
Revisiting Intentions at Hospital X's Medical Check-Up Service: A Review of Perceived Service Quality and Cost

Sutrisno ¹, Indarti Trimurtini ², Kiki Puspitasari ³, Zahrah Ayesha ⁴, Nazwa Khoerunnisa ⁵, Allik Pebryan ⁶

Abstract:

The purpose of this study is to obtain the results of a study of service quality, perceived price and revisit intentions at medical check-up services at X Hospital, as well as to obtain the results of an analysis of the related influence of service quality on revisit intentions at medical check-up services at X Hospital through perceived costs. Researchers conducted observations, interviews, and distributed questionnaires to 200 patients who had used medical check-up services. Path analysis was also used in this study. Medical check-up services at X Hospital are of high quality. However, the cost felt by patients when using medical check-up services is still felt to be less cheap. Even so, patients still have a desire to reuse the service because of the lack of choices available. Service quality is quite closely and significantly related to the perceived cost of medical check-up services. Similarly, service quality is quite closely and significantly related to the intention to revisit medical check-up services. This is not much different from the perceived cost which is quite closely and significantly related to the intention to revisit the medical check-up service. Regular customer service excellence training for all health workers can improve service quality, especially in this case, namely friendliness, speed and focus on the needs and desires of patients. The impact of this is an increase in patient satisfaction and desire to return to using medical check-up services at X Hospital. Furthermore, increasing the speed of service to patients (for example through optimisation of equipment and resources that have been owned) can increase satisfaction and desire to use medical check-up services. Furthermore, improving facilities and infrastructure (e.g. the technology used and the waiting room) can be done to increase people's desire to pay more for medical check-up services.

Keywords: *Service Quality; Perceived Cost; Revisit Intention*

Submitted: 18 Desember 2023, Accepted: 21 August 2024, Published: 15 October 2024

¹Hospital Administration Program, Faculty of Medicine, Universitas Jenderal Achmad Yani, trisno0461@gmail.com

²Bachelor of Medicine Program, Faculty of Medicine, Universitas Jenderal Achmad Yani.

³Medical Profession Program, Faculty of Medicine, Universitas Jenderal Achmad Yani.

⁴Hospital Administration Program, Faculty of Medicine, Universitas Jenderal Achmad Yani.

⁵Hospital Administration Program, Faculty of Medicine, Universitas Jenderal Achmad Yani.

⁶Hospital Administration Program, Faculty of Medicine, Universitas Jenderal Achmad Yani.

1. Introduction

With better living standards, easy access to a wide range of information, and the rapid aging of society, quantitative and qualitative demands and expectations of medical services are increasing. In addition, the sharp increase in the number of medical professionals and institutions makes competition among medical institutions inevitable. The increasing level of public awareness and expectations as well as the number of consumers of medical services means that only medical institutions that meet these expectations can be managed sustainably. Customer-oriented marketing is a standard business administration concept that aims to identify and fulfil customer needs (Kotler & Clarke, 1986).

The medical industry was previously dominated by a supplier-oriented market where patients visited hospitals without receiving patient-oriented medical services. However, today's customer-oriented market is widespread as hospitals survive when they understand the diverse needs of medical consumers and provide high-quality medical services desired by customers (Choi & Kim, 2013). The essence of customer-oriented marketing in healthcare organisations is to provide quality services to medical consumers. Thus, for the maintenance and survival of healthcare institutions by achieving a competitive advantage, a customer-oriented marketing strategy that fulfils customer needs by providing quality medical services, leading to repeat visits, is required.

Healthcare institutions are obliged to provide safe and quality medical services to patients before considering their management and operations. Bopp (1990) also categorised healthcare quality into the technical quality of medical providers and the functional quality perceived by patients, medical consumers, and argued that the latter is more important than the former in evaluating healthcare quality.

Medical provider-centred quality concerns the level of capacity to provide professional medical skills such as proficiency in medical skills and accurate diagnosis. In contrast, patient-perceived quality means, in addition to medical skills, functional quality that indicates the extent to which patient demands such as facilities, equipment, physical environment, and communication are met (Yun et al., 2008). Woolley et al., (1978) found that patients can report "perceived satisfaction" despite poor medical care outcomes.

The quality of healthcare largely depends on the criteria used in the evaluation by the patients themselves. As patients' needs are diverse and advanced, subjective evaluations based on the patient's position are considered more important in evaluating healthcare quality. Patients' perceived healthcare quality affects their satisfaction and future medical services. This means that patient satisfaction, in addition to healthcare quality, is also significant in terms of hospital profitability. Patient satisfaction with the hospital leads to the intention to revisit public and private hospitals.

One of the problems of repeat visit intention is also experienced by Hospital X. This hospital is an army hospital. In accordance with its main function, namely health support and health services in the region, they strive to provide health support and provide optimal health services for soldiers and civil servants and their families in the context of fostering the strength of the Army. Not only that, the function eventually developed not only within the Army but also for the surrounding community. In this case, of course, the local community where RS X is located.

RS X sendiri juga telah mendapatkan Sertifikat Akreditasi Rumah Sakit dan lulus dengan tingkat Paripurna. Ini menunjukkan bahwa kualitas pelayanan di RS X sudah sangat baik dan tidak kalah dengan RS lainnya. Didapatkannya penghargaan-penghargaan tersebut dan lengkapnya peralatan yang dimiliki, tentunya tidak hanya menunjukkan kualitas pelayanan yang baik saja tetapi juga bertujuan untuk memuaskan kebutuhan dan keinginan dari pasien. Dengan puasny pasien, maka diharapkan mereka akan melakukan kunjungan ulang ke rumah sakit.

One of the complete facilities owned by RS X is a medical check-up facility or service. The medical check-up facility owned by RS X is very complete and can compete with other laboratories. The medical check-up service owned by RS X when compared to its competitor (in this case, Prodia Laboratory), for the same service, has a much cheaper rate. However, the quality of the service and the lower price did not make people in the city utilise the facility. And even the people who have had a medical check-up at RS X allegedly do not come back again when they need a medical check-up.

In fact, patients of medical check-up services from RS X allegedly do not intend to come back. This can be seen from the number of patient visits in 2019-2021 which has decreased.

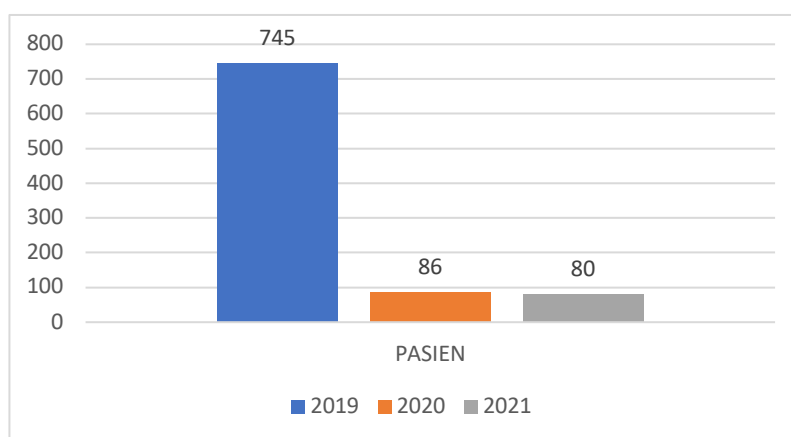


Figure 1. Number of Patients with Medical Check-up Services at X Hospital

Source: processed from various sources, 2023

The decline in the number of patient visits in the graph above is certainly interesting to study because good service quality and low prices do not make the intention to revisit high. So this research is important to do to increase the intention of repeat visits from patients of medical check-up services at X Hospital.

The purpose of this study is to obtain the results of a study of service quality, perceived price and revisit intentions at medical check-up services at X Hospital, as well as to obtain the results of an analysis of the effect of service quality on revisit intentions at medical check-up services at X Hospital through perceived costs.

2. Theoretical Background

Relationship between Service Quality, Outpatient Satisfaction and Loyalty

Service quality drives perceived price (Amin & Nasharuddin, 2013; Basu et al., 2016; Gowing et al., 2017). Perceived price, which reflects the customer's actual experience with proper service performance, leads to the assumption that service quality will have an impact on the monetary and non-monetary costs that customers pay for consumed services. The monetary cost in this study is defined as the cost of a medical check-up. The more complete the medical check-up package, the more expensive it will be. Non-monetary costs are defined as the time and effort spent by patients in waiting, queuing, and obtaining medical check-up services. When the overall level of service quality is higher, patients are more willing to pay more for the service (Dobre et al., 2013; Nunkoo et al., 2017) and consider spending their time and effort as valuable (Cheng & Monroe, 2013). The proposed hypothesis is as follows:

H1: Service quality affects perceived price.

Relationship between Service Quality and Repeat Visit Intention

Service quality influences behavioral intentions and can serve as a dominant factor leading to favorable revisit intentions (Amin & Nasharuddin, 2013; Büttner et al., 2015; Gowing et al., 2017). Patient satisfaction and loyalty are associated with their perception of the quality of service received from the same hospital, and hence shape their revisit behavior (Moon et al., 2013; Petrick, 2002). Thus, it can be hypothesized that patients with a positive service experience will reuse the medical check-up service at RS X. Hence, the proposed hypothesis is:

H2: Service quality affects repeat visit intention.

Relationship between Perceived Price and Revisit Intention

Perceived price has a significant relationship with revisit or repurchase intention (Amin & Nasharuddin, 2013; Liu & Lee, 2016). In fact, perceived price is a significant factor in future behavioral intentions (Lee & Han, 2015). In this study, it is argued that monetary and behavioral prices will affect patients' revisit intentions

toward the hospital (Liu & Lee, 2016; Wu et al., 2015). The hypotheses proposed are:

H3. Perceived price affects revisit intention.

Based on the description above, it can be described into the following research paradigm

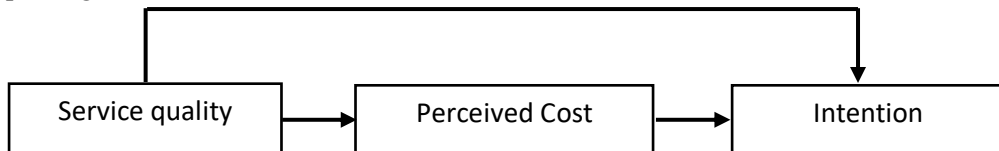


Figure 2. Research Paradigm

3. Methodology

This study uses descriptive and verification methods, as well as statistical analysis using path analysis. 200 people who have used medical check-up services at X Hospital became respondents in this study. The results of interviews and questionnaires were used to process the data and measure the influence of each variable. We previously tested the questionnaire for validity and reliability.

The results of measuring data through questionnaires for the variables studied are independent variables and dependent variables in the form of ordinal data. To equalize the data from these variables, starting from ordinal data to interval data, changes will be made using the LISREL program.

4. Empirical Findings/Result and Discussion

The profiles of the people who became respondents in this study are as follows:

Table 1. Profile of Respondents

	Indicator	F	%
Gender	Female	149	74,50%
	Male	51	25,50%
	Total	200	100,00%
Age	>60 years old	0	0,00%
	50 - 60 years old	10	5,00%
	35 -50 years old	5	2,50%
	25 - 35 years old	17	8,50%
	18 - 25 years old	163	81,50%
	<18 years old	5	2,50%
	Total	200	100,00%
Domicile	Cimahi	74	37,00%
	Kota Bandung	27	13,50%
	Kabupaten Bandung Barat	35	17,50%
	Others	64	32,00%
	Total	200	100,00%
Profession	Student	158	50,00%

	Indicator	F	%
	Housewife	10	9,38%
	Entrepreneurship	11	3,13%
	TNI/Polri	0	9,38%
	Public Servant	0	3,13%
	Private Employee	16	12,50%
	Retired TNI/Polri	5	0,00%
	Others	0	6,25%
	Total	200	100,00%
	Senior High School	147	73,50%
	Diploma	22	11,00%
Education	S1	20	10,00%
	S2	11	5,50%
	S3	0	0,00%
	Total	200	100,00%
Regular monthly expenses	< Rp 1.000.000	121	60,50%
	Rp 1.000.000 - Rp 5.000.000	73	36,50%
	Rp 5.000.000 - Rp 10.000.000	6	3,00%
	> Rp 10.000.000	0	0,00%
	Total	200	100,00%
Frequently used social media	Instagram	132	66,00%
	Whatsapp	48	24,00%
	Tiktok	10	5,00%
	Facebook	10	5,00%
	Total	200	100,00%

Source: Results of processed questionnaire data, October 2023.

All communities in several areas that became respondents in this study were predominantly female, with an age range of 18–25 years. In terms of residence, most of the respondents live in Cimahi City. In terms of the latest education, high school graduates and student occupations dominate the respondents in this study. Respondents are also dominated by regular monthly expenditures of <Rp. 1 million rupiah per month. The social media platform that is widely used by the majority of respondents is Instagram.

Regarding the descriptive analysis of each variable, the respondents' responses are as in Table 2 below:

Table 2. Descriptive Analysis of Variables			
Variable	Score	%	Category
Service quality	11.985	74,91%	Qualified
Cost	5.324	66,55%	Less cheap
Intention	2.722	68,05%	High
Average		69,84%	

The medical check-up service at RS X is considered high quality by patients. Patients experience high-quality medical check-up service at RS X due to the excellent and supportive facility management. Likewise, the staff are well trained so that patients who come feel prioritized, comfortable, and safe. In addition, the

service management system at RS X already has a good system so that their services are more effective, giving the staff more time to help answer questions from patients.

The cost perceived by respondents both to go to the hospital and for medical check-up services can be said to be still less cheap, although the costs incurred to go to the hospital depend on the distance of the patient himself. Apart from that, the background of the respondents is dominated by students who are mostly unemployed, so the costs they feel are still not cheap, as well as the cost of services provided by the hospital, depending on the series of medical tests passed by the patient.

Respondents basically intend to make repeat visits to RS X's medical check-up service. This desire can be seen in their willingness to recommend the service to their relatives and friends. Their desire to reuse medical check-up services further supports this.

By using the Lisrel program to calculate the path analysis, the structural equation is obtained as follows:

Table 3. Structural Equation

Cost = 0.515*kualitas, Errorvar.= 0.735 , R ² = 0.265		
Standerr	(0.0608)	(0.0737)
Z-values	8.475	9.975
P-values	0.000	0.000
Intention = 0.511*Cost + 0.388* quality, Errorvar.= 0.384 , R ² = 0.616		
Standerr	(0.0513)	(0.0385)
Z-values	9.978	7.564
P-values	0.000	0.000

Source: Results of the Questionnaire, October 2023

The structural relationship between variables as can be seen in the following figure:

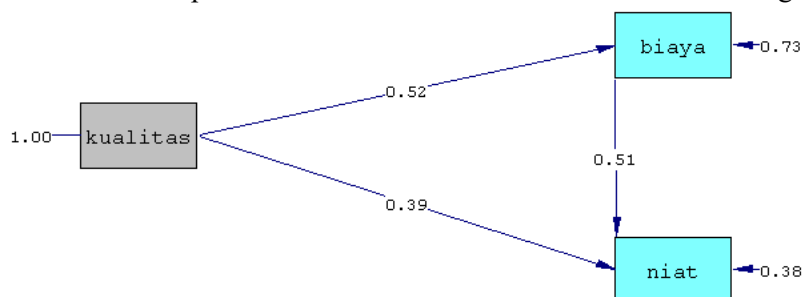


Figure 3. Structural relationships between service quality, perceived cost and patient revisit intention

Source: Results of Questionnaire, October 2023

The results of partial hypothesis testing for structural equation 1 and simultaneous and partial hypothesis testing for structural equation 2 can be seen in the following table:

Table 4. Partial Hypothesis Test for Structural Equation 1 and Simultaneous and Partial Hypothesis Test for Structural Equation 2

Structural Equation I				
Hypothesis Null	t_{count}	t_{table}	Result	Statistical Conclusion
Service quality has no effect on Perceived Cost	8,475	1,97	t _{count} > t _{table} H ₀ rejected Significant	Service quality has a significant effect on perceived cost
Structural Equation II				
Hypothesis Null	F_{count}	F_{table}	Result	Statistical Conclusion
Service quality and perceived cost have no effect on repeat visit Intention	158,01	3,04	F _{count} > F _{table} H ₀ rejected Significant	Service quality and perceived cost have a significant effect on repeat visit Intention
Hypothesis Null	t_{count}	t_{table}	Result	Statistical Conclusion
Service quality has no effect on repeat visit Intention	9,978	1,97	t _{count} > t _{table} H ₀ rejected Significant	Service quality has a significant effect on repeat visit Intention
Perceived cost has no effect on repeat visit Intention	7,564	1,97	t _{count} > t _{table} H ₀ rejected Significant	Perceived cost has a significant effect on repeat visit Intention

The table above shows that service quality significantly affects perceived costs in structural equation 1. These findings indicate that any increase or change in service quality significantly affects the cost. This is as stated by previous researchers, where service quality drives perceived price (Amin & Nasharuddin, 2013; Basu et al., 2016; Gowing et al., 2017). Moreover, continuous improvement in service quality increases patients' willingness to pay more for the service (Dobre et al., 2013; Nunkoo et al., 2017).

The results of hypothesis testing for structural equation 2 show that service quality and perceived costs have a significant effect on patient revisit intentions. When tested partially, the two variables also have a significant effect on patient revisit intentions. This is similar to the results of previous studies where perceived price has a significant relationship with revisit or repurchase intentions (Amin & Nasharuddin, 2013; Liu & Lee, 2016). In fact, perceived price is a significant factor in future behavioral intentions (Lee & Han, 2015). Hence, perceived and behavioral costs will influence patients' revisit intentions (Liu & Lee, 2016; Wu et al., 2015). In addition,

patients' satisfaction and loyalty are associated with their perception of the quality of medical check-up services at Hospital X and hence shape their revisit behavior (Moon et al., 2013; Petrick, 2002). Thus, a positive service experience will encourage patients to reuse medical check-up services at RS X.

The following table shows the magnitude of the influence of service quality and perceived costs, which have a significant effect on patient re-visit intentions, as determined from the structural equation, the relationship picture, and the hypothesis tests.

Table 5. Magnitude of Variable Influence

Table 3. Magnitude of Variable Influence					
Correlation	Coefficient	Effect		Total	
		Direct	Indirect		
Structural Equation I					
Service quality on repeat visit Intention	0,515	26,523%	-	26,523%	
Residu Factor				73,477%	
Structural Equation II					
Service quality on repeat visit Intention	0,39	15,21%	10,34%	25,55%	
Perceived cost on repeat visit Intention	0,51	26,01%	10,34%	36,35%	
Total Effect				61,90%	
Residu Factor				38,10%	

The magnitude of the influence of variables in a structural equation It shows that service quality variables have a strong enough impact on perceived costs. Therefore, to increase perceived costs, we can focus on improving service quality.

Meanwhile, the magnitude of the influence on structural equation II shows that the overall variables of service quality and perceived cost have a fairly strong impact on repeat visit intentions. Of the two variables, the perceived cost variable has the greatest impact on repeat visit intention. Furthermore, service quality also has a fairly strong impact on revisit intentions. Therefore, to increase repeat visit intentions, it is necessary to focus on increasing perceived costs and then improving service quality. As service quality and perceived cost increase, revisit intentions will continue to increase.

The inhibiting factors that make repeat visit intentions low are:

- 1) Some of the respondents stated that sometimes the health workers who served them seemed very busy with their work, so the service took longer.
- 2) Most of the respondents stated that family or friends helped them make decisions about where to seek treatment. Although their assistance was considered less than optimal due to the lack of accurate information,
- 3) Doctors are not able to foster a good relationship with patients. Doctors only carry out their duties without taking the initiative to meet the needs and desires of patients. Furthermore, doctors are less engaged in intense communication regarding the necessary steps for patients to recover from their illness. This is because the communication seems to be one-way only.

- 4) The community feels that RS X is less efficient in serving them. The community experiences long waiting times to receive the health services they need, indicating that RS X is less efficient in serving them.
- 5) The number of hospitals around Cimahi City causes the community to easily change the location of health services needed. Although it is rather difficult, they can switch to another hospital if the service is not satisfactory.
- 6) The community is dissatisfied with the experience of their medical treatment at X Hospital. The community is dissatisfied with the experience of their medical treatment at X Hospital because the quality of services provided has not met their expectations. For example, consider the friendliness of the health workers in the hospital.
- 7) People who are respondents are less willing to pay more for service facilities at X Hospital.

5. Conclusions

Medical check-up services at X Hospital are of high quality. However, the costs felt by patients when using medical check-up services are still felt to be less affordable. The services obtained are not commensurate with the amount spent by the patient. Even so, patients still have a desire to reuse the service because of the lack of choices available.

Service quality is quite closely and significantly related to the perceived cost of medical check-up services. Similarly, service quality is quite closely and significantly related to the intention to revisit medical check-up services. This is not much different from the perceived cost, which is quite closely and significantly related to the intention to revisit the medical check-up service.

Regular customer service excellence training for all health workers can improve service quality, especially in terms of speed and focus on the needs and desires of patients. Furthermore, this training is expected to enhance the friendliness of health workers, thereby improving interactive communication between patients and doctors and nurses, resulting in patients feeling more supported. The impact of this is an increase in patient satisfaction and a desire to return to using medical check-up services at X Hospital.

Another effort that can be made is to increase the speed of service to patients, for example, by optimizing the equipment and resources that are already owned. Thus, optimizing the equipment and resources that are already owned can increase the speed of service, leading to higher satisfaction and desire to use medical check-up services.

Furthermore, to increase people's desire to pay more for medical check-up services, we can make improvements to facilities and infrastructure. Improvements are not only in the machines used but also in other supporting facilities such as waiting rooms and so on.

References:

- Amin, M., & Nasharuddin, S. Z. (2013). Hospital service quality and its effects on patient satisfaction and behavioural intention. *Clinical Governance: An International Journal*, 18(3), 238–254. <https://doi.org/10.1108/CGIJ-05-2012-0016>
- Basu, J., Avila, R., & Ricciardi, R. (2016). Hospital Readmission Rates in U.S. States: Are Readmissions Higher Where More Patients with Multiple Chronic Conditions Cluster? *Health Services Research*, 51(3), 1135–1151. <https://doi.org/10.1111/1475-6773.12401>
- Bopp, K. D. (1990). How patients evaluate the quality of ambulatory medical encounters: a marketing perspective. *Journal of Health Care Marketing*, 10(1), 6–15.
- Büttner, O. B., Florack, A., & Göritz, A. S. (2015). How shopping orientation influences the effectiveness of monetary and nonmonetary promotions. *European Journal of Marketing*, 49(1/2), 170–189. <https://doi.org/10.1108/EJM-01-2012-0044>
- Cheng, L. L., & Monroe, K. B. (2013). An appraisal of behavioral price research (part 1): price as a physical stimulus. *AMS Review*, 3(3), 103–129. <https://doi.org/10.1007/s13162-013-0041-1>
- Choi, B. J., & Kim, H. S. (2013). The impact of outcome quality, interaction quality, and peer-to-peer quality on customer satisfaction with a hospital service. *Managing Service Quality*, 23(3), 188–204. <https://doi.org/10.1108/09604521311312228>
- Dobre, C., Dragomir, A. C., & Milovan-Ciuta, A.-M. (2013). A MARKETING PERSPECTIVE ON THE INFLUENCES OF WAITING TIME AND SERVICESCAPE Anca Cristina DRAGOMIR Anca-Maria MILOVAN-CIUTA. *Management and Marketing Challenges for the Knowledge Society*, 8(4), 683–698.
- Gowing, J., Walker, K., Elmer, S., & Cummings, E. (2017). What are the Most Effective Methods of Disaster Preparation for Health Professionals and Support Staff? Perspectives from Staff at St Vincent's Private Hospital, Sydney - Phase 1 of a Multi-site Study. *Prehospital and Disaster Medicine*, 32(S1), S74–S74. <https://doi.org/DOI: 10.1017/S1049023X17001972>
- Kotler, P., & Clarke, R. N. (1986). *Marketing for health care organizations* / Philip Kotler, Roberta N. Clarke. Prentice-Hall.
- Lee, E., & Han, S. (2015). Determinants of adoption of mobile health services. *Online Information Review*, 39(4), 556–573. <https://doi.org/10.1108/OIR-01-2015-0007>
- Liu, C.-H. S., & Lee, T. (2016). Service quality and price perception of service: Influence on word-of-mouth and revisit intention. *Journal of Air Transport Management*, 52, 42–54.

- <https://doi.org/https://doi.org/10.1016/j.jairtraman.2015.12.007>
- Moon, K.-S., Ko, Y. J., Connaughton, D. P., & Lee, J.-H. (2013). A mediating role of destination image in the relationship between event quality, perceived value, and behavioral intention. *Journal of Sport & Tourism*, 18(1), 49–66. <https://doi.org/10.1080/14775085.2013.799960>
- 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. <https://doi.org/10.1108/IJCHM-11-2016-0610>
- Petrick, J. F. (2002). Development of a Multi-Dimensional Scale for Measuring the Perceived Value of a Service. *Journal of Leisure Research*, 34(2), 119–134. <https://doi.org/10.1080/00222216.2002.11949965>
- Woolley, F. R., Kane, R. L., Hughes, C. C., & Wright, D. D. (1978). The effects of doctor-patient communication on satisfaction and outcome of care. *Social Science & Medicine. Part A: Medical Psychology & Medical Sociology*, 12, 123–128. [https://doi.org/https://doi.org/10.1016/0271-7123\(78\)90039-1](https://doi.org/https://doi.org/10.1016/0271-7123(78)90039-1)
- Wu, K., Vassileva, J., Noorian, Z., & Zhao, Y. (2015). How do you feel when you see a list of prices? the interplay among price dispersion, perceived risk and initial trust in Chinese C2C market. *Journal of Retailing and Consumer Services*, 25, 36–46. <https://doi.org/https://doi.org/10.1016/j.jretconser.2015.03.007>