

The Role of Effective Communication in Enhancing Leadership Skills Among Students of Bachelor of Management Mathematics in UiTM Perlis

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HIGHLIGHTS

- Communication is the most important key factor for a student to lead effectively because it helps them to express their opinion.
- It is important for students need to have effective communication because it helps them develop their leadership skills and can also improve on their self-confidence.
- There are three independent variables (IV) such as effective listening, performing tasks completely and effectively, and clarity of thought and expression:
- Leadership skills are used for dependent variables (DVs).

ABSTRACT

Communication is the most important key factor for a student to lead effectively because it helps them to express their opinion. Some students are struggling to socialise with other students due to a lack of communication skills. It is important for students to have effective communication because it helps them develop their leadership skills and can also improve their self-confidence. The purpose of this study was to identify the level of effective listening, performing tasks completely and effectively, clarity of thought and expression, and leadership skills, to assess the significant difference of demographic variables (gender, age, and semester) on effective listening, performing tasks completely and effectively, clarity of thought and expression and leadership skills, to determine the relationship between effective listening, performing tasks completely and effectively, clarity of thought and expression and leadership skills, and lastly to examine whether effective listening, performing tasks completely and effectively, clarity of thought and expression relate toward leadership skills. The random sample of 155 respondents is from the Faculty of Computer and Mathematical Science (FSKM) at UiTM Perlis. To achieve all the objectives, the researcher has chosen to apply the frequency test, the independent t-Test, the one-way ANOVA, the correlation, and regression performed by the Statistical Package for Social Sciences Version 20.0. (SPSS). Based on the findings, there is a positive relationship between the role of effective communication and leadership skills, but a great deal of determination is still needed to establish leadership criteria among undergraduates, as a few students have not been aware of the importance of leadership skills in their future careers. Moreover, the analysis shows that clarity of thought and expression are the most important roles that contribute to leadership



skills. The role of effective communication in enhancing leadership skills among university students must be properly studied so that students can develop their ability to soon become major leaders.

Keywords: *effective communication, leadership skills, ANOVA, independent t-test, regression, correlation, SPSS*

INTRODUCTION

Communication is the key organisational development tool for social interactions. Good communication skills are needed to convey ideas to others. Communication is also the key factor that enables a leader to lead effectively. The organisation is made up of employees, managers, customers, and investors. Effective communication helps a leader voice his or her thoughts to an organisation. Each group of an organisation may require a different style of leadership communication.

Kelvin (2016) states that verbal communication occurs mainly in a face-to-face situation. Verbal communication helps people exchange thoughts, feelings, and opinions. According to Abdan (2015), there are different ways to communicate, such as speech, writing, or sign. Verbal communication is a process for a person to deliver a voice message of his or her opinion so that the other party understands what he or she wants to share. Good communication is helping people pay attention to the presenter. A great communicator and a first-class communicator are the characteristics needed to become a leader (Luthra & Dahiya, 2015). Abdan (2015) concluded that communication and leadership are a great combination to make people succeed in their profession.

The role of successful communication is by listening. According to Caspersz & Stasinska (2015), effective listening is more than a cognitive process in which listeners need to understand verbal and non-verbal communication. For example, a conversation could only take place if the person and the receiver were standing. However, they had to avoid having a conversation when one person is standing while the other is sitting because effective communication requires eyes to eyes level to circumvent misunderstanding. People must avoid crossing their arms because they convey egotism or disagreement. It will help to build relationships and understanding with someone else (Abdan, 2015).

Moreover, the role of effective communication is clarity of thought and expression. There are non-verbal cues such as a smile, a panting, a shrugging of the shoulder, and a glaring that have meaning and are well understood in our culture. However, the meaning behind these indirect behaviours is unknown. Akilandeswari et al. (2015) stated that a person must first identify what and why he or she needs to send a message to the other person. Burg (2020) has stated that the burden of clarity in communication is always on the communicator. The communicator is the person who is committed to a common understanding for effective communication to take place. It is therefore important to make sure that what we mean is what we hear, and that what we hear is what we mean.

According to Ayub et al. (2014), leadership comes from a single word, 'leader,' which means a person or thing that can lead other people to succeed. Successful leaders are always trying to maintain a good balance by changing their leadership methods, which also has an impact on communication (Luthra & Dahiya, 2015). Henderson (2015) stated that the leadership's communication practices need to embrace and maintain good working relations. Leaders who have a good working knowledge of the organisation, therefore, may have the benefit of knowing what has gone before and may use that experience in discussions with staff members.



According to Akilandeswari et al. (2015), communication is crucial to making human beings and organisations successful. A person needs to have the ability to communicate effectively at home, at school, at work, and Wikaningrum et al. (2018) conducted a study on all staff at several private Islamic universities in Semarang city, Indonesia. It shows that effective communication plays a crucial role in enhancing the leadership skills that can be used, particularly at work, in the future.

This study explores the role of effective communication in enhancing leadership skills among UiTM Perlis students. There are three independent variables (IV) such as effective listening, performing tasks completely and effectively, and clarity of thought and expression. The leadership skills will be used as dependent variables (DVs).

METHODOLOGY

This is a quantitative study. The objective of this study can be achieved by selecting each unit in the sample frame of students at Universiti Teknologi MARA Cawangan Perlis, Kampus Arau. Quantitative research provides a method for making information accessible to audiences and standardised approaches allow the study to be reproduced over time (Goertzen, 2017). The advantages of using this method, such as taking less time to collect data and making it cheaper, because all data were collected at the same time.

Population and Sample

The population of this study consisted of degree students from Universiti Teknologi MARA Cawangan Perlis, Kampus Arau from the Faculty of Computer Science and Mathematics. Based on Majid (2018), the researcher needs to extract a sample from the targeted students for the study. The study sample is 155 Bachelor of Science (Hons.) Management Mathematics (CS248). The population sample will decide based on the Krejcie and Morgan tables (Krejcie & Morgan, 1970). The students who take the course are 258 from semester one to semester eight.

Theoretical Framework

This theoretical framework was adapted by Luthra & Dahiya (2015). The model measures the role of effective communication in enhancing leadership skills among UiTM Perlis students based on effective listening, performing tasks completely and effectively, and clarity of thought and expression.



Figure 1: Theoretical Framework of the Study

Research Instrument

The study uses questionnaires for the research instrument, including several questions, to gather feedback and information from the respondents. The respondents were asked to answer all items in the questionnaire based on five-point Likert-type scales; 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree.

Five sections cover the questionnaires:

1) Section A: Respondent's Information



- 2) Section B: Leadership Skills
- 3) Section C: Effective Listening
- 4) Section D: Performing Tasks Completely and Effectively
- 5) Section E: Clarity of Thought and Expression

Method of Data Collection

The data for this study is collected directly from the respondents through online questionnaires via various mediums such as email, WhatsApp, and telegram. To encourage participation from the respondents, researcher briefly explained the purpose of the study and made it clear to the participants that participation in the research was voluntary and anonymous (the respondents' identities would be kept confidential). This way was found very useful to clarify any doubt among participants in the survey and to motivate the participant to be more open and honest in his/her answers (Sekaran & Bougie, 2010). In addition, the researcher explained to the participants how to complete the questionnaire and allowed them to take about a week to complete the questionnaire.

The questionnaires will be prepared in two different languages, English and Bahasa Malaysia. This is because some respondents may have difficulty to understand the questionnaires and making it easier for respondents to respond to the questions asked. The quantitative research method used in this study depends on the primary questionnaire data of 155 respondents. Out of 155 questionnaires that had been distributed, all the set questionnaires successfully returned by students. According to Ary et al. (2002) the typical return of a questionnaire can reach between 70 to 90 percent of the return once administered. This shows that the process of data analysis to obtain research findings can be carried out.

Method of Data Analysis

The analysis of the study is carried out by the Statistical Package for Social Science Version 20.0 (SPSS), where it includes the modification of the raw data. The analysis can be done by adjusting the raw data collected to get the information. The SPSS is used to understand and interpret research findings. The data analysis used is a frequency test, independent t-test, one-way ANOVA, and regression. The SPSS software programmes can be used by selecting the appropriate menu to test each objective using the applicable statistical test.

Table 1: Statistical Techniques in Data Analysis

Statistical Techniques	Objectives
Frequency Test	To identify the level of effective listening, performing tasks completely and effectively, and clarity of thought and expression and leadership skills.
Independent t-Test	To compare the values of the means from two samples and test whether it is likely that the samples are from populations having different mean values.
One-way ANOVA	To compare the means of more than two groups based on a single treatment factor.
Regression	To examine whether effective listening, performing tasks completely and effectively, and clarity of thought and expression toward leadership skills.

Pilot Study

A pilot study was conducted in this research to ensure the reliability of the questionnaire. Moreover, the questions are easily understood by the students. The pilot study was conducted with respondents with similar characteristics to the target population. Fifteen respondents from the target population took part in the pilot study. The pilot study questionnaire consisted of 20 items that the respondents needed to respond



to, including demographic information. The reliability test based on the Cronbach's Alpha results shown in Table 2 is as follows:

Table 2: Reliability Test for Pilot Study

Variables	Number of Items	Cronbach Alpha
Leadership Skills	4	0.665
Effective Listening	4	0.769
Performing Tasks Completely and Effectively	4	0.730
Clarity of Thought and Expression	4	0.665

Based on the above table, it shows that the reliability measurement for all variables was greater than 0.6. It indicates that there is a good internal consistency of the measurement items in each scale. Thus, the instrument used in these studies is reliable for the actual study.

FINDINGS AND DISCUSSIONS

The findings of this study are based on the response given by the respondent to the questionnaire that was distributed and were evaluated to meet all of the specified objectives of this study.

Level of Students Understandings about Leadership Skills

Descriptive analysis involving mean and standard deviation was conducted to determine the role of effective communication in enhancing student leadership skills. The results of the descriptive analysis as shown in Tables 3 – 6.

Table 3: Level of Students Understanding about Leadership Skills

No.	Items	Mean	Std. Deviation	Interpretation Score
1	A leader must be able to motivate others.	4.74	0.457	High
2	A leader can identify the nature of a problem.	4.78	0.415	High
3	A leader is required to respond to people's requests and concerns.	4.67	0.471	High
4	A leader should be flexible about making changes in his leadership.	4.68	0.466	High
	Overall	4.72	0.452	High

Based on the Table 3, the item of leadership skills that have the high mean is "A leader can identify the nature of a problem" (mean = 4.78 and std. deviation = 0.415). The overall mean of leadership skills is (mean = 4.72 and std. deviation = 0.452). The students' level of understanding of leadership skills is therefore at a high level.

Table 4: Level of Students Understanding about Effective Listening

No.	Items	Mean	Std. Deviation	Interpretation Score
1	A leader needs to engage in matters important about their employee.	4.73	0.446	High
2	A leader has to be empathic.	4.64	0.482	High
3	A leader listens and do not interrupt the flow of the dialogue.	4.70	0.461	High
4	A leader must be an active listener.	4.72	0.449	High
	Overall	4.69	0.460	High

Based on the Table 4, the item of effective listening that have the high mean is "A leader needs to engage in matters important about their employee" (mean = 4.73 and std. deviation = 0.446). The overall mean of effective listening is (mean = 4.69 and std. deviation = 0.460). The level of students understanding effective listening is therefore at a high level.



Table 5: Level of Students Understanding about Performing Tasks Completely and Effectively

No.	Items	Mean	Std. Deviation	Interpretation Score
1	A leader will finish his/her work in order of priority.	4.66	0.474	High
2	A leader must be confident enough.	4.70	0.461	High
3	A leader should be able to complete what needs to be done during normal office hour.	4.61	0.489	High
4	A leader should spend enough time on planning his/her activity.	4.70	0.458	High
Overall		4.67	0.471	High

Based on the Table 5, the item of performing tasks completely and effectively that have the high mean is “A leader should spend enough time on planning his/her activity” (mean = 4.70 and std. deviation = 0.458). The overall mean for performing tasks completely and effectively is (mean = 4.67 and std. deviation = 0.471). The level of students’ understanding of performing tasks is therefore completely and effectively at a high level.

Table 6: Level of Students Understanding about Clarity of Thought and Expression

No.	Items	Mean	Std. Deviation	Interpretation Score
1	A leader usually knows how to respond to a new idea.	4.71	0.483	High
2	When communicating to their community, a leader should pay attention to their body language.	4.72	0.449	High
3	When the community talk to a leader, the leader should respect their perspective.	4.64	0.482	High
4	Before expressing his/her opinion, a leader should find a way to say in the most proper manner.	4.70	0.458	High
Overall		4.69	0.468	High

Based on Table 6, the item of clarity of thought and expression that has a high mean is “When communicating to their community, a leader should pay attention to their body language” (mean = 4.72 and std. deviation = 0.449). The overall mean for clarity of thought and expression is (mean = 4.69 and std. deviation = 0.468). Thus, the level of students’ understanding of clarity of thought and expression is at a high level.

The Role of Effective Communication in Enhancing Leadership Skills Based on Gender Using Independent t-Test

Differences in the role of effective gender-based communication are supported by the Independent T-Test analysis. The results of the analysis are shown in the following table:

Table 7: Results of t-Test Analysis

Variables	Gender	N	Mean	Std. Deviation	t	p
Leadership Skills	Male	45	18.5111	1.35885	-2.362	.019
	Female	110	19.0182	1.14925		
Effective Listening	Male	45	18.9778	1.30539	1.166	.246
	Female	110	18.7091	1.30170		
Performing Tasks Completely and Effectively	Male	45	18.8222	1.23009	.887	.376
	Female	110	18.6182	1.32708		
Clarity of Thought and Expression	Male	45	18.8000	1.28982	.146	.884
	Female	110	18.7636	1.45846		



The Table 7 shows the results of an independent t-Test for gender-based leadership skills, the P value for t-Test is 0.019, which is lower than the significant $\alpha = 0.05$ ($p < 0.05$) level, so there is a significant difference between gender-based leadership skills. For effective gender-based listening, the results of the analysis show that the value of P for t-Test is 0.246, which is greater than the significant level of $\alpha = 0.05$ ($p < 0.05$), there is no significant difference between the role of effective communication and effective gender-based listening. Next, to perform tasks completely and effectively on the basis of gender, the results of the analysis show that the value of P for t-Test is 0.376, which is greater than the significant level of $\alpha = 0.05$ ($p < 0.05$), means that there is no significant difference between the role of effective communication performing tasks completely and effectively on the basis of gender. Finally, with regard to gender-based clarity of thought and expression, the results of the analysis show that the value of P for t-Test is 0.884, which is greater than the significant level of $\alpha = 0.05$ ($p < 0.05$). It means that there is no significant difference between the role of effective communication, which is gender-based clarity of thought and expression.

Differences in the Role of Effective Communication in Enhancing Leadership Skills Based on Age of Students

Differences in the role of effective communication in enhancing student age-based leadership skills are supported by the One Way ANOVA analysis. The results of this analysis are shown in the following table:

Table 8: Results of One Way ANOVA Analysis

Variables		Sum of Squares	df	Mean Square	F	Sig.
Leadership Skills	Between Groups	.684	2	.342	.223	.800
	Within Groups	232.735	152	1.531		
	Total	233.419	154			
Effective Listening	Between Groups	6.475	2	3.237	1.926	.149
	Within Groups	255.499	152	1.681		
	Total	261.974	154			
Performing Tasks Completely and Effectively	Between Groups	3.119	2	1.560	.923	.399
	Within Groups	256.752	152	1.689		
	Total	259.871	154			
Clarity of Thought and Expression	Between Groups	13.328	2	6.664	3.472	.034
	Within Groups	291.768	152	1.920		
	Total	305.097	154			

The results of the analysis show that age-based leadership skills have a p-value = 0.800 higher than a significant $\alpha = 0.05$. Efficient age-based listening has a p-value of 0.149 greater than a significant level $\alpha = 0.05$. The p-value = 0.399 is greater than the significant $\alpha = 0.05$ for performing tasks completely and effectively based on age. Age-based clarity of thought and expression has only a lower p-value = 0.034 lower than the significant level $\alpha = 0.05$. The results show that there is only clarity of thought and expression that affects the role of effective communication in enhancing student age-based leadership skills. To date, the results of the analysis show that there are differences that are significant among each group.

To Examine whether Effective Listening, Performing Tasks Completely and Effectively, and Clarity of Thought and Expression toward Leadership Skills



The statistical analysis that has been used are regression. This is a test of the model's overall fitness. The hypothesis that was tested concerned with the selected independent variables that influence the dependent variable.

Table 10: Multiple Regression Analysis

	B	Beta	P	Collinearity		R square	Adjust d R square
				Statistic			
				TOL	VIF		
Constant	11.919					.116	.098
Effective Listening	.124	.131	.127	.805	1.243		
Performing Tasks Completely and Effectively	.248	.262	.005	.688	1.453		
Clarity of Thought and Expression	.000	.000	.999	.801	1.249		

The regression equation for full model was as follows:

$$\text{Leadership skills} = 11.919 + 0.124 (\text{Effective Listening}) + 0.248 (\text{Performing Tasks Completely and Effectively}) + 0.000 (\text{Clarity of Thought and Expression}).$$

Based on the Table 10, there was no multicollinearity as the variation inflation factor (VIF) was less than ten for all variables. As a result, it has been found that the p-value = 0.005 is less than $\alpha = 0.05$ only to perform tasks completely and effectively, so that it has a significant effect on leadership skills. While the result of effective listening and clarity of thought and expression shows that p-value = 0.127 and p-value = 0.999 are more than $\alpha = 0.05$, the two independent variables did not have a significant effect on leadership skills.

The coefficient of determination, R-square in Table 10, shows that only 11.6% of the variation in dependent variables, leadership skills can be explained by independent variables, students at this university have high knowledge of performing tasks in a complete and effective manner. The adjusted R-Squared is 9.8%, which is the dependent variable, and leadership skills are not sufficiently explained by the independent variables.

The study was tested on fourteen paths representing the hypotheses (H_8 , H_9 , H_{10} , H_{13} and H_{14}) which were found to be statistically significant. Table 11 presents summary of the result of the hypotheses testing.

Table 11: Summary of Hypothesis Test Results

	Hypothesis Statement	Results
H_1	There is significant difference in effective listening to their gender.	Not significant
H_2	There is significant difference in effective listening to their age.	Not significant
H_3	There is significant difference in effective listening to their semester.	Not significant
H_4	There is significant difference in performing tasks completely and effectively to their gender.	Not significant
H_5	There is significant difference in performing tasks completely and effectively to their age.	Not significant
H_6	There is significant difference in performing tasks completely and effectively to their semester.	Not significant
H_7	There is significant difference in clarity of thought and expression to their gender.	Not significant
H_8	There is significant difference in clarity of thought and expression to their age.	Significant
H_9	There is significant difference in clarity of thought and expression to their semester.	Significant



H ₁₀	There is significant difference in leadership skills to their gender.	Significant
H ₁₁	There is significant difference in leadership skills to their age.	Not significant
H ₁₂	There is significant difference in leadership skills to their semester.	Not significant
H ₁₃	There is significant relationship between effective listening, performing tasks completely and effectively, and clarity of thought and expression and leadership skills.	Significant
H ₁₄	There is significant influence of the effective listening, performing tasks completely and effectively, and clarity of thought and expression toward leadership skills.	Significant

CONCLUSION AND RECOMMENDATIONS

In summary, it can conclude that students at UiTM Perlis from FSKM appear to be aware of the role of effective communication in enhancing leadership skills among university students. There is a positive relationship between the role of effective communication and leadership skills, but a great deal of determination is still needed to establish leadership criteria among undergraduates, as there have been a few students who are not aware of the importance of leadership skills in their future careers. In addition, the role of effective communication in enhancing leadership skills among university students must be properly studied so that students can develop their ability to soon become major leaders.

Further research needs to be carried out in the future based on the study that I have carried out. The first recommendation for future research is to increase the number of respondents to answer the questionnaire because it helps to influence the collection of data. If more respondents are involved in this study, the data collected will be more accurate and the information collected will be clearer. Next, a further recommendation for future research that can be suggested is to study at another university, either locally or internationally. The researcher can have different associations between students from different study locations, as they will provide different leadership backgrounds. Moreover, it is important for students to develop effective communication skills to enhance leadership skills in the future, especially in finding a job, because they may feel that they are a leader in this study.

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CONFLICT OF INTERESTS DECLARATION

The authors declare no conflict of interests regarding the publication of this article.

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