other countries in Southeast Asia. Based on a survey conducted by the Human Development Index (HDI) in 2014 that is used to measure the level of world education quality, Indonesia is ranked 108th, under Singapore on the 9th, Malaysia with 56th and Thailand at position 89th.

The position of Indonesian universities at international level can also be seen from the list of the world's best universities issued by the Times Higher Education Supplement (THES). From

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the list issued by THES which was published in London in 2005, there is no college of Indonesia who entered the top 100. In 2013 only the University of Indonesia and the Bandung Institute of Technology that entered the top 500 best universities of the world that is on the 309th and 461th (www.topuniversities.com)

Performance of universities in Indonesia can be seen from the ranking of Universities undertaken by the Ministry of Research and Technology Directorate of Higher Education (Kemenristekdikti). From the ranking, in the year 2018 there is no Private University in North Sumatra, which is ranked in the top 10 best universities in Indonesia. Several universities in North Sumatera which ranked in the top 100 are USU rank 9, UNIMED ranked 21.

Some of the failures or weaknesses that can be seen from some universities with poor performance are those related to financial management, facilities and infrastructure, leadership, human resources, agency image, and unhealthy organizations (Tobari, 2015). Rapid and dramatic developments and changes in the environment, including changes in consumer tastes, technological advances and socioeconomic changes, have affected the higher education sector, resulting in high levels of business competition in the higher education industry. Developments and changes occur across geographies. Popularly, these developments are known as globalization (Siagian, 1995). Such conditions require each private university to be able to explore and develop sources of competitive advantage in order to survive.

Higher Education Performance can be formed from competitive advantage. This is in accordance with Agha & Alrubaiee (2012) research which stated that Competitive Advantage can improve Organizational Performance. In order for the company to remain competitive and gain competitive advantage, leaders can try to improve organizational performance by managing each of the core competencies dimensions of shared vision; partnership and empowerment (Ismail *et al.*, 2010)

However, in managing competitive advantage must be done well in order to achieve superior performance. Hao Ma (2000) states that competitive advantage will not boost high performance if 1) a company which has competitive advantage but fails to develop it into a compound advantage; 2) the company fails to take advantage of that potential; 3) if it has some competitive advantage but failed to make the right combination 4) the company deliberately sacrificed the competitive advantage.

Another study by Rita McGrath (2013) says that sustainability of competitive advantage cannot always be decisive in the competition because of the effects of very rapid development such as technology and market changes forcing competitive advantage must also change. The advantages of being difficult to imitate cannot be sustained because of technology developments that made those advantages eventually can be duplicated as well.

The pursuit of competitive advantage is a central arguable theme in strategic management (Porter 1996). Barney (1991) further argues that a company has the potential to produce a competitive advantage that resources must have four attributes: (a) has a value; (b) rare; (c) must be inimitable and (d) there is no substitute

There are several resources that can increase competitive advantage such as service quality (Waraich 2013, Yeboah 2014), service differentiation (Rahman 2011, Kurniaty *et al.* 2015, Pendhuka 2015), knowledge management (Bratic 2009, Mahdi *et al.* 2011, Meihami 2013, Gitchuke 2014, kaveh 2015). Without proper management, especially the management of competitive advantage, good performance is difficult to achieve.

The competitive advantage of higher education can also be obtained through partnership or partnership (Mansor, 2001). The benefits that can be obtained by universities through

partnership conducted with various agencies both domestic and foreign are: (a) Through partnership of academic programs that will be substantially enhanced by developing fields of education, research, library, community service, and publishing. (b) Through partnership, economic benefits will be obtained as a result of joint utilization of existing resources and facilities. At least the use of resources will be more effective than if only utilized by agencies individually. All of these benefits will ultimately support the efforts undertaken to improve future universities development in a better direction.

The joint use of human resources, the joint use of learning facilities and infrastructure, the publication of joint scientific works, the holding of scientific activities such as seminars and joint research, other forms deemed necessary may form the basis of partnership. The forms of partnership mentioned above can be further elaborated in the activities according to Three Roles (Tridharma) of Higher Education and Student Affairs as follows:

1. *Tri Darma* Higher education such as guest lecturing, utilization of educational equipment and facilities, funding for research, scientific seminars and workshops, evaluation, staff development, syllabus and curriculum preparation, real working class, community service, provision of practical land for students, publishing scientific magazines, and upgrading.
2. *Tri Dharma* Higher Education support such as publication, library arrangement (bibliographic compilation, catalog card), preparation of general administrative guidelines, drafting of Principal Master Plan (RIP), joint purchase (equipment, books, etc.), exchange network scientific and knowledge information, fundraising, and training skills of administrative staff and technical staff.
3. Students affairs such as polyclinics, insurance, tourism work, guidance and diverting, sports and arts activities, entrepreneurship, fostering interests and talents, academic seminars, joint purchases (needs of college and daily needs).

Therefore, this research is to know the role of partnership which is implemented to gain competitive advantage and increase performance of private universities in Medan city.

2. THEORY REVIEW

2.1 Partnership relations and competitive advantages

The same is true with partnership in the view of Chan (1993), who declared strategic partnership as a contractual agreement between corporations to work towards goals without depending on the form of partnership to be taken by the company. Interfirms relationships that the existence of partnership is seen as central to a company to face global competition and to enter new markets (Vyas *et al.*, 1995). Most of universities follow the above to raise the brand from the college to be better known to the public. Then to find colleagues who have a vision and mission in accordance with universities plans. The colleagues for partnership should consider:

1. Compatibility
2. Competencies
3. Commitment

The most effective compatibility's indicator is how colleges work together in an event where the benefits of both halves should be balanced. The most effective indicator for competencies is how each competency of worker can work in accordance with that required by each college. The most effective indicator of commitment is how the college that cooperates in the contract agreement will be committed in carrying out in accordance with the article in the partnership contract.

The relationship between the partnership with the Competitive Advantage (CA) is incorporated into the theory, according to Mulcahy. A (2009) states that partnerships is not only represent a fundamental element of the company's go-to-market strategy, but can potentially be a source of competitive advantage. According to Doina *et al.* (2012), through partnerships the potential of competitive advantage is achieved in four ways: shared investment, knowledge sharing, complementary resources, and effective management. Regarding knowledge sharing, one of the common reasons for entering into a partnership is to learn from partners. Learning, however, requires partners to work together in transferring knowledge.

According to Wanjiru. ME (2008), the company can effectively address the uncertainty and ambiguity of the environment, proactive repositioning in competitive markets and minimize transaction costs through strategic partnerships and enhance competitive advantage. Many companies have come to rely on strategic partnerships as the need to maintain competitive advantage and create customer value. The company incorporates several resources and strategic partnership capabilities to create a competitive advantage.

2.2. Relationship partnership and organizational performance

The partnership and performance relationships were examined by Piva and Colombo, *et al.* (2010), where in high technology companies (need of partnership) of various parties in the field of research and development to find new innovation or product development. It aims to improve organizational performance.

Another study by Wilson (2014) at a technology bio company in Canada found that partnership and market orientation had a positive and significant impact on business performance. Similarly, Pangarkar (2003) stated that the creation of new products resulting from the success of the alliance or partnership will improve the performance of the organization.

2.3 Relationship of competitive advantage and higher education performance

The Relationship between competitive advantages and organizational performance if incorporated into the theory according to Agha & Alrubaiee (2012) that in order to remain competitive and gain competitive advantage, managers can try to improve organizational performance by managing each of the shared vision core competencies dimensions; partnership and empowerment. That competitive advantage (flexibility and responsiveness) positively affects organizational performance (Ismail *et al.*, 2010)

To achieve a competitive advantage that can not only match their business rivals but also surpass the industry's average performance, business organizations must first understand the relationship between internal strengths and weaknesses of their organizations, as well as the potential impact on their companies' competitive advantage and performance. In other words, competitive advantage is considered as part of the foundation for high-level performance. In the era of rapid technological advances and information systems, resources and product outsourcing, and globalization, company size will have little influence on the relationship between competitive advantage and organizational performance. Majeed. S (2011) states RBV is a firm competitive advantage and one of the key of related strategic management theories to explain the complex relationship of competitive advantage and firm performance. The synchronization of middle management on competencies associated with higher performance is very important to oversee management for get high performance.

According to Al-Alak & Tarabieh (2011) in his research, managers identify and understand strategic orientations such as market orientation to enable companies to achieve competitive advantage leading to greater organizational performance. Thus, in order to improve organizational performance, innovation differentiation is relatively more important than focusing on market differentiation. In addition, it can also do both simultaneously to achieve a competitive advantage that leads to greater organizational performance.

3. RESEARCH METHODOLOGY

The research method used in this study is descriptive survey research method and explanatory survey method. The type of investigation used is causality, the type of research that states a causal relationship. The unit of analysis of this study is the Private University that operates in Medan city, while the observation unit is the Head of Study Program at private universities in Medan city. In the modeling and the solution technique that will be used as an analytical tool in this study is Partial Least Square-Path Modeling (PLS-PM).

Population and sample

The population in this study is the Head of Study Program registered at the private University in Medan City. Based on data from Kopertis I North Sumatera, currently the number of private universities active in the city of Medan is as many as 23 universities, but not all of the existing private universities be the object of research. From the data obtained, private universities which is included in the criteria amounted to 11 private universities located in Medan City. The selection of the Head of Study Program at selected private universities is using random sampling with a proportional number of 124 respondents.

4. RESULT

In this paper, analyzing data was performed on two different parts. In the first part, indirect effect and the second part direct effect. The results obtained are explained below:

A. Direct effect

The statistical results for direct effect Partnership Toward Competitive Advantage and Competitive Advantage on Performance and Partnership toward Performance.

Table 1: Direct effect of variables

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Competitive advantage -> performance	0.547	0.537	0.087	6.284	0.000
Partnership -> competitive advantage	0.515	0.528	0.059	8.768	0.000
Partnership -> performance	0.298	0.311	0.083	3.605	0.000

Table 1 presents the results significant level. The results showed that all p values of variables is less than 0.05 which indicated that relation of each variables are positively significant. Partnership effects Competitive advantage as much as 0.515, Competitive advantage toward performance 0.547 and Partnership toward performance as much as 0.298

B. Indirect Effect

According to obtained results from measuring Competitive Advantage based on path analysis shows Partnership value is equal 0.00 and the indirect effect is 0.283, means that the indirect relation between partnership toward performance is significantly positive.

Table 2: Indirect effect of variables

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Partnership -> competitive advantage -> performance	0.282	0.283	0.053	5.302	0.000

C. The figure of path analysis

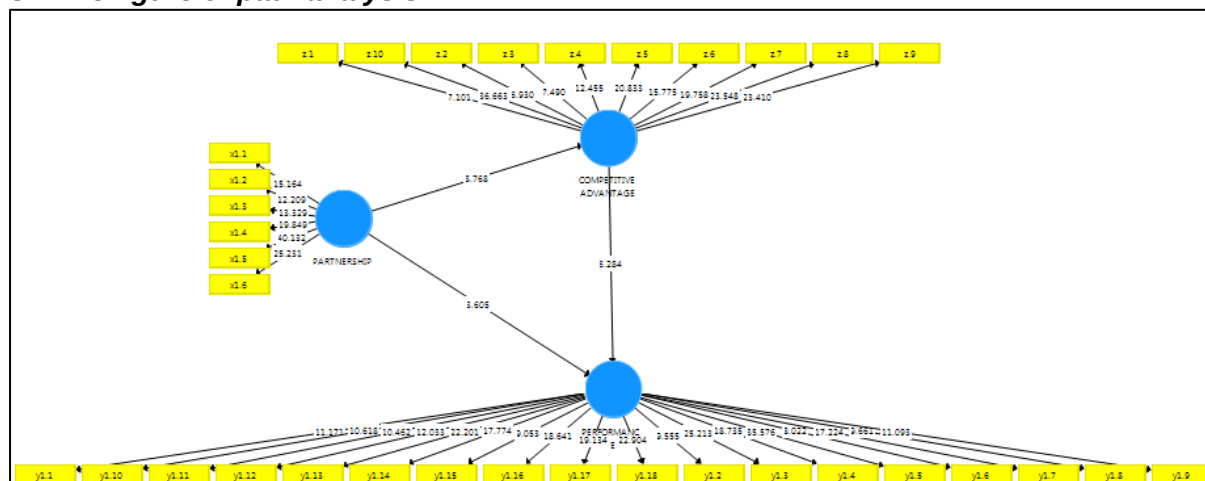


Figure 1: Path Analysis

Figure 1 presents the path analysis of the path model for the study. The path model indicates the causal relationships among the constructs in the model, which includes the estimates of the path coefficients and the coefficient of determination. The results of hypothesis finding:

Table 3: Results of hypothesis testing

Hypothesis	Path Coefficient	T-Statistic	Significant Level	Decision
H1	Partnership > competitive advantage	6.284	0.000	Supported
H2	Competitive advantage > performance	8.768	0.000	Supported
H3	Partnership > performance	3.605	0.000	Supported

5. CONCLUSION

This study aims to examine the influence of Partnership and Competitive Advantage on Performance. The results generated from the path model indicate that partnership has significant influence on Competitive Advantage and also have a significant influence on Performance. Direct effect of Partnership on performance has more value than indirect effect of Partnership on performance with intervening variable Competitive Advantage.

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