

The Service Quality Level of Higher Educational Organizations: An Institutional Strengthening Based View

1 ABSTRACT

The development of education aims to improve the quality of educational services in order to escalate the satisfaction of every user of educational services, particularly the students and the educational outcome generally. In doing so, the improvement of the quality of the educational services providers, e.g. higher education, must be carried out properly by both the government and private organizations. However, this study finds in the literature, that there are less studies explains the service quality inside higher educational institutions with the approach of institutional strengthening to disclose the influence of institutional strengthening on service quality of higher educational institutions, particularly, the institutions from developing countries. As such, the objective of this study is constructed through the emphasis on the role of institutional strengthening on the quality and of public educational service, especially the higher educational public institutions. This study applies quantitative method through the questionnaire distributions and statistical measurement approach. Using the simple random sampling, eventually, this study obtains 93 returned questionnaires that meet the requirement to be tested statistically further. As theoretical implication, this study finds that institutional strengthening plays a significant role on service quality development. This study also recommends a constructive guideline for business owners, especially SMEs to enhance their marketing strategy as for the managerial contribution.

Keywords: institutional strengthening, service quality, institutional relationship, public administration, institutional priority

1. INTRODUCTION

The study of Tolofari [1] explains that the educational services play a critical role in order to develop and/or improve the human resources and eventually the success of educational services may bring a positive impact, e.g. a better quality of educational services outcome such as a highly competitive, well-managed, skillful human resources either for national and/or global job markets [2, 3]. Likewise, in Indonesia, especially in South Sulawesi province, the development of national education aims to improve the quality of educational services in order to escalate the satisfaction of every user of educational services, particularly the students [4]. In doing so, the improvement of the quality of the educational services providers, e.g. higher education, must be carried out properly by both the government and private organizations [5]. Based on the annual report of the 9th region of Indonesian higher education service institute, which covers South, Southeast, and West Sulawesi province, this study finds that the educational service of higher education institutions has increased under several circumstances. For example, in 2020, there has been an increasing trend on (a) quality; and (b) innovation of higher education institutions academic service from 20% to 25.27% [6].

However, the literature does not include in-detail the role of several indicators, especially the institutional strengthening, in influencing the quality development of the educational service in South Sulawesi. In addition, the study of Anwarudin and Maryani [7] denotes that the role of institutional strengthening is considered to be vital for every organization, given that institutional strengthening is one of the crucial tools for organization in adjusting, reforming, as well as modifying the vital policies, rules, procedures, work mechanism, and so on that eventually bring the organization to become well-organized and well-managed in terms of

30 skills, knowledge, as well as, character development of every organization member, which
 31 may later bring a better and/or well-improved quality and innovation of public educational
 32 service, especially in the context of higher education institution. Hence, as the literature
 33 indicates that there is a lack in the body of knowledge in explaining the role institutional
 34 strengthening on service quality in Makassar region, this study then aims to conduct a
 35 research, which emphasizes the role of institutional strengthening on the quality and
 36 innovation of public educational service, especially the higher education public institutions.

37 1.1 The Policy Quality in Public Administration Perspective

38 Literature explains that there are two important stages within the quality evolution in the
 39 public sector, namely: (a) quality in the sense of respect of procedures; and (b) quality in the
 40 sense of customer satisfaction [2, 8-11]. Later, the quality in public sector, especially inside
 41 the higher education public institutions, is focused on the policy perspective, especially the
 42 important three policy quality indicators, namely: policy making, policy design, and policy
 43 implementation [12]. The policy quality then eventually affects the entire public organization
 44 in offering product and/or service for the people [13-15]. The policy quality can be measured
 45 through several features, which are: the direct evidence of the policy, the reliability of the
 46 policy, the responsiveness of the policy, and the assurance of the policy [7]. According to
 47 Sabatier and Mazmanian [15], if the applied policy is always in the continuous evaluation,
 48 the organization then is on the right track to improve its applied policy. The continuous
 49 evaluation includes the review and examination on: (a) systematic monitoring on applied
 50 policy; (b) planning and managing the potential change on applied policy; and (c) the target
 51 or objective of applied policy, which has been set previously [16, 17].

52 1.2 Institutional Strengthening

53 Based on the public administration perspective, the institutional strengthening theory from
 54 the study of Helmke and Levitsky [18] and Winter [19], suggest that the institution essentially
 55 plays a vital role as a stepping stone unit for formulating, implementing, and evaluating a
 56 policy that is primarily based on organization's objective, which is designed to be achieved
 57 further. Within the context of policy, institutional is considered as one of vital units in
 58 government's public administration, that plays an important role in carrying out a formulation,
 59 implementation, and evaluation of various programs of public administration. Subsequently,
 60 according to Winter [19], the efficient and effective institutional strengthening, that has been
 61 implemented to support various applied priority programs, however, tend to deal with a
 62 change. The change can be from, for example, the dynamic of organisasiperangkatdaerah
 63 (OPD) or local government agency's capability in creating a proper public administration
 64 management that is based on the three patterns of institutional need, namely: (1) institutional
 65 relationships; (2) institutional priorities; and (3) institutional actions [7, 18, 19].

66 1.3 Research Questions and Hypothesis

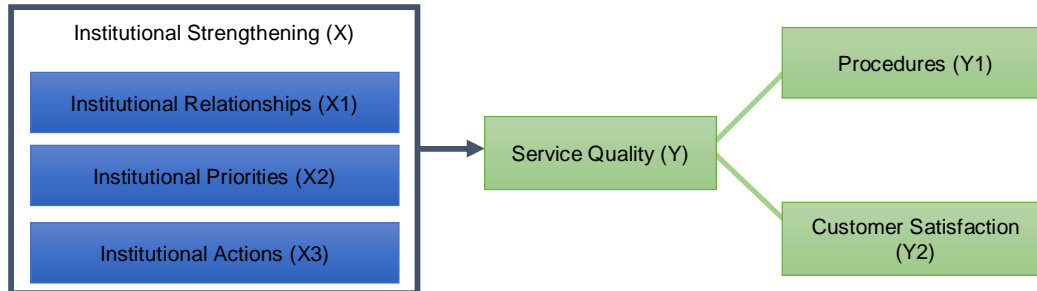
67 **Table 1. Research Questions and Hypotheses**

Questions	Detail
1	Does institutional relationships affect the quality of educational services?
2	Does institutional priorities affect the quality of educational services?
3	Does institutional actions affect the quality of educational services?
4	Does institutional strengthening simultaneously affect the service quality?
Hypothesis	Detail
H _{o1}	Institutional relationships affect the quality of educational services.
H _{o2}	Institutional priorities affect the quality of educational services.

H _{o3}	Institutional actions affect the quality of educational services.
H _{o4}	Institutional strengthening simultaneously affects the service quality.

(Data Produced, 2023)

Fig. 1. Research Conceptual Framework



(Data Produced, 2023)

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76 As shown in Figure 1, this study initially explores the role independent variable, which is the
 77 institutional strengthening (X) that has 3 indicators, namely: institutional relationships (X1);
 78 institutional priorities (X2); and institutional actions (X3), on the service quality level
 79 simultaneously. Moreover, this study then aims to discover the partial effect of all institutional
 80 strengthening (X) indicators on the service quality (Y) dimensions, which are: the procedures
 81 of service quality (Y1) and the customer satisfaction of service quality (Y2).

82 2. MATERIAL AND METHODS

83 This study applies quantitative method, which is through the questionnaire distributions and
 84 several statistical measurement approaches. The distribution of questionnaires is conducted
 85 that is aimed for the unit analysis of this study, which is, the higher educational institution
 86 that is located in Makassar, Indonesia. In order to explore the role of independent variable
 87 on dependent variable of this study, an analysis of descriptive is applied, which is suggested
 88 by Sekaran and Bougie [20], through the application of several statistical tests, namely: (1)
 89 validity-reliability test; (2) hypothesis test or partial effect test; and (3) simultaneous test or F-
 90 test. Moreover, this study has 107 samples, which are from the higher educational
 91 institutions' responses on questionnaires. Using the simple random sampling, eventually,
 92 this study obtains 93 returned questionnaires over 107 distributed, as such, this study is then
 93 supported to analyze such 93 returned questionnaires that meet the requirement to be
 94 tested statistically further.

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96 2.1 The Test of Validity and Reliability, Partial Effect, and F-Test

97 The validity test is useful in measuring the accuracy level as well as the actual content of the
 98 research [11, 14, 20]. Also, the test of reliability is also beneficial in identifying the final
 99 measured-score consistency level of similar group. The Cronbach Alpha score should be >
 100 0.60, if the variable is aimed to be reliable [20]. Furthermore, for the hypothesis test, the
 101 study of Haeruddin, Natsir [13] explains that if the significancy score of a variable is lower
 102 than 0.05, the research hypothesis is accepted. Likewise, for the F-test, as recommended by
 103 Mustafa, Akbar [11], if the results of F-test show the score of significant is not more than or
 104 equal to 0.05, then the independent variables significantly and affects simultaneously the
 105 dependent variables.

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107 3. RESULT AND DISCUSSION

108 3.1 The Test of Validity and Reliability

109 As recommended by the study of Sekaran and Bougie [20], the r-count score is an
 110 instrument to express whether a variable is valid or not, and if the score of r-count is higher
 111 than r-table, it can be concluded that the variable is valid, and if the score of r-count is lower
 112 than r-table, it can be said that the variable is invalid. Moreover, according to the findings of
 113 this study's validity test, which are shown in Table 2, all of the variables have positive r-count
 114 scores, and each variable's and indicator's r-count score is higher than r-table. As such, all
 115 variables in this study are valid and are supported statistically to be tested for further
 116 analysis.

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Table 2. The Validity Test Results

Variables	r-table	r-count
X1	0.338	0.551
X2	0.338	0.427
X3	0.338	0.692
Y1	0.338	0.914
Y2	0.338	0.538

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(Data Produced, 2023)

119 Additionally, Table 3 below displays the reliability test results of this study. According to
 120 Table 3, every variable in this study is reliable because each reliability test
 121 result demonstrates that it has a Cronbach's Alpha score that is higher than 0.60, given that
 122 based on the rule of thumb from the study of Sekaran and Bougie [20], the variable is
 123 reliable if its Cronbach's Alpha score is higher than 0.60. For instance, variable X in Table 3
 124 has a Cronbach's Alpha value of 0.735 and variable Y is 0.790. As such, this study implies
 125 that all of this study's variables are suitable with the criteria of further statistical analysis.

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Table 3. The Reliability Test Results

Variable	Dimension	C. Alpha
Institutional Strengthening (X)	Institutional Relationships	0.735
	Institutional Priorities	
	Institutional Actions	
Service Quality (Y)	Procedures	0.790
	Customer Satisfaction	

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(Data Produced, 2023)

128 3.2 Hypothesis Test

129 In this study, the partial effects of institutional relationships, institutional priorities, and
 130 institutional actions on service quality are scrutinized in order to disclose if there is
 131 significant/insignificant relationship between 3 indicators of institutional strengthening and
 132 service quality. The results of the T-test are displayed in Table 4 below.

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**Table 4. The T-Test Results
Coefficients^a**

Model	Unstandardized Coefficients		Std. Coefs.	T	Sig.
	B	Std. Error	Beta		
	(Constant)	28.351	7.85		
Ins. Relationships	.447	.009	.503	4.97	.015
Ins. Priorities	.239	.063	.416	3.79	.038
Ins. Actions	.511	.085	.622	6.01	.000

a. Dependent Variable: Service Quality
(Data Produced, 2023)

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136 According to Haeruddin, Natsir [13], if the significance score of a variable is lower than 0.05,
137 the research hypothesis is accepted, i.e. H1 is accepted and H0 is rejected, *vice versa*. As
138 shown in Table 4, eventually, the results of hypothesis test show that institutional
139 relationships (X1) has 0.015 significance score, and hence, the results of this study disclose
140 that the institutional relationships play significant role positively on service quality
141 because the institutional relationships (X1) significance score is lower than 0.05. As such, H1
142 is accepted and H0 is rejected.

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144 Moreover, the results in Table 4 also show that the significance score of institutional priorities
145 (X2) is 0.038, in other words, such score is lower than 0.05, and consequently, this study
146 concludes that H2 is accepted. Likewise, for the institutional actions, the result in table 4
147 shows that H3 is accepted because the institutional actions (X3) significance score is lower
148 than 0.05.

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Table 5. The Institutional Strengthening on Procedures

Institutional Relationships	Institutional Priorities	Institutional Actions
• Procedures	(1) Service procedural policy (2) Service time policy (3) Service legal policy (4) Service transparency policy	(1) Determining the service procedural structure, e.g. product knowledge of service officer. (2) The improvement on service time procedures, e.g. less waiting time for student in related service requirements. (3) The legal integration in service system, e.g. fraud in service. (4) The enhancement of transparency on service, e.g. clear service information for students.

(Data Produced, 2023)

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Table 6. The Institutional Strengthening on Customer Satisfaction

Institutional Relationships	Institutional Priorities	Institutional Actions
• Customer Satisfaction	(1) Customer satisfaction orientation policy	(1) The focus on the customer's expectations fulfilment, e.g. the evaluation on product quality and price. (2) The enhancement of affective commitments for the customers. (3) The improvement of service responsiveness. (4) The advancement of service availability, reliability, and assurance.

(Data Produced, 2023)

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155 Based on Table 4, the formulation is generated by this study, namely:

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$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

$$Y = 28.351 + 0.447X_1 + 0.239X_2 + 0.511X_3$$

157 In line with the formula above, this study then recommends that:

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- a) The constant score is 28.351 and this illustrates that if there is only one variable, which is institutional strengthening with its 3 indicators (institutional relationships,

- 160 priorities, and actions), then the Beta unstandardized coefficients score of service
 161 quality is 28.351.
- 162 b) As this study finds that the b1 score in the formula is 0.351, as such, this study
 163 suggests that if there is an increasing score on institutional relationships for 1 level,
 164 then the score of service quality also increases for 0.447, assumed that X2 and X3
 165 are constant.
- 166 c) As this study discovers that the score of b2 is 0.239 in the formula, this study
 167 therefore concludes, assumed that X1 and X3 are constant, that the score of service
 168 quality increases for 0.239 if there is an increasing score on institutional priorities for
 169 1 level.
- 170 d) As this study finds that the b3 score in the formula is 0.511, as such, this study
 171 suggests that if there is an increasing score on institutional relationships for 1 level,
 172 then the score of service quality also increases for 0.511, assumed that X1 and X2
 173 are constant.

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 175 Table 5 and 6 are explained in detail in the conclusion and recommendation section.

176 177 178 **3.3 Simultaneous Test**

179 This study applies the simultaneous test or F-test for exploring and determining the level of
 180 significancy of institutional strengthening simultaneously on service quality. The following
 181 Table 7 demonstrates the result of simultaneous test of this study.

182 **Table 7. The Simultaneous Test Results**

ANOVA^a

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	812.373	3	2700.791	25.065	.000 ^b
	Residual	972.335	90	10.804		
	Total	1784.708	93			

a. Dependent Variable: Service Quality

b. Predictors: (Constant), Institutional Strengthening
 (Data Produced, 2023)

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184 As recommended by Mustafa, Akbar [11], if the results of F-test show the significant score is
 185 not more than or equal to 0.05, then the independent variable significantly affects the
 186 dependent variable. This study then implies that H4 is accepted and H0 is rejected because
 187 based on Table 7 of this study, the results show that the significance level score of
 188 institutional strengthening is 0.000 i.e. such score is lower than 0.05.

189 **4. CONCLUSION AND RECOMMENDATION**

190 **4.1. Conclusion**

191 In line with the results that are found in this study, this study then concludes that institutional
 192 strengthening has a significant role in influencing the service quality, especially in the higher
 193 educational institutions contexts in Makassar, Indonesia. Furthermore, this study indicates
 194 that the role of institutional relationships on service procedures, as shown in Table 5, plays
 195 significant part. This could be seen, especially in the activity of planning, organizing,
 196 actuating, and controlling the service procedure quality. For example, a service procedural
 197 policy, which is an institutional priority, is conducted through the determination of the service
 198 procedural structure, the improvement on service time procedures, the integration of legal in
 199 the service system, and the enhancement of transparency on service. The explanations
 200 above also support several prior studies, such as the study of Browne, Kaldenberg [16] that

201 denotes that institutional strengthening becomes one of vital factors in influencing the
202 development of service quality level. For example, the role of institutional strengthening in
203 encouraging the willingness of customer to recommend the college and the educational
204 experiences to other people.

205 Moreover, this study finds that the service quality through the customer satisfaction is also
206 influenced by 3 institutional strengthening's indicators. As shown in Table 6, customer
207 satisfaction dimension is considered plays important role on the institutional relationships.
208 This can be seen in the focus of higher educational institutions on the customer's
209 expectations fulfilment, e.g. the evaluation on product quality and price, the enhancement of
210 affective commitments for the customers, the improvement of service responsiveness, and
211 the advancement of service availability, reliability, and assurance. The indications above are
212 also similar with the previous study of Bahua, Arsyad [17], that discloses that the
213 empowerment of peasant communities by strengthening institutional can be performed well
214 based on the potential and capability of the farmers in satisfying and assuring the customer.

215 **4.2. Recommendation**

216 Based on the research conclusion above, this study offers several important
217 recommendations, namely:

- 218 a) Institutional strengthening is one of the most important and crucial elements to
219 uphold as well as improve the level of service quality for organization, including
220 higher educational institutions in Makassar.
- 221 b) Following the above explanation, for the theoretical contribution, this study
222 recommends that the role of institutional strengthening on service quality inside
223 higher educational institutions in Makassar is crucial. As such, based on the findings
224 of this study, this study highly advises that it is important for the higher educational
225 institutions, especially in Makassar, to improve, develop, and/or enhance the
226 institutional strengthening in order to come up with a better result on their service
227 quality development and/or improvement.
- 228 c) Likewise, in order to fulfill the managerial contribution, the findings of this study are
229 considered to become a guideline for the higher educational institution, a business
230 owner, or even the government in order to plan, organize, actuate, evaluate, and
231 control the strategical policy in improving the whole institution structure as well as
232 the service quality, that eventually brings a positive impact on all parties, especially
233 the prospective benefits of income and/or image for higher educational institutions.
234

235 **COMPETING INTERESTS DISCLAIMER**

236 Authors have declared that they have no known competing financial interests or non-
237 financial interests or personal relationships that could have appeared to influence the work
238 reported in this paper.

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