

Learning Quality among Students in Public Higher Institution

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ABSTRACT

Learning quality refers to the full set of classroom interactions that influence student learning, including the ability of the instructor, the quality of instruction delivered by that instructor and other classroom-level factors. Learning quality is influenced by a variety of elements, including perception on academic integrity, attitudes on academic integrity and awareness on academic integrity. The purpose of this study was to discover the level of learning quality and whether there is a significant difference in learning quality between gender. The questionnaires were distributed by WhatsApp to 298 students from various programs at Universiti Teknologi MARA Kelantan, Kota Bharu campus. The sampling technique for this research is stratified random sampling and the data was analyzed using IBM SPSS Statistics Version 26. Results revealed that learning quality was high except for one item. The findings of independent t-test results showed a statistically significant mean difference in learning quality between gender. In conclusion, learning quality and knowledge management are related ideas that complement one another in helping higher education establishments cultivate a culture of excellence, creativity, and continual learning. Institutions may improve their ability to produce, disseminate, and use information for the benefit of their students by coordinating their efforts in these areas.

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INTRODUCTION

Traditionally, universities have functioned in face-to-face settings where students and faculty members meet in a classroom at a pre-arranged schedule. These classes mostly consist of lectures in which the instructor presents material to the students. However, the Covid-19 pandemic has wreaked havoc on the educational system. Because of the institution's shutdown, the students and lecturers encounter considerable challenges, which are worsened by the related public health and economic problems. To maintain academic activities, educational institutes have turned to online learning platforms as part of an ongoing initiative.

However, the sudden changes from face-to-face to online learning make the students require some time to adapt. Some of the students are having a tough time getting used to this method of learning. Due to that, the academic integrity in the education system becomes the concern of each university. During this online learning academic integrity has been questioned due to some situations. Some of the students might be attending the meeting conference but not there hearing the lecture. This action is the same as being absent from classes. Other than that, students who allowed other people to answer the assessment such as quizzes and tests on their behalf whether they do it for free or taking payment for completing them. Together with some of the students who plagiarized the work from others. According to The International Center of Academic Integrity (2022), academic integrity defines as a commitment to five fundamental values such honesty, trust, fairness, respect, and responsibility. Overall, the students need to understand and be aware of each one related to academic integrity to maintain the university's students' learning qualities.

Academic integrity is an important part of higher education. Academic integrity includes being honest and trustworthy in behaviors and activities within the educational setting. Academic integrity enhancement strategies that are reasonable and successful have long been thought of inside (Holden et al., 2021). The severity of academic integrity violations occurs and may also impact a students' willingness to report to a peer for a violation of academic integrity. Creating a culture of academic integrity has the potential to reduce academic integrity violations. Many studies have investigated types of academic integrity violations and reasons students commit these violations of academic integrity.

As seen by Erguvan (2021), during the Covid-19 epidemic, when institutions shifted to online learning, the percentage of cheating students reached an all-time high. The Covid-19 pandemic has further exacerbated the use of Internet and technology in higher education, as most educational institutions were propelled to switch to online learning and evaluation forms, facilitating students' unethical behavior (Amzalag et al., 2021). Anohina Naumeca et al. (2020) discovered poor levels of awareness of universities' academic integrity among Latvian students in a recent study. Indeed, students' plagiarism appears to be caused by a lack of understanding of academic integrity (Fatemi and Saito, 2019). As said by Farooq et al. (2019), they found that students' gender has a significant influence on their learning quality. The results show that female outperformed male student in the areas of Mathematics and English, as well as overall success scores.

Chingos (2016) defined learning quality as the full set of classroom interactions that affect student learning, including the ability of the instructor, the quality of instruction delivered by that instructor (including curriculum, teaching methods, and so on), and other classroom-level factors such as peer effects. There are several aspects that influence learning quality, including perception on academic integrity, attitudes on academic integrity and awareness on academic integrity. Therefore, to obtain high learning quality, students need to learn, and factors influencing learning include motivation, attitudes, interests, study habits and self-concept (Mulia et al., 2021).

However, there is no such study that focus on learning quality among Malaysia students. Most Malaysian studies focus on online learning rather than learning quality, such as the impact of Covid-19 in

e-learning on students and the challenges of implementing e-learning in Malaysia. As a result, this study aimed to discover the level of learning quality and to identify the mean difference in learning quality between genders.

HYPOTHESIS

There is one hypothesis for this study which is:

H₀ : There is no significant mean different in learning quality between gender

H₁ : There is a significant mean different in learning quality between gender

LITERATURE REVIEW

Learning Quality

The learning quality was defined in various perspectives. Ghufron and Hardiyanto (2017) revealed two perspectives from which the concept of quality can be examined: etymology and epistemology. Etymologically, quality has been equivalents to "degree". Therefore, if one regards an excellent quality book then the person wants to say that the book has a high degree of content and the procedures of exposure. Epistemologically, quality has many meanings as much as the expert who develops the meaning of quality. The meaning of quality is strongly influenced by the point of view of developers. For example, quality means the degree of excellence of a product or the work, both in the form of goods and services.

The concept of learning quality cannot be separated from the expert's perspective on the learning activities itself. If at this time a discourse that the meaning of learning is categorized into three clusters, namely learning as a purposeful activity, communication process, and a system, then the concept of learning quality will be influenced by the characteristics of the meaning of learning. According to La Trobe's university academic integrity, if they allowed cheating or plagiarism, it would mean no assurance of learning quality. Previous study shows that researchers analyzed the available evidence on education policy to determine what tends to work to improve student learning quality in developing countries (Masino and Niño-Zarazúa, 2016).

Comprehending learning quality still requires understanding the basic concept. It focuses on life skills, literacy, and numeracy. It is also directly related to essential elements like teachers, material, methodology, curriculum, assessment system, policy, planning, and management (UNESCO, 2003). As a result, quality education helps us determine what desired changes the educational institution intends to see in each student. Setting a high standard and helping the student work toward them. According to UNICEF (2000), learning can happen everywhere, but the effective learning outcomes that educational systems often seek take place in circumstances that are conducive to learning. The quantity and quality of education inputs the effectiveness of the curriculum and teaching methods and the quality of the institutions and home environment.

The future of the country depends on the learning quality being provided in all schools and universities and it plays a significant role in student education. Alternatively, quality is at the heart of education. Performance on licensure examinations is not the only indicator of learning quality. The quantity and quality of an institute influences the effectiveness of the curriculum and teaching methods, as well as the quality of the university and college environment (Md. Abdur Rashid, 2019).

Student learning quality has affected millions of students, lack basic literacy and numeracy skills despite having completed several years of school. Furthermore, because of gender norms and gender-based discrimination, girls may benefit less than boys when they do attend school or education institutions, potentially widening existing gender gaps in learning outcomes. As reported by Jameel (2022), findings

from 54 studies of learning-improvement programs in low- and middle-income countries, all of which reported program impacts by gender, revealed that in a small number of cases, aspects of program implementation, such as preferential treatment given to boys by tutors or gender stereotypes, prevented girls from benefiting from programs to the same extent as boys. Showing that some factors might affect the learning quality towards gender.

Learning Quality and Gender

Female students demonstrated more positive attitudes and achievement in single-gender settings, whereas male students experienced more positive attitudes and higher scores in mixed-gender collaborative environments, either e-learning or in the classroom (Almasri, 2022). This study found that the learning quality differences between gender are significant.

As said by Ayoub and Aladwan (2021), gender has a moderating effect on the relationship between Academic Integrity and Academic Performance of students taking online classes. The study's findings revealed that gender has no effect on learning quality for both male and female students. Gender interaction has an insignificant relationship with academic integrity and learning quality, indicating that the higher the academic integrity, the higher their learning quality. The results of the study suggest that the demographic variable, gender, has no statistically significant effect.

METHODOLOGY

Sampling

In this study, 1324 undergraduate students were randomly selected from six different courses in UiTM Kota Bharu, Kelantan. The sample size was calculated by Raosoft using a 95% confidence interval, 5% of margin of error and 50% response rate. Thus, the sample size recommended by Raosoft is 298 students. The sampling technique applied for this study is a stratified random sampling method. This method is a technique derived by dividing the elements of the population into non-overlapping groups called strata which are courses.

Data Collection Method and Measuring Instrument

The data collection method for this study is questionnaires. The questionnaires were distributed to 298 respondents via the WhatsApp application. It took two weeks to acquire adequate data. The questionnaire is divided into 2 parts which are Section A for demographic profiles of respondents, and Section B for Learning Quality. Demographic profiles consist of 4 questions covering age, gender, course and CGPA. For section B, there are 7 questions that was provided to the students. The questions are using the Likert scale questions ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). According to Finstad (2010), seven-point Likert scale items have been demonstrated to be more accurate, easier to use, and more accurately reflect a respondent's actual opinion.

Data Analysis

The reliability test that was chosen for this research to test the questionnaire is Cronbach's alpha. The acceptable alpha value in reliability analysis is 0.8 in the intelligence test case, and the acceptable alpha value in the reliability analysis test is 0.7 in the ability test case (Glen, 2022).

For level of learning quality, item that recorded the mean above 3.5 are considered high while value less than 3.5 are categorized as low.

Next, the independent t-test helps to compare whether there is a significance mean difference of two sets of data (Glen, 2022). In this study, independent t-test used to determine the significance mean differences in learning quality between male and female students. Levene's Test of Equality of Variances can be used to test the assumption of variance homogeneity. The variances of the groups can be considered equal when the p-value is greater than 0.05. Lastly, the p-value must be greater than 0.05 if there is a significant mean difference between variables.

STUDY FINDINGS

Descriptive Statistics

The questionnaires were distributed to 1324 undergraduate students of Universiti Teknologi Mara Kelantan, Kota Bharu campus. Table 1 reveals that most of the respondents are between the ages of 22 and 24 years old, with 178 respondents and a percentage of 59.73%. Then followed by respondents aged 19 to 21 years old, with 117 respondents representing 39.26%. Only three (1.01%) of the respondents aged above 25 years old. For gender, majority of the respondents are female, with 68.79%, while 31.21% of the respondents are male. Based on course, most respondents (92 out of 298) are from the Bachelor of Finance with percentage of 30.87%. Then, Bachelor of Statistics comes in second with 56 respondents, followed by Bachelor of Marketing with 50 respondents. There are 49 and 45 respondents for Bachelor of Islamic Banking and Bachelor of Business Eco-nomics, with percentages of 16.44% and 15.10%, respectively. Another 6 respondents are from the Bachelor of Logistics and Distributive Trade.

For cumulative grade point average (CGPA), indicates that the largest percentage of GPA is 58.06%, where 173 respondents with CGPA ranging from 3.50 to 4.00. Following that, 102 (34.23%) and 15 (5.03%) respondents hold GPAs ranging from 3.00 to 3.49 and 2.5 to 2.99, respectively. The remaining 8 respondents had GPAs less than 2.50, with a percentage of 2.68%.

Table 1 : Demographic profiles of respondents

Variable	Frequency (n)	Percentage (%)
Age		
19-21 years old	117	39.26
22-24 years old	178	59.73
>25 years old	3	1.01
Gender		
Male	93	31.21
Female	205	68.79
Course		
Bachelor of Finance	92	30.87
Bachelor of Statistics	56	18.79
Bachelor of Marketing	50	16.78
Bachelor of Islamic Banking	49	16.44
Bachelor of Business Economics	45	15.10
Bachelor of Logistics and Distributive Trade	6	2.01
CGPA		
3.50-4.00	173	58.06
3.00-3.49	102	34.23
2.5-2.99	15	5.03
<2.5	8	2.68

Reliability Analysis

To assess the reliability of this study, the variables were tested using Cronbach's alpha value. Table 4.1 summarizes the value of Cronbach's alpha for latent variables. Based on Stephanie (2022), the acceptable Cronbach's alpha for the research study is 0.7. Based on Table 4.1, the Cronbach's alpha coefficients for learning quality were 0.814 which were above 0.7. It can be concluded that learning quality was reliable and all items can be used in the study

Table 2: Result of Reliability Test

Variables	Cronbach's Alpha	N of Items
Learning Quality	0.814	7

Referring Table 3, the mean for all items under learning quality lies between 3.46 and 6.48. The highest mean recorded by the statement that social media gives easy access and retrieve to information by using any technology devices (ie smartphone, tablets, laptops) at anytime and anywhere. The lowest mean presented by the statement that the quality of learning will improve if the understanding of academic integrity is higher. Item that recorded the mean above 3.5 are considered high while value less than 3.5 are categorized as low. Therefore, it can be concluded that the learning quality among students was categorized as high except for one item (The quality of learning will improve if the understanding of academic integrity is higher).

Table 3: Mean for Learning Quality

No	Learning Quality	Mean
1	I feel the quality of education I am receiving has suffered tremendously since we started taking classes online.	5.43
2	Social media gives easy access and retrieve to information by using any technology devices (ie smartphone, tablets, laptops) at anytime and anywhere.	6.37
3	I am not really learning much during online lectures since I am rarely mentally tuned in.	5.98
4	I do not need to study more because I can refer to fellow answers during tests or exams.	6.48
5	The quality of my learning will improve if the understanding of academic integrity is higher.	3.46
6	I think copying and plagiarism would affect the learning quality.	4.87
7	Signing into class and never having to participate can make our learning quality become low.	6.14

Independent t-test

The independent t-test was used in this study to compare the mean difference in Learning Quality between gender. There are two assumptions that must be fulfilled before proceeding with the independent t-test.

Normality Assumption

The first assumption that must be achieved is a test for normality assumptions by using a boxplot. Since median for female and male being in the middle of the box plot, therefore, the normality assumption can be concluded to be satisfied in this study. The distribution of learning quality for male and female follows the normal distribution.

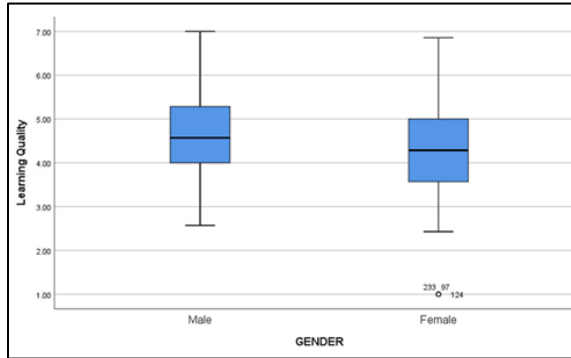


Figure 1: Boxplot for Male and Female

Homogeneity Assumption

The second assumption that must be verified is a homogeneity assumption. Based on Table 4, the p-value is 0.757 which is more than alpha value, $\alpha = 0.05$. Therefore, the variances for male and female are equal. Since the null hypothesis is rejected.

Table 4: Levene’s Test for Equality of Students’ Gender

		Levene’s Test for Equality of Variances	
		F	p-value
Learning Quality	Equal variance assumed	0.096	0.757

According to Table 5, the p-value is 0.004 which is less than alpha value, $\alpha = 0.05$. Therefore, there is a significant mean difference in Learning Quality between male and female. 95 percent confidence interval of the difference lies between 0.11098 and 0.59645.

Table 5: Independent T-test

		p-value	95% Confidence Interval of The Difference	
			Lower	Upper
Learning Quality	Equal variances assumed	0.004	0.11098	0.59645

Table 6 shows the mean values for male and female which are 4.6359 and 4.2822. Since males have a higher mean value than females, it can be assumed that male students have a higher Learning Quality than female students.

Table 6: Comparison of Learning Quality for Male and Female students

	Gender	Mean
Learning Quality	Male	4.6359
	Female	4.2822

CONCLUSION

The data produced from this study were used to provide insights into learning quality among students. Even though, Covid-19 pandemic has changed to the endemic phase, online learning will always be relevant and might be implied regularly in the future. The generalization of this present study will be a great contribution to vast knowledge in relation to learning quality.

According to the finding of this study, the level of learning quality among students was considered good except for one item which is the quality of learning will improve if the understanding of academic integrity is higher. Therefore, the students should have more awareness on academic integrity to ensure the increase of learning quality. In essence, learning quality in higher public institutions is vital for individual development, societal progress, economic prosperity, and global well-being. It serves as a cornerstone for building a knowledgeable, skilled, and empowered citizenry capable of addressing the complexities of the modern world.

For the objective to determine the mean difference in learning quality between genders, the outcome for this objective shows a statistically significant mean difference in learning quality between gender. Result revealed that males have a higher mean value than females, it can be assumed that male students have a higher learning quality than female students. Therefore, female students should improve the awareness and perception on learning quality.

Improving learning quality in higher public institutions requires a multifaceted approach that involves various stakeholders, including administrators, faculty members, students, policymakers, and community. In conclusion, learning quality and knowledge management are related ideas that complement one another in helping higher education establishments cultivate a culture of excellence, creativity, and continual learning. Institutions may improve their ability to produce, disseminate, and use information for the benefit of their students by coordinating their efforts in these areas.

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