

EFFECTS OF PRODUCT QUALITY, SERVICE QUALITY AND PRICE FAIRNESS ON CUSTOMER ENGAGEMENT AND CUSTOMER LOYALTY

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Abstract

This paper examines the key relationship effects between the customer perceived value dimensions: product quality, service quality and price fairness on customer engagement in a holistic model, using structural equation modeling. Further, the study evaluated the direct and mediating effects of these factors on customer loyalty in the automobile industry, with sample data from 224 existing car owners, based in Bangkok. The study results illustrate significant direct effects on customer loyalty, with product quality, service quality, price fairness and customer engagement all having a positive influence. On the other hand, product quality and price fairness did not significantly affect customer engagement. The findings support the prediction of direct effects which significantly affect customer loyalty. In addition, the study shows that customer engagement has a partial mediation effect on service quality and customer loyalty. This research contributes to the customer engagement and customer perceived value literature with empirical support in the context of the Thai automobile industry.

Keywords: Customer loyalty, Customer engagement, Customer perceived value

1. INTRODUCTION

Understanding customer loyalty is not a new research question, but rather one that continues to gain interest among marketing and management scholars (Petzer & van Tonder, 2019). In the

1990s to early 2000s firms largely achieved customer loyalty through building customer relationships (Lien-Ti & Yu-Ching, 2001; Verhoef, 2003) but there are also limits to sustaining positive relationships through commitment and trust (Morgan & Hunt, 1994).

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In order to improve customer loyalty, firms are now moving away from a traditional customer relationship approach to a constantly evolving customer engagement philosophy (Ananda Sabil, 2018).

Customer perceived value has received much attention in the past decade, especially in service marketing literature which has a value-driven focus (El-Adly, 2019). Later this construct played the role of antecedent to many behavioral outcomes such as customer satisfaction, and customer loyalty (Lien-Ti & Yu-Ching, 2001). The definition of customer perceived value has changed over time. However, this study uses the multidimensional nature of customer perceived value. Customer perceived value is conceptualized in the automobile context as a multidimensional construct consisting of product quality (cognitive perceived value), service quality (affective perceived value) and price fairness (cognitive perceived value), reflecting the complete car owner experience in the automobile industry, and is thus able to predict the outcome effects on customer engagement and loyalty.

Past studies have investigated the direct effects on customer loyalty through studies of service quality (Tsoukatos, Athanasopoulou, & Giovanis, 2015), product quality (Odekerken et al., 2001), and price fairness (Kareem Abdul, 2018); and the indirect (mediating) effects measured through studies of customer satisfaction (Durga Prasad, Sharma, & Kaura, 2015; Gizaw & Pagidimarri, 2013), online community commitment (Zheng, Cheung, Lee, & Liang, 2015) and customer engagement (Moliner,

Monferrer-Tirado, & Estrada-Guillén, 2018). Both the direct and indirect effect studies show a difficulty to reach a consensus and generalize the antecedents of customer loyalty.

Therefore, this study uses a cumulative evaluation of customer perceptions, of product quality, service quality, and price fairness, to form a single integrated customer perceived value, which influences customer engagement and customer loyalty, and which is conceptually appropriate. Thus, the integrated customer perceived value construct captures the value that customers placed on a firm's offerings (product quality, service quality and price fairness). To measure customer perceived value, constructs have been borrowed from past literature, to include product quality (Garvin, 1987), service quality (Lee, Yoo, & Lee, 2000), and price fairness (David, Arturo, & Águeda, 2007), with the construct of customer engagement (Vivek, Beatty, Dalela, & Morgan, 2014) used to test the mediating effect on customer loyalty (Chaudhuri & Holbrook, 2001).

The effect of customer engagement on building customer loyalty is increasing in importance in the marketing literature (So, King, Sparks, & Wang, 2014). This study addresses the calls for more research on customer engagement to further the understanding of this emerging construct (Parihar, Dawra, & Sahay, 2019). It examines the direct effects of the characteristics of perceived value (product quality, service quality and price fairness) towards customer engagement, and also their indirect effects via customer engagement, with a focus on customer loyalty in the automobile industry in

Thailand.

The following sections are organized as follows. Section 2 comprises the literature review, with the subsequent section 3 discussing the research model and development of hypotheses, section 4 discussing methodology, section 5 discussing empirical results, and section 6 dealing with the discussion and implications (theoretical and managerial).

2. LITERATURE REVIEW

A review of literature was conducted as a prelude for developing an integrated structural model of customer loyalty.

2.1. Customer Loyalty

A firm's prediction of market share through its existing loyal customers (Chen, 2012) is an essential concept in marketing studied by many researchers to retain current customers (Boakye, Blankson, & Prybutok, 2017). Oliver (1999) defines customer loyalty from an attitudinal and behavioral perspective, whereby customers exhibit long-term commitment to future repurchases. Prior studies show that customer loyalty can be largely achieved through evaluation of customers' perceived level of service quality (Aydin & Özer, 2005; Bloemer & Kasper, 1995; Zeithaml, Berry, & Parasuraman, 1996), product quality (Cronin, Brady, & Hult, 2000), price fairness (Asadi, Khazaei Pool, & Reza Jalilvand, 2014), and customer engagement (So et al., 2014; Vivek, Beatty, & Morgan, 2012). This research uses a unidimensional construct of customer loyalty that includes both purchase and attitudinal attachments from

previous studies (Chaudhuri & Holbrook, 2001; So et al., 2014).

2.2. Customer Engagement

In marketing contexts, engagement refers to the activity level the customer has with respect to the firm, i.e. "willing to invest time, energy or other resources" beyond the purchase of the brand (Bergkvist & Bech-Larsen, 2010; Vivek et al., 2012). The intensity of a customer's engagement connection can be understood through the organization's offerings in terms of product quality, service quality, and price (Vivek et al., 2014). While there are several multidimensional conceptualizations available for the customer engagement construct (e.g., Brodie et al. 2013), this study adopts the conceptualization proposed by Bergkvist and Bech-Larsen (2010) and (Vivek et al., 2014), as it focuses specifically on the automobile industry, emphasizing the emotional aspect of engagement. This study thus incorporates the concept of customer engagement using service-dominant logic (affective response) in marketing perspective relationships, enriched by the interaction of current or potential customers (Vivek et al., 2014).

2.3. Product Quality

The definitions of quality from past literature are not precise and vary widely, often defined from the users' perspective (Parasuraman, Zeithaml, & Berry, 1988). The current study initially used Garvin's (1987) eight dimensions as a starting point, and later captured four of the dimensions through a formal pre-test, so

that higher item scores could be retained; these were performance, reliability, durability and specification. Zaichkowsky (1985) studied the classification of product categories comprising of utilitarian value or cognitive value components, suggesting that hedonic or affective value does not have any effect in the automobile industry. Based on these findings from past research, it is considered that product quality has a utilitarian function in the automobile industry, which influences its relationships with other factors.

2.4. Service Quality

Academicians assessment of “service quality” as a variable has changed over time and has never been properly defined (Gronroos, 1984; Masen, 1974). According to Parasuraman et al. (1988) when competing businesses sell many similar products, service quality becomes the foremost means of competitive differentiation. This study uses a unidimensional measure consisting of 3 item scales tested in a study by Lee et al. (2000) which found the overall measure to be equivalent to SERVQUAL and SERVPERF. Service quality is defined as “customers overall evaluation of service performance” (Bergkvist & Bech-Larsen, 2010).

2.5. Price Fairness

Price fairness is defined as “the customer perception on whether an outcome, and/or a transaction process is... reasonable, acceptable, and just” (Bolton et al., 2003). Another way customers perceive price fairness is by comparing

the quoted price with other references, and would be evaluated as unfair, in the case of a price increase (Lyn Cox, 2001). Past studies suggest that price fairness is a mental activity carried out by customers who may have cognitive (thinking) and affective (emotional) components in their response to prices (Xia, Monroe, & Cox, 2004). The present study focuses on the cognitive perceived value measure of price fairness by studying consumer understanding of markets, the environment and vendor constraints (Bolton et al., 2003; David et al., 2007).

3. RESEARCH MODEL AND HYPOTHESES DEVELOPMENT

In the following portion the relationship between various constructs is reviewed and thus hypothesized.

3.1. Product Quality and Customer Engagement

Waller and Ahire (1996) define product quality based on the manner in which customers perceive the actual quality versus their views towards quality of the product in terms of performance, reliability, durability and conformance. Keller's 2008 study showed that brand judgement usually begins with positive quality (product) perceptions, but attitudinal attachment is almost always needed for customer engagement to occur. Product quality is “often considered to contribute to the development of competitive advantage, then the design and manufacture of products tailored to meet customer requirements should enhance quality performance” (Benson, Saraph, &

Schroeder, 1991). A study by Van Doorn et al. (2010) showed a direct effect, whereby the greater the perceived product quality, the greater the level of customer engagement. Therefore, the subsequent hypothesis is suggested:

H1. The higher the perceived product quality, the greater the level of customer engagement

3.2. Service Quality and Customer Engagement

Service quality perception can be understood by knowing what customers will do (prediction), and their expectations for the actual service delivered, i.e. what do customers think the company should do or provide? (Lee et al., 2000). With a specific type of customer engagement tool, firms can accrue and offer more value to customers (Kaltcheva, Patino, Laric, Pitta, & Imparato, 2014). The study of Darwin, Suwanna, and Theingi (2017) shows that service quality positively affects customer engagement. High levels of satisfaction in service quality affect customer engagement positively (Saha & Theingi, 2009). Consequently, the resulting hypothesis is proposed:

H2. The higher the perceived service quality, the greater the level of customer engagement.

3.3. Price Fairness and Customer Engagement

Price Fairness comparisons may lead customers to engage in order to verify the fairness in price (Martins & Monroe, 1994). Price fairness in the form of transparency helps to engage customers

and build loyalty (Bertini & Gourville, 2012). Price is an important indicator for customers to discuss; the offered price of service providers online influences online community engagement (Nguyen, Conduit, Lu, & Hill, 2016). Based on the conclusions from the social information processing theory, price fairness is positively correlated to customer engagement (Nguyen et al., 2016). As a result, the following hypothesis is proposed:

H3. The higher the perceived price fairness, the greater the level of customer engagement

3.4. Product Quality and Customer Loyalty

A study by Odekerken et al. (2001) investigated the impact of three dimensions of product quality (technical, functional and relational) which can affect customer loyalty. Having a better understanding of customer perceived quality can enhance a firm's customer loyalty (Sen & Kenyon, 2012). Thus, better perceptions of product quality are established when the degree of conformance exceeds customer expectations, and results in customer loyalty (Garvin, 1984). Therefore, the subsequent hypothesis is proposed:

H4. The greater the perceived product quality, the greater the level of customer loyalty.

3.5. Service Quality and Customer Loyalty

In this study the quality perception is determined through the customers overall perceptions on service quality, whether

the actual delivered service is very high, excellent or likable (Lee et al., 2000). Customers tend to change the brand in the case of any negative perception regarding service quality; in contrast, positive perception towards service quality influences the customer to remain loyal (Quach, Jebarajakirthy, & Thaichon, 2016). Based on these findings we propose that:

H5. The higher the level of service quality, the greater the level of customer loyalty.

3.6. Price Fairness and Customer Loyalty

When customers perceive prices as fair, they are more likely to consider entering into a relationship with a firm and become loyal (Bolton et al., 2003). In addition, when customers perceive the price of the product or service as correct, they tend to make repeat purchases in future (Martín-Consuegra, Molina, & Águeda, 2007). Previous study proves the positive association among perceived price fairness and customer loyalty (David et al., 2007). Therefore, we propose the resulting hypothesis:

H6. The higher the level of price fairness, the greater the level of customer loyalty.

3.7. Customer Engagement and Customer Loyalty

Customer engagement can be used to create value and a stronger customer loyalty relationship (Banyte & Dovaliene, 2014; Rajah, Marshall, & Nam, 2008). From a customer's standpoint, the degree of commitment depends on "the

customer's evaluation of the utilization experience" (Chaudhuri & Holbrook, 2001; So et al., 2014). Moreover, in a study conducted by Kevin Kam Fung, Ceridwyn, Beverley Ann, and Ying (2016) it was proven that customer engagement positively affects customer loyalty. Therefore, the following hypothesis is proposed:

H7. The higher the level of customer engagement, the greater the level of customer loyalty

3.8. Customer Engagement as a Mediating Variable

Customer engagement contributes significantly to the development of customer relationships through antecedents such as product quality (Van Doorn et al., 2010), service quality (Quach et al., 2016), and price fairness (Nguyen et al., 2016). A previous study revealed that customer engagement mediates loyalty when "the customer is seeking signs, interest, and pleasure from the product or service category" (Parihar et al., 2018). The perceived quality of products and services, and price fairness will have indirect influences on loyalty via engagement and satisfaction, as well as producing positive direct effects (Lien-Ti & Yu-Ching, 2001). Therefore, it can be hypothesized that customer engagement is a mediator, linking the relationship between product, service, or price with customer loyalty. Hence, further hypotheses are proposed as follows:

H8a. Customer engagement will mediate the relationship between product quality and customer loyalty.

H8b. Customer engagement will mediate the relationship between service quality and customer loyalty.

H8c. Customer engagement will mediate the relationship between price fairness and customer loyalty.

Following the discussion above, a hypothesized model was developed as shown in Figure 1.

4. METHODOLOGY

This section describes the procedures and analytical tools used in the study.

The first section discusses the procedure of data collection, the second section details the methods used in measurement, while the third section describes the data analysis techniques.

4.1. Data Collection

The Thai automobile market is dominated by two major companies: Toyota, and Honda. The survey was administered by handing out pen-and-paper questionnaires to car owners in the Bangkok area. The sample size used to conduct the exploratory factor analysis (EFA) was 224, which is in accordance with the recommendations of Hair, Anderson, Tatham, and Black (1998) who stated that a minimum of five to ten cases per measure should be used in order to get robust results. As shown in Table 1 below, 50.9% of respondents were male, while 49.1% were women. 28.6% of respondents belonged to the age category 42-47 years old, 69.2% currently hold at least a master's degree, 39.7% own a Toyota brand car, and 32.6% spent around 450,001 – 750,000 baht to buy the car, with an average spending of 664,200 baht on a new car purchase.

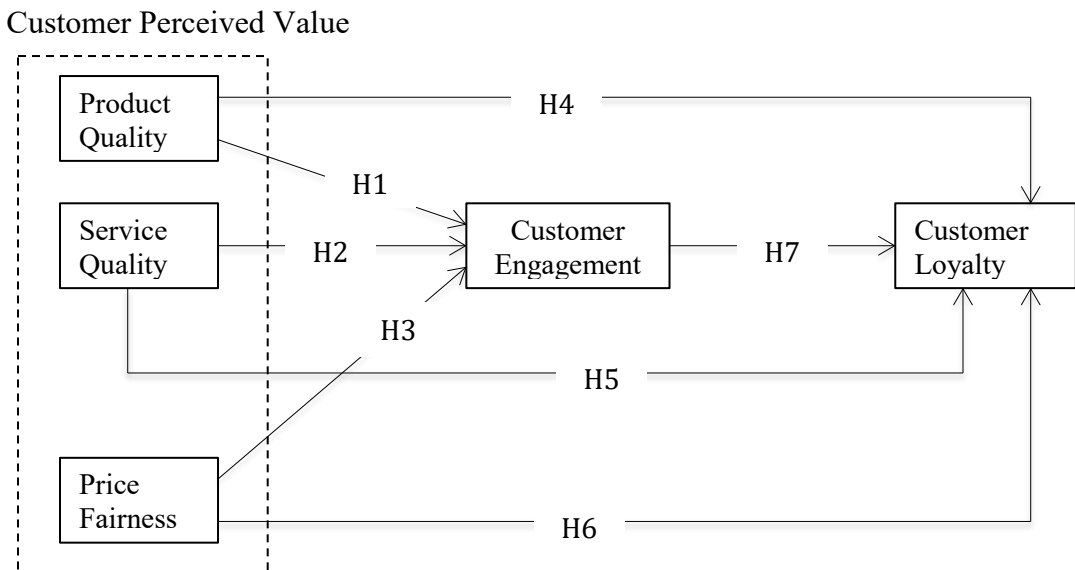


Figure 1 Research Framework

Table 1 Respondent Profiles

Items		Percentage
Gender	Male	50.9
	Female	49.1
Age	18-23	4.9
	24-29	7.1
	30-35	17.4
	36-41	21.9
	42-47	28.6
	48 and older	20.1
Education	High School	0.9
	Bachelor's degree	29.9
	Master's Degree or Higher	69.2
Spending on Last Vehicle Purchase	150,000 – 300,000 Baht	0.9
	300,001 – 450,000 Baht	11.6
	450,001 – 750,000 Baht	32.6
	750,001 – 1,050,000 Baht	27.7
	1,050,000 +	27.2
Brand of Car you Drive	Toyota	39.7
	Honda	35.3
	Others	25.0
Year of the car purchased	Year 2001 – 2005	12.8
	Year 2006 – 2010	29.9
	Year 2011 – 2015	44.7
	Year 2016 – 2018	12.6
<u>Other Statistics:</u>		
I frequently visit this car brand's website	Disagree	3.5
	Slightly Disagree	37.1
	Slightly Agree	38.4
	Agree	16.5
	Strongly Agree	4.5

4.2. Measurement

The constructs used in this study were taken from previous work and modified according to the study's context. The item measures used are shown in

table 2. The perceived product quality is “defined as the product's performance, reliability and durability” (Waller & Ahire, 1996). The service quality uses the unidimensional measures and 3 item scales tested by Lee et al. (2000) who

found the measure to be equally relevant compared to SERVQUAL and SERVPERF. The price fairness construct was taken from (David et al., 2007) and has 4-item measures. For the customer engagement measure, we borrowed the measurement items and adapted from the previous studies of Bergkvist and Bech-Larsen (2010) and Vivek et al. (2014) with the 5-item measures used in this study. For the customer loyalty measure, the previous works of Chaudhuri & Holbrook (2001) and So et al. (2014), which focus on purchase loyalty behavior were adapted from, with 5-item measures being used in this study. The questionnaire was designed using positive

statements and a six-point Likert scale with end points of '1 = Strongly disagree' and '6 = Strongly agree'. The six-point Likert scale was chosen as there is no significant statistical difference from choosing other types (Lei, 1994).

4.3. Data Analysis

Construct reliability was tested using Cronbach's alpha, while construct validity was tested using an exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), with additional testing using average variance extracted (AVE) for discriminant validity.

Table 2 Operationalization of Variables: Reliability and Validity

Construct Name	Item measures	Factor loadings	Cronbach Alpha	Mean	SD	Adopted Paper
Product Quality	My car has good performance.	.763	.806	5.18	.718	(Garvin, 1987)
	My car is reliable.	.839		5.12	.755	
	My car is durable.	.730		5.07	.783	
	My car conforms to specification.	.666		5.07	.774	
Service Quality	The service quality of my car dealer is very high	.830	.847	4.82	.774	(Lee et al., 2000)
	The service quality of my car dealer is excellent	.816		4.81	.854	
	The service quality of my car dealer is likable	.800		4.79	.812	
Price Fairness	I paid a fair price for the car I purchased	.630	.794	4.98	.849	(David et al., 2007)
	I consider the car dealer pricing policy as fair	.779		4.59	.837	
	I consider the car dealer's pricing policy as ethical	.804		4.71	.827	
	I consider the car dealer's pricing policy as acceptable	.724		4.82	.699	

Construct Name	Item measures	Factor loadings	Cronbach Alpha	Mean	SD	Adopted Paper
Customer Engagement	I always follow the news about the car brand I purchased	.717	.747	3.75	.838	(Bergkvist & Bech-Larsen, 2010)
	I frequently talk about this car brand to others	.748		3.69	.873	
	I frequently visit this car brand's website	.717		3.81	.909	
	I like to learn more about this car brand	.617		3.75	.892	(Vivek et al., 2014)
	I pay a lot of attention to anything about this car brand.	.649		3.89	.978	
Customer Loyalty	I intend to keep using this car brand for my transportation needs	.644	.891	4.88	.976	(So et al., 2014)
	I consider myself loyal to this car brand.	.792		4.68	1.061	
	I would be willing to pay a higher price for this car brand over other brands.	.825		4.46	1.155	
	If this car brand is out of stock, I will wait and refuse any substitutes.	.816		4.30	1.361	(Chaudhuri & Holbrook, 2001)
	Even if a new brand is launched in the market, I will still use this car brand.	.838		4.49	1.167	

Cronbach's alpha was used to test for reliability, to verify how well the set of item measures hypothesized for this construct belong together (internal consistency). As Table 2 shows, the values for Cronbach's alpha ranged from 0.747 to 0.891, all of which are higher than the recommended value of 0.7 (Nunnally, 1978), indicating that the scale holds an exceptional internal reliability

and consistency. The measurement is said to have convergent validity if the factor loading value is higher than 0.5 with no cross loading (Hair et al., 2010). As seen from table 2, the factor loadings were between 0.617 and 0.839, indicating that all constructs have acceptable convergent validity.

Table 3. The test of discriminant validity

	Brand Loyalty	Product Quality	Price Fairness	Service Quality	Customer Engagement
Brand Loyalty	0.795				
Product Quality	0.364***	0.738			
Price Fairness	0.443***	0.511***	0.720		
Service Quality	0.486***	0.409***	0.453***	0.808	
Customer Engagement	0.451***	0.035	0.179*	0.188*	0.645

† p < 0.100, * p < 0.050, ** p < 0.010, *** p < 0.001

The results in Table 3 show the square root of AVE (average variance extracted) for each factor, each of which is larger than the correlations with other factors (the diagonal indicators are larger than other off-diagonal indicators in each column and row), suggesting that sufficient discriminant validity has been achieved (Fornell & Larcker, 1981; Vitari & Ravarini, 2006).

5. RESULTS

5.1. Measurement Model

Confirmatory factor analysis (CFA) was used to test all measures and assess the measurement model in terms of convergent and discriminant validity (Anderson and Gerbing, 1988; Fornell and Larcker, 1981). The estimated CFA model shows a good fit as follows: normed chi-square statistic (χ^2/df) =

1.890, which is less than the maximum threshold of 3.0; comparative fit index (CFI) = 0.943, which is greater than the minimum threshold of 0.90; root mean square, error of approximation (RMSEA) = 0.063, which is lower than the maximum threshold of 0.08 (Hu and Bentler, 1999; Byrne, 1998). In summary, the CFA results indicate the model fits well with the data and also achieves construct validity.

5.2. Structural Model

To assess the full model, the “initial model” and “revised model” were compared following the application of modified indices (MI’s), as shown in Table 4. The inclusive final model-fit suggests that the model fits well for practical use (Bagozzi & Yi, 1988; Gaskin, 2016).

Table 4. Overall goodness-of-fit for the identified model

Measure	Initial Model	Interpretation*	Final Model	Interpretation*
CMIN	291.437	--	181.014	--
DF	109.000	--	92.000	--
CMIN/DF	2.674	Excellent	1.968	Excellent
CFI	0.903	Acceptable	0.940	Acceptable
SRMR	0.111	Terrible	0.064	Excellent
RMSEA	0.087	Terrible	0.066	Acceptable
PClose	0.000	Terrible	0.035	Acceptable

*Note: Hu (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives" recommends combinations of measures.

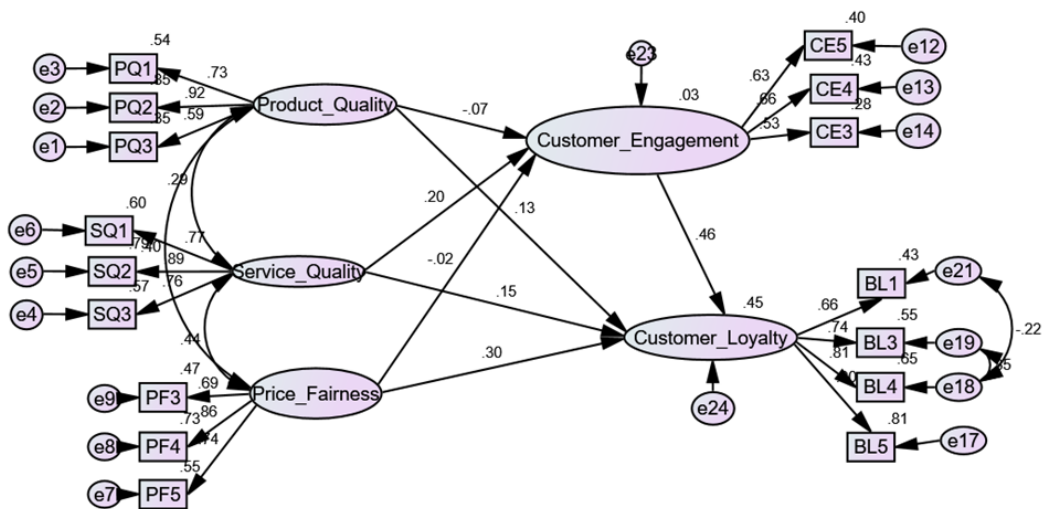


Figure 3: The structural model

Based on the results of the structural model, among product quality ($\beta = -.075$, $t = -.745$), service quality ($\beta = .199$, $t = 1.888$) and price fairness ($\beta = -.018$, $t = -.160$), only service quality has significant

effects on customer engagement. Consequently, only H2 is supported at $p < 0.100$; while H1 and H3 are not supported. All three predictors, product quality, service quality and price fairness,

have significant effects on customer loyalty ($\beta = .132$, $t=1.768$; $\beta = .145$, $t=1.856$; $\beta = .304$, $t=3.609$ respectively), such that H4, H5, and H6 are supported. Finally, customer engagement ($\beta = .458$, $t= 4.866$) also has a positive effect on customer loyalty, thus H7 is also supported (see table 5).

The Mediating Effect of Customer Engagement

In order to investigate the mediation effects of the independent variables the jamovi statistical tool was used, with a 95% confidence interval and 2,000 bootstrap samples (Taylor, MacKinnon, & Tein, 2007) to examine the direct and indirect

effects. The findings from table 6 show that there is a partial mediation effect of customer engagement, which is statistically significant, regarding the relationship with service quality at the $p<0.10$ level, and customer loyalty at the $p<0.001$ level, including regression weights with a total effect = 0.55, direct effect = 0.52, and indirect effect of =0.03, supporting H8b. Whereas, the mediating effect of customer engagement via product quality and price fairness, affecting customer loyalty as a dependent variable is not significant, even at the $p <0.10$ level, thus results do not support H8a and H8c (Baron & Kenny, 1986) (see table 6).

Table 5 Results of path coefficients

Hypotheses	Predictor	Outcome	Standardized regression weights (β)	t-value	Conclusion
H1	Product Quality	Customer Engagement	-.075	-.745	Not supported
H2	Service Quality	Customer Engagement	.199 +	1.888	Supported
H3	Price Fairness	Customer Engagement	-.018	-.160	Not supported
H4	Product Quality	Customer Loyalty	.132 +	1.768	Supported
H5	Service Quality	Customer Loyalty	.145 +	1.856	Supported
H6	Price Fairness	Customer Loyalty	.304 ***	3.609	Supported
H7	Customer Engagement	Customer Loyalty	.458 ***	4.866	Supported

*** $p < 0.001$, ** $p < 0.010$, * $p < 0.050$, + $p < 0.10$

Table 6 Conclusion of Mediation results

	Path	IV → Med	Med → DV	Total Effect	Direct Effect	Indirect Effect	Results
H8a	PQ → CE → CL	ns	***	0.39	0.43	-0.04	No Mediation
H8b	SQ → CE → CL	†	***	0.55	0.52	0.03	Partial Mediation
H8c	PF → CE → CL	ns	***	0.58	0.55	0.03	No Mediation

*** $p < 0.001$, ** $p < 0.010$, * $p < 0.050$, † $p < 0.100$, ns = not significant

The following section summarizes the important findings from the study and discusses their relevance in light of the study objectives. The practical implications of the study, the limitations of the study and directions for future study are addressed.

6. DISCUSSION

This article contributes to marketing literature by shedding light on how the characteristics of customer perceived value (product quality, service quality and price fairness) affect customer engagement and customer loyalty. The current research empirically tests the suggestion of previous researchers that, by improving the customer perceived value on service quality will increase the influence on customer engagement behavior (Darwin et al., 2017) and ultimately affect customer loyalty (Kevin Kam Fung et al., 2016). For instance, the findings of this study correspond to our expectation, and follows evidence in previous work (e.g., see Brodie, Hollebeek, Juric, & Ilic, 2011; Vivek et al., 2012) that customer engagement directly affects customer loyalty, especially in a competitive environment.

This research extends Quach et al.'s (2016) study finding that when service quality is positively perceived it will influence customers to become loyal to the brand, through direct and indirect effects in the automobile industry. Perhaps, this is the reason why customers are more attracted towards service quality, because of the presence of intangible attributes seen within service quality, which addresses emotional, social, and intellectual bases (Hellén & Gummerus, 2013). The results of the study further reveal that product quality and price fairness can enhance customer loyalty behavior. It is consistent with previous studies showing that when the degree of conformance of a product and price exceeds expectations, it will result in customer loyalty (Bolton et al., 2003; Lien-Ti & Yu-Ching, 2001). For example, price fairness is a mental activity carried out by customers who may have cognitive (thinking) and affective (emotional) components in their responses to prices (Xia et al., 2004) influencing the loyalty factor. Our results found a partial mediating effect of customer engagement on service quality and customer loyalty. Such partial mediating effects are possible because when customers see

service dimensions of both tangible and intangible qualities in the service dimension (which are the basic requirements determining loyalty), it may trigger customer interaction (Lehtinen & R. Lehtinen, 1991).

The findings of our study also suggest that the proposed customer perceived value drivers, such as product quality and price fairness, show insignificant effects on customer engagement, which is inconsistent with previous work (Ali, Javad Khazaei, & Mohammad Reza, 2014; Quach et al., 2016). It is possible that if a customer did not feel the price sacrifices worthwhile, they would not purchase again and likely would not engage with the firm. Further, customers with negative affective price fairness assessments, are more likely to be involved in revenge-seeking behavior and this has a decreasing effect toward engagement behavior with the brand of focus. Finally, our results found that customer engagement did not mediate the effect between customer perceived value dimensions, such as product quality and price fairness, and customer loyalty, and are therefore inconsistent with previous studies (Nguyen et al., 2016; Van Doorn et al., 2010). This result implies that customers do not seek signs, interest or pleasure from product categories in the automobile industry (Parihar et al., 2018).

6.1 Theoretical Implications

This study contributes to emerging customer engagement literature by incorporating the new dimension, customer perceived value as a source of strengthening customer engagement well beyond the purchase (Hapsari, Clemes, &

Dean, 2017; Lien-Ti & Yu-Ching, 2001). Past studies defined customer perceived value differently; it was important to further investigate and validate the relationships with this variable that affect customer engagement and customer loyalty. Our findings contribute to the limited research on the relationship between price fairness, customer engagement and loyalty behaviors. From a theoretical perspective, this study created new linkages with customer perceived value, focusing on its effects on customer engagement, and thus contributes to the customer engagement theory. This is an important step toward providing customers perceived value regarding product quality, service quality and price fairness, which is an additional perspective to the existing service dominant logic relationship, and thus contributes to the existing literature.

Product quality, service quality and price fairness are also relevant constructs in the customer loyalty marketing literature, which considers customer engagement as the key mediating variable (Van Doorn et al., 2010). Previous study has shown that the utilitarian value of the product category negatively affects the brand, whereas, the hedonic value positively affects the brand's interactions and coincides with our study results (Chaudhuri & Holbrook, 2001).

Past research on customer perceived values, using unidimensional measurements is sparse. This study contributes to the emerging literature in customer engagement by incorporating new dimensions of the customer perceived values, which are product quality, service quality, and price fairness, that connect with customers and

strengthen customer engagement beyond the purchase. This is an additional perspective to the existing service dominant logic relationship, and thus contributes to the existing literature. The findings of this study also strengthen customer loyalty literature by proving the key determinants of customer loyalty (Van Doorn et al., 2010).

The mediating role of customer engagement which plays a central role between values and customer loyalty, recommends that customer relations can be strengthened through service quality which is service dominant, and affective values in the perspective of customer engagement, thus, this study contributes to customer loyalty literature, as well as emerging customer engagement literature, yielding a framework that encapsulates quality-engagement experiences in a durable goods industry.

6.2. Managerial Implications

This research also has several practical implications for customer management. The knowledge generated from this study reinforces the importance of managing the customer's experience with the brand. A strong influence of service quality on customer engagement and customer loyalty provides a sound reason for the automobile industry to focus on marketing strategies and actions that are likely to engage customers, through using online communication. It is suggested that managers in the automobile industry regard service quality as similar to a motivating factor, leading to customer engagement and loyalty. In the automobile industry,

service quality can be framed as solutions, by drawing the customers' attention with the right service attributes. Good service quality can provide customers with memories that endure the customer engagement experiences. At the same time, no matter how hard the manager attempts to improve the service quality, the other perceived value factors such as product quality and price fairness, will remain an essential concern to consumers and will have direct effects toward customer loyalty. In the automobile industry, firms can build customer loyalty by putting emphasis on product quality, price fairness, and especially through service quality, which will lead to customers becoming even more engaged.

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