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The Role of Mediation of Customer Satisfaction in Service Quality Relationship on Hospital Patient Loyalty in Indonesia

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Abstract— **Services in the service sector have a strategic role in creating competitive advantage and value for customers. The efforts that need to be done in improving the competitive advantage is through customer satisfaction and loyalty. The study aims to examine the effect of services quality (Servqual) on satisfaction and loyalty of patient as the service users of BPJS hospital services in Central Java. The study also proves the importance of services quality (Servqual) in achieving patient loyalty. The study took a sample of hospital patients in Central Java a total of 184 patients. The sampling technique in this research is by using purposive sampling. The result of research provides empirical evidence that service quality has a significant effect on patient satisfaction. Service quality significantly affects the patient loyalty. Also, patient satisfaction has a significant effect on patient loyalty.**

Keywords— Services quality, patient satisfaction, patient loyalty

1.   Introduction

The development of technology and information, as well as the impact of global economic growth, has brought consequences to the competition of the service industry [1]. Consequently, services companies have to concern more on the quality of services they offer. The quality of services is the level of excellence to meet consumer desires. Good quality is seen from the consumer perception, not from the company. The consumer perceptions of service quality are a total assessment of the superiority of a product that can be either goods or services [2].

The quality of services affects the satisfaction, and the satisfaction affects the interest in buying or reusing [3]. Serving the best services to the consumer is principally a review of quality services. Quality is something to be achieved by a product or service, means quality is the whole characteristics of products or services which able to fulfil the certain need of the consumer [4].

Hospital is one form of an organization engaged in the field of health services where one of the efforts it undertakes is to be a reference destination of lower level health service provider, such as health center, private practice doctor and also other hospitals. Furthermore, as a reference point of health services, the hospitals need to maintain the quality of its services to those in need. The health service is demanded by the service users to be better, and then the goal of the organization, i.e. the ability to perform excellent service and quality can be realized.

Quality of services such as reliability, responsiveness, assurance, empathy and tangibles is control in achieving customer satisfaction that is multidimensional [5]. The reliability of the officer, the responsiveness of the officer to the patient, the officer's response, the reality of the service process, the service guarantee with the reality and the tangible evidence of the service provided to the patient is a factor closely related to the quality of service.

There are six reasons why a company needs to gain customer loyalty [4]. First, existing customers are more perspective; it means loyal customers will give big profit to the company. Second, the cost of acquiring new customers is far greater than the cost of maintaining and retaining existing customers. Third, customers who already believe in the company in an affair tend to believe also in other affairs. Furth, the cost of companies operating will be efficient if the company has a lot of loyal customers. Fifth, the company can reduce the psychological and social cost because the loyal customers already have a lot of positive experience with the company and its products. Sixth, loyal customers will always defend the company even try to attract and suggest the other people were also the customer of the company.

To gain customer loyalty, service of the organization needs to focus on some factors which can impact the customer loyalty [6]. The first factor that can impact the customer loyalty is the service quality. As the company in the service sector, the service quality must be considered as important. The service quality can be interpreted as the expected level of excellence and the control over the level of excellence satisfies the demand of customers. Therefore, to meet the quality of service as expected by the customers, the company must provide excellent service and excellence. The

second factor that can affect customer loyalty is customer satisfaction. The third factor that also impacts customer loyalty is the image of the company. If the image of the company is good then, the customer will remain to use the services and products of the company.

As the institution which provided the health service to the public, the hospital is not only demanded to fulfil the health service well but also is demanded to compete for maintaining its continuity. The demand mentioned before is absolute to create customer loyalty which may become a precious asset for the hospital in the future.

The study aims to examine the effect of quality of service on patient satisfaction and loyalty of service users of BPJS Hospital in Central Java Indonesia. The study also gives important contribution in knowledge development about the concept of quality of services by using five primary benchmarks (reliability, responsiveness, assurance empathy and tangible) which have been examined and have contributed difference empirical evidence in the context of research service industry. The result of the study also contributes important issue in achieving customer loyalty of hospital's service users in Indonesia.

2. Theoretical Review and Development of Hypothesis

The Relationship between Quality Service on Customer Loyalty

According to Bitner and Hubbert [7], service quality is the whole impression of customer toward inferiority/superiority of the organization and services offered. Meanwhile, Tjiptono [8] stated that service quality is excellence level which is hoped and control over the level of excellence to meet customer desires. The measurement of quality of service in the model of SERVQUAL is based on the multi-item scale designed to measure the expectation and perception of the customer, as well as the gap in the primary dimensions of service quality.

In the original study, the primary dimensions of service quality are rehabilitation, responsiveness, competence, access, courtesy, communication, credibility, security, ability to understand the customer and tangible evidence [9]. However, the next study, [10] completes and summarizes those ten dimensions. Competence, courtesy, credibility and security are united become assurance, at the same time, access, communication and ability to understand the customer are categorized as empathy. Furthermore, five main indicators

influence the service quality, i.e. tangible evidence, reliability, responsiveness, assurance and empathy.

Loyalty is a subjective concept, defined by the customer and has the level of loyalty [11]. Meanwhile, [12] explains the meaning of loyalty as the commitment of customer which holding out to consistently keep subscribing or rebuying the chosen products/services even though the situation and business marketing has potential to cause behavioural changes. Researching by using gauge service quality dimensions [10]. The alternative relationship between service quality and behavioural intentions which service quality as the variable of intervening is the relationship between satisfaction and loyalty. Loyalty is the intensity of purchase which is conducted by the customer because of various things offered by the seller. The intensity of purchasing depends on the way of customer decides the decision in making procurement. The result of research that was shows that service quality affects the customer satisfaction, and customer satisfaction affects the loyalty [13]. It means if the study of is connected to the study of [10] then, if one of service quality, i.e. assurance covers knowledgeability, courtesy and trustworthy be possessed by the staff can be increased then, it will affect the loyalty. Based on the literature review and previous studies above, it can be concluded the hypothesis in this study as follows:

H1: The quality of service (Servqual) has a positive effect on patient loyalty.

The Relationship Service Quality on Customer Satisfaction

Satisfaction is a situation that depends on the feeling of the customer after they experience a performance or outcome that has met their expectations. According to [12], satisfaction is the level of a person's feelings after comparing the performance or perceived result service received and perceived with the expected.

Consumer satisfaction is a buyer's evaluation whereby the chosen alternatives gives the same outcome or exceed the expectations of the consumer . Meanwhile, dissatisfaction arises when the results obtained do not fulfil the expectation of consumer.

Satisfaction or dissatisfaction of consumer is the response of the consumer to the evaluation of discrepancies/disconfirmations that are felt after their use [14]. According to [4], consumer's satisfaction is the level of a person's feeling after comparing the performance (or outcome) and his expectations. There are similarities between some of the above understanding, i.e. concerning the

components of customer satisfaction (expectations and perceived results). The consumer's expectations are estimates or consumer beliefs about what will be received by him when he bought or consumed a product. According to [4], the satisfaction of consumer is the result of consumer's feeling who experience the performance of a company that matches his expectations.

Consumer satisfaction is the level of someone's feelings after comparing the perceived work to the expectations. In the service marketing activities include activities that identify needs that need to be satisfied, the determination of the service will be presented, the determination of reciprocity of provision of such services, and the determination of how to promote such services [15]. The model that specifically assesses the relationship between customer satisfaction and loyalty; the result shows that customer satisfaction is an intervening variable between service quality and loyalty. Quality of service influence customer satisfaction and customer satisfaction affect loyalty.

The study of Cronin Jr and Taylor [16] explains that the customer perception has an important role in conceptualizing and measuring the performance of health services and patient satisfaction on health services. Furthermore, it is very difficult for the patients to assess the intended performance because the patient has little expertise in assessing the clinical aspects. The customer perceptions on the relationship of customer satisfaction on customer loyalty as the foundation of the company in achieving competitive advantage thereby enhancing the creation of customer's perceived value [17]. In fact, the essence of customer value creation in the context of developing service organizations is created through customer perceptions and satisfaction [18]. Service organizations must understand how organizations play an important role in their ability to manage customer perceptions and levels of satisfaction to create value, ensure customer satisfaction and maintain customer loyalty.

Based on the literature review and previous studies above, it may arrive at the hypothesis as follows:

H2: Quality of service (Servqual) have a positive effect on patient satisfaction

The Relationship of Patient Satisfaction and Patient Loyalty

Customers always want satisfaction on services offered by the company. As a consequence, customer satisfaction becomes an important key for business organization in attracting the interest of the customer to by and customer loyalty to increase sales of the company [19-21]. Meanwhile, the study of Lien, Wen [22] concludes the importance of customer satisfaction in increasing the intensity of repeat purchase for the consumer.

Some concepts about customer satisfaction have also changed over the last few decades [23]. Customer satisfaction is defined in multiple perspectives. The concept of customer satisfaction has been widely accepted in a very wide scope of research, although satisfaction is an effective response that needs to involve the cognitive experiences and expectations of consumers [24]. Also explained that customer satisfaction is an evaluation of service performance, customers compare the result with their expectations before buying or consuming the product/services. Consumer satisfaction in using servicer is defined as a customer evaluation of his experience, and reactions to a particular product in transacting or reacting to the services [24].

The other researchers see two different concepts of consumer satisfaction [7]. In his study, when asked about more specific satisfaction in making transactions, consumers tend to comment on certain events in the transaction service (e.g. the actions of certain employees). In contrast, consumers tend to comment on general impressions and experiences with companies (e.g. the honesty of a company) when asking about overall satisfaction. Satisfaction in the transaction is a psychological reaction that product customers or services providers must be performance-oriented for a certain period [24]. Based on the literature review and previous studies above can be resulted in a hypothesis in this study as follows:

H3: Customer satisfaction has a positive effect on patient loyalty.

3. The Design of Research

This study would be tested to explain the effect of service quality dimension to the dependent variable of this research, i.e. patient loyalty and as an intervening variable is a patient satisfaction. The type of research is quantitative with explanative level explaining the causal relationship of research variable. The method of data collection through a survey using the help of questionnaires distributed directly to the respondents, i.e. patients as research objects.

4. The Definition of Operational and Measurement

Parasuraman [25] defines service quality as a global decision or attitude related to service superiority. Patient loyalty is a loyal patient attitude which has obedience and compliance to hospital policy (Lupiyoadi, 2004). Satisfaction is a feeling or emotional assessment of the patient to the services performed in Central Java Regional Hospital (Riduwan, 2005). The question items in the questionnaire are closed with question model using answers with Likert scale (1 – 7). The analysis is a perceptual analysis that is the respondent's perception of the question posed.

5. Sample and Data Collection

The respondents in this study were the patients who used the services of a hospital in Central Java Indonesia. The study was conducted within a period f four months. The number of questionnaires distributed a total of 184 respondents. In sampling, the research used purposive sampling method. The basic consideration that is used is by seeing the patients who have used the services BPJS in the Hospital, at least two times.

6. The Testing Validity and Reliability of Constructs

The preliminary testing in this study was done by testing the research instrument. The technique used is the validity and reliability test. This test can be done with Structural Equation Modelling (SEM). SEM can confirm various indicators/dimensions of a concept/construct and measure relationship among variables theoretically constructed in this research model. Then, the reason for using this technique is methodological, the design of this study is simultaneous. It also has a relatively complex relationship and using SEM with AMOS software is predicted can examine the goal of the study.

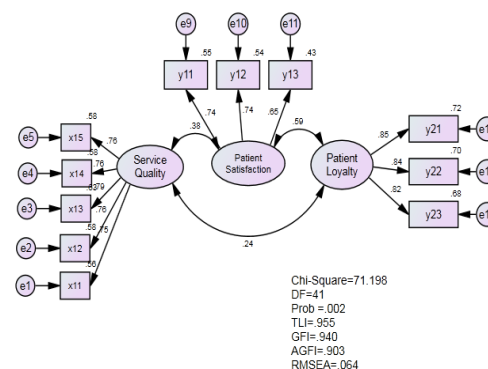The test result of validity and reliability of each construct can be explained in the following figure:

Figure 1 explains the loading factor scores for each indicator can be illustrated in the following table below.

Table 1. Scale Item for Measures

Construct	Items	Standardized factor loading	Cronbach Alpha
Service Quality	Reliability (X11)	0.747	0.837
	Responsiveness (X12)	0.758	
	Empathy (X13)	0.794	
	Assurance (X14)	0.762	
	Tangible (X15)	0.759	
Patient Satisfaction	Satisfaction 1 (y11)	0.744	
	Satisfaction 2 (y12)	0.736	0.806
	Satisfaction 3 (y13)	0.654	
Patient loyalty	Loyalty1 (y21)	0.849	
	Loyalty2 (y22)	0.837	0.800
	Loyalty3 (y23)	0.825	

Based on Table 1, we explained that the loading factor value of construct shows that the indicator value is at above 0.6 cut off point. It implies that the service quality, patient satisfaction, and patient loyalty was statistically valid. The resulting testing of the construct has shown that the Cronbach alpha score for each construct is higher than 0.6 which means the three constructs are statistically reliable.

7. The Result of Research

The testing result of Structural Equation Modeling (SEM) analysis at full model can be seen in figure 1. Test results of full confirmatory showed good result, i.e. has met the criteria of goodness of fit. The model structure is used to describe the causality models of research with tiered relationships. The test result showed the criteria of goodness of fit had been fulfilled such as Chi-Square of 41.458. The probability value is 0.447. Both assumptions are met. The value of TLI is 0.999, the value of GFI is 0.957, the value of AGFI is 0.930, and the value of RMSEA is 0.009 which

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indicates that the values are in accordance with the specified cut-off. The phenomenon mentioned before indicated that the model of research meets and fulfils the appropriate criteria (standard). The results of analysis on the relationship between exogenous constructs with endogenous constructs in full model can be seen in the following figure.

Figure 2. The Effect of Service Quality, Customer Satisfaction on Patient Loyalty

Chi-Square=41.548
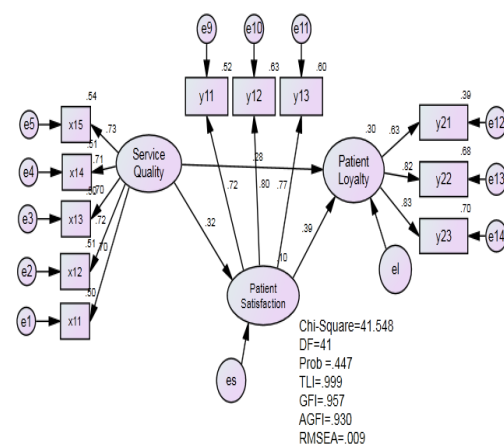DF=41
Prob =.447
TLI=.999
GFI=.957
AGFI=.930
RMSEA=.009

Table 2 explains the value of standardized path coefficients on the analysis of the relationship among service quality, patient satisfaction and patient loyalty. Then, the result of research is also shown in table 2, which forming three hypotheses. The three hypotheses built in this study is the relationship between service quality on patient loyalty, the relationship between service quality on customer satisfaction and the relationship between customer satisfaction on loyalty.

Tabel 3. The Test Result of Coefficient Relation of Service Quality, Patient Satisfaction and Patient Loyalty

Hypothesis		Stand. Path coef.	t value	Prob.	Result
H1	Service Quality → Patient loyalty	0.263	2.819	0.005	Significant
H2	Service Quality → Patient satisfaction	0.369	3.182	0.001	Significant
H3	Patient satisfaction → Loyalty	0.313	3.659	0.000	Significant

    The test result of analysis of each hypothesis can be explained as follows:

- The first hypothesis examines the effect of service quality on patient loyalty. The examination of analysis showed that the value of t and probability described a positive and significant relation, i.e. the value of t is 2.819 (t = 2.819 > 1.96) with significance value (0.005 < 0.05). Then, hypothesis 1 is accepted.
- The second hypothesis examines the effect of service quality on patient satisfaction. The result of analysis examination shows that the value of t and probability describes a positive and significant relationship, i.e. t = 3.182 (t = 3.182 > 1.96) with the value of significant is (0.001 < 0.05). Then, hypothesis 2 is accepted.
- The first hypothesis examines the effect of patient satisfaction toward patient loyalty. The result of analysis examination shows that the value of t and probability describe a positive and significant relationship, i.e. the value of t = 3.659 (t = 3.659 > 1.96) with a significant value of (0.000 < 0.05). Then, hypothesis 3 is accepted.

8.   Discussion and discussion of research result

The study was designed to examine the effect of service quality, patient satisfaction on patient loyalty as services users of Hospital in Indonesia. The result of research provides empirical evidence that service quality which consists of dimensions, i.e. reliability, responsiveness, assurance, empathy and tangible has a positive effect on patient satisfaction and patient loyalty. The result of the study is in line with the previous research which was conducted by Sanyal and Hisam [26] who declared that there is a tight relationship between service quality and satisfaction. The result of the study also supports the research of Kundu and Datta [27] who discovered that service quality also has a significant effect on customer satisfaction.

Customer satisfaction plays an important role in creating loyalty. The result of research is in line with the previous research which examined the role of customer satisfaction and loyalty. The study is also in line with another study that was conducted by Nagy and Kacmar [17] who found that customer satisfaction can be achieved if the products or services provide an experience that is more than the customer expectations.

9.   Conclusions

The result of the study shows empirical evidence about the influence of service quality on customer satisfaction and patient loyalty in the Hospital in Indonesia. In line with the above research objective, the study in the previous research explains that customer satisfaction has relevance for the long-term success of the organization by maintaining the loyalty. The study also provides empirical evidence about the importance of

customer satisfaction concept as the variable of mediation on the influence of service quality on patient satisfaction. The result of research also gives an important contribution to the study of customer behaviour.

The implication of research result identifies that it is important for the management of the hospital to concern on the dimensions, service quality for the customer. The statement mentioned before also in line with this finding of research which mentioned that five main dimensions, i.e. reliability, responsiveness, empathy, assurance and tangible able to increase the patient satisfaction and loyalty by arranging their relationship to the customers as maintained loyalty. The other findings in this research show that the other efforts in maintaining the customer loyalty are by providing the best service for the customers.

References

[1. Matthyssens, P., A.H. Kirca, and S. Pace, *Business-to-business marketing and globalization: two of a kind.* International Marketing Review, 2008. **25**(5): p. 481-486.

2. Bielen, F. and N. Demoulin, *Waiting time influence on the satisfaction-loyalty relationship in services.* Managing Service Quality: An International Journal, 2007. **17**(2): p. 174-193.

3. Chen, H.G., et al., *The impact of financial services quality and fairness on customer satisfaction.* Managing Service Quality: An International Journal, 2012. **22**(4): p. 399-421.

4. Kotler, P. and K. Keller, *Marketing Management (14th Edition).* 2012.

5. George, A. and G.S.G. Kumar, *Impact of service quality dimensions in internet banking on customer satisfaction.* Decision, 2014. **41**(1): p. 73-85.

6. Lai-Ming Tam, J., *The moderating role of perceived risk in loyalty intentions: an investigation in a service context.* Marketing Intelligence & Planning, 2012. **30**(1): p. 33-52.

7. Bitner, M.J. and A.R. Hubbert, *Encounter satisfaction versus overall satisfaction versus quality: the customer's voice", in Rust, R.T. and Oliver, R.L.* Service Quality: New Directions in Theory and Practice, Sage Publications, London, 1994.

8. Tjiptono, F., *Pemasaran Jasa.* Bayumedia Publishing. 2005, Malang.

9. Parasuraman, A., A. Zeithaml, and A. Malhotra, *E-S-QUAL: a multiple-item scale for assessing electronic service quality.* Journal of Service Research,, 2005. **Vol. 7 No. 3**: p. p. 213.

10. Zeithaml, V.A., A. Parasuraman, and A. Malhotra, *"A conceptual framework for understanding e-service quality: implications for future research and managerial practice",.* Working Paper, Report. Marketing Science Institute, Cambridge, MA, 2001. **No. 00-115, .**

11. Barnes and J. G., *Secrets Of Customer Relationship Management.* 2003, Yogyakarta: ANDI.

12. Oliver, R.L., *Satisfaction: A Behavioral Perspective on the Consumer.* 1997, New York, NY: McGraw-Hill, .

13. Brunner, T.A., M. Stöcklin, and K. Opwis, *Satisfaction, image and loyalty new versus experienced customers.* European Journal of Marketing, 2008. **Vol. 42 No. 9/10**: p. pp. 1095-1105.

14. Wang, Y. and H. Po-Lo, *Service quality, customer satisfaction and behavior intention.* Journal international entrepreneur, 2002.

15. Donio, J., P. Massari, and G. Passiante, *Customer satisfaction and loyalty in a digital environment an empirical test.* Journal of Consumer Marketing, 2006. **vol. 23/7**: p. pg. 445–457.

16. Cronin Jr, J.J. and S.A. Taylor, *SERVPERF versus SERVQUAL: reconciling performance-based and perceptions-minus-expectations measurement of service quality.* The Journal of Marketing, 1994: p. 125-131.

17. Nagy, B.G. and K.M. Kacmar, *Increasing customer satisfaction in the new venture context.* Journal of Research in Marketing and Entrepreneurship, 2013. **Vol. 15 No. 2, 2013**: p. pp. 143-159.

18. Hills, G.E. and R.W. LaForge, *Research at the marketing interface to advance entrepreneurship theory.* Entrepreneurship Theory & Practice, 1992. **Vol. 17**: p. pp. 33-59.

19. Alex, D., *Impact of Product Quality, Service Quality and Contextual Experience on Customer Perceived Value and Future Buying Intentions.* European Journal of Business and Management, 2006. **Vol 3, No.3**: p. pg. 307-315.

20. Chang, Y., et al., *Determinants of user satisfaction and continuance intention of smartphones: Focus on interactivity perspective.* 8th International Telecommunications Society (ITS) Asia-Pacific Regional Conference, 2011.

21. Anderson, E.W. and M.W. Sullivan, *The Antecedents and Consequences of Customer Satisfaction For Firms.*

Marketing Science, 1993. **Vol. 12. 2.**: p. pg. 125.

22. Lien, C.-H., M.-J. Wen, and C.-C. Wu, *Investigating the Relationships among E-Service Quality, Perceived Value, Satisfaction, and Behavioral Intentions in Taiwanese Online Shopping.* Asia Pacific Management Review, 2010. **Vol. 16(3)**: p. pg. 211-223.

23. Johnson, M., *Customer satisfaction", in Smelser, N.J. and Baltes, P.B.* International Encyclopedia of the Social & Behavioral Sciences, Elsevier. Amsterdam, 2001: p. pp. 3198-202.

24. Oliver, R.L., ,, *Satisfaction: A Behavioral Perspective on the Consumer. McGraw-Hill, New York, NY.* 1997.

25. Parasuraman, A., *Customer service in business-to-business markets: an agenda for research.* Journal of Business & Industrial Marketing, 1998. **13**(4/5): p. 309-321.

26. Sanyal, S. and M.W. Hisam, *An Analysis of the Impact of Service Quality and Passenger Satisfaction on Passenger Preference for Airlines: A Study of the Indian Aviation Sector.* International Review of Management and Marketing, 2016. **6**(2).

27. Kundu, S. and S.K. Datta, *Impact of trust on the relationship of e-service quality and customer satisfaction.* EuroMed Journal of Business, 2015. **10**(1): p. 21-46.