Factors Influencing Life and Health Insurance Consumer Satisfaction in China

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Abstract

Consumer satisfaction is the emotional response, whether positive or negative, experienced upon assessing a product in relation to its anticipated value. Especially in life and health insurance consumer satisfaction, perceived quality denotes the customer's evaluation of a product's superiority. This perception of quality positively impacts customer satisfaction. Therefore, it is important to identify quality factors that can influence life and health insurance consumer satisfaction. The quality factors are determined based on the weighting method. Factors that achieve the weight of factor 0.5 and above are selected. The selected factors are price, expected value, insurance policy, tangibility, reliability, assurance, responsiveness, empathy, technology security, information security, and regulation. These factors are then mapped with the quality dimension which are product quality, service quality, and security quality. The satisfaction model of life and health insurance is proposed based on identified quality factors. This paper contributes to the research on the life and health insurance consumer satisfaction model in China which integrates product quality, service quality, and security quality factors in one model that can be used as a guideline to insurance companies in improving consumer satisfaction.
Keywords: Consumer Satisfaction, Life and Health Insurance, Quality Factors, Product Quality, Service Quality, Security Quality

Introduction

The life and health insurance industry in China has seen a significant increase in its performance over the past decade. China has become the second-largest insurance market in the world since 2018, ranking after the USA (Allianz, 2022). In 2022, despite the economic downturn caused by the COVID-19 epidemic, the total premium growth remains to be 4.8%. In China's insurance market, there are two types of insurance: property and liability insurance, and life and health insurance. In 2022, China's total premium income was 4695.7 billion RMB, including 1271.2 billion RMB for property and liability insurance and 3424.5 billion RMB for life and health insurance (CBIRC, 2023). Life and health insurance is currently the largest insurance in China, with premiums accounting for more than 70% of all premiums (2023

China's Insurance Development Report[1]). There are 232 insurance companies in China in 2023. Among them, 97 companies are life and health insurance companies.

In general, life and health insurance protects against mortality risks and disease risks (Yang, 2022). It serves as a backbone for the future when misfortunes occur (Raza et al., 2020). Under ordinary conditions, life and health insurance are not that useful. In the event of misfortune, life and health insurance helps families by paying out a considerable amount of insurance claims. Through life and health insurance, family wealth and family risk are well managed. Taking 2022 as an example, the total claim amount of life and health insurance is 775.7 billion RMB, and the loss rate reaches 23%. (2023 China's Insurance Development Report).

Even though life and health insurance in China is growing fast, research shows that consumers are not satisfied with life and health insurance (Fang, 2022). A survey conducted by the Consumer Insurance Bureau of China Banking and Insurance Regulatory Commission in 2020, shows that 71.4% of total consumers are "not satisfied" or "very dissatisfied" with life and health insurance. Consumer dissatisfaction focuses on the quality of life and health insurance. 70% of respondents were dissatisfied with insurance product quality, 68.4% dissatisfied with the service quality, and 75% dissatisfied with security quality. Some past studies confirm there is a positive relationship between quality and consumer satisfaction (Baumgarth & Binckebanck, 2011).

Considering all these facts, this paper aims to analyse the quality factors that can influence life and health insurance consumer satisfaction in China. According to Fang (2022), quality is affecting consumer satisfaction. There are mature models for evaluating consumer satisfaction such as the CSI model (Cheng et al., 2020) and the SERVQUAL model (Nugraheni, 2019), which focuses on product and service quality factors. According to Niu (2021), security quality should also be considered in improving consumer satisfaction. Therefore this paper identified the quality factors based on product, service, and security quality factors that can influence consumer satisfaction.

This paper has made certain contributions. In theory, this paper extends existing satisfaction research to the field of life and health insurance. Especially, the introduction of quality factors provides a new dimension of security quality, besides the traditional dimensions of product quality and service quality. Meanwhile, this paper can bring application value to the life and health insurance industry in China by improving consumer satisfaction with life and health insurance.

The remainder of this paper is structured as follows. First, a thorough literature review helps to clarify the existing research on the factors of consumer satisfaction towards life and health insurance. Second is the methodology used in this paper. Third, the results are discussed on the quality factors and proposed model. The last part of this paper is the conclusions.

Literature Review
Life And Health Insurance Consumer Satisfaction

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Insurance means that the applicant pays the premium to the insurer according to the contract (Wei, 2014). Consumer satisfaction is described as a consumer's joy or discontent that results from an evaluation of perceived service quality performance and the actual services delivered (Nguyen & Hoang, 2017). Life and health insurance consumer satisfaction involves consumer satisfaction toward insurance products, services, and security (Huang, 2015). Insurance products are promises provided by insurance companies. The core of insurance products is to transfer risks and provide certain economic compensation when necessary (Yu, 2019) Insurance services are services that revolve around the core of economic compensation and payment (Shi, 2022). Insurance security is the security of hardware and software, consumer identification and legal protection, as well as the regulation of insurance (Sarmad et al., 2020; Zhang 2016).

Research In Quality Factors Affecting Life and Health Insurance Satisfaction
The European Customer Satisfaction Index (ECSI) model states that perceived quality influences consumer satisfaction positively (Susanti et al., 2019). Perceived quality is the customer's judgment about a product's superiority (Zeithaml, 1988). Perceived quality is reflected by product quality and service quality dimensions (Ganguli & Roy, 2011). Jiyas and Sureshkumar (2019) find that consumers are not satisfied with the quality of insurance products. Meanwhile, service quality is seen as an essential element of research on consumer satisfaction. Kim (2024) believes that service quality affects consumer satisfaction with life insurance.

Security quality is another dimension of perceived quality to improve consumers' satisfaction (Eckert, 2022), due to the evolution of information technology. Chattha (2020) reveals some factors of consumer satisfaction based on information sources and the Internet. However, the current literature and models are more about product quality and service quality. Lack of research on security quality, therefore, this paper focuses on the identification of quality factors that integrate product, service, and security quality towards life and health insurance consumer satisfaction in China.

Research Methodology
This paper looks into the quality factors that influence life and health insurance consumer satisfaction in China. Firstly, the quality dimensions influencing consumer satisfaction are identified through a literature review. This paper uses both direct and summative content analysis. Next, the influencing quality factors related to the quality dimension are determined through a literature review. The weighting method is used to select the quality factors. Factors that achieve a weight of 0.5 and above are selected. 11 factors are identified accordingly. Then, a satisfaction model is proposed based on the selected factors.

Results
Quality Dimensions
Three quality dimensions which are product quality, service quality, and security are identified through previous literature as shown in Table 1.

Table 1

Quality Dimensions Affecting Life and Health Insurance Satisfaction in China

No	Dimensions	Sources
1	Product Quality	Pan (2022); Lu (2022); Fomell (1989); Yu (2019); Tsoukatos (2007); Huang (2015)
2	Service Quality	Chen (2021); Fang (2022); Han (2018); Shi (2022)
3	Security Quality	Sarmad et al. (2020); Zhang (2016); Zhang (2017); Li (2015）

Product Quality

Product quality reflects the overall excellence of insurance products, as well as the suitability of an insurance policy in meeting the needs and expectations of consumers (Lu, 2022). Insurance products are the carriers of insurance. Whether consumers are satisfied with insurance, the first thing to consider is the quality of insurance products. In life and health insurance, products are designed by specialized actuaries. Three product quality dimension factors are identified: price, expected value and insurance policy.

Service Quality

Service quality, including the service of the underwriting process and claim process (Chen, 2021; Fang, 2022). Service quality refers to the degree to which a product or service meets or exceeds customer expectations. The dimension of service quality is almost listed in all the literature considering consumer satisfaction in all fields (Arnaser et al. 2017; Anabela, 2021). By the SERVQUAL model, service quality includes tangibility, reliability, responsiveness, assurance, and empathy.

Security Quality

Security quality refers to the sense of security and trust that consumers feel; it is the safeguards against potential threats and vulnerabilities, ensuring the protection of data, assets, and users from unauthorized access, breaches, and other security risks (Fang, 2022). It includes the security of hardware and software, consumer identification and legal protection, as well as the regulation of insurance (Sarmad et al., 2020; Zhang, 2016; Zhang, 2017; Li, 2015). Only a few researchers in China in recent years put it into a major concern as security is gaining its significance. Security quality includes technology security, information security, and regulation.

Quality Factors

This paper concentrates on the identification and selection of quality factors that influence life and health insurance consumer satisfaction in China. The factors are achieved and judged by the weighting method. Factors with high-weight rankings are selected. Using the weighted method, the weighted average method is used to calculate the weighted average times of factors in the literature. The weight for literature after 2016 is 1.2, otherwise, it is 0.8. Then the total number of occurrences of all factors divided by the number of factors is the expected times of occurrences of factors. Finally, the weight of the factor is obtained by the weighted average times divided by the expected times of occurrences. A factor is effective when the weight is above 0.5. The process is expressed as follows:

$P_i = F_i / E$

P_i represents the weight of the factor named i.

E (expected times of factor) = total times of all factors / number of factors.

Fi (weighted average times of the factor) = the number of occurrences of this factor after 2022 * 1.2 + the number of occurrences of this factor before 2016 * 0.8.

The result of the selection of quality factors using the weighted method is in Table 2. There are 11 factors selected, which are reliability, price, assurance, expected value, information security, regulation, insurance policy, tangibility, responsiveness, empathy, and technology security.

Table 2

Weights on Factors of Perceived Quality Influencing Life and Health Insurance Satisfaction in China

No	Factor Name	Weight
1	Reliability	1
2	Price	1
3	Assurance	1
4	Expected Value	0.90
5	Information Security	0.90
6	Regulation	0.85
7	Insurance Policy	0.83
8	Tangibility	0.83
9	Responsiveness	0.80
10	Empathy	0.77
11	Technology Security	0.77

Quality Dimension with Its Quality Factors

The quality dimension and its quality factors are shown in Table 3. The quality factors of the product quality dimension are price, expected value, and insurance policy. The quality factors for product quality dimension are derived from the ECSI model. The ECSI (European Consumer Satisfaction Index) has been validated across life and health insurance companies in European countries (Biesok, 2018). The quality factors of the service quality dimension are tangibility, reliability, responsiveness, assurance, and empathy. The quality factors are derived from the SERVQUAL model. SERVQUAL has been used as a standard method to measure consumer satisfaction in the service industry. The quality factors of the security quality dimension are technology security, information security, and regulation. The quality factors for the security quality dimension are derived from the CSE model. CSE (Consumerpro-lection Supervision Evaluation) is a model established by Chinese government to test insurance consumer satisfaction.

Table 3

Quality Dimension and Its Quality Factors

Quality Factor	Definition	Source of Literature	Source of Model	Quality Dimension
Price	Insurance price is the monetary value that an individual is required to pay in exchange for an insurance policy, which	Fang (2022); He (2015); Pan (2021); Li (2020)	ECSI	Product quality

Quality Factor	Definition	Source of Literature	Source of Model	Quality Dimension
	provides coverage for potential risks or losses. It represents the cost of insurance for a defined period.			
Expected Value	The anticipated average value of benefits or pay-outs that consumer can expect to receive from an insurance policy over time. It is evaluated by summing the products of the probability of each benefit occurrence and its corresponding financial benefit.	He (2020); Vyas (2015); Nugraheni, (2019); Pan (2021)	ECSI	Product quality
Insurance Policy	Insurance policy serves as a legal contract between an insurance provider and an individual that details the clauses, coverage, exclusions, and other terms associated with insurance.	Sulaiman (2020); Vyas (2015); Zhao (2017); He (2015)	ECSI	Product quality
Tangibility	The physical aspect of the service, which includes the physical facilities and equipment of insurance company as well as employees' appearance.	Parasuraman, Zeithaml & Berry (1988); Presbury (2009); Sandaruwan (2020)	SERVQUAL	Service quality
Reliability	The abilities to perform the promised service dependably and accurately.	Parasuraman, Zeithaml & Berry (1988); Presbury (2009); Sandaruwan (2020)	SERVQUAL	Service quality
Responsiveness	Insurance company is willing to help consumers through providing a prompt and accurate service.	Parasuraman, Zeithaml & Berry (1988); Presbury (2009); Sandaruwan (2020)	SERVQUAL	Service quality
Assurance	The knowledge and courtesy of insurance employees and their ability to convey trust and confidence.	Parasuraman, Zeithaml & Berry (1988); Presbury (2009); Sandaruwan (2020)	SERVQUAL	Service quality
Empathy	Insurance company provides care and attention individually to each consumer.	Parasuraman, Zeithaml & Berry (1988); Presbury (2009); Sandaruwan (2020)	SERVQUAL	Service quality

Quality Factor	Definition	Source of Literature	Source of Model	Quality Dimension
Technology security	Technology security refers to the protection of the hardware, software, and infrastructure that insurers use to store, process, and transmit data.	Li(2020); He (2020); Paposa (2019); Sandaruwan (2020); Fang (2022); He (2015)	CSE	Security quality
Information security	Information security encompasses the protection of all sensitive and confidential information within an insurance company, it focuses on safeguarding information from unauthorized access, disclosure, alteration, or destruction.	Li (2020); Sulaiman (2020); He (2020); Paposa (2019); Sandaruwan (2020)	CSE	Security quality
Regulation	Insurance regulation refers to the framework of laws, rules, and oversight established by authorities to supervise the insurance industry.	Sulaiman (2020); He (2020); Zhao (2017); Sandaruwan (2020); Liu (2022); Liu (2020)	CSE	Security quality

A Proposed Satisfaction Model for Life and Health Insurance Satisfaction in China
The satisfaction model of life and health insurance in China is proposed in Figure 1. This model consists of three quality dimensions which are product, service, and security dimension. The quality factors of the product quality dimension are price, expected value, and insurance policy. The quality factors of the service quality dimension are tangibility, reliability, responsiveness, assurance, and empathy. The quality factors of the security quality dimension are technology security, information security, and regulation.

The underpin models in developing the satisfaction model of life and health insurance in China are ECSI, SERVQUAL, and CSE models.
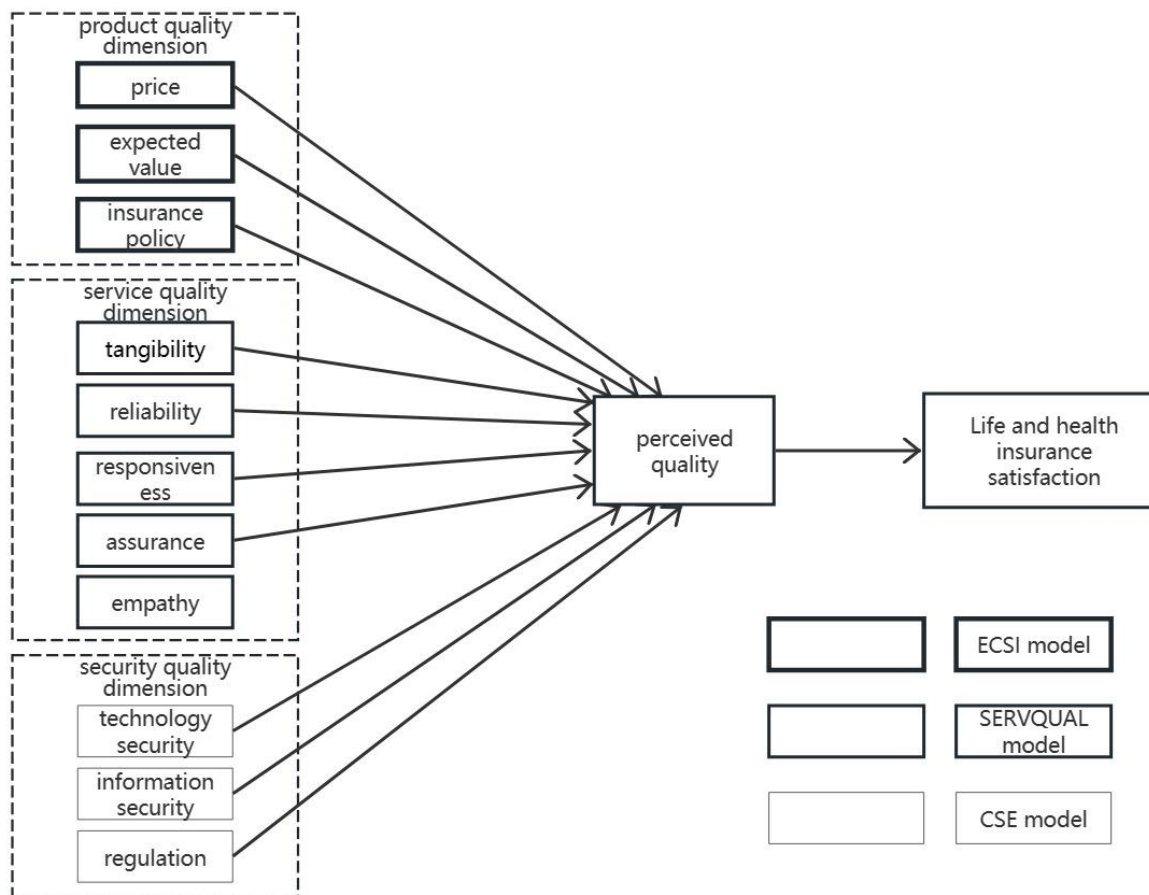
Figure 1. The Proposed Satisfaction Model for Life and Health Insurance in China

Conclusions

This paper focuses on the identification of quality factors in influencing life and health insurance consumer satisfaction in China. It is concluded that product quality, service quality, and security quality are the quality dimensions identified in this paper. The quality factors within product quality dimension are price, expected value, and insurance policy. The quality factors within the service quality dimension are tangibility, reliability, assurance, responsiveness, and empathy. The quality factors within the security quality dimension are technology security, information security, and regulation. Based on the identified quality factors, the satisfaction model is proposed based on the underpinning model which is ECSI, SERVQUAL, and CSE model.

This paper explains the existing problems and influencing factors in China's life and health insurance consumer satisfaction. The identified quality factors and the proposed satisfaction model can be used to help insurance companies find opportunities to improve their products, services, and security accordingly.

In order to evaluate the proposed satisfaction model, a questionnaire will be developed. The questionnaire will be distributed to the consumers of life and health insurance in China.

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