# A Study for Hanoi on How Perceived Value and Service Quality Affect Customer Satisfaction in Healthcare Insurance

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**ABSTRACT:** Healthcare insurance is currently attracting special attention in low- and middle-income countries. Theory and practice have proven that healthcare insurance is a means to improve access to healthcare services for all people, especially those with low incomes, helping to prevent financial risks during illness, especially the risk of financial disaster due to direct payment methods. The empirical literature on health insurance participation is limited despite the importance of insurance participation. This research was conducted through interviews and surveys of customers of insurance businesses in Hanoi, with 242 feedback forms received. The authors process the collected data through SPSS software. Research results show a positive relationship between customer-perceived value and service quality and satisfaction. Service quality also positively impacts customers' perceived value. The research results are the basis for the authors' proposal of policy suggestions for insurance businesses to develop healthcare insurance operations in Vietnam's current insurance market.

**KEYWORD:** Perceived value, service quality, customer satisfaction, healthcare insurance

**JEL CODE: G00, G02, G20**

## 1. INTRODUCTION

Healthcare insurance is a means of financing one's healthcare costs. In contrast, countries are increasingly trying to increase social insurance coverage to ensure social security for people. However, with the development of society, the risks of serious diseases are also increasing. As economic conditions develop, people's need to improve the quality of high-end and comprehensive medical care is also growing. Therefore, in addition to mandatory social health insurance, many customers have proactively participated in private health insurance to increase healthcare costs and benefits for themselves and their families. Typically, health insurance products and services are distributed through a complex network of insurance agents (Grönroos, 1982). Meanwhile, empirical studies on insurance coverage tend to have a supply-side bias (Tolani et al., 2019, Hsieh et al., 2019, Lin et al., 2019) and have overlooked demand-side determinants such as emotional value awareness, insurance knowledge, and cognitive trust, which may explain the increased usage and access to insurance services among the population. Accordingly, customer satisfaction and loyalty have become the key to success in this industry (Ramamoorthy et al., 2018). Only insurance companies that believe in delivering the highest value to customers can sustain growth and profitability and survive (Chattoraj, 2005).

Existing literature has emphasized the importance of perceived value in influencing customers' purchases and repurchase intentions (Fan et al., 2019). Lin et al. (2019) argue that an individual's increase in perceived value affects an equivalent increase in the antecedent value of an insurer's trust and reputation. Similarly, in the insurance sector, Marcos and Coelho (2017) demonstrate that service quality affects loyalty and, therefore, customers' repeat purchases. However, several empirical studies have investigated the influence of perceived value on customer satisfaction in the service industry, and they have had mixed results. For example, Bayarsaikhan et al. (2015) found that customer satisfaction is more about price than value. In contrast, Ramamoorthy et al. (2018) found the relationship between customer value and satisfaction insignificant. Thus, Abdel Fattah et al. (2021) suggest that further research is needed on the important factors of customer value and satisfaction with insurance.

Many researchers have studied service quality related to customer satisfaction in life insurance; However, what has yet to be tested is how perceived value is used as a mediator between service quality and satisfaction within the context of the healthcare insurance sector. Accordingly, this study aims to examine the impact of perceived product value and service quality on customer satisfaction in the healthcare insurance sector in the current Vietnamese context.

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## 2. LITERATURE REVIEW

### Perceived value

Perceived value theory posits that consumers receive value when a product provides benefits that outweigh the consumer's sacrifices. From that perspective, comprehensive insurance can be achieved when consumers Use insurance to get the desired benefits from the insurance contract. Additionally, insurance services must be of satisfactory quality to promote insurance participation because, for every service or product purchased, consumers expect quality and various psychological benefits (Venkatesan and Jacob, 2019). To buy or redeem insurance, consumers must capture value through the benefits conferred Nshakira-Rukundo et al. (2019). Accordingly, Weedige et al. (2019) shed light on perceived value as consumers' beliefs about how they will be better off by purchasing an insurance policy.

### Service quality

Service quality can be defined as the degree of difference between customer expectations and customer perceptions. Based on the conceptual definition of service, the next step is to develop an instrument to measure customer perceptions of service quality. The result was the development of the SERVQUAL instrument (Parasuraman et al., 1991), in which service quality scores (gaps) are measured. SERVQUAL remains the most widely used tool for measuring service quality. The original SERVQUAL tool evaluates five attributes of a service (tangibles, reliability, responsiveness, assurance, and empathy). Total service quality is a second-order construct comprised of all five components: tangibles, reliability, responsiveness, assurance, and empathy. Accordingly, studies hypothesize that SERVQUAL dimensions positively influence overall service quality. Overall service quality positively influences service satisfaction, and both positively influence revisit intention (Parasuraman et al., 1994).

### Customer satisfaction

Customer satisfaction is attracting increasing attention from researchers, especially in the financial services sector. Kotler and Keller (2006) define satisfaction as a person's satisfaction or disappointment resulting from comparing perceived product performance or results with their expectations. Satisfaction is defined and measured by disconfirming or confirming consumer expectations (Bearden et al., 1998). Customer satisfaction is considered transaction-specific; it must meet the expectations and actual performance of pre- and post-purchases. Accordingly, reliability and assurance are the most critical factors of customer satisfaction in the insurance industry (Siami and Gorji, 2011).

## 3. METHODOLOGY

Based on previous research reviews, this study aims to examine the relationship between perceived value, service quality, and satisfaction in the health insurance sector in the Vietnamese market based on suggestions by (Venkatesan and Jacob, 2019) and adjusted to suit the scope of the study. The questionnaire was designed based on the theories introduced in the literature review. It includes 12 observation variables with a 5-point Likert scale. Based on the "Data cleaning" results using SPSS22 data analysis software, 250 survey questionnaires were distributed, but only 242 questionnaires received were valid and cleaned. After conducting the survey, collect information and process data. Collected data will be analyzed with descriptive statistics, Cronbach Alpha reliability analysis, factor analysis, and correlation analysis to see the relationship between factors in customer satisfaction. Primary data provide original data and a better understanding of aspects of current behavior (Hair Jr et al., 2019). Furthermore, Hair Jr et al. (2019) argues that preliminary data minimizes duplication.

## 4. RESULTS

### Descriptive analysis

The detailed descriptive analysis results of this group of workers are shown in detail in the following table 1:

**Table 1: Demographic characteristics of Respondents**

| Variables | Category | Frequency | Percentage (%) |
|---|---|---|---|
| Gender | Male | 116 | 47.9 |
| | Female | 126 | 52.1 |
| Age | 20 − 30 | 70 | 28.9 |
| | 31 − 40 | 123 | 50.8 |
| | 41 − 50 | 33 | 13.6 |
| | above 50 | 16 | 6.6 |
| Time of participation | Firt year | 29 | 12.0 |

| | | | |
|---|---|---|---|
| | 1 – 3 years | 138 | 57.0 |
| | 3 – 5 years | 61 | 25.2 |
| | Above 5 years | 14 | 5.8 |
| Income | Under 10 million | 22 | 9.1 |
| | 10 - 15 | 38 | 15.7 |
| | 15 - 20 | 129 | 53.3 |
| | Above 20 | 53 | 21.9 |

From the descriptive analysis, we can see that:

Genders**:** The results show that 116 male and 126 female participants responded to the questionnaire. Currently, health insurance purchased by businesses for employees is quite common, so the proportion of men and women who own this type of insurance is similar in Vietnam.

Age: According to the analysis results, the number of surveyed people aged from 31 to 40 years old accounts for the most significant proportion. The second is from 20 to 30 years old, the third is from 41 to 50, and the last is from 50 years old. This is the age of the subjects surveyed and working with insurance businesses. They can take out insurance for their daughters or their parents.

Regarding participation time, health insurance especially received more attention after the COVID-19 epidemic, so the proportion of respondents with participation time mainly from 1 to 3 years is common.

Income: From the interview data, the highest proportion of income is 15 -20 million (53.3%). This is also a suitable income level to afford the current health insurance premiums in businesses.

***Cronbach's Alpha – Reliability***

In order to conduct the reliability test, Cronbach's Alpha is used as the most popular and effective tool in SPSS analysis (Hair et al., 2010)[9]. In this research, the Cronbach's Alpha test is applied for one dependent variable and three independent variables. Table 2 demonstrates the result of Cronbach's Alpha test. Hair et al. (2010)[9] also note that the Cronbach's Alpha result should be equal to or higher than 0.7 (≥0.7) to be reliable enough for research. The Cronbach's Alpha results in table 2 all meet these standard requirements, which means that every item in the questionnaire has a good level of reliability and can be accepted to use for this research.

**Table 2: Cronbach's Alpha Analysis**

| Variables and coding | Cronbach's Alpha | No. of items |
|---|---|---|
| Service quality (SVQ) | 0.833 | 4 |
| Perceived value (PV) | 0.891 | 4 |
| Customer satisfaction (CS) | 0.934 | 4 |

***KMO and Barlett's Test***

In this research, the KMO and Barlett's Test for independent variables is conducted as the result is illustrated in the Table 3. As shown, the KMO value is 0.880 (0.5 < 0.802 < 1) and the sig. value is 0.000 (<0.05), that means these values satisfied the conditions in the study (Hair et al., 2010)[9]. In addtion, after implementing the rotation matrix, we got the followings: every determinant with factor load > 0.5, Eigenvalues is 1.65 > 1, and the Variance explained = 75.709 %. It demonstrates that the factor analysis of the research data is appropriate.

**Table 3: KMO and Bartlett's Test**

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.880 |
|---|---|---|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1898.027 |
| | Df | 66 |
| | Sig. | 0.000 |
| Total variance Explained | | 75.709 |
| Total Eigenvalues | | 1.65 |

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*Correlations*

The results of Pearson analysis correlation show a strong linear correlation between the dependent and independent variables of the model (Hair et al., 2010). The results show that the perceived value and service quality variables have a significant positive correlation with customer satisfaction at the 0.580 and 0.405 correlation levels, respectively. This means that service quality and customer-perceived value contribute to customer satisfaction in healthcare insurance. In addition, service quality and perceived value have a statistically significant correlation with a coefficient of 0.434. The detailed results are shown in the following table:

**Table 4: The results of correlations**

|  |  | CS | PV | SVQ |
|---|---|---|---|---|
| **CS** | Pearson Correlation | 1 | .580** | .405** |
|  | Sig. (2-tailed) |  | .000 | .000 |
|  | N | 242 | 242 | 242 |
| **PV** | Pearson Correlation | .580** | 1 | .434** |
|  | Sig. (2-tailed) | .000 |  | .000 |
|  | N | 242 | 242 | 242 |
| **SVQ** | Pearson Correlation | .405** | .434** | 1 |
|  | Sig. (2-tailed) | .000 | .000 |  |
|  | N | 242 | 242 | 242 |

**. Correlation is significant at the 0.01 level (2-tailed).

## 5. DISCUSSION

Research results show that perceived value is closely related to customer satisfaction. This impact is even more potent than that of service quality. This result is also consistent with previous studies on life insurance. This can be explained in the field of health insurance in particular and insurance in general; the tangibility of the product is limited. Therefore, measuring service quality is also more difficult for customers. Meanwhile, health insurance is risk insurance, so the benefits that insurance brings help customers feel more clearly. At the same time, the research results also show a positive relationship between service quality and customer perceived value. Therefore, insurance businesses still have to focus on improving the quality of their insurance services. On that basis, it will promote increased perceived value through customer benefits.

The quality of insurance services is expressed through the quality of customer service before, during, and after the insurance period and the quick accuracy in the assessment, verification, and settlement of insurance payments. Therefore, insurance businesses should develop and expand access to health insurance products through electronic application platforms of financial institutions and e-commerce. Health insurance packages should also have diverse scopes and fees so customers can easily choose. Healthcare insurance contracts still have many complex terms that need to be clarified for customers to understand, leading to customers not accepting and not feeling satisfied when resolving their benefits. Therefore, insurance terms must be clear, concise, and easy to understand to avoid customer misunderstandings.

Regarding resolving customer benefits, it is necessary to promote the application of interconnected technology combined with electronic medical records at medical examination and treatment facilities to control fraud and shorten customer approval time profile.

## 6. CONCLUSION

This study aims to test the relationship between perceived value, service quality, and customer satisfaction in the health insurance sector. Although the research was conducted carefully, it still needed to be improved in its small sample size. It only stopped looking at correlations without analyzing the internal factors that make up the independent variables in the study model. Further research could clarify these issues.

## REFERENCES

1) Abdel Fattah, F. a. M., Dahleez, K. A., Darwazeh, R. N. & Al Alawi, A. M. M. 2021. Influence of service quality on consumer loyalty: a mediation analysis of health insurance. *The TQM Journal,* 33**,** 1787-1805.
2) Bayarsaikhan, D., Kwon, S. & Chimeddagva, D. 2015. Social health insurance development in Mongolia: Opportunities and challenges in moving towards Universal Health Coverage. *International Social Security Review,* 68**,** 93-113.

3) Bearden, W. O., Malhotra, M. K. & Uscátegui, K. H. 1998. Customer contact and the evaluation of service experiences: propositions and implications for the design of services. *Psychology & Marketing,* 15**,** 793-809.

4) Chattoraj, A. 2005. Customer delivered value-A key to success. *The Insurance Times,* 15**,** 22-29.

5) Fan, H., Yan, Q., Coyte, P. C. & Yu, W. 2019. Does public health insurance coverage lead to better health outcomes? Evidence from Chinese adults. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing,* 56**,** 0046958019842000.

6) Grönroos, C. 1982. An applied service marketing theory. *European journal of marketing,* 16**,** 30-41.

7) Hair, J., Anderson, R., Babin, B. & Black, W. 2010. Multivariate data analysis: A global perspective : Pearson Upper Saddle River. NJ.

8) Hair Jr, J., Page, M. & Brunsveld, N. 2019. *Essentials of business research methods*, Routledge.

9) Hsieh, C.-Y., Su, C.-C., Shao, S.-C., Sung, S.-F., Lin, S.-J., Kao Yang, Y.-H. & Lai, E. C.-C. 2019. Taiwan's national health insurance research database: past and future. *Clinical epidemiology*, 349-358.

10) Kotler, P. & Keller, K. L. 2006. *Dirección de marketing*, Pearson educación.

11) Lin, X., Bruhn, A. & William, J. 2019. Extending financial literacy to insurance literacy: A survey approach. *Accounting & Finance,* 59**,** 685-713.

12) Marcos, A. & Coelho, A. 2017. Antecedents and consequences of perceived value in the insurance industry. *European Journal of Applied Business and Management,* 3.

13) Nshakira-Rukundo, E., Mussa, E. C., Nshakira, N., Gerber, N. & Von Braun, J. 2019. Determinants of enrolment and renewing of community-based health insurance in households with under-5 children in rural south-western Uganda. *International journal of health policy and management,* 8**,** 593.

14) Parasuraman, A., Berry, L. L. & Zeithaml, V. A. 1991. Perceived service quality as a customer-based performance measure: An empirical examination of organizational barriers using an extended service quality model. *Human resource management,* 30**,** 335-364.

15) Parasuraman, A., Zeithaml, V. A. & Berry, L. L. 1994. Reassessment of expectations as a comparison standard in measuring service quality: implications for further research. *Journal of marketing,* 58**,** 111-124.

16) Ramamoorthy, R., Gunasekaran, A., Roy, M., Rai, B. K. & Senthilkumar, S. 2018. Service quality and its impact on customers' behavioural intentions and satisfaction: an empirical study of the Indian life insurance sector. *Total Quality Management & Business Excellence,* 29**,** 834-847.

17) Siami, S. & Gorji, M. 2011. Service Quality Management in the Insurance Industry on the Basis of Service Gap Research Findings show that rate of present Model, Aust. *J. Basic & Appl. Sci,* 5**,** 797-802.

18) Tolani, S., Rao, A., Worku, G. B. & Osman, M. 2019. System and neural network analysis of intent to buy and willingness to pay insurance premium. *Managerial Finance,* 45**,** 147-168.

19) Venkatesan, R. & Jacob, J. 2019. Does loyalty and satisfaction support customer retention in life insurance sector?-An empirical study. *International Journal of Business Excellence,* 18**,** 435-449.

20) Weedige, S. S., Ouyang, H., Gao, Y. & Liu, Y. 2019. Decision making in personal insurance: Impact of insurance literacy. *Sustainability,* 11**,** 6795.