The Influence of Visual Packaging Design on Brand Preference with Mediating Variables Perceived Quality and Perceived Value (Study on Unsoed Students Consumers SilverQueen)

Aprilianing Setyowati[1], Sri Murni Setyawati[2], Monica Rosiana[3*]

[1*]Universitas Jenderal Soedirman, aprilianing.setyowati@mhs.unsoed.ac,id, Indonesia
[2]Universitas Jenderal Soedirman, nunk_pwt@yahoo.co.id, Indonesia
[3*]Universitas Jenderal Soedirman, monicarosiana@unsoed.ac.id, Indonesia
* Monica Rosiana

ABSTRACT

Purpose of this study is to examine and analyze the influence of visual packaging design on brand preference with mediating variables perceived quality and perceived value (study on Unsoed students consumers SilverQueen). This research was conducted at Jenderal Soedirman University. The respondents of this research are Unsoed active students and consumed SilverQueen product at least twice or repeatedly, taken using direct survey method with questionnaire instrument. A survey was conducted to collect data from 125 respondents. This study employed Cronbach Alpha to test the reliability and Confirmatory Factor Analysis (CFA) to test the validity of the measurement items. Additionally, Structural Equation Modelling (SEM) was used to test the hypotheses. The result indicate that visual packaging design has a significant and positive relationship with brand preference; perceived quality; and perceived value. Then, perceived quality in turn has a significant and positive relationship with perceived value. Perceived value successfully mediating visual packaging design in brand preference, and the mediation effect has significant effect. Besides, perceived value successfully mediating perceived quality in brand preference, and the mediation effect has significant effect. However, perceived quality does not show any significant relationship toward brand preference. Furthermore, perceived quality not successfully mediating visual packaging design in brand preference, and the mediation effect has no effect.

Keywords: Visual product packaging design, Perceived quality, Perceived value, Brand preference, Consumer behaviour.

1. Introduction

Indonesia shows significant increasing trend of chocolate product consumption, this case is showed by the increasing 2021 trend of sales on e-commerce Tokopedia. Due to this fact, firm competition amongst chocolate product market in Indonesia were created. To appear outstanding in the competition and to increase sales, various chocolate brand are competitively innovating and planning marketing strategy to attract consumer that expected to increase consumers brand preference towards their product. The main purpose of marketing is to reach targeted market and influencing consumer behaviour (Venter dkk, 2011). Velasco, dkk (2015) stated that packaging

aesthetic is the key aspect of product marketing. Design aesthetics leads as key role in influencing consumers brand preferences (Hekkert & Leder, 2008) and as effective silent sales person in attracting consumers attention at once (Silayoi & Speece, 2007). Therefore, visual packaging design gives the opportunity to communicate and influence the consumer at buying point (Chiang & Wigley,2009). According to Bono, dkk (2003) that stated attractive product packaging shows that the product is loved.

Visual packaging design has an important role in affecting on how consumers interpreted in which high or low the quality or the value of a product (Venter dkk, 2011). Due to the lack of perceived product information back then (Linn dkk, 2012) and packaging visual is considered as the indicator of product quality (Honea & Horskky, 2012), according to Silayou and Speece (2004) consumers tend to presume a product has a high quality if it has proper packaging, but if the packaging quality is low then consumers will presume the content inside product has low quality too. Afterwards, that perceived quality will then drive consumers' perceived value towards a product (Golob & Podnar, 2007). Perceived value is a result from subjective consumers judgement upon additional value of a product (Huber dkk, 2002).

Previous research conducted by Wang (2013) claimed that visual packaging design has positive and significant relation towards brand preference. But at the research that is done by Steenis, dkk (2016) revealed that packaging visual did not directly influencing consumers behaviour at picking a product but by the consumers preferences itself. It is in line with the research from Setiowati & Liem (2017) that indicate visual packaging design had no impact on brand preference, to increase brand preference consumers are not only considering the visual packaging design, but also including another variable as perceived quality and perceived value.

Researchs that conducted by Olesen & Davide (2017) and Yamoah (2005) concluded that visual packaging design has positive and significant impact towards perceived quality and perceived value. Then, consumers with high perceived quality and value will positively affecting brand preferences (Chomvilailuk & Butcher, 2011; Chiu dkk, 2010). According to Ooijen, dkk (2017) and Jara, dkk (2017) revealed that visual packaging design has positive connection towards perceived quality. Afterwards perceived quality is affecting brand preferences (Epriliana & Ellyawati, 2011). The research conducted by Belleau (2007) and Koutsimanis (2012) is also showed that visual packaging design gives impact towards consumers perceived value and important antecedent to brand preference (Hellier dkk, 2003).

Significant connection between consumers' perceived quality to perceived value is also explored on the research conducted by Aurier & Lanuze (2011) and McDouall & Levesque (2000). Then, the result of Konuk (2018) research shows that there is indirect impact from perceived quality towards brand preference mediated by perceived value. This study explored how visual packaging design affecting brand preference through perceived quality and perceived value. This study is expected to explain the reason of research result gap about the impact of visual packaging design towards brand preference conducted by Wang (2013) and Setiowati & Liem (2017), as well as to be able to know about several factors that impacting brand preferences.

2. Literature Review

2.1 Brand Preference

According to Hellier, dkk (2003) stated that brand preference is a level in which consumers like the service or product offered by company currently as comparison to products or services provided by other company along with series of consideration. If a product produce perceived value and benefit that bigger than the cost to get then it will generate higher urge to be picked (Grewal, 1998). Besides the opposite, if value and benefit produced by a product is smaller than the cost to get, consumers tend to reject the related product and shift onto other alternative that has similar rating (Benedict, 1986).

2.2 Visual Packaging Design

There is rating standard that could impact consumers interest towards a packaging itself. One of the judgement is visual design showed at main panel of product packaging. According to Klimchuck & Krasovec (2012), visual packaging design could be defined as attraction among visual aspects as form, material structure, colour, graphic, and typograph and another design to produce suitable and fit product to distribute.

2.3 Perceived Quality

Consumers perception towards product quality is how consumers experiencing something and acting along with marketing stimulation of a product (Silayoi & Speecee, 2007). Consumers are tent to evaluate and set what they don't like or like on an object (Grewal dkk, 1998). According to Grewal, dkk (1998) that defined perceived quality is consumers impressions to experienced quality up to a previously perceived product information.

2.4 Perceived Value

Perceived value is an important factor in predicting consumers purchase behaviour (Peng & Liang, 2013). This experienced value give them clue about how to satisfied the needs better and to increase consumers' brand preference (Lin, 2002). Inside value, there is trade off exchanging and drawing between cost and benefit. According to Chiu, dkk (2011) perceived value or also known as experienced value is important part for the company in developing competitive advantage to increase market share and or also earning. When a brand maximizing visual packaging design attribute which well aesthetically designed could promote good perception too, therefore increased consumers interest to choose a product rather than other similar existing products.

2.5 Hypothesis Development

According to Yamoah (2005) visual packaging design directly impact on consumers choice. It happened because it is important for a brand to give attention in packaging design of its product (Belch, 2007). The use of visual element is effective in attracting and affecting consumers purchasing behaviour (Underwood, 2003). Due to that, following hypothesis was formulated:
H1: Visual packaging design positively and significantly affects brand preference.

Product packaging becomes one of effective communicating tools to show product advantage (Underwood, 1998). Well visually designed packaging could attract and then drive consumers on

affecting purchase decision (Silayoi & Speece, 2007). Other than that, visual packaging design could indicate the quality of a product (Venter dkk, 2011). Therefore, following hypothesis is proposed:

H2: Visual packaging design positively and significantly affecting perceived quality.

Packaging design can be used as a tool to communicate brand message thus it finally could upgrade the value of a product (Belleau, 2007). Based on Olesen & Davide (2017) interesting visual packaging design has positive impact to consumers perceived value. Then, according to Halaswamy & Subhas (2014) argue that product packaging could elevate perceived value on product. According to explanation above, following hypothesis is inisiated:

H3: Visual packaging design positively and significantly affecting perceived value.

Perceived quality is a part of brand equity, which could drive consumers on choosing product decision (Zeithmal, 1998). Besides, perceived quality is connected to consumers judgement that directing to repeat order and finally forming loyalty (Gill dkk, 2007). According to Chomvilailuk & Butcher (2010) indicate that perceived quality could lift brand preference. Thus, following hypothesis is created:

H4: Perceived quality positively and significantly affecting brand preference.

Flint (1997) found that value is the key of marketing activity. Due to the importance of value as an element that could connect directly to consumers judgement on product (Fouriner, 1998). The higher a value of a product the higher consumers perceived to the product itself (Calvo & Margin, 2017). According to Chiu, dkk (2010) explained that there is strongly positive connection between perceived and brand preference. Therefore, following hypothesis is initiated:

H5: Perceived value positively and significantly affecting brand preference.

According to Konuk (2018) stated that one of predictor and consequence of perceived value is perceived quality. Perception towards quality has strong relation with consumers perceived value (Choi & Kim, 2013). Along with research conducted by Konuk (2018) and Aurier & Lanauze (2011) that perceived quality positively related to perceived value. Therefore, consumers perception towards quality can cause increasing of consumers perceived value to food product. Thus, following hypothesis is created:

H6: Perceived quality positively and significantly affecting perceived value.

Tolba (2011) concluded that consumers quality perceived towards product packaging that has interesting visual design has significantimpact towards consumers brand preference. According to research conducted by Gill, dkk (2007) and Sahrawet & Kundu (2007) which indicate that perceived quality has significant impact towards brand preference. Thus, following hypothesis is proposed:

H7: Perceived quality mediating the impact between visual packaging desidn and brand preference.

Consumers perceived value is an important factor in affecting brand preference. According to Utami, dkk (2016) which stated that perceived value is truly important in consumers judgement to a product which achieved from a good packaging so that would increase brand preference. Research that conducted by Chiu, dkk (2010) and Muzakir & Damrus (2018) mentioned that

consumers perceived value onto good products' visual packaging design has significant impact to consumers brand preferences. Therefore, following hypothesis is initiated:

H8: Perceived value is mediating the impact between visual packaging design and brand preference.

Consumers perceived value as main factor which could affect product selection principal by the consumers. According to Woodruff (1997) mentioned that consumers perception towards experienced value upon the use of a product will determine long term success to a brand. Perceived value could be achieved by the result of consumers assessment to a product perceived quality (Snoj dkk, 2004). Then according to Cuong (2020), perceived value is positively affecting brand preferences. Therefore it could be concluded that consumers perceived value is based on perceived quality that has significant impact towards brand preference (Konuk, 2018). Thus, following hypothesis is proposed:

H9: Perceived value is mediating the impact between perceived quality and brand preference.

3. Research Methodology

3.1 Population and Sample

This study uses quantitative approach with survey method. This research is held in Jenderal Soedirman University, Purwokerto. Population target in this study are active Unsoed students and ever do purchase of SilverQueen product twice or repeatedly. The sample used in this study are 125 respondents. The sample adoption technique is using non-probability sampling which is convenience sampling method.

3.2 Variable Measurement

The measurement of each variable is using 5 point likert scalethat shows point 1 is the least disagreement until point 5 that shows most agreement. Visual packaging design was measured by 4 indicators adopted from (Cahyorini & Rusfian, 2011), consists of brand name, colour, typographic, and graphic. Perceived quality variable measured with the indicators adopted from (Hung & Chen, 2011) consisted of three indicators, functional value, experimental value, and symbolic value. Then, the perceived variable measured by the indicators adopted from (Doods dkk, 1991) that consisted of three indicators which are emotional value, social value, and value for money. Then the brand preference variable measured with indicators adopted from (Hellier dkk, 2003) that consisted of three indicators, liking brand, brand choice, and choosing certain brand compared to other brand.

3.3 Data Analysis Tools

Data processing and hypothesis examination were held using Structural Equation Modeling (SEM) with AMOS 26 software.The measurement model is used to test the validity and reliability, while the structural model is used to test causality or hypotheses with a predictive model.

4. Results

4.1 The Accuracy of Measurement Analysis

Convergent validity is a validity test that is used to indicate the construct or latent variable is shared with the construct or orther latent variable so that it can be said be convergent (Ghozali, 2011:134). This measurement can be seen from standardized loading estimate value. According to Hair, et al (2010) the acceptable standardized loading estimate value is > 0,5. The reliability test shows the extent to which measurement result using the same object will produce the same data (Sugiyono, 2012:130). This test aims to determine whether the questionnaire is reliable or not, so that it can be seen that questionnare has been consistent or not. Then, variance extract (AVE) is the average variance extracted with the accepted value (≥ 0,50).

The Table 1.1 shows the result of CFA and statistics scale, including loading factors, Reliability, and Average Variance Extracted (AVE). The finding shows that all steps included in the analysis are reliable, and the estimated construct reliability range between 0,70 until 0,82. According to Hair, dkk (2014) stated that the indicators could be approved as reliable if the composite reliability ≥ 0,7 even though 0,6 still acceptable.

Table 1. Result analysis of the Factor loading, Reliability and Varians Extract (AVE)

Research constructs	Measurement items	Factor loading	Reliability	AVE
Visual packaging design	Brand name	0,70	0,70	0,67
	Colour	0,78		
	Typography	0,71		
	Graphic	0,53		
Perceived quality	Functional value	0,75	0,82	0,81
	Experimental value	0,69		
	Symbolic value	0,71	0,71	0,73
Perceived value	Emotional value	0,81		
	Social value	0,87		
	Value for money	0,61		
Brand preference	Liked the brand	0,58	0,70	0,73
	Preffered brand	0,94		
	Chose the brand again	0,63		

The correlation among the construct far away under the resistence 0,90, shows that all the indicators are different from each other. Afterwards, AVE for each variable exceed each quadratic correlation that proved discriminant validity. Discriminant validity is a test of validity in SEM which is measured by calculating the level of difference between constructs in a model. This level of difference indicates that the data used is dicriminantly valid data by being tested and the

comparison of the average variance value (AVE) with the squared value of average variance (AVE).

Table 2. Result of the dicriminant validity analysis

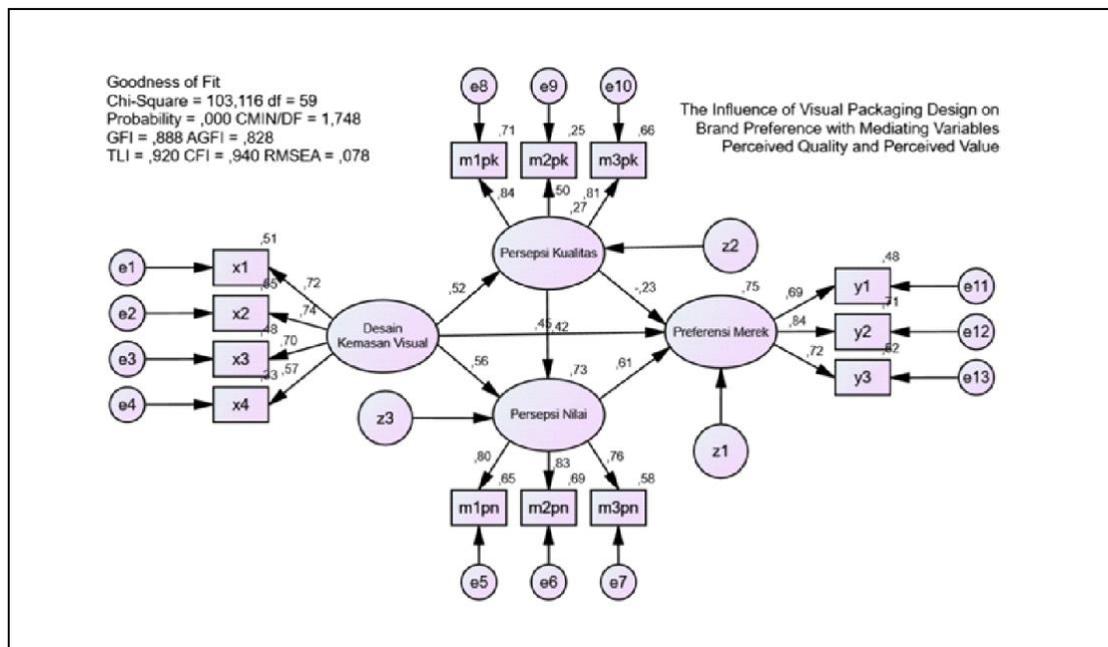| Variable	DKV	PK	PN	PM
DKV	0,667			
PK	0,270	0,813		
PN	0,601	0,500	0,734	
PM	0,646	0,194	0,640	0,727

4.2 Compatibility Test and Statistics Test

Figure 1. Conceptual framework and research result

Figure 1.1 shows that chi-square value = 103,116 from df=59 is 1,748. Besides, GFI value (0,888), CFI (0,94), TLI (0,92), AGFI (0,828), and RMSEA (0,78) that close to recommended value in the literature. Therefore, it can be concluded that the model in this study is said to be marginal fit.

Figure 1.1 served proposed hypothesis test and hypothesis coefficient. Visual packaging design has a significant and positive relationship with brand preference (g 0,45, p 0,010); perceived quality (g 0,52, p ***) and perceived value (g 0,56, p ***), support H1, H2, and H3. Afterwards, perceived quality does not show any significant relationship toward brand preference (g -,23, p ,092), that reject H4. Then, perceived value has a significant and positive relationship with brand preference (g 0,61, p 0,005), which support H5. And H6 shows that perceived quality has a significant and positive relationship with perceived value. This is in line with positive and significant path (g 0,42, p ***), shows support towards H6.

4.3 The Moderation Effect of Pentagon Tourism Identity

Causality test is indirectly conducted with SPSS 26 software and Sobel Test.

Table 3. Result of Indirect effect of Hypothesis 7

Causality between variables (inderect effect)	Z-count	Z-table	Explanation
Visual packaging design --> Perceived quality --> Brand preference	1,435	1,96	H7, ditolak

According to Z-count = 1,435 < 1,96 (significance level 0,05). Therefore, it is possible to conclude that perceived quality is not mediating between visual packaging design towards brand preference, which is rejecting H7.

Table 4. Result of Indirect effect oh Hypothesis 8

Causality between variables (indirect effect)	Z-count	Z-table	Explanation
Visual packaging design --> Perceived value --> Brand preference	4, 319	1,96	H8, diterima

Then H8 mentioned that perceived value is mediating visual packaging design to brand preferences. Following the result from Z-count = 4,319 < 1,96 (significance level 0,05), which means H8 is accepted.

Table 5. Result of Inderect effect of Hypothesis 9

Causality between variables (inderect effect)	Z-count	Z-table	Explanation
Perceived quality --> Perceived value --> Brand preference	5,597	1,96	H9, diterima

5. Discussion

The finding shows visual packaging design is affecting brand preferences positively and significantly, in line with the research by Silayoi & Speece (2004) and Yamoah (2005). Afterwards, visual packaging design has significant impact to perceived value and perceived quality. Perceived quality is affecting brand preferences significantly and positively. This promote the research conducted by Wang (2013). Other than that, perceived quality has positive and significant impact to perceived value. The statistics result also showed that there is indirect relation between visual packaging design and brand preference. Previous study conducted by Febriani & Tjokosaputro (2019) mentioned that packaging design is not significantly affecting brand preference. In this study, found that mediating variable in line with research conducted by Steenkamp (1986) which state that perceived value is mediating the correlation between product design attribute towards brand preference.

The study failed to support the correlation of perceived quality has positive and significant impact towards brand preference, which means contradictive with the previous study. This result is in line with the research conducted by Ayu (2009) which stated that perceived quality did not significantly affect brand preference. This is because consumers prioritize product design, features, and price in their tendency to choose products. in addition, it is possible that consumers are not completely convinced of the reliability of a product quality. Perceived quallty in this study assumes that the product dsoes not have a good quality due to the negative issue in the product. But, consumers still choose this product over other products. This indicates that negative issue of the product affects with consumer's perception of quality but does not reduce their product preferences. However this study found that perceived value is mediating the correlation between perceived quality to brand

preference. Other than that, this study emphasized the failure to support the correlation of perceived quality is mediating visual packaging design to brand preference. Perceived quality has significant and positive impact to brand preference only through perceived value.

6. Conclusion

The result indicate that visual packaging design has a significant and positive relationship with brand preference; perceived quality; and perceived value. Then, perceived quality in turn has a significant and positive relationship with perceived value. Perceived value successfully mediating visual packaging design in brand preference, and the mediation effect has significant effect. Besides, perceived value successfully mediating perceived quality in brand preference, and the mediation effect has significant effect. However, perceived quality does not show any significant relationship toward brand preference. Furthermore, perceived quality not successfully mediating visual packaging design in brand preference, and the mediation effect has no effect. Therefore, visual packaging design is an important forecaster in evaluating consumers behaviour towards product and brand particularly on low involvement product as chocolate.

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