

# The Study of Quality Service of Education in Public Vocational Schools in Using ServQual Model

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**Abstract**—The research aims to determine the level of quality service of education in Public Vocational Schools in West Lombok. The research employed the ServQual (service quality) method, involving 200 students of Public Vocational Schools in West Lombok who were selected through cluster proportional random sampling. The data were collected using questionnaires using Likert scale. The research dimension and instruments were adapted from the previous publication, consisting of the aspects of reliability, responsiveness, assurance, empathy, and physical/tangible feature. All data were analyzed statistically by descriptive statistics and comparative analysis. The research showed that there was a significant difference of quality service of education between reality and students' expectation. The average value of students' expectation on the 5 aspects of the quality of education service was higher than the average value of reality. It inferred that the level of quality service of education in public vocational schools in West Lombok was not satisfactory yet.

**Keywords**—service quality; vocational education; servqual

## I. INTRODUCTION

The main problem faced by vocational high school in Indonesia is the gap between the graduates with workers need in the industries or the job market. BPS claimed that around 1,621,402 graduate of vocational high school were jobless. This number is higher than the number of senior high school graduate, within the last 5 years (2010 until 2015) [1]. This condition is due to the lack of education service quality on the eight education national standard (SNP) [2]. In theoretical construction, these eight standards are reflection from 10 dimensions of service quality namely: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, empathy, and tangibles [3, 4]. The lack of fulfillment of these aspects is indicated as the cause for low capability of vocational secondary graduates, among other things, such as changes in the job market and sudden increase in vocational graduates [5]. Similar with conditions in Indonesia, Sri Lanka indicates the fulfillment of service quality factors in other aspects (such as library services) on responsiveness, supportiveness, building environment, collection and access, furniture and facilities, technology, web services and service delivery [6]. The Palli and Mamilla also ensure good service quality levels in assurance, reliability,

tangibility, and empathy aspects in India, although responsiveness is weak [7].

Based on the problems and findings, this study was conducted to confirm the signals. In addition, the inconsistency of the findings in some of these countries demands the importance of confirmation. Differences in levels of education and in the context of Indonesia become another renewal of this study. This research is conducted to address the above mentioned concerns. Therefore, the aim of this research is to find the level of quality on education service in state vocational secondary schools in Regency based on tangible, reliability, responsiveness, assurance, and empathy dimensions.

## II. METHODOLOGY

### A. Types of Research and Sampling

This research used ServQual (*service quality*) method as in developed by Parasuraman et al [3]. ServQual was conducted in state vocational secondary schools of tourism in West Lombok Regency – Indonesia involving 200 students as sample. All samples were determined through cluster proportional random sampling, due to the subjects' homogeneity.

### B. Method and Research Instrument

Method and instrument used in this research was adapted from questionnaire developed by Parasuraman et al and Dursun et al [3, 8]. The questionnaire consists of 22 statements that represent 5 service quality dimensions namely, *tangible*, *reliability*, *responsiveness*, *assurance*, and *empathy*. Each item is presented in two models namely student perception and student hope aspects then later compared. If the accepted quality service fulfils the hopes or above expectation, it can be concluded that the service is of good quality, and vice versa. Tangible aspect consists of 4 items (sample statement: “new references such as textbooks, must be complete in the library”); reliability consists of 5 items; responsiveness 4 items; assurance 7 items; and empathy 3 items.

### C. Technical Analysis

This research conducted technical analysis using descriptive statistics and comparative analysis (T-test), and analysis on compatibility of perception with expectation using Importance Performance Analysis quadrant from Martilla and

James [9]. Result analysis is based on: (1) quadrant A (Concentrate Here); (2) quadrant B (Keep up with the good work); (3) quadrant C (Low Priority); and (4) quadrant D (Possibly Overkill).

III. RESULTS

A. Validity and Reliability Test Result

Cronbach’s Alpha analysis was used for all dimensions of ServQual and the research refers to the minimum point of 0.70 [10]. Overall there is a consistency on internal and reliability for all items (Table 1).

TABLE I. TEST RESULTS ON EDUCATION SERVICE QUALITY

No	ServQual Component	Reality	Expectation
1	Tangible	0.699	0.724
2	Reliability	0.824	0.740
3	Responsiveness	0.776	0.756
4	Assurance	0.763	0.785
5	Empathy	0.758	0.754

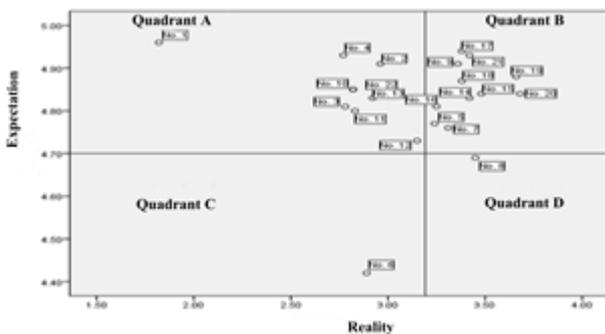
B. The Conditions of Education Service Quality of Vocational Schools in West Lombok Barat Regency

Research result indicates that quality of education services in vocational schools of West Lombok Regency can be classified into 4 sections based on quadrant analysis on the Importance Performance Analysis [9] (Fig.1 and Table II).

TABLE II. RESULTS ON EDUCATION SERVICE QUALITY

No	Service Quality Aspects	Expectation		Reality		Mean Dif	t-value
		Mean	SD	Mean	SD		
1	Tangible	19.6	0.845	10.33	3.54	-9.27	36.25
2	Reliability	23.51	1.598	16.24	3.16	-7.27	32.36
3	Responsiveness	19.22	1.248	11.61	3.04	-7.61	32.39
4	Assurance	29.18	1.594	20.99	3.98	-8.19	28.48
5	Empathy	14.55	0.996	9.58	2.56	-4.97	26.15

Source: Primary Data



Source: Primary Data

Fig. 1. Quadrants on education service quality.

The following can be summarised based on table 2 and picture 1: **First.** Quadrant A. Items that fall into this quadrant are statements number (1) (2) (3) (4) (10) (11) (12) (13) and (22). All items in this quadrant are important indicators, however, they all show lack of performance. Items under this quadrant must be prioritised. **Second.** Quadrant B. Items in this quadrant are number (5) (7) (9) (14) (15) (16) (17) (18) (19) (20) and (21). Items in this quadrant are considered important and have shown good performance. Thus, the good work must be kept up. **Third.** Quadrant C. Item in this quadrant is statement number (6). This particular item is considered a less important indicator and it is also not fully performing. **Forth.** Quadrant D. Item in this quadrant is no (8).

IV. DISCUSSION

The research results indicate that there are differences between education service quality in vocational schools on tangible, reliability, responsiveness, assurance and empathy dimensions between perception and expectations. All attributes have negative scores. This result is in line with research conducted by Qadri that states: their expectations were higher than the experience of service quality from the existing bank in Pakistan in the all aspect of servqual [11]. This condition is similar to that in Pakistan which also shows low support for these five dimensions [12]. The highest gap in this research is tangible dimension, although findings in [2] by Sukardi and Wardana indicate the highest gaps are found in content and process standard dimensions. Tangible dimension is very influential on the other dimensions because standard on school infrastructure and facilities is part of the policy for fixing and improving basic services and quality of education process, including in the field of library services [6]. Tangible dimension is the ability of company to show to external parties its existence, such as physical facilities, technology, and employee appearance. Physical facilities, employee equipment, and communication facility are an integral part in providing quality education [3].

Negative scores were achieved for other dimensions such as reliability, responsiveness, assurance. Responsiveness dimension indicates that school management lacks response on the needs or problems faced by students needing immediate attentions. When in fact responsiveness dimension is important in providing immediate service (responsive) and accurate towards consumers [3]. In other words, responsiveness is a form of school’s ability in assisting consumers and provide accurate services [4]. In this dimension, it appears to be confirmed by Palli and Mamilla findings in India that the responsiveness aspect still has weak support [7]. Assurance dimension also indicates a lack of achievement when in fact this dimension is a determining factor in education quality. This achievement of dimension is equal to the achievement in Pakistan [12] which shows no strong support. As assurance dimension factor identified by Mostafa as an important to quality service is that students want to feel safe [13]. Some important aspects in this dimension according to Ardalan et al., namely: safety, program standards, and instructor credentials [4].

The research result on empathy dimension indicates gap value on all its attributes. Empathy dimension has the lowest

gap. This result is in line with the research result of Parasuraman et al. that states empathy dimension as the dimension with the lowest priority [14]. Jayasundara et al, precisely this dimension has a fairly high support in Sri Lanka [6]. This can be understood that the organization from the view point that 'willingness to care and provide personal attention to their customers is an integral part quality improvement. Overall, the whole dimensions are necessary and need to be strengthened in order to improve education service quality as indicated by these findings.

#### V. CONCLUSION

The results of this research show a gap on education service quality of vocational secondary schools on all dimensions, namely tangible, reliability, responsiveness, assurance, and empathy, with perception or reality lower than expectation. Therefore, the level of quality on education services of vocational secondary schools in West Lombok Regency is still low or insufficient. Based on these findings, the implications are: (1) in practice, institutions are advised to strengthen and improve quality on education services on all five dimensions; (2) theoretically, these research results can be followed up by widening the sample, variable, and construction on other quality dimensions.

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#### REFERENCES

[1] Badan Pusat Statistik, "Pengangguran terbuka menurut pendidikan tertinggi yang ditamatkan 1986 – 2017," [Online]. Retrieved from:

<https://www.bps.go.id/statictable/2009/04/16/972/pengangguran-terbuka-menurut-pendidikan-tertinggi-yang-ditamatkan-1986---2017.html>, accessed on 17 Desember 2017.

- [2] Sukardi and L.A. Wardana, "The study of service quality and competitiveness of secondary education in West Sumbawa," Atlantis Press, pp. 400-404, 2016.
- [3] A. Parasuraman, V.A. Zeithaml, and L.L. Berry, "Reassessment of expectations as a comparison standard in measuring service quality: Implications for future research," *Journal of Marketing*, vol. 58, pp. 111-24, 1994.
- [4] A. Ardan, G.S. Rhiel, and M. Wermus, "A theoretical framework for providing quality service to college degree programs," *International Journal of Education Research*, vol. 7, no. 2, pp. 97-109, 2012.
- [5] Kementerian Pendidikan dan Kebudayaan, *Revitalisasi Pendidikan Vokasi*, Jakarta: Kemendikbud, 2016.
- [6] C. Jayasundara, P. Ngulube, and M.K. Minishi-Majanja, "A theoretical model to predict customer satisfaction in relation to service quality in selected university libraries in Sri Lanka," *SAJnl Libs & Info Sei*, vol. 75, no. 2, pp. 179-194, 2009.
- [7] J.G. Palli and R. Mamilli, "Students' opinions of service quality in the field of higher education," *Creative Education*, vol. 3, no. 4, pp. 430-438, 2012.
- [8] T. Dursun, K. Oskaybas, and C. Gokmen, "Perceived quality of distance education from the user perspective" *Contemporary Educational Technology*, vol. 5, no. 2, pp. 121-145, 2014.
- [9] J.A. Martilla and J.C. James, "Importance performance analysis," *Journal of Marketing*, vol. 41, no. 1, pp. 77-79, 1977.
- [10] J. C. Nunnally, *Psychometric Theory* (2nd ed.), New York: McGraw-Hill, 1978.
- [11] U.A. Qadri, "Measuring service quality expectation and perception using SERVQUAL: A gap analysis," *Business and Economics Journal*, vol. 6, no. 3, pp. 1-6, 2015.
- [12] A. Sardar, S. Amjad, and U. Ali, "An empirical analysis of the service quality gap in business education: Evidence from higher education in Pakistan," *Journal of Education for Business*, vol. 91, no. 3, pp. 148-158, 2016.
- [13] M.M. Mostafa, "A comparison of SERVQUAL and I-P analysis: Measuring and improving service quality in Egyptian Private Universities," *Journal of Marketing for Higher Education*, vol. 16, no. 2, pp. 83-103, 2006.
- [14] A. Parasuraman, V.A. Zeithaml, and L.L. Berry, *Delivering Quality Service*, New York: The Free Press, 1990.