

THE ROLE OF SERVICE QUALITY IN AFFECTING CUSTOMER SATISFACTION: THE MEDIATING ROLE OF CUSTOMER VALUE

Zulganef^{1*}

Management Department, Faculty of Economy and Business, Universitas Widyatama, Bandung, Indonesia, zulganef@widyatama.ac.id

*Corresponding author

Cucu Hodijah²

Communication Studies, Institut Manajemen Wiyata Indonesia, Sukabumi, Indonesia, cucu_hodijah@imwi.ac.id

Abstract

Background – In service sector, there is always a possibility for customers to selectively choose their desired service that will meet their satisfaction. Organizations are thus required to identify the factors that determine customer satisfaction.

Aim – This study aims to investigate the mediating effect of customer value on the relationship between service quality and customer satisfaction at the library of Widyatama University, Bandung, Indonesia.

Design/ Methodology/ Approach – Using quantitative approach, this study distributed 800 questionnaires to respondents, and receive 713 questionnaires that can be used for further analysis. The data analysis is carried out using structural equation modeling (SEM) with AMOS.

Findings – This study shows that customer value has no effect on satisfaction, meaning that customer value does not play a role in mediating the relationship between service quality and satisfaction. Only two variables based on dimensions of Service Quality Analysis (SERVQUAL) have an effect on other variables, namely assurance and empathy.

Conclusion – Customer value and satisfaction for library users at Widyatama University are two different things that have no relationship or connection at all. The service quality variable that affects customer value is assurance, while the variable that affects satisfaction is empathy.

Research implication – There are two things that must be considered by the library manager, namely the assurance perceived by library users, and the empathy that the library's managers and staff must have, especially as the providers of library service.

Limitations – This research was only conducted in one university library, so the results about the condition of the library or services cannot be generalized. It also only utilizes the two-dimensional model of SERVQUAL, thus future research are required to address and develop this topic.

Keywords: Service, Quality, Customer, Value, Satisfaction, Empathy.

Abstrak

Latar Belakang – Dalam sektor layanan bisnis, selalu ada kemungkinan bagi pelanggan untuk memilih layanan yang mereka inginkan secara selektif sehingga dapat merasakan kepuasan. Organisasi perlu mengidentifikasi berbagai faktor yang mempengaruhi kepuasan pelanggan.

Tujuan – Penelitian ini bertujuan untuk menginvestigasi pengaruh mediasi dari *customer value* pada hubungan antara kualitas layanan dan kepuasan konsumen di perpustakaan Universitas Widyatama Bandung, Indonesia.

Desain/ metodologi/ pendekatan – Menggunakan pendekatan kuantitatif, penelitian ini mendistribusikan 800 kuesioner pada responden, dan menerima 713 kuesioner yang dapat digunakan untuk analisis lebih lanjut. Analisis data dilakukan dengan *structural equation modeling* (SEM) dengan *software* AMOS.

Temuan – Penelitian ini menunjukkan bahwa *customer value* tidak berpengaruh terhadap kepuasan, dan *customer value* tidak berperan dalam memediasi hubungan antara kualitas layanan dan kepuasan.

Diterima : 13 Maret 2023

Direview : 17 April 2023

Direvisi : 01 Mei 2023

Disetujui : 31 Mei 2023



Hanya dua variabel pada dimensi Kualitas Layanan (SERVQUAL) yang berpengaruh terhadap variabel lain, yaitu *assurance* dan empati.

Kesimpulan - Nilai dan kepuasan pelanggan bagi pengguna perpustakaan di Universitas Widyatama adalah dua hal berbeda yang tidak memiliki hubungan atau keterkaitan sama sekali. Variabel kualitas pelayanan yang mempengaruhi nilai pelanggan adalah jaminan, sedangkan variabel yang mempengaruhi kepuasan adalah empati.

Implikasi Penelitian – Terdapat dua hal yang harus dipertimbangkan oleh pengelola perpustakaan, yaitu *assurance* yang dipersepsikan pengguna perpustakaan, serta empati yang harus dimiliki pengelola dan staf perpustakaan, terutama sebagai penyedia layanan.

Batasan Penelitian – Penelitian ini hanya dilakukan pada satu perpustakaan di universitas, sehingga hasil mengenai kondisi perpustakaan atau layanannya tidak dapat digeneralisasi. Penelitian ini juga hanya menggunakan model dua dimensi dari SERVQUAL, sehingga peneliti selanjutnya perlu menjawab dan mengembangkan topik ini.

Kata Kunci : Layanan, Kualitas, Pelanggan, Nilai, Kepuasan, Empati.

INTRODUCTION

Marketing is one of the most important activities in an organization or company. It is the breath and soul of every function, strategy, and policy enacted by a company. Without exception, companies should be able to act as marketers and feel involved in the process of satisfying their customers, either directly or indirectly (Preko et al., 2014). To face the tight competition, business entities need to be more careful in observing the development of the market and defining customer needs (Holma, 2014), as when needs are met, satisfaction will be created. Many scholars have revealed that realizing customer satisfaction is not an easy task that can be completed in one day.

To achieve customer satisfaction, customer value and the marketing activities of the company should be developed, since customer value is one of important steps in providing customer satisfaction. However, in the future, research is needed to describe the process and mechanisms by which customer satisfaction can be realized based on the

construct of customer value (Yang & Peterson, 2004; Sihombing et al., 2016; Sihombing, 2014; Jahanzeb et al., 2013) and service quality (Caruana et al., 2000; Jahanzeb et al., 2013; Mittal et al., 2015). In addition, Oh & Kim (2017) revealed that there is the growing research on service quality, customer value, and customer satisfaction in the field of marketing or customer behavior. Research on these concepts has contributed to leading marketing or customer behavior journals in the last 15-16 years by an average of over 4%.

Oh & Kim (2017) also put forward some data showing that there is still a lack of research on customer value as a mediator variable. Regarding the relationship between service quality and customer satisfaction, several literatures have also shown arguable results. Numerous studies have shown that service quality leads to customer satisfaction (Oh & Kim, 2017; Mittal et al., 2015; Kumar, 2018). On the other hand, other scholars revealed the opposite (Khatab et al., 2019; Behera, 2018; Abkar, 2017) as customer

satisfaction becomes the background of service quality. Therefore, this research would like to fill the gap in the research mentioned by the previous studies mentioned above. The most noticeable is the disruption of service that customers expect with products and services, especially the tendency now for customers to look very selectively in determining the choice of service; this is worth underlining since it is close to customer satisfaction (Octavian et al., 2022).

Referring to previous research and the phenomenon mentioned above, this study aims to verify and analyze the role of customer value as a mediating variable in the relationship between service quality and customer satisfaction. Likewise, what happened in the library world. Visitors to a library are its main customers, and they are the main factor that must be considered by the management of the library (Pors, 2010), especially in a university library. The management of the library of Widyatama University must be wise in their marketing and always trying to improve the quality of service so as to give satisfaction to their customers.

Several researchers have tested or verified theories in various ways, including using the Hierarchical Regression method (Cheng, 2001) or the Structural Equation Modeling (SEM) method (Berndt & Williams, 2013; Mittal et al., 2015; Nunkoo et al., 2017). However, Cheng (2001) revealed that

the SEM method is more effective in developing a model than the multiple regression method. Furthermore, Anderson & Gerbing (1988) revealed that one of the advantages of the SEM method is that it can test theory through models. With this method, it is possible for a researcher to test several models based on existing data, so that the most appropriate model (theory) with the data that's been obtained by the researcher can be known. Referring to Anderson & Gerbing (1988), this study used structural equation modeling approach as tool for analysis.

To the best of the authors' knowledge, not many in Indonesia have used a two-step approach to using SEM to analyze customer behavior data. Therefore, this approach was chosen by the authors as the data analysis tool in this study. A library is the main option for obtaining information or documents directly, cheaply and easily for students, lecturers and staff, both to develop a frame of reference as well as scientific reference in completing assignments or completion of the scientific works of the librarian. This is possible because in the Widyatama University library there are many collections that can be used as literature for research.

A decrease in student visits to the library of Universitas Widyatama during the period 2017 to 2020, indicated that there has been a decrease in the quality of services which have an impact on customer satisfaction (the university's students). This decrease might

also occur due to the technological advancement in the Industry 4.0 that has not fully adopted by the library in Universitas Widyatama. Following the rapid changes of technology, library should also provide and develop digital library, e-library, and even m-library. The number of visit can be counted based on the visit to the website of digital or e-library itself, besides the physical visit. In addition, students are currently able to access source of knowledge in the internet using open-access journals and free-downloadable e-books. Table 1 presents data on the number of visits during the period covered by this study.

The data above show the declining trend in the number of visits to the library of Widyatama University throughout the period January 2017 to December 2020. This indicates a weakening of the interest of customers in using the library facilities, and also indicates that customer satisfaction with library services is declining. Libraries are obliged to make an exact disclosure of information about its service which is the most important thing in a library, especially a university library. Whether it is the main library or the mobile field library, it should always be friendly and fun as well as offering a complete collection, as those are the key characteristics of a successful library.

Table 1
Number of Visit to Widyatama Library (2017-2020)

Month	Year				Total
	2017	2018	2019	2020	
January	9.440	8.704	8.209	7.540	33.893
February	15.376	15.958	16.205	10.705	58.244
March	13.623	14.433	14.447	5.571	48.074
April	12.968	12.728	12.736	0	38.432
May	9.022	9.295	9.735	0	28.052
June	4.348	5.228	5.745	666	15.987
July	3.869	4.137	3.987	632	12.625
August	5.162	5.657	5.651	499	16.969
September	16.028	15.968	15.646	940	48.582
October	15.573	15.588	15.114	2.571	48.846
November	12.599	12.794	13.529	1.679	40.601
December	8.113	8.385	8.635	789	25.922
Total	126.121	128.875	129.639	31.592	416.227

Source: Universitas Widyatama Library Data

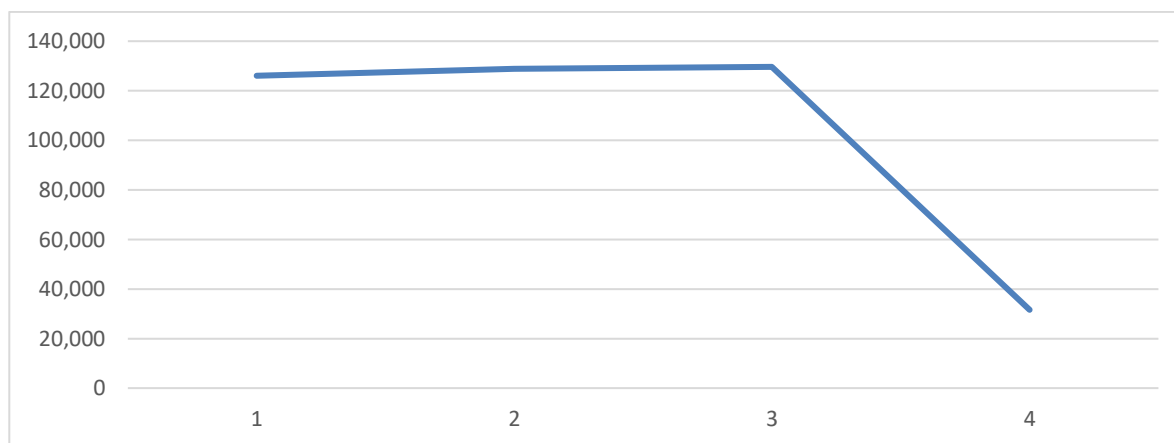


Figure 1. Chart of Library Visit (2017-2020)

LITERATURE REVIEW

This study is based on some previous studies which is used as references, such as Yang & Peterson (2004); Caruana et al., 2000; Jahanzeb et al., 2013; Duarte & Amaro, 2018; Mittal et al., 2015).

Service Quality and Satisfaction

Several authors have proposed different definitions of satisfaction. For example, Oliver (1993) described satisfaction as a cumulative and affective overall satisfaction. Spreng & Olshavsky (1993) measured overall satisfaction as the overall experience of buying and using camera products. However, Parker & Mathews (2001) conducted an in-depth study of the definitions of satisfaction and revealed that the one that is often used by researchers is an evaluation of what is received and what is expected by customers. based on this, the authors use the definition of satisfaction in this study in accordance with that proposed by Parker & Mathews (2001).

According to Parasuraman et al. (1988), there are five dimensions that are used to analyze the extent to which a service has met the customer's expectations, i.e. reliability, responsiveness, assurance, empathy, and tangibles. Several previous studies reveal the relationship between satisfaction and service quality. Among them are Ahmed et al. (2022) who examined the condition of services in Bangladesh, and found that both price and service quality have an influence on satisfaction; then there are Amin & Isa (2008) who examined Muslim banking customers in Malaysia and found that the quality of services provided by banks in Malaysia affects customer satisfaction. Several other studies that are in line with the findings of the two studies above are Caruana et al. (2000); Yilmaz et al. (2018).

Service Quality and Perceived Value

Customers, when evaluating and choosing a product or service, do not only depend on the quality of services; they also depend on the value that they perceive. The company must

add value that is able to make customers get what they pay for or more than they expect, and therefore retain customers (Cronin et al., 2000; Ha & Jang, 2010; Yu & Lee, 2019; Shahriari et al., 2012; Zhang et al., 2021).

According to Kotler & Keller (2012), what is offered by a company will be successful if it delivers value and satisfaction to the target buyer. The value increases in line with quality and service. Value is a concept that has a central role in marketing. Marketing is an activity to identify, create, communicate, deliver and monitor customer value. Satisfaction reflects a person's judgment about the performance of the products (or other outcome) in relation to their expectations. If the performance of the product is in accordance with their expectations, then the customer is satisfied. If the product performance exceeds expectations, the customer will be happy. However, if the performance of the product is below expectations, then the customer will be dissatisfied.

Value is defined by Rokeach (1973) as belief that is important to a person as a guide in making judgments and engaging in certain behavior. In the context of marketing or customer behavior, value is defined as benefit that customers get from the purchase of a product (Kotler & and Keller, 2012). Referring to Kotler's opinion, this study defines value as the customers' perception or evaluation of the benefits and costs of a product when compared with others.

Customer perceived value can also be understood as the comparison between total customer benefit (personal benefit, product benefit, service benefit, and image benefit) and total customer cost (monetary, physical, time, and energy cost) (Yu & Lee, 2019). In the field of marketing or customer behavior, several previous studies have succeeded in revealing the relationship between service quality and customer value, both as a consequence variable and as a mediating variable. These include Caruana et al. (2000); Shahriari et al. (2012); Jahanzeb et al. (2013); Ha & Jang (2010). Based on previous works, this study seeks to verify some of these studies, hoping that the relationship between perceived value and service quality can be generalized.

The library at Widayatama University is a place that assists students in acquiring reference books, materials, information, , and, as much as possible, it should be able to provide satisfactory services to its customers. In addition, the library University at Widayatama should increase the value for the customer since the customer value is the priority concern for every library. This value is a measure of the success of the library which is the given value which is created for customer satisfaction. The value for customers is the advantage that should be possessed by the library. Based on the description above, the framework of this study can be simplified as illustrated here in Figure 2.

Based on the purpose of the study and literature review of this study, the authors formulate the following research hypothesis:

H₁: There is a positive and significant effect of Physical Evidence on Customer Value.

H₂: There is a positive and significant effect of Empathy on Customer Value

H₃: There is a positive and significant effect of Responsiveness on Customer Value.

H₄: There is a positive and significant effect of Reliability on Customer Value.

H₅: There is a positive and significant effect of Assurance on Customer Value.

H₆: There is a positive and significant effect of Physical Evidence on customer satisfaction.

H₇: There is a positive and significant effect of Empathy on customer satisfaction.

H₈: There is a positive and significant effect of Responsiveness on customer satisfaction.

H₉: There is a positive and significant effect of Reliability on customer satisfaction.

H₁₀: There is a positive and significant effect of Assurance on customer satisfaction

H₁₁: There is a positive and significant effect of customer value on customer satisfaction.

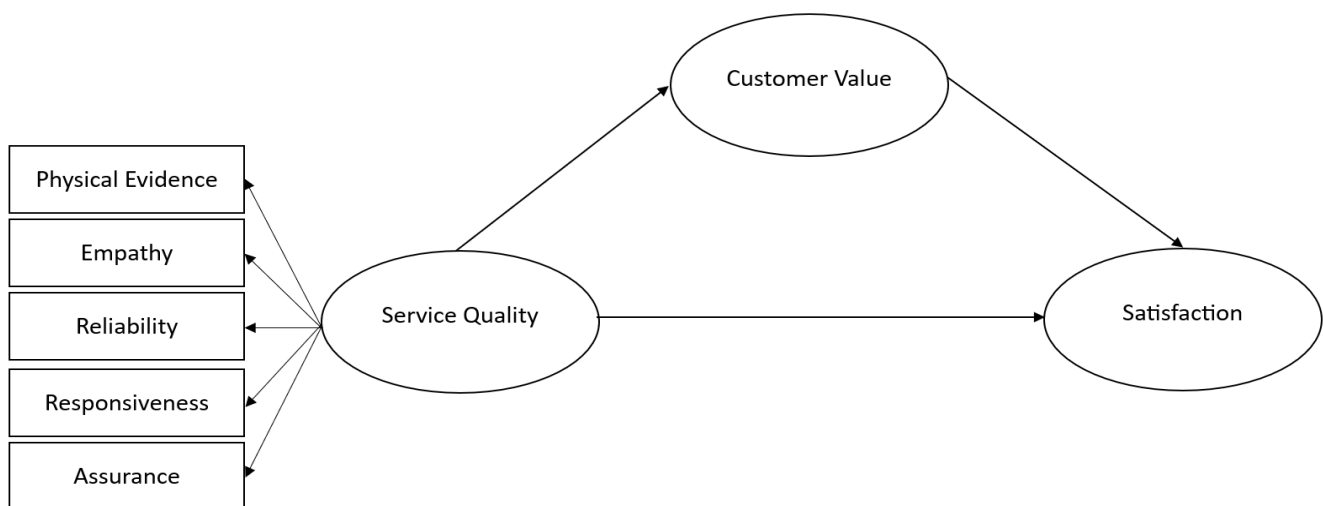


Figure 2. Research Model

RESEARCH METHODOLOGY

This research approach uses verification, namely the methods used to test the truth of the knowledge yielded by previous research (Singh, 1986). Meanwhile, the research method used was a survey which employed a questionnaire as its data collection tool Sekaran (2003) with the unit of analysis being the students who were users of the library of Widyatama University in Bandung.

The population of this study comprises all university students who were enrolled during the 2020-2021 academic year. The sampling method used was cluster random sampling, which is a sampling method whereby the population is first organized into groups based on departmental criteria, and then the number of samples in each group from the study programs is allocated proportionally. Furthermore, the selection of the

respondents was carried out using purposive sampling, which is the most direct method for maximizing the chance of collecting respondents from a representative sample.

The questionnaire items for the variables in this study were adopted from the work of previous researchers. Service quality variables, namely tangibles, empathy, responsiveness, reliability, and assurance were operationalized based on Zeithaml et al. (1990). The tangibles variable had six questions; the empathy variable had 11 questions; the responsiveness variable had six questions; the reliability variable had 11 questions; the assurance variable had six questions. Meanwhile, the satisfaction variable was operationalized into seven question items; and the customer value variable had eight question items.

The variable value used in this study is the benefit received by customer when buying a product (Kotler & Keller, 2012). The value is operationalized into eight questionnaire items. Meanwhile, the operationalization of the satisfaction variable is adopted from Parker & Mathews (2001) which revealed that the most language used by service customers in understanding satisfaction is the evaluation of what is received and what is expected. The authors used seven questionnaire items for the operationalization of the satisfaction variable.

Data collection was carried out by distributing questionnaires to the university

students who were the respondents. As many as 713 questionnaires were returned and processed, and the measurements of responses used a Likert scale. All variables were measured using a Likert scale because it is used to measure the attitudes, opinions and perceptions of a person or a group in relation to a social phenomenon (Sekaran, 2003).

RESULTS AND DISCUSSION

The Students' Responses of Service Quality at Widayatama University Library

The 713 returned questionnaires, descriptively statistic analytic then describe in table 2. As a statistically distribute it stated, the higher portion of sample were accounting studies and management studies. Other were distributed unequally regarding available student number on each study program.

Validity and Reliability

The testing of reliability and validity of the variables was conducted using confirmatory factor analysis (CFA) and the results are shown in Tables 3 and 4. Table 3 shows that not all of variables are reliable and valid; several of them were dropped because their values indicated that they did not fit the criteria for a good indicator based on factor analysis, including the loading factor which was not unique or too small. Table 4 shows the values for the construct reliability for each variable. because all of the construct

reliabilities are above 0.7, and then the variables are measured properly and are unique (Hair et al., 2013; Chau, 1997).

The Mediating Variable

To analyze the role of customer value as a mediating variable in the relationship between service quality and customer satisfaction, the authors used an SEM analysis tool with the GLS (Generalized Least Squares) method, with the measurement model and structural model as shown in Figure 3. The results of the authors' analysis are presented in Table 5.

The goodness of fit values in Table 5 indicate that the model is quite fit to the data. Among them are the Cmin/DF value which is less than five, the RMSEA value is less than 0.08, the GFI value is close to 0.9 (0.883 rounded up to 0.9), the AGFI value is also close to 0.9 (0.864 rounded up to 0.9), although TLI and CFI is still below 0.9. Meanwhile, the author's structural model is presented in Table 6. Table 6 shows that, of the variables incorporated into service quality, there are only two variables that have a significant effect on other variables, namely the assurance variable which has an influence on customer value, and the empathy variable which has a significant influence on satisfaction. Meanwhile, the influence of customer value on satisfaction is not significant. Of the eleven hypotheses tested, only two were supported, namely the influence of assurance on customer value

(H5), and the effect of empathy with satisfaction (H7). Therefore, it can be said that only 10% of the eleven hypotheses are supported.

Discussion

This study aimed to examine the role of customer value as a variable that mediates the relationship between service quality and satisfaction. The results show that customer value is not a mediating variable between service quality and satisfaction. The customer value variable only appears when there is assurance only, the service quality dimension variable has no effect on customer value. This demonstrates that, if the assurance is perceived positively by the user (student), then the benefit (value) will be perceived by the user, and then the benefit (value) will not create satisfaction. Assurance is the trust and confidence received or felt by customers based on the knowledge and courtesy of service providers Vaz & Mansori, (2013). This means that, although students feel that visiting the library has benefits, these benefits obtained do not create satisfaction. This condition shows that, in order to create a perception of benefits obtained by users, the library manager at Widayatama University should focus more on the issue of the guarantees desired by the library's users.

The second matter that needs to be discussed in this study is the dimensions that directly affect satisfaction. The

dimension is empathy, and the effect of empathy on satisfaction is direct. This means that, if the empathy is felt by the library users, it will directly lead to a sense of satisfaction with the library services. By definition, empathy is a person's ability to accurately detect feeling or emotional information conveyed by others Levenson & Ruef, (1992). This definition indicates that a librarian must be able to understand feelings or information about the emotions—whether they are positive emotions or negative emotions—felt by library users. An example of this would be when library users feel disappointed when looking for a desired book because it cannot be found, both related to the place (bookshelf) for storage and the physical nature of the book.

Customer value in this study is defined as the benefits obtained by a user or customer in terms of the services consumed. Kotler & Keller (2012) revealed that the benefits obtained by a customer can be categorized as either psychological benefits or physical benefits. Given that service quality can be categorized as having a physical dimension (tangible, responsiveness, and assurance) and a psychological dimension (empathy and reliability), in this study, it can be said that the dimension that directly affects satisfaction is the psychological dimension, namely the empathy.

There is another perspective which uses the service quality theory proposed by

Gronroos, (1984), namely that service quality consists of parts; the first is technical quality, while the second is functional quality. Technical quality is what the customer receives when he or she interacts with the service provider, while functional quality is related to how the service is presented. This is related to problems with the behavior of service providers who interact with customers; for example, problems of service speed and response to customer requests.

Based on the distribution of service quality proposed by Gronroos, (1984), it can be ascertained that the dimension that creates value is the technical quality, because it is in the form of assurance, while the dimension that creates satisfaction is the functional quality, which is represented by empathy.

The third matter related to the relationship between customer value and customer satisfaction is not significant and is even negative. This shows that the customer value variable and the customer satisfaction variable are two independent variables which have no interrelationship at all. The students, as library visitors, see that the value in the form of benefits obtained from their visit does not create satisfaction for them at all. The descriptive data show that the level of benefit that students get from their visit to the library is quite high, however, this study also shows that the benefits are not related to the satisfaction that they feel. Descriptively, the average

value of respondents' answers related to the benefit variable is 4.02 while the average for respondents' answers related to the satisfaction variable is 4.30. However, even though the responses to the two variables show good values (both above 4.0), the two have no relationship with each other at all, which is indicated by the non-significant relationship. This shows that the benefits obtained by students when they come to the library are relatively high, and the

satisfaction they get is relatively high too. Nevertheless, the two have no relationship. On the other hand, it can be seen that the service quality variable that has a direct influence on satisfaction is empathy. In addition, although the level of benefit (customer value) and satisfaction obtained by students is high (the average answer of both respondents is above 4), however, there is no relationship between them.

Table 2
 Respondent Distribution

Study Program	Number of Students	Proportion of sample (%)	Number of sample
Accounting S1 (Undergraduate level)	1.412	34	259
Management S1	1.494	36	244
Accounting D3 (Diplome)	176	4	29
Management D3	156	4	29
Industrial Technique	110	3	22
Informatics	360	9	65
Information System Technique	109	3	22
English	116	3	7
Japanese	20	0.5	122
Graphical Design	67	1	7
Multimedia Design	21	0.5	7
Total	4041	100	713

Source: Universitas Widyatama Library Data, 2023

Table 3
 Indicator Measurement with CFA

	Component						
	1	2	3	4	5	6	7
SAT5	0,853						
SAT6	0,848						
SAT7	0,832						
SAT3	0,831						
SAT4	0,827						
SAT1	0,822						
SAT2	0,806						
EMPATHY4		0,973					
EMPATHY7		0,963					
EMPATHY9		0,961					
EMPATHY1		0,954					

	Component						
	1	2	3	4	5	6	7
ASSURANCE1			0,951				
ASSURANCE2			0,950				
ASSURANCE3			0,932				
ASSURANCE4			0,605				
RELIABILITY10				0,808			
RELIABILITY8				0,785			
RELIABILITY9				0,737			
RELIABILITY11				0,723			
RELIABILITY7				0,722			
RESPON3					0,828		
RESPON2					0,800		
RESPON1					0,775		
RESPON4					0,710		
RESPON5					0,674		
PE11						0,966	
PE6						0,952	
PE3						0,940	
VALUE7							0,810
VALUE8							0,771
VALUE6							0,710
VALUE4							0,687

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Source: Processed Data

Table 4
 Construct Reliability

Assurance	Empathy	Reliability	Responsiveness	Physical Evidence	Value	Satisfaction
0.92	0.98	0.87	0.87	0.97	0,83	0,94

Source: Processed Data

Table 5
 Goodness of Fit Indices

χ Chi Square	1.455.428
probability	0.000
Cmin/df	2.69
RMSEA	0.049
GFI	0.883
AGFI	0.864
TLI	0.604
CFI	0.64

Source: Processed Data

Table 6
 Structural Model Evaluation

			Estimate	S.E.	C.R.	P
Customer Value	<---	Reliability	0.057	0.035	1.608	0.108
Customer Value	<---	Tangibles	-0.018	0.025	-0.712	0.476
Customer Value	<---	Empathy	0.027	0.023	1.178	0.239
Customer Value	<---	Responsiveness	-0.008	0.034	-0.231	0.817
Customer Value	<---	Assurance	0.892	0.087	10.293	***
Satisfaction	<---	Reliability	0.009	0.052	0.171	0.864
Satisfaction	<---	Responsiveness	0.024	0.048	0.497	0.619
Satisfaction	<---	Empathy	0.136	0.033	4.182	***
Satisfaction	<---	Tangibles	0.025	0.036	0.676	0.499
Satisfaction	<---	Customer Value	-0.059	0.183	-0.321	0.748
Satisfaction	<---	Assurance	0.134	0.193	0.691	0.490

Source: Processed Data, 2023

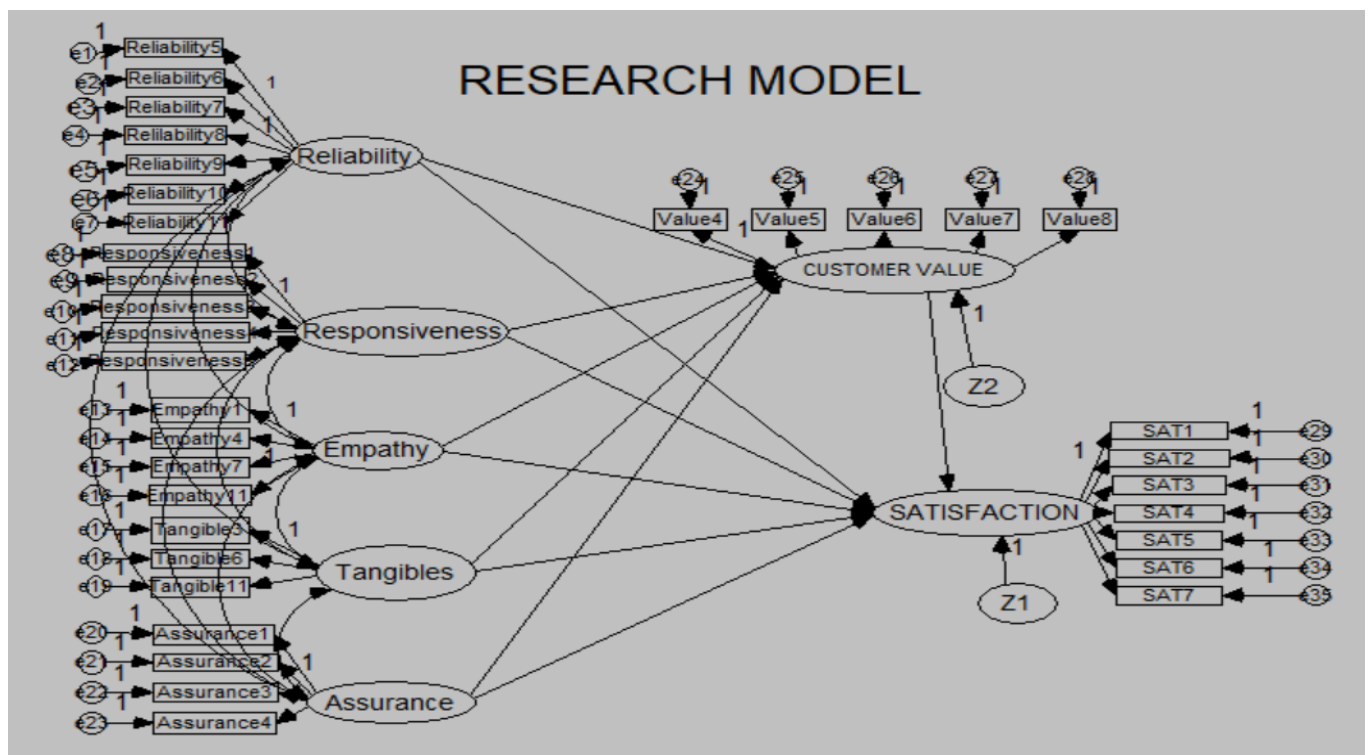


Figure 3. Output of Inner and Outer Model

CONCLUSION

Based on the analysis of the data and as explained in the previous section, the authors have reached some conclusions. Customer value and satisfaction for library users at Widayatama University are two different things that have no relationship or connection at all. The service quality

variable that affects customer value is assurance, while the variable that affects satisfaction is empathy. The assurance variable can be categorized as a technical quality, while the empathy variable can be categorized as a functional quality. This shows that the benefits obtained by library users are technical benefits; while, on the

other hand, what creates satisfaction is functional, not technical. The two dimensions of SERVQUAL that play a role in this study indicate two things that must always be considered by company managers, namely empathy and assurance. The level of customer value attached to the services of the library at University Widyatama is good; this is demonstrated by the results of this study in which items have an average value of 3.98, meaning it is between 3.40 to 4.19, which means good; thus the performance of library service quality is within the range of customers' expectation.

RESEARCH IMPLICATIONS

Based on the results of the research above, to create customer satisfaction, in this case among the student users of the Widyatama University library, there are two things that must be considered by the library manager, namely the assurance perceived by library users, and the empathy that the library's managers and staff must have, especially as the providers of library service. Assurance needs to be considered because it is this variable that has the consequence of creating value for students; meanwhile, the

empathy variable must be considered by library managers because this variable is the only service quality dimension that directly creates satisfaction for library users.

Furthermore, this study also has several limitations. First, this study was only conducted in one university library, so the results about the condition of the library or services cannot be generalized. Therefore, these results need to be verified further by other researchers with various other libraries. However, the relatively large sample—questionnaires returned from 713 library users—provides some minor validation of the findings of this study. Furthermore, this study should be developed by testing the SERVQUAL variable while no longer using a 5-dimensional model, but, instead using a 2-dimensional model as proposed by (Gronroos, 1984) in order that the SERVQUAL dimension can be simplified into functional and technical dimensions.

ACKNOWLEDGEMENT

The author would like to express sincere gratitude to those who have contributed to the completion of this article.

REFERENCES

- Abkar, A. H. A.-H. S. A. (2017). The impact of perceived service quality dimensions on customer satisfaction. *International Journal of Bank Marketing*, 35(3), 411–43
- Ahmed, S., Al Asheq, A., Ahmed, E., Chowdhury, U. Y., Sufi, T., & Mostofa, M. G. (2023). The intricate relationships of consumers' loyalty and their perceptions of service quality, price and satisfaction in restaurant service. *The TQM Journal*, 35(2), 519–539.



- Amin, M., & Isa, Z. (2008). An examination of the relationship between service quality perception and customer satisfaction: A SEM approach towards Malaysian Islamic banking. *International Journal of Islamic and Middle Eastern Finance and Management*, 1(3), 191-209.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411-423.
- Behera, J. P. (2018). Impact of Service Quality on Consumer Loyalty in Indian Banking Sector in Odisha. *International Journal for Research in Engineering Application & Management*, 4(2), 319-327.
- Berndt, A. E., & Williams, P. C. (2013). Hierarchical Regression and Structural Equation Modeling. *Family and Community Health*, 36(1), 4-18.
- Caruana, A., Money, A. H., & Berton, P. R. (2000). Service quality and satisfaction - the moderating role of value. *European Journal of Marketing*, 34(11/12), 1338-1352.
- Chau, P. Y. (1997). Reexamining a Model for Evaluating Information Center Success Using a Structural Equation Modeling Approach. *Decision Sciences*, 28(2), 309-334.
- Cheng, E. W. (2001). SEM being more effective than multiple regression in parsimonious testing model for management development reserach. *Journal of Management Development*, 20(7), 650-667.
- Cronin, J. J., Bady, M. K., & Hult, G. T. (2000). Assessing the Effects of Quality, Value, and Customer Satisfaction on Customer Behavioral Intentions in Service Environments. *Journal of Retailing*, 76(2), 193-218.
- Curuana, A., Money, A. H., & Berthon, P. R. (2000). Service Quality and Satisfaction - the moderating role of value. *European Journal of Marketing*, 34(11/12), 1338 - 1352.
- Duarte, P., & Amaro, S. (2018). Methods for modelling reflective-formative second order constructs in PLS: An application to online travel shopping. *Journal of Hospitality and and Toursime Technology*, 9(3), 295-313.
- Gronroos, C. (. (1984). A Service Quality Model and Its Marketing Implications. *European Journal of Marketing*, 18(4), 36-44.
- Ha, J., & Jang, S. (2010). Perceived values, satisfaction, and behavioral intentions: The role of familiarity in Korean Restaurants. *International Journal of Hospitality Management*, 29, 2-13.
- Hair, J. F., Tatham, R. L., & Black, W. C. (2013). *Multivariate Data Analysis with Readings*. London: Prentice-Hall International, Inc.
- Holma, A. M. (2014). Adaptation in business contexts: working triadic relationships. In *Deep knowledge of B2B relationships within and across borders* (Vol. 20, pp. 119-291). Emerald Group Publishing Limited.
- Jahanzeb, S., Fatima, T., & Mohsin Butt, M. (2013). How service quality influences brand equity: The dual mediating role of perceived value and corporate credibility. *International Journal of Bank Marketing*, 34(11/12), 126-141.
- Kang, G.D. (2006). The hierarchical structure of service quality: integration of technical and functional quality. *Managing Service Quality: An International Journal*, 16(1), 37 - 50.

- Khatab, J. J., Esmaeel, E. S., & Othman, B. (2019). The influence of service quality on customer satisfaction: Evidence from public sector and private sector banks in Kurdistan/Iraq. *International Journal of Advanced Science and Technology*, 28(20), 865-872.
- Kotler, P., & Keller, K. L. (2012). *Marketing Management*. Pearson Education.
- Kumar, A. (2017). Effect of service quality on customer loyalty and the mediating role of customer satisfaction: an empirical investigation for the telecom service industry. *Journal of Management Research and Analysis*, 4(4), 159-166.
- Kumar, M., Sujit, K. S., & Charles, V. (2018). Deriving managerial implications through SERVQUAL gap elasticity in UAE banking. *International Journal of Quality & Reliability Management*, 35(4), 940-964.
- Levenson, R. W., & Ruef, A. M. (1992). Empathy: A Physiological Substrate. *Journal of Personality and Social Psychology*, 63(2), 234-246.
- Mittal, S., Gera, R., & Batra, D. K. (2015). An evaluation of an integrated perspective of perceived service quality for retail banking services in India. *International Journal of Bank Marketing*, 33(3), 330 - 350.
- Nunkoo, R., Teeroovengadum, V., Thomas, P., & Leonard, L. (2017). Integrating service quality as a second-order factor in a customer satisfaction and loyalty model. *International Journal of Contemporary Hospitality Management*, 29(12), 2978-3005.
- Octavian, D., Nicoleta, D., & Ionel, B. (2022). Determinants of e-commerce satisfaction: a comparative study between Romania and Moldova. *Kybernetes*, 1-17.
- Oh, H., & Kim, K. (2017). Customer satisfaction, service quality, and customer value: years 2000-2015. *International Journal of Contemporary Hospitality Management*, 29(1), 2-29.
- Oliver, R. L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of Consumer Research*, 20(3), 418-430.
- Parasuraman, A., Zeithaml, V. A., & Berry, a. L. (1988). SERVQUAL: A Multiple-Item scale for measuring customer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Parker, C., & Mathews, B. P. (2001). Customer satisfaction: contrasting academic and consumers' interpretations. *Marketing Intelligence & Planning*, 19(1), 38-44.
- Pors, N. O. (2010). Citizen services and public libraries: an analysis of a new service in Danish public libraries. *New Library World*, 111(7/8), 263-272.
- Preko, A., Agbaru, S. K., & Feglo, M. (2014). Service Delivery, Customer Satisfaction and Customer Delight in. *European Journal of Business and Management*, 6(3), 71-83.
- Rakhmat, J. (2004). *Metode Penelitian Komunikasi, dilengkapi contoh analisis statistik*. Bandung: P.T. Remaja Rosdakarya.
- Rokeach, M. J. (1973). *The Nature of Human Values*. New York: The Free Press.
- Sekaran, U. a. (2003). *Research Methods for Business: A Skill Building Approach*. New York: Willey Publisher.
- Shahriari, M., Mohammadi, E., Abbaszadeh, A., Bahrami, M., & Fooladi, M. M. (2012). Perceived ethical values by Iranian nurses. *Nursing Ethics*, 19(1), 30-44.

- Sihombing, S. O. (2014). Identifying Current Values of Indonesian Youth. *The 9th International Conference on Business and Management Research*. Kyoto: Kyoto University, Japan.
- Sihombing, S. O., Pramono, R., Zulganef, Z., & Ismanto, I. (2016). Instrumental and Terminal Values of Indonesian Micro-Finance Entrepreneurs: A Preliminary Report. *IJER © Serials Publications* 13(3), 841-853.
- Singh, A. K. (1986). *Tests Measurements and Research Methods in Behavioural Science*. New Delhi: Tata McGraw-Hill Publishing Company Limited.
- Spreng, R. A., & Olshavsky, R. W. (1993). A desires congruency model of consumer satisfaction. *Journal of the Academy of Marketing Science*, 21, 169-177.
- Vaz, A., & Mansori, S. (2013). Malaysian Private Education Quality: Application of SERVQUAL Model. *International Education Studies*, 6(4), 164-170.
- Yang, Z., & Peterson, R. T. (2004). Customer Perceived Value, Satisfaction, and Loyalty: the role of switching cost. *Psychology & Marketing*, 21(10), 799-822.
- Yilmaz, V., Ari, E., & Gürbüz, H. (2018). Investigating the relationship between service quality dimensions, customer satisfaction and loyalty in Turkish banking sector: An application of structural equation model. *International Journal of Bank Marketing*, 36(3), 423-440.
- Yu, S., & Lee, J. (2019). The effects of consumers' perceived values on intention to purchase upcycled products. *Sustainability*, 11(4), 1034.
- Zeithaml, V. A., Parasuraman, A., & Berry, L. (1990). *Delivering Quality Service: Balancing Customer Perceptions and Expectations*. New York: The Free Press.
- Zhang, M., Xu, P., & Ye, Y. (2022). Trust in social media brands and perceived media values: A survey study in China. *Computers in Human Behavior*, 127, 107024.