ServQual Model Test on Teacher Education Program (PPG) Management: An Empirical Survey of Service Quality and PPG Student Satisfaction at Widya Dharma University, Klaten

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Abstract

The aim of the research was to analyze the index model of PPG FKIP Unwidha student satisfaction from the quality of online learning services by analyzing the gaps in each element of service. The research method used was in the form of quantitative research to test the gap between expectations and perceptions of service quality. Respondents in the research were 60 students. The sampling technique was carried out by purposive sampling. Quantitative tests in research were in the form of validity test, instrument item reliability, Servqual model gap test. Research findings show that all dimensions tested have a positive satisfaction value with the largest positive value on the empathy dimension. Lecturers and education staff at the Unwidha PPG Program must be able to improve service quality with priority improvements starting with the lowest positive value respectively on the next positive value.

Keywords: satisfaction index, Servqual, learning, PPG students

1.   INTRODUCTION

The real threat that Indonesia must face at this time is that the number of people infected with Covid-19 exceeds one million cases, so that Indonesia is included in the category of the top 20 countries in the world where the population has been confirmed with the virus (Kompas.com, 2021). Even though vaccination activities have started since the beginning of January 2021, in the following period post-Eid 2021 events emerged with the number of new confirmed patients continuing to increase. This can happen with the emergence of a new variant of the Delta virus mutation from India in Kudus and Cilacap. The

1134

Ministry of Education and Culture of the Republic of Indonesia took swift steps for the safety and health of students so that until now they are still implementing blended learning at school and university institutions (Kemendikbud, 2020). The readiness conditions of each private higher education are different regarding the readiness of supporting infrastructure in starting a new online learning model.

This Government policy makes schools and higher educations must be able to adapt to carrying out new distance or online learning. Despite experiencing various obstacles, the enthusiasm for teaching lecturers must continue to be pursued. Based on current conditions in the field, it can be recognized that online learning models cannot be implemented en masse in clusters of middle and lower class private higher educations and have not been tested effectively and efficiently. Innovation is demanded, the adaptability of lecturers in carrying out online learning in the present and in the future. Online learning at this time can be a necessity to enter a new normal era in the future (Heryani, 2021).

The fact is that at this time in several lower and middle private higher educations there are still many obstacles to the quality of service in serving students, especially in the online learning model. The many problems with the quality of learning services in private higher educations due to the limited modern learning infrastructure for lower cluster Private Higher Education during the Covid-19 pandemic makes research on student satisfaction very important to study. The biggest source of income of private higher educations comes from student tuition fees. The reduced quality of service results in a decrease in the quality image of private higher educations which leads to a reduction in the number of admission of new students in the future which can disrupt the operational activities of private higher educations. From the problems on the background of the problem, it is necessary to measure the quality of online learning services for PPG FKIP Unwidha students. The formulation of the problem posed in the research is "Are the online learning services accepted by PPG students at the Faculty of Teacher Training and Education (FKIP) Unwidha during the Covid-19 pandemic satisfactory?"

2. LITERATURE REVIEW
2.1 Servqual concept

Research examining the measurement of customer satisfaction on the quality dimension had been carried out by many researchers such as Gronroos (2004) who examined the quality dimensions including professionalism and skill, attitude, behavior, accessibility, reliability, trustworthiness, recovery, reputation, credibility and service cape.

Brady and Cronin (2001) examined the dimensions of learning quality, including the quality of learning interactions, the quality of the physical environment of learning activities and the quality of learning outcomes. Parasuraman, Zeithaml and Berry's (1998) research is very popular which examined service quality on five main dimensions including the dimensions of reliability, assurance, responsiveness, empathy and tangibles.

Five dimensions of the quality of learning services according to Parasuraman et al. include the physical evidence dimension, this dimension emphasizes the visible quality of the physical appearance of learning, such as lecturer equipment, learning facilities and infrastructure, laboratories, LCDs, air conditioners in classrooms, internet bandwidth capacity for online learning, laptops and data packages during activities online learning in the era of the Covid-19 pandemic.

Reliability dimension, this dimension tests the ability of lecturers and learning staff to provide service activities to PPG students according to promises. Complaints against students during the online learning process are carried out quickly and efficiently, such as in promotional brochures, banners, promotions through social media carried out by the university, whether they are right according to what is stated in these various media.

Responsiveness dimension, this dimension measures the desire, response, intention to help PPG students in providing the best possible online learning services. When PPG students experience learning difficulties in the Covid-19 pandemic era through online learning models, what is the responsiveness of lecturers, PPG program education staff in providing solutions to problems experienced by PPG students.

The Assurance dimension, it is the knowledge and ability of lecturers, PPG program education staff in providing services in a professional manner. So that in a pandemic condition what they promised is in accordance with reality. Fulfillment of this promise can foster students' trust in the institution.

The Empathy Dimension, this dimension is a good concern for the actors of the study program institutions for PPG students. This dimension can be used as an analogy, such as the feeling when the PPG study program manager acts as if he were a PPG student who needed service.

The Servqual concept is based on a model known as the Conceptual Model of Service Quality, which measures gaps that can arise. This concept examines the five gaps and the fifth gap between service providers in the PPG study program and PPG students can be a starting point for fixing gaps at a later stage.

2.2   Early research studies related to Servqual in Higher Education

From several literatures, a conceptual basis for measuring the service quality of higher education institutions is obtained by using the Servqual Scale which can be used in several conditions. Several question items in the service quality variable can be adjusted according to the application and research objectives to be achieved. Hennig-Thurau et al., (2001) examined student evaluation of the quality of higher education services in several aspects: (a) structure, in the form of physical learning facilities, competence of lecturers and academic staff, (b) process, namely in the form of academic administration activities , the quality of mid-term exams, final exams and learning exams in the form of practicum and academic staff's concern for student problems, (c) learning, including student evaluation of the benefits of learning models that are applied to face challenges in the future.

Service quality is very important for higher education institutions. As an organizational entity, Private Higher Education is obliged to always prioritize excellent service quality as a form of responsibility to stakeholders. Competition between higher Educations in Indonesia is currently getting tougher and consumers are increasingly trusting higher education institutions that are capable and ready to face the changing challenges of learning technology (UII, 2020).(Sung & Yang, 2009) examined student confirmation of the quality of Higher

3.   RESEARCH METHOD

3.1   Method of collecting data

The survey method used in research was to dig up in-depth information directly to students who received online learning services through questionnaires. The survey method is a research method by taking research samples from the population through a questionnaire as the main instrument (Singarimbun and Effendi, 1989).

3.2   Required research data

The main data needed in research was data taken from the respondents directly. In this activity, a number of PPG Unwidha Program students who received online learning services during the Covid-19 pandemic were taken as respondents so that information on satisfaction and dissatisfaction could be obtained from the quality of learning services that had been experienced. Additional data was used in research where this data was obtained from searching for information on journal publications via the internet and other sources relevant to research activities.

3.3   Data collection technique

Questionnaires were distributed non-randomly to PPG study program student respondents to find out confirmation of satisfaction or dissatisfaction with the quality of online learning services during the post-Covid-19 pandemic. Follow-up literature search was carried out to obtain new information during the analysis and final reporting of research activities.

3.4   Sampling Method

The population is all objects that needs to be studied. The population in the research were all students of the PPG program of Unwidha who could experience the quality of online learning services during the post-Covid-19 pandemic in 2022. The students taken as the research sample were 60 respondents by purposive sampling. Data was taken in January 2023 via a google-form questionnaire.

3.5   Data Analysis

Quantitative tests carried out in research activities include testing the validity and reliability of instruments as well as confirmation tests of the Mathematical Importance ServQual model to draw conclusions about the quality of service felt by PPG students during online model learning.

3.6   Data analysis method
a   Test on the validity and reliability of the instrument

The validity test carried out in research was to measure the ability of the questionnaire to carry out its functions in the sense that the instrument in the questionnaire was able to measure what it actually wanted to measure (valid). The reliability test was carried out to test whether the instruments in the questionnaire could describe consistency, constancy (Sekaran, 2007). The validity test used the Pearson product moment correlation and was corrected through the part whole test (Santoso, 2007). The reliability test used the Hoyt model. The statistical programming tool used the SPSS 21 program.

b.   Student Confirmation Test on the quality of learning services

The service quality confirmation test was carried out using the Importance ServQual model gap test (Cronin & Taylor, 2002): **I kj = $\sum$ (P ij-Eij),** where Ikj was the confirmation

of satisfaction or dissatisfaction, Pij was the perception of perceived service quality while Eij was the expectation of service quality

4. RESULT

In this study, a sample of 60 respondents was finally used. Respondents are students of the Unwidha PPG Program. The characteristics of the subjects studied in the study were adult respondents, with the reason that the subjects could still feel and judge the quality of service, besides that the subjects studied had a perfect understanding, in assessing how the service quality of the PPG study program of Unwidha Klaten is in carrying out learning and being able to feel satisfaction from the service. In order that the research is optimally successful, researchers conducted pre-survey activities and literature studies. From the results of the pre-survey obtained attributes which can then be categorized into 15 dimensions of service quality where 4 items are Tangibles dimension, 2 items are Reliability dimension, 3 items are Responsiveness dimension, 3 items are Assurance dimension and 3 items are Empathy dimension. The five dimensions were then arranged into questionnaire statements that were easily understood by students.

4.1 Validity and Reliability Test
a. Validity Test

In this study, it was tested early on 30 answers from early-stage student respondents with the results described in table 1 as follows:

Table 1. List of Valid Item table

Item	Rpq Coef.	P	Status
El	0.473	0.005	Valid
E2	0.691	0.000	Valid
E3	0.589	0.000	Valid
E4	0.498	0.003	Valid
E5	0.656	0.000	Valid
E6	0.649	0.000	Valid
E7	0.394	0.017	Valid
E8	0.456	0.006	Valid
E9	0.728	0.000	Valid
E10	0.584	0.001	Valid

Ell	0.530	0.002	Valid
E12	0.358	0.028	Valid
E13	0.550	0.001	Valid
E14	0.570	0.001	Valid
E15	0.781	0.000	Valid
PI	0.890	0.000	Valid
P2	0,979	0.000	Valid
P3	0.472	0.000	Valid
P4	0.827	0.000	Valid
P5	0.652	0.000	Valid
P6	0.762	0.000	Valid
P7	0.804	0.000	Valid
P8	0.578	0.004	Valid
P9	0.647	0.000	Valid
P10	0.863	0.000	Valid
P11	0.810	0.000	Valid
P12	0.770	0.000	Valid
P13	0.759	0.000	Valid
P14	0.788	0.000	Valid
P15	0.883	0.000	Valid

Source: primary data processed 2023

The results of the validity test on the questionnaire attributes in the table above showed that all items were valid.

b.   Reliability Test

The item reliability test is used to determine the extent to which measurements can give the same or consistent results if repeated measurements are carried out on the same subject. This test was carried out factor by factor, as many as the factors in the questionnaire. The approach taken in this reliability test was the Hoyt technique, with consideration of the high degree of flexibility in its application. This technique only requires that all items measure the same thing (univocal). Hoyt's reliability test may only be used to test intra-factor reliability (Sutrisno Hadi, 1991).

From the results of the study, the results of the reliability test are broken down in table 2 as follows:

Table 2 Reliability Test

Factor	Rtt	P	Status
expectation	0.870	0.000	Reliable
Service performance	0.939	0.000	Reliable

Source: primary data processed 2023

From the results of the reliability test it can be seen that all items on the two factors passing the validity test are reliable. To be said to be reliable, the Rtt value of a measuring instrument must be greater than the r table value. From the table above it can be concluded that the 15 statement items in the questionnaire are reliable, so they can be used in the next analysis stage.

4.2   ServQual Analysis

To analyze the level of community confirmation, this research used the Weighted Servqual formula (Cronin & Taylor, 1992). This formula was used to quantitatively calculate the gap between the quality expected by students and the quality actually felt by these students, while the formula is as follows: $I\,kj = \sum Iij(Pij - Eij)$

Quantification of the total average confirmation value of the quality of online learning services was obtained by + 40 points. The maximum or minimum confirmation value with a total of 60 student respondents can be achieved by multiplying 4 points so that a maximum IKJ = 240 points and a minimum IKJ = -240 points.

The maximum confirmation value is achieved by assuming that PPG students have minimum expectations for the quality of service accepted and experience the maximum actual performance for perceived service quality. Conversely, the minimum confirmation value is achieved with the assumption that PPG students have maximum expectations for the quality of online learning services accepted, but in reality they experience minimal actual online learning performance for the quality of services accepted.

The research quantitative test explains the confirmation value of the quality of online learning services accepted with a sample of 60 students in the PPG Program of Unwidha

having a distance interval of 240 points, this figure is then divided into 4 confirmation level scales with a neutral mean value: very dissatisfied, dissatisfied, satisfied and very satisfied according to PPG student preferences. From the quantitative test, the value of the interval range is 60 points. Figure 1 explains the quantification of the confirmation test of the average students of PPG Program Unwidha on the quality of online learning services during the post-Covid-19 pandemic as follows:

Very dissatisfied Dissatisfied Neutral   Satisfied Very satisfied
I..................I..............I.................I..............I
-120   -60   0   60   120
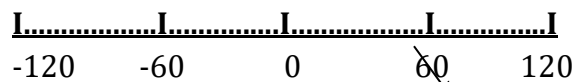
Average confirmation of satisfaction with the quality of learning services (+ 40 points)

Figure 1   Average confirmation of student satisfaction from service quality

From the information above, it can be explained that the average confirmation value of PPG students of Unwidha on the quality of online learning is + 40 points, which is in the satisfied category. This value is on the right side of the line from the neutral point (0) so that it is stated that the quality of service for the academic community in the PPG program of Unwidha is on average satisfying the students.

Based on the analysis of community confirmation as a whole, the following table presents an analysis of the level of confirmation of the dimensions of service quality which includes the Tangibles, Reliability, Responsiveness, Assurance and Empathy dimensions, to determine the extent to which each dimension influences the quality of learning in the Unwidha PPG Program which is described in table 3.

Table 3 Confirmation per dimension

Dimension	Positive confirmation
Physical evidence	20
Empathy	70
Assurance	45
Reliability	30
responsiveness	35

Source: primary data processed 2023

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From the findings of the primary data, the physical evidence dimension has the lowest satisfaction value of 20 points, followed by reliability of 30 points, responsiveness of 35 points, assurance dimension of 45 points and finally empathy dimension of 70 points. The dimension of physical evidence is related to the ability of institutions in the Unwidha PPG Program to provide visible online learning facilities such as physical equipment and the ability of lecturers to teach online, online learning facilities and infrastructure, laboratories, internet bandwidth capacity for online learning, laptops and data packages. The dimension that has the lowest satisfaction value is improved as soon as possible, then further improvements need to be made to the dimension that has the satisfaction value on the second, third and so on.

The research findings above are different from the findings (Irawati and Jonatan, 2020) where during the Covid-19 pandemic, online learning at the Faculty of Engineering of Private Higher Education in Surabaya found 17 attributes that were measured, all of which still gave negative values. This condition occured because the learning model that was required online still provided weaknesses in certain subjects that required student involvement in developing conative and psychomotor dimensions.

The impact of online lectures during the Covid-19 pandemic conditions still presents various problems, including the findings of Argaheni (2020) who conducted a meta-analysis of learning model research explaining that online learning createsd obstacles that tended to confuse students, students became passive, reduced productivity and creativity so that information accumulated learning that was less useful and could increase stress among students.

After the discussion, several conclusions are drawn as follows:

Confirmation of the quality of online learning services for PPG students of Unwidha during the post-Covid-19 pandemic has a positive average satisfaction score of 40 points. The standard that must be obtained to obtain minimum satisfaction is that the confirmation test value must have points equal to zero. From the average satisfaction test, it is obtained a positive value of 16 percent. Thus, it is concluded that the management of PPG Study Program of Unwidha has been able to provide satisfactory services to students.

5.   RECOMMENDATION

The management of PPG study program of Unwidha should continue improving to develop online learning infrastructure and lecturer skills to be skilled in modern learning practices. Surveys of the quality of learning services should continue to be carried out

periodically. The recovery condition due to the Covid-19 pandemic is predicted to take a relatively long time because community immunity has not been achieved through comprehensive vaccination and the emergence of various new mutations of virus variants so that economic recovery is also expected to slow down. For learning models in the future, innovative higher education online learning models can become mandatory learning innovation models in the new normal era to achieve prime competitiveness of university institutions. Big private higher educations such as Telkom University and Binus University are two of the leading private higher educations in Indonesia, which are currently increasingly in demand by the public because of their achievements in high technology learning innovations in Indonesia.

6.   GRATITUDE

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