

THE SERVQUAL MODEL THAT AFFECT PATIENT SATISFACTION AT A DARYO DENTAL SPECIALIST CLINIC

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Abstract

The problem of increasing patient visits in a dental clinic is that currently researchers want to learn about the services provided to patients. Daryo Dental Clinic, Jakarta is a concept founded by Drg. Daryono. With this clinic, the community can be provided with dental services so that patient satisfaction becomes a priority. This research was conducted at the Daryo Dental Specialist Clinic using Quantitative methodology is used in this research. SPSS is used to analyze the collected questionnaires to 70 patient respondents as selected patients who were over 17 years old and were patients who had been registered as old patients. The aim of the research is to find out: 1) To find out the suitability of patient satisfaction variables which have a significant influence on services at the Daryo Dental clinic. 2) To find out the most dominant variables in influencing patient satisfaction. This research uses a questionnaire consisting of 5 dimensions and 29 indicator which will be analyzed statistical product and service solution (SPSS) 24.00 program. The results of the research show that the factors that are important and immediately from the SPSS output results, a correlation coefficient (r) value of 0.903 is obtained, which means that this occurs. There is a very strong relationship between tangibility variables (X1), empathy (X2), reliability (X3), responsiveness (X4) and assurance (X5) on the patient satisfaction variable (Y).

Keywords: Patient satisfaction, Service quality, Dental clinic specialist, TERRA

Introduction

Visiting the dentist is one of the most difficult things to deal with, especially for children and adults. If it is not due to toothache, it is better not to visit the dentist. Dental treatment is something scary for them to hear the sound of the bur tool. Many dental problems include: cavities, tartar, bleeding gums, bad breath, tooth color (Pratiwi D, 2007). The rapid growth of dental clinics, especially in Jakarta, has become a lot of competition in this day and age. Compared to previous generations who were less interested in this field of dentistry. More and more young dentists find it difficult to create jobs by opening a dental practice. To be able to create and maintain the competition that occurs between dental clinics and others, must have the right strategy (Ruswanti & Kusumawati, 2020). One of the necessary competitive strategies is to create patient satisfaction in a dental clinic and maintain old patients to become our loyal customers (El-Adly MI, 2019).

Good service quality is not only achieved, but also maintained and maintained (quality assurance) given the shifting needs, expectations and desires of patients and various interested parties. Therefore, the quality of health services, especially health services, especially health services in dental clinics, should be an ongoing activity to be provided to patients accompanied by efforts to constantly improve treatment patterns and find solutions to service or treatment problems that occur (Kamagahara, Y., Takeda, T., Jin, S., Lu, X., Ota, T., Hara, T., & Kida, N. 2016).

Previous research (Novita, 2008; Margaretha, 2008; Andaleeb, 1998; Butters, 2000; Gills, 2001; Heidegger, 2006; Johnson and Russel, 2015; Ruswanti and Kusumawati, 2020), explains patient satisfaction in the service insurance, company, hospital or healthcare in general. The eight studies did not specifically explain patient satisfaction in the

object of research at the dental clinic. Therefore, this study focuses more on patient satisfaction only on the object of research at the dental clinic specialistic.

The novelties of this research are : The research only focuses on the object of research in the dental clinic specialist in West Jakarta.

Based on these reasons, it is hoped that it can provide information about this research and answer the questions:

1. How does the level of patient satisfaction have a significant effect on services at the Daryo Dental Specialist clinic? 2. Which variable is the most dominant in influencing patient satisfaction?

The purpose : Based on the background and problem formulation stated above, the objectives of this research are to determine whether the patient satisfaction variable has a significant effect on services at the Daryo Dental clinic. Know the most dominant variables influencing patient satisfaction.

Patient satisfaction

One of the best ways to demonstrate quality of care is patient satisfaction (Butters & Willis, 2000), and well-designed surveys are the most common way to collect information on patient satisfaction. These surveys allow clinicians to identify areas of improvement that may be needed to improve the quality of care they provide to their patients and even allow them to improve their own quality of care (Iliffe et al., 2008). Well-designed patient satisfaction surveys can help physicians determine what improvements are needed to improve the quality of care provided and even reduce the likelihood of physicians being held accountable (Milgrom et al., 1996).

Customer satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's received performance or outcome in relations to the person's expectation (Kotler,2012). In general, customer satisfaction is defined as the fulfillment of expectations through a complex evaluation process, which includes all services and various individual assessment attributes that form different perceptions of service quality (El-Adly, 2019). Meanwhile, patient satisfaction (Jaapar et al., 2017) defines patient satisfaction as a response to improved health services from the start. In research by Ruswanti et al. (2020), a relationship states that patient satisfaction with good service will affect the patient's intention to return and take treatment.

High patient satisfaction will result in increased revenue and patient willingness to return (Tekin & Erol, 2017). On the other hand, high competition in dental clinics helps patients choose the best dental services as dental clinics offer the latest dental equipment and treatment methods (Kamagahara et al., 2016).

Service Quality

Service quality has been increasingly recognized as a critical component in delivering differentiated services and giving professional service organizations a competitive advantage (Taner and Antony, 2006). Hospitals and clinics rely heavily on service quality to verify and improve the weaker elements of their health system. To maintain and improve the quality of their services, healthcare providers should use the responses obtained from surveys of patients' perceptions of healthcare services (Taner and Antony, 2006; Chakraborty and Kaynak, 2018; Hensen, Schiller, Metze, and Luger, 2008).

Created by Parasuraman, Zeithaml, and Berry (1985), the Service Quality Model enables the measurement of healthcare services by assessing patients' service expectations and service providers' perceptions of their performance. Freddy K. (2003) states that this model has been widely used in the literature on service quality, and the initial ten dimensions have been changed to five dimensions. The TERRA dimensions are:

1. Tangibility – physical facilities, equipment, and appearance of the personnel
2. Empathy – caring, individualized attention the firm provides to its customers
3. Reliability – the ability to perform the promised service dependably and accurately
4. Responsiveness – the willingness to help customers and provide prompt services
5. Assurance – employee knowledge and courtesy, and their ability to convey trust and confidence

Relationship between service quality and patient satisfaction.

Previous studies have shown that factors such as patient loyalty, word-of-mouth publicity, purchase intentions and behaviors can influence patient actions and decisions about healthcare services (Andaleeb, 1998). According to Padma et al. (2014), customer satisfaction and service quality are often considered as one and the same. Service marketers pay more attention to service quality because it is under the company's control and can benefit customers (Padma, Rajendran, and Lokachari, 2010). Service quality allows healthcare providers to find areas that need improvement. By doing this, they can meet patients' needs and wants, which in turn will save the hospital time and money to resolve patient complaints (Pakdil and Harwood, 2005).

In the healthcare literature, patient satisfaction is very important. Andaleeb (1998) showed that patient satisfaction in healthcare is influenced by communication, cost, facilities, competence, and behavior. Positive interactions between doctors and patients can increase patient satisfaction more than other healthcare provider relationships, according to Pakdil and Harwood (2005). In addition, Padma, Rajendran, and Lokachari (2010) found that many factors influence patient satisfaction, including personnel quality, infrastructure, administrative processes, clinical care processes, patient safety, overall medical care experience, and social responsibility. In addition, patient satisfaction can have an impact on quality of care as satisfied patients are more likely to continue with their treatment plan and establish a positive relationship with the nurse (Russell, Johnson, and White, 2015).

For a long time, it has been recognized that understanding service quality and patient satisfaction is key in creating strategies to improve services. Research on patient satisfaction is particularly important in healthcare, as expressed by Lin and Kelly (1995). Existing research has studied patient satisfaction as a component of quality outcomes (Heidegger, Saal, and Nuebling, 2006), as well as in research measuring quality of care (Gill and White, 2009). Again, quality of care may play a greater role in patient satisfaction. (Johnson and Russell, 2015).

- H1 : Tangibility affects patient satisfaction
- H2 : Empathy affects patient satisfaction
- H3 : Responsiveness affects patient satisfaction
- H4 : Reliability affects patient satisfaction
- H5 : Assurance affects patient satisfaction

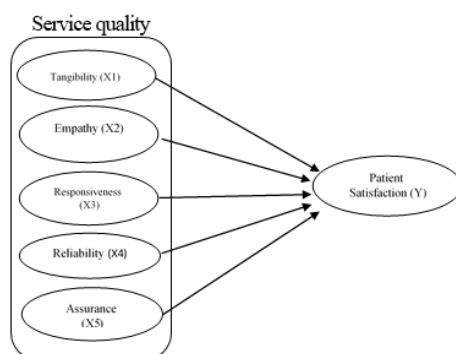


Figure 1. The conceptual research framework

Research Methods

Quantitative methodology is used in this research. SPSS is used to analyze the collected questionnaires. Data collection was carried out by sending questionnaires to respondents who had done dental treatment at dental clinic specialist in the city of Jakarta using an online survey service provider in October 2023 within the period of collecting data from respondents for two weeks. The selected population has experience in performing dental

treatment at dental clinics in the city of Jakarta. The Purposive sampling technique was used in the study and succeeded in collecting 70 sample respondents.

Validity and reliability tests were used to assess the model. At the same time, the indicators in the reliability test model use Cronbach's alpha with a minimum value of 0,6. The Validity test model use bivariate pearson correlation with a minimum value of 0,3.

Classical assumption test which consists of testing autocorrelation, Multicollinearity, Heteroscedastisity, Normality) and Multiple linear regression analysis (Ghozali, Imam. 2018).

Hypothesis testing on simultaneous test (F test), this test is used to determine whether in the independent variables together have significant effect on the dependent variable with F value < 0.05. Hypothesis testing on partial test (t-test) sig value <0.05 (Ghozali, Imam. 2018).

Each indicator is measured using a Likert scale from 1 (strongly disagree) to 5 (strongly agree). The researcher used a verification descriptive research design. While the research methodology employed is quantitative methods (Sugiyono, 2015; Freddy K, 2003).

Variable research :

- a. Dependent variable: Patient Satisfaction (Y)
- b. Independent variable: Tangibility (X1), Empathy (X2), Responsiveness (X3), Reliability (X4), dan Assurance (X5)

The indicators measured in this study are translated into 29 questions. Then from the results of distributing the questionnaire, the score value of each question item is described in the table 1. The results of the questionnaire were tested to determine whether or not the question items were used (Andaleeb, S. S. 2001; Pakdil, F., and T. N. Harwood. 2005; Freddy K, 2003; Tjiptono, F and Gregorius C, 2019).

Table 1. Variable Measurement

No	Variable	Indicators	Description
1.	Tangibility	X11	The complete physical facilities and interior arrangement provide a sense of comfort for patients
		X12	The doctor's appearance reassures the patients who come
		X13	The condition of the facilities and facilities available are in good condition
		X14	The strategic location can be reached by public transportation, making it easier the patient arrives
2.	Empathy	X21	Professionalism of doctors in providing services
		X22	Patient complaints can be resolved well
		X23	The doctor's ability to build good relationships with patients
		X24	Understanding health for patients
3.	Responsiveness	X31	Professional service from doctors to patients
		X32	Satisfactory service to patients
		X33	Timely service according to patient promises
4.	Reliability	X41	Speed and accuracy of service from doctors to patients
		X42	Willing to give time as requested to explain to help patient
		X43	Listen to patient complaints well
		X44	The nurse's willingness to serve politely
		X45	Friendly service makes patients feel comfortable
5.	Assurance	X51	Doctor's knowledge & competence towards patient interests
		X52	The trust given by doctors so that patients feel assured
		X53	Efforts to increase dental health insurance for patients
		X54	Understand the need for insurance for dental health for patients
		X55	Provides a guarantee of action for patients in the near future
		X56	There are payments that can be given in stages

6.	Satisfaction	Y1	Satisfied with the products in the clinic
		Y2	Satisfied with the price
		Y3	Satisfied with the existing location
		Y4	Satisfied with existing promotions
		Y5	Satisfied with the service from doctors and employees
		Y6	Satisfied with the process during the inspection activities from start to finish
		Y7	Satisfied with the current physical evidence

Results and Discussion

Presentation of data is intended to make it easier to analyze and discuss in detail. The data presented is data that the author has collected through questionnaire techniques. The results of the questionnaire regarding the profile of the respondents. The data obtained from the questionnaire distributed regarding respondent data based on gender can be seen in the table 2 below.

Table 2. Respondent Profile

No.	Variables	Rate	
1.	Sex	Man	55.7%
		Woman	44.3%
2.	Age	< 30 years old	35.7%
		31 – 40 years old	30%
		41 – 50 years old	21.4%
		> 50 years old	12.8%
3.	Occupation	Students	17.1%
		Entrepreneur	18.5%
		Private Officers	41.4%
		Others	22.8%
4.	Education level	Elementary School	17.1%
		Junior High School	8.5%
		Senior High School	57.1%
		Undergraduate/Postgraduate	17.1%

Validity Test

In this study, researchers conducted a validity test with the help of the SPSS 24.00 program (Ghozali, Imam. 2018). The validity test was carried out using Pearson's bivariate correlation (product of person moments). From the output of the SPSS results in the attachment, it can be seen that all the r values of all questions are greater than 0.3 so it can be concluded that all questions contained in all variables are valid.

Reliability Test

After the validity test, then proceed with the reliability test. This test is to determine whether the measuring instrument used is reliable. The reliability test carried out in the study using the Cronbach Alpha method (Ghozali, Imam. 2018). Where the instrument can be said to be reliable if the alpha value is greater than 0.6. From the SPSS results, the alpha values for all variables in the study are as follows:

- a) On the tangibility variable (X1) obtained an alpha value of 0.660
- b) On the empathy variable (X2) obtained an alpha value of 0.629
- c) On the responsiveness variable (X3) obtained an alpha value of 0.601
- d) On the reliability variable (X4) obtained an alpha value of 0.615
- e) On the assurance variable (X5) obtained an alpha value of 0.639
- f) On the patient satisfaction variable (Y) obtained an alpha value of 0.692

Because all variables have a Cronbach alpha value of more than 0.6, it can be concluded that the data is reliable and can be used to reveal the research variables to be carried out (see Table 3).

Table 3. Validity and Reliability

Variables	Cronbach's Alpha	N	%
Tangibles	.660	70	100.0
Empathy	.629	70	100.0
Responsiveness	.701	70	100.0
Reliability	.615	70	100.0
Assurance	.639	70	100.0
Satisfaction	.692	70	100.0

Autocorrelation Testing

The autocorrelation test is a test of assumptions in regression where the dependent variable is not correlated with itself. This means that the value of the dependent variable is not related to the value of the variable itself. The presence of autocorrelation symptoms causes the regression results to be inefficient because the variance or standard error of estimate that occurs is not minimum and makes the significance test inaccurate. To determine the presence or absence of autocorrelation symptoms, it can be done with the Durbin-Watson Test with a significance level of 5% (Ghozali, Imam. 2018).

In this study, the Durbin-Watson test (DW test) was used to determine the presence or absence of autocorrelation symptoms in the calculation of the regression. If $D-W > dU$, then there is no autocorrelation; If $D-W < dU$, then there is autocorrelation; If $dL < DW < dU$, then it cannot be detected whether autocorrelation occurs or not.

Based on the results of calculations with the help of SPSS, the following results are obtained: Durbin Watson's d value with a significance level of 5% and k (number of independent variables) = 5, and n (number of observations) = 70, obtained a value of $dU = 1.768$. While the results of the SPSS calculation obtained the Durbin Watson test value = 1,774. Because the DW value $> dU$ ($1,774 > 1,768$), it can be interpreted that this model does not have either positive or negative autocorrelation or both, so this regression model meets the requirements of the classical assumptions about autocorrelation (see Table 4).

Table 4. Durbin-Watson test (DW test)

R	R Square	Adjusted R Square	Std.Error of the estimate	Durbin-Watson
.903	.815	.801	.84388	1.774

Classical Assumption Testing of Regression: Multicollinearity

The multicollinearity test is used to determine whether or not there is a deviation from the classic assumption of multicollinearity, namely the existence of a linear relationship between independent variables in the regression model (Ghozali, Imam. 2018). The prerequisite that must be met in the regression model is the absence of multicollinearity. In this case, the researchers tested by looking at the variance inflation factor (VIF) value in the regression model.

From the SPSS results, it can be seen that the variance inflation factor (VIF) value for the physical variable is 1.374, empathy is 1.454, responsiveness is 2.032, reliability is 1.528, and assurance is 2.368. Because these values are smaller than 5, it can be concluded that there is no multicollinearity problem between the independent variables (see Table 5).

Table 5. Variance inflation factor (VIF)

Model	B	Std.Error	Beta	Tolerance	VIF
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Const	3.341	1.648			
X1	.166	.082	.128	.728	1.374
X2	.253	.082	.201	.688	1.454
X3	.322	.157	.157	.492	2.032
X4	.307	.080	.255	.654	1.528
X5	.378	.077	.407	.422	2.368

Classical Assumption Testing of Regression: Heteroscedasticity

Heteroscedasticity means that the residual variation is not the same for all observations. For example, heteroscedasticity will appear in the form of increasingly large residuals. A regression is said to have detected heteroscedasticity if the residual scatter diagram forms a certain pattern.

Based on the output results generated by SPSS which can be seen in the attachment, it can be concluded that the residual scatter diagram spreads randomly, does not form a certain pattern, is spread both above and below the number 0 on the Y axis. Thus it can be concluded that the regression is free from heteroscedasticity and meets the requirements of the classical assumptions about heteroscedasticity (Ghozali, Imam. 2018).

Regression Classical Assumption Testing: Normality

In this study, to determine whether the data population is normally distributed, it is detected by looking at the distribution of data on the diagonal axis of the graph, where if the data spreads around the diagonal line and follows the direction of the diagonal line, the regression model fulfills the assumption of normality.

From the SPSS results seen in the attachment, it can be seen that the data spreads around the diagonal line and follows the direction of the diagonal line so it can be concluded that the regression model fulfills the assumption of normality.

Multiple Linear Regression Analysis

To analyze the relationship between the dependent variable and the independent variable in this study using computer aids, namely the statistical product and service solution (SPSS) 24.00 program. This program is used because it can assist in finding correlations and regressions between the dependent variable, which in this study is the consumer satisfaction variable (Y) with the independent variables, which in this study are tangibility variables (X1), empathy (X2), responsiveness (X3), reliability (X4) and assurance (X5).

To determine the relationship between the variables of tangibility variables (X1), empathy (X2), responsiveness (X3), reliability (X4) and assurance (X5) together on the dependent variable of patient satisfaction (Y), multiple regression analysis is used.

From the results of data processing through SPSS, a multiple regression equation is obtained, which is as follows:

$$Y = 3.341 + 0.166 X1 + 0.253 X2 + 0.322 X3 + 0.307 X4 + 0.378 X5$$

$$r = 0.903; R \text{ square } (r^2) = 0.815; F \text{ count} = 56.469$$

From the results of the analysis of the multiple regression equation above, the authors can describe it as follows:

- a. The regression coefficient of each of the tangibility variables (X1), empathy (X2), responsiveness (X3), reliability (X4) and assurance (X5) on the customer satisfaction variable (Y) is positive, this means that if there is an increase in each variable by one unit, it will also be followed by an increase in customer satisfaction (See Table 5).
- b. The value of a (constant) is 3,341, explaining that if the tangibility variables (X1), empathy (X2), responsiveness (X3), reliability (X4) and assurance (X5) are ignored or constant, then customer satisfaction increases by 3,341 (See Table 5).
- c. Correlation coefficient (r)

To measure the magnitude of the relationship between tangibility variables (X1), empathy (X2), responsiveness (X3), reliability (X4) and assurance (X5) together on the variable customer satisfaction (Y) can be measured from the magnitude of the correlation coefficient (r).

From the results of the SPSS output, the correlation coefficient (r) is 0.903 (See Table 4), which means that there is a very strong relationship between the tangibility variables (X1), empathy (X2), responsiveness (X3), reliability (X4) and assurance (X5) on the variable customer satisfaction (Y).

d. Coefficient of determination (r^2)

The coefficient of determination in multiple regression is used to determine the percentage contribution of the influence of the independent variables (physical (X1), empathy (X2), responsiveness (X3), reliability (X4) and guarantee (X5)) together on the dependent variable (customer satisfaction (Y)).

From the results of this simple linear regression analysis, it shows that the coefficient of determination (r^2) is 0.815 (See Table 4), this shows that the percentage contribution of the influence of the independent variables (tangibility (X1), empathy (X2), responsiveness (X3), reliability (X4) and assurance (X5)) on the dependent variable (patient satisfaction (Y)) is 81.5%. While the remaining 18.5% is influenced by other variables that are not included in this study.

Hypothesis Testing

Hypothesis testing on simultaneous test (F test)

This test is used to determine whether the independent variables (tangibility (X1), empathy (X2), responsiveness (X3), reliability (X4) and assurance (X5)) together have a significant effect on the dependent variable (customer satisfaction (Y)).

From the results of the SPSS Output, the calculated F value is 56,469 with a sig value of 0.00. Because the sig value. <0.05 , it can be concluded that the independent variables (tangibility (X1), empathy (X2), responsiveness (X3), reliability (X4) and assurance (X5)) together have a significant effect on the dependent variable (patient satisfaction (Y)) at the Daryo Dental clinic at the 95% confidence level (see Table 7).

Hypothesis testing on partial test (Statistical test t - test)

This test is used to determine whether the independent variables (Tangibility (X1), empathy (X2), responsiveness (X3), reliability (X4), assurance (X5)) partially have a significant effect on the dependent variable (customer satisfaction (Y)).

The following are the results of testing the effect of variables X1, X2, X3, X4 and X5 individually on variable Y, namely:

a. Relationship between tangibility (X1) and patient satisfaction (Y). From the results of the SPSS calculation, the sig. value is 0.046. Because the sig value. <0.05 , it can be concluded that partially the physical variable (X1) has a significant effect on the customer satisfaction variable (Y) at the Daryo Dental clinic at the 95% confidence level (see Table 6). The same as the research submitted by (Tianur S & Hapzi A, 2019), which also stated that the tangibility influence patient satisfaction.

b. The relationship between empathy (X2) and patient satisfaction (Y). From the results of the SPSS calculation, the sig. value is 0.003. Because the sig value. <0.05 , it can be concluded that partially the empathy variable (X2) has a significant effect on the customer satisfaction variable (Y) at the Daryo Dental clinic at the 95% confidence level (see table 6). This is also in line with research conducted (Christine NLT et al.,2019) which also explains that empathy will affect patient satisfaction.

c. The relationship between responsiveness (X3) and patient satisfaction (Y). From the results of the SPSS calculation, the sig. value is 0.045. Because the sig value. <0.05 , it can be concluded that partially the responsiveness variable (X3) has a significant effect on the customer satisfaction variable (Y) at the Daryo Dental clinic at the 95% confidence level (table 6). This is to research (Christine NLT et al.,2019), which states that responsiveness influence patient satisfaction.

d. The relationship between reliability (X4) and patient satisfaction (Y). From the results of the SPSS calculation, the sig. value is 0.000. Because the sig value. <0.05 , it can be concluded that partially the reliability variable (X4) has a significant effect on the customer satisfaction variable (Y) at the Daryo Dental clinic at the 95% confidence

level (table 6). This is to research (Tianur S & Hapzi A,2019), which states that reliability influence patient satisfaction.

e. The relationship between assurance (X5) and patient satisfaction (Y). From the results of the SPSS calculation, the sig. value is 0.000. Because the sig value. <0.05, it can be concluded that partially the guarantee variable (X4) has a significant effect on the customer satisfaction variable (Y) at the Daryo Dental clinic at the 95% confidence level (see Table 6). This is to research (Christine NLT et al.,2019), which states that assurance influence patient satisfaction.

Table 6. t-test

Model	t	Sig	Zero-Order	Partial	Part
Const	2.028	.047			
X1	2.038	.046	.555	.247	.109
X2	3.095	.003	.631	.361	.166
X3	2.047	.045	.707	.248	.110
X4	3.843	.000	.683	.433	.206
X5	4.926	.000	.816	.524	.265

Table 7. F-test

Model	F	Sig.
Regression	56.469	.000

The most dominant variable from the results of the SPSS calculation which can be seen in the attachment, the correlation value is obtained, as follows:

1. Tangibility variables (X1) with customer satisfaction (Y) of 0.555
2. Empathy variable (X2) with customer satisfaction (Y) of 0.631
3. Responsiveness variable (X3) with customer satisfaction (Y) of 0.707
4. Reliability variable (X4) with customer satisfaction (Y) of 0.683
5. Assurance variable (X5) with customer satisfaction (Y) of 0.816

Based on the results above, it means that the assurance variable (X5) has the most dominant influence on patient satisfaction at the Daryo Dental clinic when compared to other variables (see Table 6).

Conclusion

From the analysis of the discussion previously explained, it can be summarized in several conclusions and suggestions as follows the relationship between tangibility (X1), empathy (X2), responsiveness (X3), reliability (X4), and assurance (X5) has a significant effect on patient satisfaction (Y) at the 95% confidence level. Based on the result of 0.816, it means that the assurance variable (X5) has the most dominant influence on patient satisfaction at the Daryo Dental clinic when compared to other variables. The implication of this research is as a marketing strategy by prioritizing the guarantee variable used to increase patient satisfaction in terms of the dental clinic business.

References

Andaleeb, S. S. 1998. Determinants of customer satisfaction with hospitals: A managerial model. *International Journal of Health Care Quality Assurance* 11 (6):181–7.

- Andaleeb, S. S. 2001. Service quality perceptions and patient satisfaction: a study of hospitals in a developing country. *Social Science & Medicines*, 52(9), 1359-1370. Doi: 10.1016/s0277-9536(00)00235-5
- Butters JM, Willis DO. A comparison of patient satisfaction among current and former dental school patients. *J Dent Educ*. 2000;64(6):409-15.
- Chakraborty, S., and H. Kaynak. 2018. Towards a Triadic Quality Measurement Framework for US Healthcare. *Quality Management Journal* 25 (1):46–63. doi:10.1080/10686967.2018.1404358.
- Christine NLT et al., 2019. Measuring the influence of service quality on patient satisfaction in Malaysia. *Quality Management J*. Vol:26, No.3; 129-143. <https://doi.org/10.1080/10686967.2019.1615852>
- El-Adly, M. I. 2019. Modelling the relationship between hotel perceived value, customer satisfaction, and customer loyalty. *Journal of Retailing and Consumer Services*, 50(xxxx), 322–332. <https://doi.org/10.1016/j.jretconser.2018.07.007>
- Freddy K. 2003. Measuring customer satisfaction. Gramedia Pustaka Utama. Jakarta
- Ghozali, Imam. 2018. Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Badan Penerbit Universitas Diponegoro: Semarang
- Ghozali, I., & Latan, H. 2014. Partial least squares: Konsep, metode, dan aplikasi menggunakan program warppls 2.0. Edisi kedua. Semarang: Universitas Diponegoro.
- Gill, L., and L. White. 2009. A critical review of patient satisfaction. *Leadership in Health Services* 22 (1):8–19. doi:10.1108/17511870910927994.
- Hensen, P., M. Schiller, D. Metze, and T. Luger. 2008. Evaluating hospital service quality from a physician viewpoint. *International Journal of Health Care Quality Assurance* 21 (1):75–86. doi:10.1108/09526860810841174.
- Heidegger, T., D. Saal, and M. Nuebling. 2006. Patient satisfaction with anesthesia care: What is patient satisfaction, how should it be measured, and what is the evidence for assuring high patient satisfaction? *Best Practice & Research Clinical Anaesthesiology* 20 (2):331–46. doi: 10.1016/j.bpa.2005.10.010.
- Iliffe S, Wilcock J, Manthorpe J, et al. Can clinicians benefit from patient satisfaction surveys? Evaluating the NSF for older people, 2005-2006. *J R Soc Med*. 2008;101(12):598-604.
- Jaapar, M., Musa, G., Moghavvemi, S., & Saub, R. (2017). Dental tourism: Examining tourist profiles, motivation and satisfaction. *Tourism Management*, 61, 538–552. <https://doi.org/10.1016/j.tourman.2017.02.023>
- Johnson, D. M., and R. S. Russell. 2015. SEM of service quality to predict overall patient satisfaction in medical clinics: A case study. *Quality Management Journal* 22 (4):18–36. doi:10.1080/10686967.2015.11918448.
- Kamagahara, Y., Takeda, T., Jin, S., Lu, X., Ota, T., Hara, T., & Kida, N. 2016. Qualitative analysis of the customer satisfaction at the dental clinics. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 9745(August 2014), 229–242. https://doi.org/10.1007/978-3-319-40247-5_24
- Kotler, P., & Keller, K. L. 2012. Marketing management. 14th Edition. Essex: Pearson Education Inc.
- Lin, B., and E. Kelly. 1995. Methodological issues in patient satisfaction surveys. *International Journal of Health Care Quality Assurance* 8 (6):32–7. doi:10.1108/09526869510098840.
- Margaretha M. Siahaan. 2008. Analisis kepuasan konsumen terhadap pelayanan di PT. Asuransi Jiwa Bumi Asih Jaya. Labora. Manajemen
- Milgrom P, Cullen T, Whitney C, et al. Frustrating patient visits. *J Public Health Dent*. 1996;56(1):6-11.
- Novita. 2008. Analisis kepuasan karyawan PT. Tiga Serangkai Nusantara. Labora. Manajemen
- Padma, P., P. S. Lokachari, and R. Chandrasekharan. 2014. Strategic action grids: A study in Indian hospitals. *International Journal of Health Care Quality Assurance* 27 (5):360–72. doi: 10.1108/IJHCQA-11-2012-0108.
- Padma, P., C. Rajendran, and P. S. Lokachari. 2010. Service quality and its impact on customer satisfaction in Indian hospitals: Perspectives of patients and their attendants. *Benchmarking: An International Journal* 17 (6):807–41. doi:10.1108/14635771011089746.

- Pakdil, F., and T. N. Harwood. 2005. Patient satisfaction in a preoperative assessment clinic: An analysis using SERVQUAL dimensions. *Total Quality Management & Business Excellence* 16 (1):15–30. doi:10.1080/1478336042000255622.
- Parasuraman, A., V. A. Zeithaml, and L. L. Berry. 1985. A conceptual model of service quality and its implications for future research. *Journal of Marketing* 49 (4):41–50. doi:10.2307/1251430.
- Pratiwi, D, 2007, *Gigi Sehat Merawat Gigi Sehari-hari*, Penerbit PT. Gramedia, Jakarta.
- Russell, R. S., D. M. Johnson, and S. W. White. 2015. Patient perceptions of quality: Analyzing patient satisfaction surveys. *International Journal of Operations & Production Management* 35 (8):1158–81. doi:10.1108/IJOPM-02-2014-0074.
- Ruswanti, E., Eff, A. R. Y., & Kusumawati, M. D. 2020. Word of mouth, trust, satisfaction and effect of repurchase intention to Batavia hospital in west Jakarta, Indonesia. *Management Science Letters*, 10(2), 265–270. <https://doi.org/10.5267/j.msl.2019.9.006>
- Sugiyono. 2015. *Metode penelitian kuantitatif kualitatif dan r&d*. Bandung: Alfabeta.
- Taner, T., and J. Antony. 2006. Comparing public and private hospital care service quality in Turkey. *Leadership in Health Services* 19 (2):1–10. doi:10.1108/13660750610664991.
- Tekin, P., & Erol, R. 2017. The internal and external customer-focused process improvement and the performance analysis studies in healthcare systems. *Journal of Industrial Engineering and Management*, 10(3), 407–430. <https://doi.org/10.3926/jiem.2069>
- Tianur S, Hapzi A. 2019. Patient satisfaction model and patient loyalty: Analysis of service quality and facility (Case study at Rawamangun special surgery hospital). *Sch Bull*,5(10):551-559. DOI: 10.36348/sb.2019.v05i10.002
- Tjiptono, F and Gregorius C. 2019. *Service quality & Customer satisfaction*. Ed.V. Yogyakarta: ANDI