The Effect of TERRA Service Quality on Patient Satisfaction at Level II Bhayangkara Hospital Semarang and Its Impact on Loyalty

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Abstract. The article attempts to explore strategy implementation through the formulation of service satisfaction, which is measured by TERRA (Tangible, Empathy, Reliability, Responsiveness, and Assurance). The strategy was chosen based on its usefulness and benefits which can be strengthened by the Theory of Planned Behavior. So it is worthy of consideration, as a scientific article that can be a reference for other researchers in the future. The TERRA formulation is easy to implement at a practical level, and can more accurately measure company needs in the field compared to other service satisfaction formulations. The novelty of this study, namely using a different research approach, using the PLS-SEM analysis tool, which is more relevant, and reliable because it eliminates unnecessary error data so that the results are more accountable. Using the basic theory of planned behavior as a "scalpel" will attract readers, and/or other researchers, as a basis for developing more comprehensive research in the future, especially research on optimizing satisfaction with the TERRA formulation.

Keywords: Influence; Service Quality; TERRA; Satisfaction; Loyalty.

1. Introduction

Consumer satisfaction is a subjective value of the satisfaction of the services provided. Subjectivity still has an objective basis, meaning that judgment is also based on previous experience, education, psychological conditions, and environmental influences at that time. But based on existing truths and objective statements, not only to make bad decisions when there is no disturbing experience but also to say good things when there is no comfortable atmosphere.[1]

Athanassopoulos et al. (2001) in their research [2], contended that help fulfillment and every one of its aspects like actual proof, unwavering quality, confirmation, and compassion have a critical and positive relationship with patient fulfillment and faithfulness to monetary specialist co-op associations. Whereas [3] stated that, the main finding which is conflicting with the past writing is the irrelevant relationship of unwavering quality with patient fulfillment and this might be because of a few reasons for example numerous past examinations on this build have been done in evolved nations while we did This exploration study is in a non-industrial nation where the idea of endlessly administration fulfillment is totally not quite the same as that of created nations.

Timo et al. [4] suggested that product satisfaction and service satisfaction are very good in determining patient satisfaction. Innovations and appropriate strategies must be continuously improved to create patient satisfaction and loyalty. In contrast to Kasiri et al. (2017), who argue that satisfaction is: (1) the incorporation of normalization and customization of administration contributions is vital to increment administration fulfillment; (2) normalization higherly affects administration fulfillment when contrasted with customization; (3) practical fulfillment higherly affects patient fulfillment when contrasted with specialized fulfillment; and (4) patient fulfillment fundamentally affects patient devotion.[5]

This study tries to explore the implementation of the strategy through the formulation of service satisfaction, which is measured by TERRA (Tangible, Empathy, Reliability, Responsiveness, and Assurance). This strategy was chosen, based on its usefulness and benefits which can be strengthened by the Theory of Planned Behavior.

The TERRA formulation is very easy to implement at a practical level, and can more accurately measure company needs in the field compared to other service satisfaction formulations. The novelty of this study, namely using a different research approach, using the PLS-SEM analysis tool, which is more relevant, and reliable because it eliminates unnecessary error data so that the impact on research results is more accountable. In addition, using the basic theory of planned behavior, as a "scalpel" in this research, will be able to attract readers, and/or other researchers, as a basis for developing more comprehensive research in the future, especially research on optimizing loyalty with the TERRA formulation.

This examination is remembered for the kind of illustrative exploration. As indicated by Sugiyono (2018) illustrative exploration is research that has the point of testing speculations that have been formed already and the examination results will make sense of the causal connection between factors.[6] The data and information collection technique used by the author in this study was field research, where the data was obtained by giving questionnaires directly to the respondents.

The information examination strategy utilized in this study is the PLS (Halfway Least Square) Examination technique with the assistance of the SmartPLS rendition 3.0 application. PLS is a strong arrangement of logical strategies, regularly alluded to as delicate demonstrating on the grounds that it doesn't utilize the suspicion of OLS (common least squares) relapse, for example, information should be typically conveyed in a multivariate way and there are no multicollinearity issues between exogenous factors.[7]

Based on the research background, the formulation of the problem that must be answered in this study is to test whether the dimensions of TERRA service satisfaction affect patient satisfaction at the hospital. Bhayangkara Level II Semarang?

2. Library Review

According to Wardanengsih et al. [8], patient satisfaction and patient satisfaction are the basic principles of satisfaction control. Medical service satisfaction shows the performance of medical services. In general, the more perfect the appearance of a health service, the more perfect the satisfaction. [9].

Indicators of service satisfaction assessment, there are 5 (five) dimensions used by patients in evaluating services that affect the satisfaction of a TERRA service, namely: Tangible (physical evidence), Empathy, Reliability, Responsiveness, and Assurance (Guarantee) [10].

2.1 There is a Tangible Influence on Loyalty

Direct evidence/physical appearance is where health workers show a friendly and polite attitude in serving patients and are very concerned about the completeness of the equipment and comfort in the hospital. This study also illustrates that service satisfaction to patients greatly influences patient loyalty. [11]. The results of this study are also supported by Timo et al.[8] and Athanassopoulos et al. (2001), found that tangibility has a positive effect on patient satisfaction. Based on the description of the relationship between the research variables described above, it can be proposed to develop a hypothesis, namely as follows:

H1: Tangibles have a positive effect on loyalty.

2.1.1 There is an Effect of Empathy on Loyalty

Compassion is focusing on individual or individual attributes given to patients by attempting to comprehend shopper wants, including simplicity of making connections, great correspondence, and addressing patient necessities. The results of the study [11] show that empathy has a relationship to patient satisfaction. Based on the description of the relationship between the research variables described above, it can be proposed to develop a hypothesis, namely as follows:

H2: Empathy has a positive effect on loyalty.

2.1.2 There is an Effect of Reliability on Loyalty

Griffin [12] stated that patients grow into loyal patients gradually. Research [13] found that the responsiveness dimension affects the level of patient loyalty. Results of research by Kasiri et al. [12] and [2], found that unwavering quality emphatically affects patient fulfillment. In view of the portrayal of the connection between the examination factors depicted above, it tends to be proposed to foster a speculation, to be specific as follows:

H3: Reliability has a positive effect on loyalty.

2.1.3 There is an Effect of Responsiveness on Loyalty

Responsiveness needs to be a concern for the hospital management to keep working on improving things that affect the responsiveness of nurses so that the value of patient satisfaction is a top priority and there is no negative image of the hospital due to unsatisfactory responsiveness so that patient satisfaction can be maintained or increased. This is according to research [14] which argues that there is good responsiveness, so the hope is that patients trust, are proud, and are willing to recommend to others. Based on the description of the relationship between the research variables described above, it can be proposed to develop a hypothesis, namely as follows:

H4: Responsiveness has a positive effect on loyalty.

2.1.4 There is an Assurance Effect on Loyalty

Affirmation is the information, politeness, and capacity of organization representatives to cultivate patient confidence in the organization, including information, capacity, kindness, and reliability of staff, liberated from risk, hazard, and uncertainty. Consumer trust and confidence are indicated by the level of service use from service provider companies [11]. Based on the description of the relationship between the research variables described above, it can be proposed to develop a hypothesis, namely as follows:

H5: Assurance has a positive effect on loyalty.

3. Methodology

In fulfilling the objectives of the research, namely to test whether TERRA's service quality dimensions affect loyalty and whether TERRA's service quality dimensions can confirm the

theory of planned behavior that has an impact on loyalty, this research is included in the type of explanatory research. The technique of collecting data and information itself is in the form of field research. The data obtained will be analyzed using the SmartPLS version 3.0 application.

PLS is a strong arrangement of logical techniques, regularly alluded to as delicate demonstrating in light of the fact that it doesn't utilize the presumption of OLS (conventional least squares) relapse, for example, information should be ordinarily conveyed in a multivariate way and there are no multicollinearity issues between exogenous factors.[7] The estimation models in this review incorporate the External Model and Inward Model, with tests including Joined Legitimacy, Discriminant Legitimacy, Normal Fluctuation Removed (AVE), Composite Dependability, and Inward model examination.

4. Result and Discussion

4.1 Research Result

1.1.1. Results of Exogenous Variable Analysis

The exogenous variable in this study is Land Administration Quality (X1). The consequences of the distinct investigation of exogenous factors are as per the following:

Table 4.1. Results of Service Quality Variable Analysis (X1)

Code	Indicator Item	Mean	Criteria
X1.1	*Assurance.3* (Medical personnel serve in a reassuring manner so that patients feel safe)	1.733	Very Low
X1.2	*Emphaty.2* (Medical staff pay close attention to patients)	2.167	Low
X1.3	*Reliability.2* (dependable nursing skills)	2.167	Low
X1.4	*Responsiveness.2* (the presence of nurses accepts and serve well)	2.333	Low
X1.5	*Tangibility.2 (*complete medical equipment)	2.760	Medium
	Tangibility.3 (Hospital medical staff and employees look neat and clean)	2.760	Medim
	Total Average	2.320	Low

Source: Primary data processing, 2023

Based on the results of the analysis shown in table 4.1, the average (mean) rating of respondents to the TERRA Service Quality variable is 2.320, which is included in the Low criteria. From the assessment above, respondents agree that the quality of patient care is not the only variable that can be used as a decision benchmark in determining loyalty.

1.1.2. Endogenous Variable Analysis Results

The endogenous factors in this study are fulfillment (Y1) and dependability (Y2). The aftereffects of the unmistakable examination of the endogenous factors are as per the following:

Table 4.2. Results of Variable Analysis of Satisfaction (Y1) and Loyalty (Y2)

Code	Indicator Item	Mean	Criteria
Y1.1	satisfied and will be loyal to the services obtained at the hospital	2.000	Very low

|			
Y2.1	loyal to use the health services in the hospital	1.700	Very low
Y2.2	will not switch to using health facilities at other hospitals, other than those at this hospital	1.833	Very low
Y2.3	I will continue to make total reference to the health services available at the hospital to other people I meet	1.800	Very low
	Total Average	1.833	Very low

Source: Primary data processing, 2023

In view of the consequences of the expressive examination, the table above shows that respondents appraised the fulfillment and unwaveringness factors as having a typical worth of 1,833 with extremely low rules. From the average assessment, respondents agreed that the satisfaction perspective is important to use as a parameter for planning patient loyalty in the future.

1.1.3. Measurement Models Evaluation

United legitimacy is estimated utilizing the external stacking boundary. Individual reflexive measures can be supposed to be related in the event that they have a worth of more than 0.5 with the develop you need to gauge. Coming up next is the aftereffect of the external model test to show the external stacking esteem utilizing the Savvy PLS investigation apparatus (3.0).

Fig 1. Outer Model Test Result

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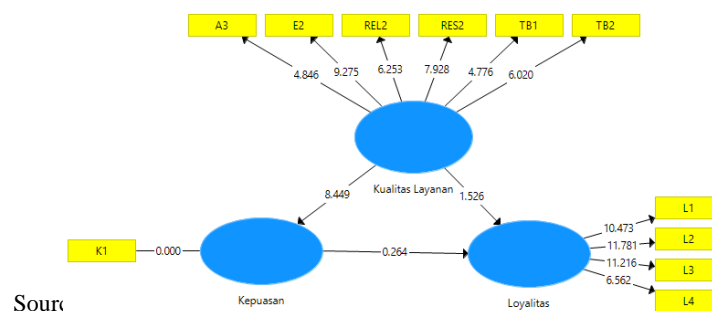
To see more clearly the value of the loading factor, the indicator construct data for each variable is presented as follows:

Table 4.3 Outer Loading Convergent Validity Test

Variable	AVE	Outer Loading
Service Quality	0,640	0,730
Loyalty	0,882	0,939

Source: SmartPLS 3.0 Output Results

In accordance with the table above, the indicator value has an outer loading value > 0.7. There is no variable indicator whose outer loading value is below 0.7 so that it is declared feasible or valid to be used as research.

1.1.4. Discriminant Validity

The discriminant legitimacy test utilizes the boundary cross-stacking esteem. To satisfy discriminant legitimacy in the event that the cross-stacking pointer esteem on the variable is the biggest when contrasted with different factors. In light of the experimental outcomes, it was found that every pointer thing has the biggest cross-stacking esteem contrasted with the cross-stacking values on different factors. The markers utilized in this study have great discriminant legitimacy. Coming up next is the worth of the cross-stacking factor:

Table 4.4 Cross-Loading Factor Discriminant Validity Test

Variable	Construct	Convergent Validity
Service Quality	A3	0,772
	E2	0,758
	REL2	0,785
	RES2	0,880
	TB1	0,947
	TB2	0,961
Loyalty	L1	0,981
	L2	0,947
	L3	0,937
	L4	0,890

Source: SmartPLS 3.0 Output Results

In view of the table over, the cross-stacking esteem in each build has a higher worth than different develops. This shows that the manifest variable in this concentrate accurately makes sense of the idle variable and demonstrates that this multitude of things are substantial.

1.1.5. Composite Reliability

A dependability test is done to demonstrate the exactness, consistency, and accuracy of the instrument in estimating a build. In PLS-SEM utilizing SmartPLS, estimating the unwavering quality of a build should be possible in more ways than one, to be specific by R Square, AVE, Q2, and GoF. The consequences of the R Square, AVE, Q2, and GoF lists should be visible in the accompanying table:

Table 4.5 *Composite Reliability*

| Variable	R Square	Q^2	AVE	GoF
Service Quality	0,730	0,878	0,640	0,720
Loyalty	0,249		0,882	

From the table above it tends to be seen that the R Square incentive for every variable has been at a worth above 0.2 which is viewed as high in disciplines like buyer conduct. The worth of the degree of significance (Q^2) for all factors is 0.878. This implies showing that exogenous builds have extraordinary prescient importance for their endogenous develops [15]. The Decency of Fit (GoF) esteem got in handling this exploration information is 0.720 which as per [16] incorporates a huge GoF of more than 0.38 in light of the fact that the records expected in the inward model test have met the prerequisites, the proposed model design is plausible to foresee every one of the speculations proposed in this review.

1.1.6. Evaluation of the Structural Model (Inner Model)

1.1.6.1. Hypothesis Testing (Resampling Bootstrapping)

To see if a speculation is acknowledged or dismissed should be possible by focusing on the importance esteem between develops, t-insights, and p-values. In the bootstrapping strategy in this review, the speculation is acknowledged whether the t-factual importance esteem is more noteworthy than 1.96 as well as the p-esteem is under 0.05, then Ha is acknowledged and Ho is dismissed, as well as the other way around.

Fig 2. *Inner Model* **Test Result**
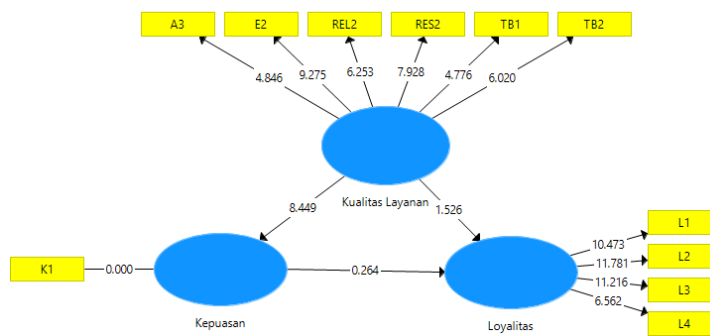
Source: Primary data processed, 2023

Based on the test image above, the results of the hypothesis test are represented in the table as follows:

Table 4.7 Path Coefficient and Indirect Effect

No	Hypothesis	Original Sample	Sample Mean	STDEV	T Statistic	P Value	Information
1	Tangible ---> Loyalty	-0.011	-0.023	0.291	0.036	0.971	Accepted
2	Empathy ---> Loyalty	0.088	0.094	0.211	0.416	0.678	Accepted
3	Reliability ---> Loyalty	0.275	0.315	0.304	0.902	0.367	Accepted
4	Responsiveness---> Loyalty	0.435	0.418	0.263	1.656	0.098	Accepted
5	Assurance ---> Loyalty	-0.118	-0.079	0.306	0.385	0.700	Accepted

1.2. Discussion

1.2.1. Tangible Effects on Loyalty

The findings of a tangible relationship with the loyalty variable have a positive effect, but are not significant so it is by the research hypothesis. Positive influence, the meaning is tangible and felt by hospital consumers. increases, then patient loyalty will also increase, conversely if the tangible factor decreases, then patient loyalty also decreases. Tangibles are meant to be RS's capabilities. in

demonstrating his ability when dealing directly with his patients. From the average response of respondents to tangibles on comparable and linear loyalty, tangibles have a positive effect on patient loyalty.

1.2.2. The Effect of Empathy on Loyalty

The findings of the relationship between empathy and satisfaction have a positive but not significant effect so it is by the research hypothesis. Positive influence, the meaning is the empathy felt by hospital patients. increases, then patient loyalty will also increase, conversely if the empathy factor decreases, then patient loyalty also decreases. Empathy is intended as individual attention given by hospital employees to patients such as the ease of contacting the company, and good communication from hospital employees to patients. Services will run well, smoothly, and with quality, if all parties interested in providing services have empathy in completing or managing or have the same commitment to service. From the average respondent's response to empathize on comparable and linear loyalty, empathy has a positive effect on patient loyalty.

1.2.3. The Effect of Reliability on Loyalty

The findings of the reliability relationship with the loyalty variable have a positive effect but are not significant so it is by the research hypothesis. Positive influence, the meaning is the perceived reliability of hospital patients increases, then patient loyalty will also increase, conversely if the reliability factor decreases, then patient loyalty also decreases. Reliability is intended as reliability in the form of skills in mastering the field of work according to skills, as well as reliability in mastering competencies according to the work experience of hospital employees. The findings show that reliability is an elaboration of the existence of hospital nurses, who always accept and serve their patients well, which leads to the loyalty of patients who seek treatment at the hospital.

1.2.4. The Effect of Responsiveness on Loyalty

The findings of the responsiveness relationship with the loyalty variable have a positive effect, but are not significant so it is by the research hypothesis. Positive influence, the meaning is the responsiveness felt by hospital patients. increases, then patient loyalty will also increase, conversely if the responsiveness factor decreases, then patient loyalty also decreases. Responsiveness is intended as the desire of hospital employees. to help his patients, and provide responsive services, like how hospital employees do. in receiving requests, complaints, suggestions, criticisms, complaints, and so on for products or even services received by patients.

1.2.5. The Effect of Assurance on Loyalty

The findings of the assurance relationship with the loyalty variable have a positive effect, but are not significant so it is in line with the research hypothesis. Positive influence, the meaning is the assurance felt by hospital patients. increases, then patient loyalty will also increase, conversely if the assurance factor decreases, then patient loyalty also decreases. Assurance is intended as a reference to provide the best and best possible service to hospital patients. The findings show that assurance is an elaboration of the existence of hospital medical staff, who always serve their patients well in a convincing manner, which results in patient satisfaction in seeking treatment at the hospital. Consumer trust and confidence is indicated by the level of service use by service provider companies [11].

In view of the consequences of the computation examination over, these discoveries affirm the Hypothesis of Arranged Conduct, that in a help framework, specialist co-ops and purchasers should have a cozy relationship, where customers are dynamic members in the development of the help cycle [17]. Several causes can influence loyalty. [18] described this as influenced by consumer characteristics, marketing stimulation, and others. These variables influence each other in the stage of forming a patient's good or bad perception of the services offered by the hospital.

5. Conclusion

From the results of the analysis, it can be concluded that there are positive results between TERRA's service quality dimensions on loyalty, and TERRA's service quality dimensions can confirm the theory of planned behavior which has an impact on loyalty.

Advice that can be given related to the strategy for implementing the TERRA formulation which has an impact on loyalty within the scope of the hospital, namely: It is hoped that the hospital can maintain and improve the quality of service towards Empathy, because the Empathy variable has a dominant influence in influencing the Loyalty Level of Patients, including by paying more attention to the needs of patients during hospitalization. The limitations of this study are examining institutions with a small number of respondents/patients or a small population, causing a limited number of samples. Suggestions for further research are to expand the number of research samples to all patients in the hospital.

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