

**“SERVICE CONTINUANCE INTENTION IN THE  
HEALTH INSURANCE SETTING: A PLS-SEM  
APPROACH”**

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**Abstract**

*This study aimed to access service continuance intention and the mediating role of customer satisfaction in between the service quality, perceived price, and perceived value towards the service continuance intention of the health insurance customers in the context of Malaysia. Data were collected from international university students. Simple random sampling technique was used to collect the data from the 264 respondents. PLS-SEM technique was employed to test the model and proposed hypotheses. Findings of this study discovered that all three factors (service quality, perceived price, and perceived value) significantly affect customer satisfaction and service continuance intention. Moreover, this study demonstrated that customer satisfaction plays a significant positive role to mediate the relationship between the service quality, perceived price, and perceived value toward the service continuance intention. The findings of this research advocates that health insurance firms operating in Malaysia should focus to enhance the service quality, offer competitive price, and deliver the best value to the customer which significantly improve customer satisfaction. Consequently, customer satisfaction triggers the customer toward continues business transaction with the same insurance firm.*

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**Keyword:** *service continuance intention, customer satisfaction, service quality, perceived price, perceived value*

## **1. Introduction**

One of the biggest challenges for service firms in the service market is meeting the customer expectation to sustain in today's competitive market by providing the satisfactory service experience to the customer (Abu-Salim, Onyia, Harrison, & Lindsay, 2017; Kotler, 2012). In this current era of business, the firms are facing intense and fierce competition to operate their businesses in the market characterized by global competition. Firms are now aware that it is essential to build a long-run relationship with their customers to survive in this competitive market (Mittal, Kumar, & Tsiros, 1999). Researchers stressed that today's market is not a traditional market, now it is about developing long term mutually beneficial relationships with customers (Johnston, O'Connor, & Zultowski, 1984). This philosophy of relationship marketing has gained considerable attention from both marketing practitioners and marketing researchers.

Currently, relationship marketing philosophy has experienced a paradigm shift, due to the stiff competition among private players of the market to gain customer loyalty by satisfying the customer needs, which ultimately leads them to the survival and success in the market (Ramamoorthy, Gunasekaran, Roy, Rai, & Senthilkumar, 2018). Demong, Othman, Yunus, and Amran (2019) stressed that, in this era of competition only firms can sustain their growth and profits who are providing highest value to the customer more than their competitors, because service quality exerts a significant impact on the satisfaction of the customer which consequently retains and makes customer loyal to the firm.

In the financial services market, particularly in insurance sector where money exchange for intangible services, firms proactively focus on service quality and pleasant customer service experience to develop customer long term relationship and achieve higher customer loyalty which ultimately leads customer to continue to use the service (Koorneef, Robben, Al Seiri, & Al Siksek, 2012). The services marketing literature shows that customer loyalty and service usage continuance with the same service provider mostly influenced by the satisfaction level customer experienced while experiencing the service (Rai & Medha, 2013). Therefore, the recognition of the potential

factors is necessary which may affect customer satisfaction in the service marketing domain.

Tse and Wilton (1988) explain customer satisfaction as the difference between actual and perceived service quality. Further Customer's dissatisfaction also accessed by this gap, which consequently identifies the behavioural consequences of the customer such as the service usage continuance or quit the service (Koenig-Lewis & Palmer, 2014). In line with the above argument, both service quality and customer satisfaction proposed as the key influencers of the service usage continuance behaviour (Hussain, Al Nasser, & Hussain, 2015).

Furthermore, in the past literature, perceived price identified another important influencer of customer satisfaction by the past researches (Spathis, Petridou, & Glaveli, 2004). However, other researchers Carlson and O'Cass (2010); Chen (2008) also stressed that there is a need to further examine the role of the service quality, perceived service price, and customer expectations simultaneously, toward the customer satisfaction in the services marketing domain. Dimitriadis (2011) also identified that in the past, the role of service price and service quality toward customer satisfaction is largely overlooked. In this study, service price and service quality identified as a vital consideration in the customer's evaluation of received value. Because of service quality perception of the customer developed by cost and benefit analysis (Dimitriadis, 2011).

Another crucial factor which may influence the satisfaction of customer is the perceived value. Several investigations have been conducted in the past to investigate the role of the perceived value of the customer toward satisfaction and behavioural consequences of the customer such as (Cronin Jr, Brady, & Hult, 2000; Rust & Oliver, 2000). Further, Chiu, Wang, Fang, and Huang (2014) revealed that customer satisfaction is significantly affected through the value perceptions of the customer. Therefore, in this study, customers' perceived value anticipated as the significant influencer of the customer satisfaction and usage continuance behaviour of the customer. Surprisingly, very few investigations have been done to evaluate the effect of perceived price, service quality, and perceived value of the customer toward customer satisfaction and the service continuance behaviour simultaneously. This study will attempt to investigate the combined effect of the selected factors toward customer satisfaction and service continuance usage behaviour.

Moreover, this study investigates the mediating effect of customer satisfaction between selected factors and service continuance behaviour of the customer.

This study has two major objectives, first this study will investigate the possible simultaneous effect of the three selected antecedents namely service quality, perceived value, and perceived price toward the satisfaction and service continuance behavior in the health insurance service domain as suggested by the scholars (i.e., Carlson & O'Cass, 2010; Chen, 2008; Spathis et al., 2004). Secondly, this study will evaluate the mediating role of customer satisfaction between the selected antecedents and service continuance behaviour of the customer with their existing insurance provider. The unique contribution of this study is the customer satisfaction as mediator in between the selected antecedents and behavioural intentions of the customer such as service continuance behaviour. It is expected that this study findings might attempt to contribute to existing knowledge of the customer satisfaction and service continuance intention in the health insurance sector as advocated by Al-Amri, Gattoufi, and Al-Muharrami (2012). As per the theoretical grounds this study underpinned by the Expectancy Disconfirmation Theory (EDT). The EDT measures customer satisfaction from the discrepancy among expected and actual service of customers in perceived products or services (Spreng & Jr, 2003).

## **2. Literature review:**

### **2.1 Service Continuance Intention**

Service continuance intention or repurchase intention involves the probability that a customer used a service once, and to continue buying and using again (Abu-Salim et al., 2017). Similar conception given by the other researchers (i.e., Chiu et al., 2014; Rahman, Mohamad, Abdelfattah, & Aziz, 2014) the probability that a customer intent to buy the service again in the future. Service continuance intention vigorous and vital construct which have been investigated several researchers in the past for instance, (Abu-Salim et al., 2017; Soderlund & Ohman, 2003; Zeithaml, Berry, & Parasuraman, 1996; Zhang et al., 2011). It is empirically evident that customer satisfaction and the service quality both are the significant influencers of service continuance intention (Abu-Salim et al., 2017; Martin, O'Neill, Hubbard, & Palmer, 2008; Zeithaml et al., 1996). A recent study conducted by (Ahmad, Ahmad, & Zakaria, 2018b); Ahmad et al. (2010) stressed that service firms are

facing the greatest challenge in the service marketing context in terms of customer retention. Similarly, Rahman et al. (2014) argued that customer's positive behavioural intention such as service continuance intention always derived and backed by the positive observation of the perceived service quality.

Past literature on the service continuance intention appears to evident that service continuance intention is significantly linked with the service providers effective ability to make a customer loyal by ensuring customer happy and satisfied which is not possible without delivering the most effective service quality to the customer. Therefore, the central focus of the firm should be the earn customer loyalty and to retain them, to gain the competitive advantage over the competitors(Rahman et al., 2014; Udo, Bagchi, & Kirs, 2010) A study conducted by Cronin and Taylor (1992) on the customer satisfaction, quality of the service, and repurchase intention revealed that customer satisfaction is a key contributor to develop the customer service continuance intention, it also found that customer satisfaction have direct impact on the repurchase intention. Based on the previous literature this study attempts to investigate how service continuance intention can be affected by the selected factors in the context of health insurance services. These selected factors are discussed in detail below.

## **2.2 Service quality**

Service quality perceptions of the customer defined as the variance amongst service quality expectations and the real service quality received by the customer(Parasuraman, Zeithaml, & Berry, 1985; Ramamoorthy et al., 2018). In the mid of '80s(Parasuraman et al., 1985)have done an exploratory study to explore the phenomena of service quality and revealed that high or low service quality decisions made by the customers purely depends on the perceptions of customer that how they perceive the actual and expected performance. After developing the concept of service quality, In1988 the service quality instrument initially introduced by the (Parasuraman, Zeithaml, & Berry, 1988)consists on the service quality scores. This instrument namely SERVQUAL is still the most vital construct to measure the service quality.

Culiberg and Rojšek (2010) postulated that customer satisfaction is the direct response after service consumption, and the service quality develops the perception of the customer regarding the service provider. Past researchers argued that

service quality significantly effects by the expectations of service quality and the perceptions of service quality(Hussain et al., 2015).Hussain et al. (2015)stressed that it is necessary to work on the continues improvement in the delivery of service quality which depends on the service providers ability to fulfil the customer's needs. By doing so, service firms could take advantage over their competitors as well as achieve their financial goals to create and maintain the best service quality which makes customer satisfied. Consequently, this will grant several benefits to the firm, for instance, a lasting profitable relationship with the customer by creating a good corporate image, positive word of mouth, gaining their loyalty, and reason to repurchase the service (Park, Robertson, & Wu, 2005).

It is widely acknowledged that the positive perception of service quality has significant affect the loyalty and satisfaction of the customer. For instance, Hartono and Raharjo (2015) conducted a study to investigate how service quality affect the customer loyalty by including customer satisfaction as mediator and found customer satisfaction as potential mediator between service quality and loyalty of the customer. Another research was done by the Ladhari (2009) in the tourism sector revealed that service quality significantly affect the behaviouralconsequences of the customer via mediating role of emotional satisfaction, other studies also shows correlation between customer satisfaction and service quality (Anderson & Sullivan, 1993; Cronin & Taylor, 1992). Therefore, based on the previous literature this study will attempt to investigate the potential effect of the service quality toward satisfaction and behavioural outcomes (i.e., service continues intention).

### **2.3 Perceived service Price**

In the context of services marketing price is a significant factor which contributes to developing customer perceptions and decisions to buy the product(Munnukka, 2005; Varki & Colgate, 2001).Such as fairness perceptions of the price(Martin, Ponder, & Lueg, 2009), and price equity (Bolton & Lemon, 1999). Herrmann, Xia, Monroe, and Huber (2007) further argued that price is a crucial factor to make a customer buying decision, also, it is significantly influencing the customer's perception regarding service quality. Perceived price plays an essential role in selects the service as more than one provider of insurance services are operated in the market.

Price is a vitally increasing topic in the context of service industry particularly in the insurance industry (Ramamoorthy et al., 2018). Researchers stressed that it is necessary to know for the service firms that how a customer perceives their price and price changes because customer's concerns regarding the price fairness or unfairness significantly affect the product choice decision (Ryu & Han, 2010). A customer's perception regarding the service firm's reasonable or unreasonable price mostly results in negative decisions toward that service or firm such as, switching and spreading negative word of mouth (Swan & Oliver, 1989). As explained by Zeithaml and Graham (1983), the term 'price is the twofold concept i.e., monetary and non-monetary. The monetary side involves the objective price (i.e., actual cost), while the non-monetary side represents the perceptions of the customer termed as encoded price (Jocoby, 1977). In other words, the price can be labelled as consumer's observations of the suitability of price in comparison to the firm's competitors' price.

An extensive body of the literature revealed that price reasonableness forms customer behaviour to buy the service again or quit the service (Ryu & Han, 2010; Varki & Colgate, 2001). Varki and Colgate (2001) also found similar results that customer perceptions of fairness of price trigger customer intention to engage in repeat purchases and to spread the positive word of mouth regarding the service firm. In another study, Kim and Han (2010) conducted in the tourism industry confirmed that perceived fairness of price is a significant predictor of the customer's intention to repurchase the same service. These researchers have developed a consensus that perceived price is the significant influencer of customer behaviour to decide whether customer continue the purchases or switch to another service provider.

Based on the previous literature, this study expected that the positive perceptions of the customer regarding the price contribute to making customer satisfied and loyal which in return shape the behavioural intention of the customer such as service continuance intention. As Fox (2010) indicated that service customers dislike the hidden or supplementary charges after making a financial contract. This situation would influence customer perception negatively regarding the overall value of the service and may decrease customer satisfaction.

## **2.4 Perceived Value**

Perceived value involves the overall customer's evaluation regarding the total value of the service according to his/her perception that what he/she received in terms of value (Sweeney, Soutar, & Johnson, 1997; Zeithaml, Berry, & Parasuraman, 1988). In the last two decades, customer perceived value gains its popularity in the services marketing domain. Several studies investigated perceived value as the two-dimensional construct such as functional value and the transactional value (Eid, 2015). Parasuraman (1997) argued that the positive perception of the customer regarding the perceived value could be the significant competitive advantage for any service provider. Similarly, Furman (2010) postulated that perceived value can be considered as the key factor of the satisfaction because when the customer observes that the paybacks in terms of service are greater than the cost or the vice-versa, it may cause to affect the perceived value of the customer.

Therefore, it is established that development of the customer value is an exchange process involves customer evaluation of the received benefits by the service provider and the cost spent by the consumer to use the service. In the early 1990s marketing researchers and practitioners focus on the product or service quality and service price as the main driver of customer satisfaction (Chang & Wildt, 1994). Other studies that have been conducted to evaluate the linkage amongst perceived value and satisfaction are established that customer satisfaction is significantly influenced by the perceived value of the customer (e.g., Cronin, Brady, & Hult, 2000; Rust & Oliver, 1993).

Some recent studies also evident that perceived value is the key driver of satisfaction and customers' behavioural intentions regarding repurchase decisions (e.g., Lai, Griffin, & Babin, 2009; Wang, Lo, & Hui, 2003). In the context of marketing, researchers examine the perceived value, customer satisfaction, and loyalty of the customer in the B2B and in the B2C domain (Lam, Shankar, Erramilli, & Murthy, 2004). And revealed that customer value and satisfaction both are the key influencers of loyalty (Zeithaml, 1988). Based on the previous literature this study assumes that the customer value will contribute to shaping customer satisfaction and behavioural intentions such as service continuation.

## **2.5 Customer satisfaction**

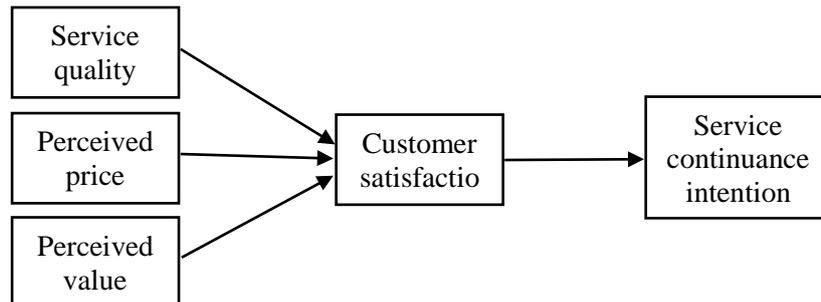
Customer satisfaction defined in the past literature as the discrepancy between the expectations and the actual gain

receives by the service or the product (Abu-Salim et al., 2017; Oliver, Rust, & Varki, 1997). In other words, it is the consequence of the evaluation between desired value with the actual value of the service (Zeithaml, Parasuraman, Berry, & Berry, 1990). Simply, when the service value matches the expectations of the customer or more than of the customer expectations ultimately the customer will be satisfied or the. Consequently, a delighted or the satisfied customer more inclined toward the repurchase the service and long-term loyalty (Seiders, Voss, Grewal, & Godfrey, 2005). In contrast, when the customer feels that the outcome he or she received against the expectations is lower than expected, it leads the customer toward dissatisfaction (Abu-Salim et al., 2017). Which in return affect the customer repurchases decision and customer loyalty (Chéron & Nornart, 2010; Nguyen, Nguyen, Nguyen, & Phan, 2018).

Past literature established that customer satisfaction form the behavioural outcomes of the customer such as the repurchase intention and customer loyalty. Mittal and Kamakura (2001) revealed that customer satisfaction is a crucial factor which contributes to form the future decisions of the customer regarding repurchase the service or the product. The similar argument was given by the Chadha and Kapoor (2009) that customer satisfaction is the key factor which increases the loyalty of the service customer. Rahim Mosahab (2010) further extend that customer satisfaction not only influence the future purchases but it would be the cause to feast the positive word of mouth to the other customers regarding their good experience. In contrast, when customer dissatisfy it may not only stop the service again but also spread the bad word of mouth among others regarding their bad experience, which, therefore, leads toward the significant loss of firm's potential customers (Ahmad, Ahmad, & Zakaria, 2018a; Bougie, Pieters, & Zeelenberg, 2003).

In relation to the service quality and customer loyalty, Kheng, Mahamad, and Ramayah (2010) suggested that customer satisfaction as a mediator might affect the relationship between service quality and customer loyalty. because customer delightfulness triggers customer loyalty toward the repurchase intention, and customer dissatisfaction may cause the service discontinuance or switching behaviour (Rust & Oliver, 2000). As per the suggestion of the prior researchers that customer satisfaction plays a crucial role as mediator in between the service quality, service price, and service value

toward the customer loyalty and repurchase intention this study attempts to investigate the customer satisfaction as mediator in between the service quality, service price and service value toward the behavioural intention namely service continuance intention of the customer.



**Figure 1:** *Research Framework*

According to the research framework proposed in this study as per the literature review, hypotheses proposed as follows.

**H1:** Service quality significantly correlated with customer satisfaction.

**H2:** Perceived price significantly correlated with customer satisfaction.

**H3:** Customer value significantly correlated with customer satisfaction

**H4:** Service quality significantly correlated with the service continuance intention.

**H5:** Perceived price significantly correlated with the service continuance intention

**H6:** Customer value significantly correlated with the service continuance intention

**H7:** Customer satisfaction significantly correlated with the service continuance intention

**H8:** Customer satisfaction mediates the relationship between service quality and service continuance intention.

**H9:** Customer satisfaction mediates the relationship between the perceived price and service continuance intention

**H10:** Customer satisfaction mediates the relationship between perceived value and service continuance intention.

### 3. Methodology:

The study in hand is the cross-sectional in nature. Data were collected from the international students of the University Utara Malaysia. A self-administered questionnaire survey was

conducted to collect the data. The population of this study was 2663 international students from various countries e.g., Thailand, China, Bangladesh, Pakistan, Nigeria, Somalia, Algeria, Jordan, and Egypt. The sample size was determined by using the Morgan sampling table. According to the Morgan table, the sample of 335 international students was sufficient for this population to test this study hypothesis. Systematic random sampling was used to distribute the questionnaires among international student. List of international students was retrieved from the website of University Utara Malaysia. 5point Likert-type scale was used to measure this study constructs. Measurement of all study variables are adapted from previous studies, for instance, service continues intention from (Bhattacharjee, 2001), Service quality, perceived price, perceived value, and customer satisfaction from (Nguyen et al., 2018).

#### **4. Analysis and results**

##### **4.1 Data screening and pre-analysis**

After completion of the data collection process, 264 usable questionnaires are received to analyze the data. As a prerequisite of the statistical analysis of the data, a complete data screening process has been employed. It was ensured that data was free from any statistical error such as missing values, normality, common method variance, and outliers. However, some missing values were detected are handled by using the mean replacement approach which is widely recommended approach by the statisticians (Farooq & Radovic-Markovic, 2017; Hair, Hult, Ringle, & Sarstedt, 2016), this mean replacement approach replaced all missing data entries with the mean score of the same indicator's data points, this feature is built-in feature in smart PLS(Hair et al., 2016).

Further, data analysis of this research starts with a summary of the demographic attributes of the respondents, such as respondents' nationality, marital status, gender, study program; moreover, duration of their study is also asked. In terms of nationality, out of total 264respondents 23.9% were chines students with the dominating nationality in this research, Nigeria 18.6%, Thailand 8.3%, Bangladesh 9.1%, Pakistan 10.6% Somalia 11.4%, and Algeria, Jordan, and Egypt were 7.6%, 4.5%, and 6.1% respectively. Majority of the respondents were male as 76% and most of the respondents were married. In terms of study level, the majority of the respondents were the PhD students as 40% of the total sample whereas, 34% and 25 % were the masters' and undergraduate program students

respectively. Majority of the respondents were studying for 2 years as 41.7% a summary of the demographic profile of respondents shown in table 1 below.

**Table 1.**  
*Demographic profile of the respondents*

<b>Demographic variables</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>	Male	203	76.9%
	Female	61	23.1%
<b>Marital Status</b>	Bachelor	111	42.0%
	Married	153	58.0%
<b>Nationality</b>	Thailand	22	8.3%
	China	63	23.9%
	Bangladesh	24	9.1%
	Pakistan	28	10.6%
	Nigeria	49	18.6%
	Somalia	30	11.4%
	Algeria	20	7.6%
	Jordan	12	4.5%
	Egypt	16	6.1%
<b>Program</b>	Under-Graduate	66	25.0%
	Master's	92	34.8%
	PhD	106	40.2%
<b>Duration of study</b>	1 year	56	21.2%
	2 years	110	41.7%
	3 years	79	29.9%
	4 years	19	7.2%

#### **4.2 Measurement Model**

To evaluate the theoretical model, this study employed PLS structural equation modelling using (PLS-SEM) by using the software application namely Smart PLS (Hair, Ringle, & Sarstedt, 2011). In the first step, the measurement model was accessed, which also known as the outer model. This assessment of measurement determines the overall models' goodness of fit which is done by testing the reliability and validity (Ramayah, Lee, & In, 2011). Reliability test determines how consistently a measurement instrument measures the concept it is expected to measure. The current study fulfilled the acceptable criteria for composite reliability, Cronbach alpha, and AVE values of all the variables as suggested by (Hair, Sarstedt, Ringle, Smith, & Reams, 2014).

All the CR values of each latent variables within the range of 0.90 to 0.88 and each AVE value exceeds the minimum acceptable level of 0.50 which shows that satisfactory level of internal consistency reliability was used in this study. Moreover, the Cronbach's alpha value was also in the range of 0.82 to 0.87 which is more than the minimum criteria of 0.70 suggested by the (Ringle, Wende, & Will, 2010). However, 2 items were deleted because of the low outer loading but overall results of Cronbach alpha, composite reliability and AVE are satisfactory for further analysis as shown in Table 2.

**Table 2.**  
*Construct Reliability, Cronbach's Alpha, CR, and AVE of Latent Variables*

<b>Construct Name</b>	<b>Items</b>	<b>Loading</b>	<b>C-Alpha</b>	<b>CR</b>	<b>AVE</b>
<b>SQ</b>	SQ1	0.831	0.860	0.899	0.641
	SQ2	0.803			
	SQ3	0.825			
	SQ4	0.814			
	SQ5	0.726			
<b>PP</b>	PP1	0.752	0.875	0.909	0.667
	PP2	0.831			
	PP3	0.827			
	PP4	0.841			
	PP5	0.828			
<b>PV</b>	PV1	0.812	0.874	0.913	0.725
	PV2	0.870			
	PV3	0.856			
	PV4	0.867			
<b>CS</b>	CS1	0.816	0.831	0.888	0.664
	CS2	0.790			
	CS3	0.826			
	CS4	0.827			
<b>CI</b>	CI1	0.846	0.827	0.897	0.743
	CI2	0.870			
	CI3	0.870			

Moreover, to assess the discriminant validity of this study Fornell-Larcker criterion was used presented in Table 4. Table 4 shows that the square-root of AVE is higher than the correlation values which demonstrates that the discriminant validity of this proposed measurement model is achieved (Hair et al., 2016). Therefore, these results fulfil all necessities to

establish the validity of the all latent constructs of the measurement model as shown in Table 3.

Moreover, newly developed criteria HTMT were also used in this study to assess the validity of the latent construct, suggested by Henseler, Ringle, and Sarstedt (2015). As a rule of thumb, an HTMT value should be less than 9.0. the HTMT value is greater than 9.0 directs a significant problem to assess the discriminant validity (Hair et al., 2016). For this study, all HTMT values are less than the 9.0 as shown in Table 4.

**Table 3.**

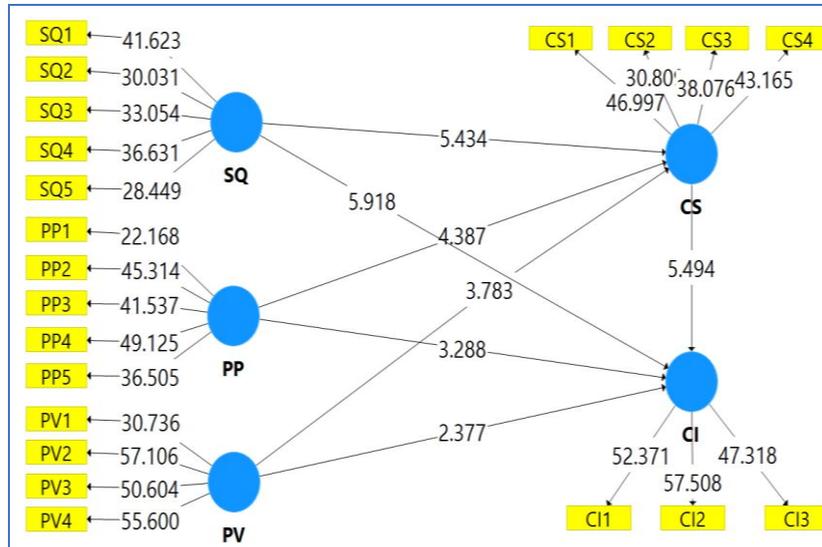
*Discriminant validity (Fornell-Larcker)*

	CI	CS	PP	PV	SQ
CI	0.862				
CS	0.733	0.815			
PP	0.627	0.601	0.817		
PV	0.616	0.611	0.497	0.852	
SQ	0.724	0.684	0.575	0.642	0.801

**Table 4.**

*Discriminant validity (HTMT)*

	CI	CS	PP	PV	SQ
CI					
CS	0.884				
PP	0.736	0.703			
PV	0.722	0.713	0.566		
SQ	0.846	0.797	0.656	0.734	



**Figure 2:** Structural model (Bootstrapping)

### 4.3 Structural model

Once the measurement model was assessed the next step is the assessment of the structural model. The structural model involves the assessment of the coefficient of determination values (R<sup>2</sup>) of the latent constructs, predictive relevance of the overall model and the significance level of the relationships between the proposed relationships. Firstly, this study presents (R<sup>2</sup>) values of the endogenous variables. The R<sup>2</sup> values given by the proportion of variance in the endogens variables' that can be described by one or more predictor variable (Elliott & Woodward, 2007; Hair, Anderson, Babin, & Black, 2010). Even though the acceptable level of R<sup>2</sup> value varies according to the research context, however, some scholars set the minimum criteria of R<sup>2</sup> value of 0.10 (Hair *et al.*, 2010). As mentioned in Table 5 the R<sup>2</sup> value of customer satisfaction and service continuance intention are 0.564 and 0.661 respectively.

**Table 5.**

*R Square of the latent constructs*

Construct	R Square
CS	0.564
CI	0.661

After evaluation of the R<sup>2</sup> values, the direct relationships were tested in the structural model. To assess the direct relationships, there are several steps have been employed in the PLS-SEM. Firstly, the basic purpose of this study is to focus on model evaluation with an examination of direct relationships with the mediating variable (customer satisfaction), and the dependent variable (service continuance intention) and secondly, test the mediating relationships among the service quality, perceived price, perceived value toward service continuance intention through structural model. In the current study, all 3 hypotheses of direct relationship (H1, H2, and H3) with the mediating variable were accepted as shown in Table 6. Moreover, the hypotheses (H4, H5, H6, and H7) with the direct relationship toward the dependent variable also accepted.

Which shows that the customer satisfaction, service quality, perceived price, and perceived value are significantly correlated with the continuance intention as shown in Table 6. Whereas, the results of mediation analysis H8-H10 are also accepted which shows that the relationship between service quality, perceived price, and perceived value toward the service continues intention significantly mediated by customer satisfaction as shown in Table 7.

**Table 6.**  
*Direct Relationships results*

Hypotheses	Relationships	Beta	STDEV	T Statistics	P Values
H1	SQ -> CS	0.379	0.07	5.434	0
H2	PP -> CS	0.266	0.061	4.387	0
H3	PV -> CS	0.236	0.062	3.783	0
H4	CS -> CI	0.335	0.061	5.494	0
H5	SQ -> CI	0.311	0.053	5.918	0
H6	PP -> CI	0.188	0.057	3.288	0.0018
H7	PV -> CI	0.118	0.049	2.377	0.0188

**Table 7.**

*Mediation Results*

Hypotheses	Relationship	Beta	STDEV	T Statistics	P Values
H8	PP -> CS -> CI	0.089	0.024	3.728	0
H9	PV -> CS -> CI	0.079	0.024	3.232	0.001
H10	SQ -> CS -> CI	0.127	0.036	3.554	0

**4.4. Analyzing Predictive Relevance  $Q^2$**

To evaluate the predictive accuracy, the Stone-Geisser's (1974)  $Q^2$  value criteria was accessed as suggested by (Henseler et al., 2014). The blindfolding procedure was performed to obtain the value of  $Q^2$ . The research models' predictive relevance was assessed through the cross-validated redundancy measure  $Q^2$  (Ringle, Sarstedt, & Straub, 2012). It explains that exogenous variables which involved in the structural model have predictive relevance for latent endogenous constructs (Chin, 2010; Hair et al., 2016). The  $Q^2$  statistics of greater than zero of a research model is considered to have predictive relevance (Henseler, Ringle, & Sinkovics, 2009). The  $Q^2$  value of this study's model is 0.462 for continuance intention and 0.351 for customer satisfaction which supports the underlying assumption of this study, that the endogenous construct (i.e. Customer Satisfaction, and service continues intention) involved in this study have strong predictive relevance as shown in Table 8. Hence, overall predictive relevance for our proposed structural model is achieved.

**Table 8**

*Predictive Relevance ( $Q^2$ ) of the latent Constructs*

Latent constructs	$Q^2$
CI	0.462
CS	0.351

## **5. Discussions:**

The findings of this research study revealed that service quality, perceived price, and perceived value are significantly correlated with customer satisfaction in the health insurance context. Which shows that the health insurance's service quality, perceived price, and the perceived value significantly affect customer satisfaction. These results are confirmed the past studies finding such as (Abu-Salim et al., 2017; Farooq, Salam, Fayolle, Jaafar, & Ayupp, 2018).

This study findings also demonstrated that service quality, perceived price, and the perceived value statistically significant with the service continuance intention. Which shows that the perceptions of the customer regarding insurance firm's service quality, perceived price, and the perceived value are the major concerns of the customer to buy this service again in future. The findings of this research aligned with the previous assertions such as (Abu-Salim et al., 2017).

Another significant finding of this research is the potential role of customer satisfaction as mediator between the service quality, perceived price, and the perceived value toward service continuance intention. The results found that customer satisfaction significantly mediate the linkage between the service quality, perceived price, and perceived value toward the service continuance intention. Although customer satisfaction is partially mediated the link between the service quality, perceived price and the perceived value toward service continuance intention but the importance of customer satisfaction in this study cannot be overlooked. These results suggest the practitioners and the managers of the health insurance firms working in the context of Malaysia, they should focus more to win the customer satisfaction which ultimately affects the service continuance intention of the customer.

### **5.1. Conclusion**

In this current era of business service, quality becomes the most critical success factor particularly in the service context when service quality is considered as the unique attribute to distinguish service quality from competitors (Ekiz et al., 2006). This argument holds true in the current nature of competition in the service market (Farooq et al., 2016). In line with the above arguments, this study reveals that the service quality of the health insurance firms working in Malaysia is significantly contributing to making customer satisfy. Furthermore, this study results show that customer perceptions regarding the service price and the accepted value of the health

insurance service also affect the satisfaction level of the customer. Moreover, this study also provides evidence that customer satisfaction plays an essential role as mediator in between the service quality, perceived price, and perceived value to service continuance intention.

### **5.2. Implications of the study.**

This study has several practical implications for insurance companies and their policy makers. The results of this study suggest that the insurance firms working in Malaysia should focus on the strategies to improve their service quality, to offer a competitive price to their customers and to provide the best value in terms of their services which makes the customer happy and satisfied. As these factors are found to be more important for customer satisfaction, which consequently effects customers service continuance intention toward the same product/service.

From the theoretical perspective, this study contributes to the literature by investigating the selected factors of customer satisfaction in the single framework simultaneously, which found to be significant toward customer satisfaction. Moreover, this study makes a contribution to the fact that customer satisfaction is the significant mediator between the selected factors and the service continuance intention of the customer. In brief, this study makes a contribution in the literature of customer satisfaction and the service continuance behavior of the customer by providing the deep insight regarding the relationships in between the selected factors of customer satisfaction and service continuance behaviour.

### **5.3. Limitations and recommendations.**

This study has a number of limitations. Firstly, this study is limited in terms of the respondent, this study covers only international students of the specific university which may restrict the generalizability of the results of this study to the whole students of the Malaysian universities and other insurance customers. Secondly, this study is not particularly focused on the specific health insurance company. That's why this study results may not be generalized to the specific insurance company. Thirdly, this study conducted in the Malaysian insurance context. This study results may be found different in another context.

In future, researchers should focus on the whole population of the insurance sector including local customers and international customers. Moreover, in the future studies should be done to investigate the selected factors toward the

customer satisfaction and service continuance intention in the different Asian context, which may provide deeper insight regarding the behaviour of the customer in terms of satisfaction and continuance intention.

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