

Product Quality, Convenience and Brand Loyalty: A Case Study of SilverQueen's Adolescent Consumers

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Abstract—The present study analyzed the relationship between product quality and repurchase behavior as well as a relationship between convenience and repurchase intention-behavior based on the perspective of Expectancy Disconfirmation Theory and Resource Matching Theory. Data was accumulated from 366 students of Sophomore and senior high school in Denpasar City who consumed Silver Queen chocolates, with convenience sampling technique. Differing from previous studies, this study reveals that in the adolescent segment market of chocolate bar product, the relationship between quality as well as convenience and repurchase intention are not significant. The reasons for the findings may be students' limited financial capacity, subjective norms or different consumption orientation between the children segment market and adolescent segment market. Further study needs to explore the effects of subjective norms and shopping orientation effects on intention to purchase chocolate bar products.

Index Terms—product quality, convenience, intention to repurchase

I. INTRODUCTION

The present research was initiated by the tendency of adolescent consumers in Denpasar City to buy chocolate bars product more often. They choose SilverQueen brand as their preferred brand. A preliminary study was conducted to explore the reason why they choose the SilverQueen brand. Observation and interviews involving five students uncovered the facts that the quality, and the ease of reaching products/or convenience were consumers' reason to purchase SilverQueen consistently.

The preliminary study was conducted to explore the phenomenon of chocolate bar consumption in the adolescent market in which SilverQueen competes to attract consumers. Competitors in chocolate bar market segment are Choki-Choki, Kitkat, and Toblerone. Data indicated that students choose the SilverQueen brand because of its taste, popularity, variation, easiness to get SilverQueen, and its texture. Consumers also declared that they intend to repurchase SilverQueen and willing to pay a higher price than the current price to consume the SilverQueen Chocolate product. Based on the data grabbed on the preliminary study, the present research uncovered whether convenience and product quality of SilverQueen have a significant effect on repurchase behavior. The previous study reported that product quality has an important effect on the intention to repurchase. Product quality is the ability of a product to satisfy consumer need or expectations [1]–[3].

Expectancy Disconfirmation Theory (EDT) states that if there is a confirmation between perceived quality and expected quality [4], it will cause consumer satisfaction and then the accumulation of satisfaction will create consumer loyalty to the brand [5].

On the other research stream, the convenience concept is defined and closely related to ease of product use [6], time savings [7], location [8], and limited consumer effort [9] in consuming a product. The Resource Matching Theory (RMT) perspective states that convenience is predicated on the limited resources of consumers allocated in processing information, accessing the product and making the decision regarding the product. Price is one of the convenience dimensions that has a positive correlation with the intention to repurchase.

II. LITERATURE REVIEW

A. Expectancy Disconfirmation Theory

The EDT states that attitude toward a product or the decision of individual consumer choosing product is influenced by the expectation and perception of product performance [4]. When the product performance exceeds the expected product performance, the consumer will be satisfied, while when the perception of product performance is below consumer expectation, consumer dissatisfaction will exist.

B. The relationship among Product Quality, Customer Satisfaction, and Brand Loyalty

The EDT explains that satisfaction relates to the size and direction of the experienced disconfirmation that occurs as a result of the comparison between performance and expectations [4], [10]. This theory is related to the concept of product quality that compares expectations with product performance [2], [3]. Product quality is a factor that determines the overall product features [11], the excellence or superiority of a product [12], influence consumer purchase behavior [13], business performance (Sweeney, et al. (1999); Fornell (1992); Anderson, et al. (1994)), lead to premium prices (Gale (1994); Aaker (1991)), impact on trust of the brand or the product (Chiou and Droge (2006)), lead to consumer satisfaction (Gotlieb, et al. (1994)) and trigger loyalty (Eskildsen, et al. (2004)). Product quality is measured by a modified concept from Garvin's study, that the quality of the product has an impact on loyalty

[1]. Quality can initiate customer satisfaction and become a stepping stone to develop loyalty [5].

Consumer satisfaction is an evaluation of the comparison between expectations and perceptions of performance (Wirtz and Bateson (1999)) and disconfirmation based on experiences perceived by consumers [4] such as certain transactions or attributes and the use of good products and services (Anderson, et al. (1994)). Consumer satisfaction may encourage word of mouth, repurchase intention [14], and loyalty (Ekinici (2005); Caruana (2002)). Consumer satisfaction encourages brand loyalty (Oliver (1999); Anderson and Srinnivasan (2003)). Brand loyalty is defined as the evaluation of the experience of shopping for a brand (Aaker (1991); Deighton, et al. (1994); Astuti and Cahyadi (2007)), being the brand purchased in the greatest proportion, (Cunningham (1956); Rafiq (2009)), choice response, attitudes and behavior of consumers (Engel and Blackwell (1982)) to lead the repurchase commitments (Assael (1998); Oliver (1999)) even into inertial actions (Oliver (1999); Kan (2002); Lin (2005)) of a particular brand. Brand loyalty reflects an obstacle to entry, a basis for a premium price, time to respond to a competitor, a fortress against destructive prices, and a core dimension of brand equity (Aaker (1996)).

Brand loyalty is measured based on the frequency of purchases, consumer recommendations to others, first choice brands (Anselmsson, et al. (2007)), and willingness to pay more (Aaker (1996)). Product quality has a significant impact on loyalty in the food industry (Alimubin and Yoga (2015)), the health industry (Gunawan and Djati (2011)), and even environmentally friendly products [5]. The relationship between product quality and brand loyalty is defined as follows:

H1: Product quality has a positive and significant impact on brand loyalty

C. Resource Matching Theory, Convenience, and Brand Loyalty

The RMT states that the persuasive impact of a message is maximized when the resources allocated to processing the communication match those required based on the idea that consumers have limited resources to process information and complete task assignments [15], [16]. Availability of the consumer resource should be matched with required information to complete task requirements to build application in chocolate bar marketing positive attitude toward the task.

Application of the RMT in chocolate bar marketing is that the availability of consumer resources, both financial and non-financial, should be met to make a person choose a product, and it can be said that the product is easy to get or convenient enough from the customer's perspective.

Convenience makes customers easy to use products [6], leads to time savings (Schaffer (2000)), makes it easy to reach a location [8], and alleviates consumer efforts [9] in purchasing a product. The ease provided by a product can be measured through the ease of making decisions [13], ease of access [17], ease of benefits [18], ease of transaction [19], and ease of post-benefits [20].

D. Convenience and Intention to buy

Convenience can generate consumer's behavioral intentions [14], Garcia-Fernandez, et al. reported that convenience has a positive correlation with satisfaction, which has an impact on repurchase and loyalty [21]. Convenience also directly, positively, and significantly affects loyalty [22].

H2: Convenience has a positive and significant effect on brand loyalty.

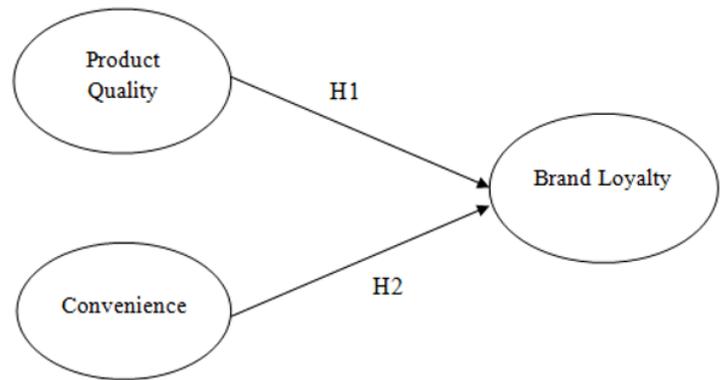


Fig. 1. Conceptual model.

III. RESEARCH METHODOLOGY

A. Research design and sample data

The study began with a preliminary study which involved 30 students in the target population schools namely State Middle School 1 Denpasar, State Middle School 5 Denpasar, State High School 1 Denpasar, and State High School 6 Denpasar who had consumed Silver Queen chocolate. A preliminary study was conducted to explore the reason behind chocolate bar product purchasing. Further data analysis was then conducted to investigate the relationship between product quality and convenience to brand loyalty.

The population in this study were all students in the four schools who had consumed chocolate. In total, the number of target population is 4260 people. Samples were taken using the nonprobability sampling technique with the convenience sampling technique. The consideration of error tolerance is a maximum of 5%, so the data collected was from 366 respondents based on Slovin's formula. Individual characteristics of respondents are presented in table I.

B. Research Instrument

The research instrument contained 19 statement items which intended to measure product quality, convenience, and brand loyalty in sequence. In addition, there were seven question items to grab individual characteristics of the respondents such as the name, age, gender, amount of allowance per week received, the frequency of buying chocolate per month, three chocolate brands that had been purchased, and the type of SilverQueen variant that was most often purchased. The product quality instrument which is consist of eight items was developed through Garvin's [1]. Data were measured in

TABLE I
RESPONDENT CRITERIA

No	Description	number	%
1	Age		
	a. 13	73	20
	b. 14	73	20
	c. 15	73	20
	d. 16	74	20
2	Sex		
	a. Male b. Female	83 283	23 77
3	Pocket money (weekly/Rp)		
	a. 70.000	65	17
	b. 120.000	55	15
	c. 150.000 d. 300.000	75 171	20 46

five interval likert scale, namely performance (SilverQueen Chocolate is delicious), features (SilverQueen packaging size is easy to carry everywhere), suitability (Silver Queen chocolate composition is suitable for consumption), reliability (SilverQueen chocolate does not melt easily), durability (SilverQueen Chocolate is not easily moldy), serviceability (ease of providing complaints to SilverQueen producers through telecommunication channels, aesthetics (SilverQueen chocolate packaging design is attractive), and perceived quality (SilverQueen chocolate is a quality chocolate). The entire item quality of the product is declared valid with KMO value ≥ 0.5 , Factor loading item ≥ 0.4 , Cumulative explained variance ≥ 0.5 , Eigen factor ≥ 1.0 (Hair, et al. (1998)) and Cronbach's alpha value of 0.827 ($\alpha \geq 0.6$). Product Convenience is measured using seven statement items that contain the dimensions of ease of decision making ("I prefer SilverQueen chocolate compared to other chocolate brands because of the halal label on SilverQueen packaging") [13], ease of access ("It's easy to get SilverQueen, SilverQueen is sold in all minimarkets") [17], [20], ease of transaction ("I can buy SilverQueen using debit and credit cards in addition to paying cash") [19], ease of benefits ("SilverQueen provides ease of purchase with a variety of sizes available") [18], and ease of post-benefits ("Ease of delivery of complaints to SilverQueen manufacturers", "SilverQueen product information is easily obtained through the internet and other sources") [20]. Overall item of convenience is declared valid with KMO value ≥ 0.5 , Factor loading item ≥ 0.4 , Cumulative explained variance ≥ 0.5 , Eigen factor ≥ 1.0 and Cronbach's alpha value of 0.777 ($\alpha \geq 0.6$).

The four statement items used to measure brand loyalty (Anselmsson, et al. (2007)) are modified based on consumers' first choice brand, such as trying to get SilverQueen chocolate when I want to eat chocolate, the intention of recommending the brand to others (Assael (1998)) such as recommending SilverQueen chocolate to friends and relatives, the behavior of repurchase intention such as "If the shop where I usually buy SilverQueen chocolate is out of stock, then I will try to get SilverQueen in other stores", and willingness to pay more

to keep consuming the brand (Aaker (1996)) such as "I am willing to pay more for SilverQueen rather than buy other brands". All items in brand loyalty are declared valid with KMO value ≥ 0.5 , Factor loading item ≥ 0.4 , Cumulative explained variance ≥ 0.5 , Eigen factor ≥ 1.0 and Cronbach's alpha value of 0.767 ($\alpha \geq 0.6$).

C. Hypothesis testing and data Analysis

The entire data was analyzed using multiple regression analysis methods to verify correlations among variables of product quality, convenience, and brand loyalty. The classic assumption test was also employed. Data normality test was based on the Kolmogorov-Smirnov test (Asymp. 2-tailed Sig) $\geq 5\%$, the multicollinearity test (VIF) ≤ 10 , the heteroscedasticity test with the Glejser test (Sig.) $\geq 5\%$. The hypothesis will be tested by Test F (F-count \geq F-table then H1 accepted), t test (t-count \geq t-table then H1 is accepted). R square explains the contribution of variance of the independent variables to that of the dependent variable, based on determination value $0 \leq R^2 \leq 1$.

IV. RESULTS

The average chocolate consumption per month is 5 times with the chocolate brand ranking first being SilverQueen, followed by Cadbury, Kitkat, Beng-Beng, and Toblerone. The favorite type of SilverQueen variant for respondents in State Middle School 1 Denpasar, State High School 1 Denpasar, and State High School 6 Denpasar is the Classic variant with a Cashew Milk Chocolate of 68 grams, whereas the respondents in State Middle School 5 Denpasar chose Classic variants of Cashew Milk Chocolate of 33 grams.

The quality of the data was acceptable. Validity parameters indicated that the product quality (KMO = 0.922; Berlett's test = 2632.482; Total variance explained = 0,65), product convenience (KMO = 0.907; Berlett's test = 1563.618; Cumulative total variance explained = 66.274) as well as consumer loyalty (KMO = 0.778; Berlett's test = 491,943; Cumulative total variance explained = 64,612) are valid. The reliability indicator reveals that product quality instrument (Cronbach's alpha value of 0.945), product convenience (Cronbach's alpha value of 0.914) and brand loyalty (Cronbach Alpha = 0,914) are reliable.

The results of descriptive statistics indicated that from respondents' perspective product quality is relatively good, product convenience of SilverQueen is also relatively high, and moderate brand loyalty level of youth segment market.

The results of multiple linear regression analysis is presented the following equation.

$$Y = 10.898 + 0.10ProductQuality + 0.71Convenience + e \quad (1)$$

Classical assumptions verification indicated that the validity of the regression model does not violate the classical assumptions. The regression model revealed a positive value of brand loyalty toward SilverQueen Brand. The results also indicated that the correlations between product quality and

TABLE II
DESCRIPTIVE VARIABLE SCORES

Variables	Average
Product Quality	4.02
SilverQueen chocolate is delicious	4.17
SilverQueen packaging size is easy to carry anywhere	4.07
SilverQueen chocolate composition is suitable for consumption	3.98
SilverQueen chocolate does not melt easily	4.02
SilverQueen Chocolate is not easily moldy	3.96
Ease of providing complaints to SilverQueen producers	3.96
SilverQueen chocolate packaging design is attractive	4.02
SilverQueen chocolate is a quality chocolate	4.01
Convenience	4.04
I prefer SilverQueen chocolate compared to other brands of chocolate because of the halal label on SilverQueen packaging	4.14
It's easy to get SilverQueen SilverQueen is sold in all minimarkets	4.03
I can buy SilverQueen using debit and credit cards in addition to paying cash	3.98
SilverQueen provides ease of purchase with a variety of sizes available	4.01
Ease of delivery of complaints to SilverQueen manufacturers	4.07
SilverQueen product information is easily obtained through the internet and other sources	4.03
	4.06
Brand Loyalty	3.31
Trying to get SilverQueen chocolate when I want to eat chocolate	3.52
Recommending SilverQueen chocolate to friends and relatives	3.44
If the shop where I usually buy SilverQueen chocolate is out of stock, then I will try to get SilverQueen in other stores	3.37
I am willing to pay more for SilverQueen rather than buy other brands	2.89

Source: Primary data is processed (2018)

TABLE III
MULTIPLE LINEAR REGRESSION TEST RESULTS

Variables	Coefficient	Std. Error	t	Significance
Constant	10.898	1.211	8.996	0.000
Product Quality	0.10	0.030	0.338	0.736
Convenience	0.71	0.041	1.729	0.085
R^2				0.11
F coefficient				2.049
F Significance				0.130

Source: Primary data is processed (2018)

brand loyalty as well as the correlation between product convenience and brand loyalty are not significant. The strength of determination is also very low, with a significance t-test above 0.05. The R^2 value resulted in a number of 0.11. It reveals that the brand loyalty model was only 11.1% influenced by product quality and convenience. The root of low coefficient of determination can be the research model which only contains two predictors, while there are other variables that contribute to brand loyalty, such as social influence (Chen, et al. (2018)), product reevaluation (Cohen and Houston (1972)), brand equity (Aaker (1991); Moisescu (2006)), brand involvement (LeClerc and Little (1997)), value perception (Dodds, et al. (1991)), brand trust (Garbarino and Johnson (1999)), consumer commitment (McAlexander, et al. (2002)), brand personality [8], brand awareness, brand image, quality perception, organizational association (Feldwick (1996); Chernatony and McDonald (2003)), and repurchase behavior (Cunningham (1956)). Consistent with the determination coefficient parameter, the F coefficient is 2.049 with a significance of 0.130 ($p \geq 0.05$) indicates that simultaneously, the independent variables do not significantly influence the dependent variable.

A. Relationship between Product Quality and Brand Loyalty

The relationship between product quality and brand loyalty is not significant, thus hypothesis 1 is rejected. Product quality does not affect brand loyalty ($t = 0.338$; $p = 0.736$). Those who valued the product quality highly will not necessarily repurchase it. Product quality not directly leading to brand loyalty was also reported by other researchers (Woodruff (1977); Lenzun, et al. (2014); Haryanto (2013); [22]; Lasander (2013)). Influencing factors that can cause this phenomenon is inadequate financial resources (Saqib, et al. (2016)) to purchase SilverQueen more often, and subjective norms (Chen and Deng (2016)) that also able to influence consumer behavior such as an encouragement from the environment that limits consumption of sweet foods that will cause various health problems.

B. Relationship between Convenience and Brand Loyalty

The result indicated that Product Convenience was not significantly correlated with brand loyalty ($t = 1.729$; $p = 0.085$), in other words, hypothesis 2 is rejected. The finding was similar to those of Kishada and Wahab (2013). Convenience does not always support loyalty because of shopping orientation differences. There is a different shopping orientation between men and women. Men tend to buy products that are needed (rational purchase decision orientation) while women tend to more emotional in making purchases or more often based on feeling (Chen and Hung (2015)). 5.

Despite its positive contribution, the limitation of the present study is acknowledged in affecting the results of the study. The number of sample data and its quality because of impropriety and no control variable employed in the model are the limitations among others. to verify regarding the research

findings' consistency. Future study is recommended to replicate the present study and include social influences (Chen, et al. (2018)) and brand trust (Garbarino and Johnson (1999)) in the model in addition to product quality and convenience.

V. DISCUSSION, MANAGERIAL IMPLICATIONS AND RECOMMENDATION

The results of this study present practical directions that are important in managing in the context of brand loyalty of SilverQueen chocolate in the adolescent market segment in Denpasar City. It is recommended that a complaint procedure is needed to improve in order to comply with mandatory provisions of Law No. 8 of 1999 concerning Consumer Protection and quality assurance system need to be strengthened. There should be complaint procedure simplification, to reflect higher product responsibility toward its consumer, pay more attention to retailer's chocolate storage, maintain halal labels on packaging and increase distribution channels and easy-to-view product displays. It is recommended to replicate the present study with a larger sample size, to test findings consistency in the next research program.

VI. CONCLUSION

The results showed that product quality had no significant correlation on SilverQueen brand loyalty in adolescents in Denpasar City. The correlation between convenience and SilverQueen brand loyalty is also not significant in the adolescent segment in Denpasar City. The present study provides fruitful insight that needs to be explored further. Whether in terms of convenience goods, product quality is not a major consideration in making purchasing decisions. The significance value of product quality which is weaker than convenience shows that convenience plays a greater role in decision making for convenience goods.

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