

Effect of Packaging on Perceived Quality and Brand Loyalty: The Mediating Role of Brand Association in Over-the-Counter Market

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Abstract

Distinctive packaging design and strong brand association are essential elements to increase brand quality and customer loyalty which can insulate a company against competitive actions in a retail environment. However, there is a relative scarcity of studies on the impact of packaging on brand quality and loyalty through the mediating effect of brand association in the over-the-counter health market. Against this background, the current study aimed to investigate the packaging's effect on brand quality and loyalty through the intervening effect of brand association in the over-the-counter health market. Using a systematic sampling technique, survey questionnaires were distributed to 348 customers shopping in the over-the-counter market. The data gathered were statistically analysed using structural equation modelling via SPSS Amos 20. The research revealed that brand association partially mediates the path between packaging and brand quality but fully mediates the packaging's effect on brand loyalty in the over-the-counter health market. The study also found that brand quality plays a partial role in the impact of brand association on loyalty in the over-the-counter health market. The study, therefore, established that the interplay of product packaging and brand association are crucial elements for enhancing the brand quality and the customers' loyalty in the over-the-counter health market. Besides, the research confirmed that enhanced association and quality are pre-requisite for developing and enriching loyalty in the over-the-counter health market.

Keywords

Packaging, Brand Association, Brand Quality, Brand Loyalty, Herbal Medicine

1. Introduction

The use of over-the-counter (OTC) medicines has gained popularity over the world due to their immense contributions to health care delivery, particularly in remote communities where health care facilities are non-existent. The over-the-counter health care system offers several treatment options and quick access to medicines to fight minor sicknesses (DeLorme, Hu, Reid, & Ann, 2010). Herbal medicines sold in Ghana at retail pharmacies, OTC medicine stores and herbal shops are often considered as non-prescription medications (WHO, 2011; WHO, 2005). Herbal medicines are “processed plant materials or raw plant materials and herbal medicinal products with therapeutic or human benefits derived from one or more plants” (WHO, 1998: p. 6). In the OTC health market, the medicinal products dispensed have less risk profile (Calamusa et al., 2012) and as a result, patients are allowed to buy them with little or no directions by a physician. Consequently, the medicinal product packaging is a key source of information that patients can refer to for safe and effectual use of the medicines (WHO, 2002). Berman (2004) pointed out that about one-third of medicinal errors are attributed to ineffective packaging design, whilst one-fourth are linked to poor drug naming, which creates potential treatment failures. Effective medicinal product packaging is, therefore, a mandatory requirement in the drug industry (Ghana Food & Drugs Authority, 2013).

According to UNDP (2007), more than half of Ghanaians depend on herbal medicines to treat and manage their ailments. This might have led to the proliferation of herbal medicinal products in the OTC health market in the last few years. As result, there is keen competition in the OTC health market resulting in low-profit margins. It has been emphasized that distinctive packaging design does not only differentiate one brand from another (Keller, 2013) but also increases the perceived quality (Wang, 2013), brand association (Oppong & Phiri, 2018) and customer loyalty (Dhurup, Mafini, & Dumasi, 2014), which can ensure the herbal medicinal products’ success in a competitive retail environment.

The potential role of packaging in strengthening perceived quality (e.g., Underwood & Klein, 2002; Wang, 2013), brand association (e.g., Underwood, 2003; Oppong & Phiri, 2018) and customer loyalty (e.g., Dhurup et al., 2014; Oppong & Phiri, 2018) has been extensively studied of late. Again, a recent research conducted by Oppong, Yeboah and Gyawu (2020), examined the intervening role of brand association in the impact of brand awareness and perceived quality on loyalty. However, there is little or no research on the impact of packaging on perceived quality and loyalty through the brand association’s mediational effect. Against this background, the current research aimed to investigate the packaging’s effect on perceived quality and brand loyalty through the brand association’s mediational role in the OTC health market in Ghana.

This research, therefore, advances the existing brand literature by bringing to fore the importance of brand association’s mediational role in the packaging’s effect on brand quality and loyalty, particularly in the OTC market. The study

also adds to the prior brand theory by highlighting the brand quality's mediational effect in the path between brand association and loyalty in the OTC health market. Again, the study serves as a point of reference to motivate herbal practitioners to exploit packaging and brand association to increase the brand quality and customers' loyalty in the OTC market. Besides, the research extends the herbal practitioners' knowledge in building brand association and herbal medicinal brands' quality to enhance customers' loyalty in the OTC market. Enhanced perceived quality and a large customer loyalty base can sustain herbal medicine firms in the stiff competitive OTC market in Ghana.

The rest of the paper provides the literature review, conceptual framework and hypotheses, the research methodology, and the data analysis and results. The paper then ends with a discussion, implications of the findings, conclusion, limitation and direction for future research.

2. Theoretical Review

2.1. Customer-Based Brand Equity

A brand with powerful equity is recognized as one of the invaluable and strategic assets of a company because it creates a long-term cash flow. Brand equity is described as the extra value a product accrues due to the company's prior efforts in marketing the brand (Keller, 1993). Keller (2013) reported that positive brand equity conveys numerous advantages to a firm, such as increased perception of brand performance, promotion effectiveness, large margins, less vulnerability to marketing crisis and competitive actions, and more inelastic to price increases.

The concept of brand equity has been studied in three different ways, including financial-based, customer-based, and employer-based perspectives. According to Keller (1993: p. 1), customer-based brand equity (CBBE) measures "the differential effect that the brand knowledge has on consumer response to the marketing of that brand". A brand, therefore, has positive or negative CBBE when it commands more or less favourable reactions from the customers to a product and how it is marketed compared to the product's fictitious version. The underlying notion of the CBBE is that the power of a brand lies in the strength of the brand knowledge in the customers' memory, resulting from previous experiences with the brand. The source of CBBE is, therefore, the customers' brand knowledge, consisting of brand awareness and brand image. Thus, CBBE is created when customers have strong brand awareness and hold some strong, favourable and unique brand associations in memory.

Alternatively, Aaker (1991) explained that brand equity consists of assets and liabilities linked to a brand name or symbol that increase or reduce the product's value to a company and its clients. These brand assets include brand name awareness, brand loyalty, brand association, perceived quality and other proprietary brand assets like patents, trademarks, etc. The author established that brand loyalty, brand awareness, brand association and perceived quality are the key sources of CBBE. A review of the literature shows that Aaker's CBBE model

has been extensively used in many different contexts, and hence, this paper adopted this model.

2.2. Brand Loyalty

Brand loyalty measures customers’ positive attitude toward a particular brand (Pride & Ferrell, 2015). Oliver (2015: p. 432) also defined loyalty as “a deeply held commitment to rebuy or re-patronise a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour”. Chaudhuri and Holbrook (2001) suggested that brand loyalty consists of attitudes and behaviours. Behavioural loyalty indicates consumers’ re-patronage of a brand, whereas attitudinal loyalty describes a customer’s commitment to a brand. Oliver (2015), however, distinguished four types of loyalty based on their increasing scope; cognitive, affective, conative and action loyalty. Cognitive loyalty is directed towards the brand’s performance features, affective loyalty focuses on the brand’s likeableness, conative loyalty expresses the consumer’s socially committed intention to repurchase the brand, and action loyalty denotes a commitment to the action of re-buying. A large customer loyalty base creates an opportunity to gain large market share, word-of-mouth referrals, a barrier to competitors’ entry and action, and higher profitability (Chaudhuri & Holbrook, 2001; Aaker, 1996).

2.3. Conceptual Framework

The conceptual model delineates the main variables used and their proposed relationships in the research (Miles & Huberman, 1994). In the current research, packaging is a predictor variable, the brand association is an intervening variable, whilst perceived quality and brand loyalty are outcome variables. Again, brand association is an independent variable, perceived quality is an intervening variable and loyalty is an outcome variable. The conceptual framework depicted in Figure 1 shows that packaging has a direct influence on the association, perceived quality and brand loyalty. Moreover, brand association positively affects perceived quality and loyalty, whilst perceived quality also has a direct effect on brand loyalty.

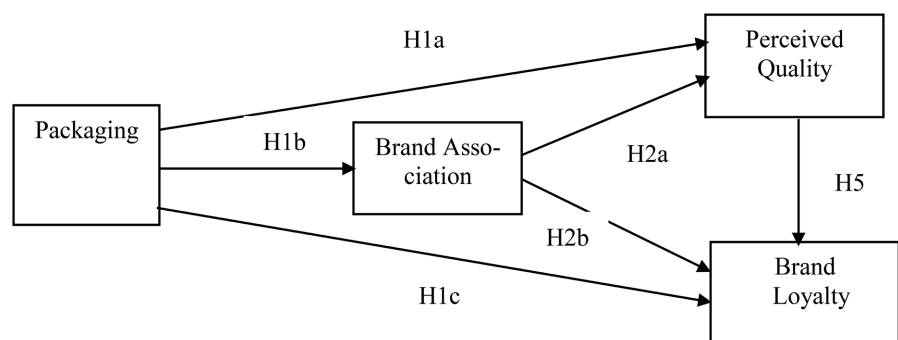


Figure 1. Conceptual model.

In the present study, the packaging is described as producing a container and a graphic design for a product (Pride & Ferrell, 2015). Likewise, the brand association also indicates anything that is connected to the brand by consumers which include perceived value, brand personality and organizational characteristics (Aaker, 1991). Perceived quality is operationalized as the judgement about the excellence or superiority of a product (Zeithaml, 1988), whilst brand loyalty is customers' favourable attitudes and behavioural disposition towards a particular brand.

2.4. Research Hypotheses

Guided by the study's conceptual framework and literature, the proposed hypotheses are explained below.

2.4.1. Packaging

Product packaging plays a vital role in consumer buying behaviour because it is buyers' first exposure to the product and creates lasting impressions during the time of purchase and consumption. Packaging is defined as designing and producing the container for a product (Kotler & Keller, 2016). Similarly, Pride and Ferrell (2015: p. 282) also described "packaging as the development of a container and a graphic design for a product". Product packaging is usually made up of three layers namely, primary, secondary and tertiary packaging. The primary package is in direct contact with the product and the secondary package protects the product in the primary package and may be disposed of once the product is being used up. The tertiary package surrounds the earlier types of packages and facilitates the distribution, unification and protects the product in the entire supply chain (Simms & Trott, 2010; Ampuero & Vila, 2006). Zeithaml (1988) noted that packaging is both an intrinsic and extrinsic feature of a product. The intrinsic attribute is an integral part of the ingredients of the product, whilst the extrinsic relates to the product information attached to the package. Underwood (2003) also positioned packaging as an intrinsic attribute, an element of the product that is often essential in building and transmitting the brand's identity to consumers. Keller (1993), however, contended that a product package is one of the attributes of a brand and is not part of the core ingredients for a product to function, but rather facilitates the purchase and consumption process.

Kotler and Armstrong (2012) emphasized that the basic function of packaging in the past was to hold and protect the product in the distribution chain. However, increased competition in the retail and self-service environment have changed the role of packaging to perform an important marketing tool by seizing consumers' attention, describing the product's features and creating consumer confidence and making sales (Kotler & Armstrong, 2012; Kotler & Keller, 2016). Simms and Trott (2010) asserted that well-designed packaging influences consumers' buying decisions at the point of sale and can reinforce the product's success, particularly in the fast-moving consumer goods industry.

Underwood (2003) also noted that the visual and structural qualities of packaging such as colours, fonts, brand logo, packaging materials, shapes, product information and other elements communicate the brand's personality, creating a unique brand association. Moreover, visual, verbal and tactile attributes of packaging provide a cue of product performance, quality, usage situations, and evoke past experiences in the consumer's memory (Garber, Burke, & Morgan, 2000). WHO (2002) also pointed out that the quality of medicinal products is largely inferred from their packaging. Consequently, a product's packaging is a key determinant of its quality (Silayoi & Speece, 2007). Hess et al. (2014) highlighted that packaging can enhance consumer satisfaction which underlies greater loyalty and profitability. Prior studies also indicate that packaging positively influences perceived product quality (Underwood & Klein, 2002; Wang, 2013), brand association (Underwood, 2003; Oppong & Phiri, 2018) and brand loyalty (Dhurup et al., 2014; Oppong & Phiri, 2018). Hence, the following propositions are posited:

H1a: There will be a significant and direct relationship between packaging and perceived quality.

H1b: There will be a significant and direct relationship between packaging and brand association.

H1c: There will be a significant and direct relationship between packaging and brand loyalty.

2.4.2. Brand Association

Brand associations relate to anything that the consumer mentally attached to the brand (Aaker, 1991). Aaker (1996) is of the view that brand association includes perceived value, brand personality and organizational associations. Zeithaml (1988) explained perceived value as the subjective evaluation of the utility of the product based on what is received and given out. Brand personality refers to a set of human traits linked to the brand, and it tends to reflect the emotions and feelings evoked by the brand (Keller, 1993). Finally, the organizational association relates to the organisational aspects (people, values, and programs) that are associated with the brand.

Aaker (1991) stated that brand associations can position, distinguish and extend the brand name to other brands. Furthermore, consumers depend on brand associations to retrieve, organise and process the product information in their minds before deciding to buy a product. Past studies show that brand association has a direct impact on loyalty (Oppong, Yeboah, & Gyawu, 2020; Azadi, Esfahani, & Mohammadpoori, 2015) and perceived quality (Listiana, 2015; Falahat, Chuan, & Kai, 2018). In turn, the brand association is positively influenced by packaging (Underwood & Klein, 2002; Oppong & Phiri, 2018). Consequently, the following propositions are posited:

H2a: There will be a significant and direct relationship between brand association and perceived quality.

H2b: There will be a significant and direct relationship between brand association and brand loyalty.

H3: Brand association mediates the relationship between packaging and perceived quality.

H4: Brand association mediates the relationship between packaging and brand loyalty.

2.4.3. Perceived Quality

Zeithaml (1988) defined perceived quality as the consumer's subjective assessment of excellence or superiority of a product. Aaker (1991) highlighted that perceived quality differs from actual product quality where the latter relates to the extent to which a product or service provides superior service. Zeithaml (1988) further distinguished between product-based quality and manufacturing-based quality. In the author's view, product-based quality indicates the nature and quantity of ingredients that make up a product, whereas manufacturing-based quality relates to conformance to production or service requirements. Aaker (1991) suggested that customers consider the quality of a product based on its performance, features, reliability, conformance, durability, serviceability, fit and finish. It has been emphasised that high perceptions of brand quality can drive consumers to select the brand rather than its competing brands (Yoo, Donthu, & Lee, 2000). Aaker (1992) highlighted that high perceived quality can be a basis of differentiation, purchase decision, line extensions, and willingness to pay a price premium and overall, contributing to a firm's profit margin. Empirical studies also revealed that high perceived brand quality has a significant and positive relationship with loyalty (Alhaddad, 2015; Oppong et al., 2020), and is positively affected by brand associations (Listiana, 2015; Falahat et al., 2018). As a result, the following propositions are posited:

H5: There will be a significant and direct relationship between perceived quality and brand loyalty.

H6: Perceived quality mediates the relationship between brand association and brand loyalty.

3. Research Methodology

The methodology employed to evaluate the proposed hypotheses is explained below.

3.1. Research Population and Sampling

The targeted product for the study was locally-made herbal medicines sold as non-prescription medicines. These herbal medicines have been licensed and certified by the Ghana Food and Drugs Authority, the body which regulates the production and sale of herbal medicines in the country. Moreover, licensed herbal shops were included in the study rather than the retail pharmacies and OTC medicine stores because the herbal shops have been mandated to sell only herbal

medicinal products, making it easy to recruit the research participants. The research had a population of 3710 customers who make daily purchases of herbal medicinal products from 80 licensed herbal shops in the Central Business District in Kumasi. The number of herbal shops operating in the Central Business District was obtained from the 2020 data of the Kumasi Traditional Medicine Practice Council which has been given the power to register the herbal shops in the metropolis. A sample of 348 customers was obtained by using Krejcie and Morgan's (1970) model of sample size formula.

$$s = \frac{X^2 NP(1 - P)}{d^2(N - 1) + X^2 P(1 - P)}$$

s = required sample size.

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d^2 = the degree of accuracy expressed as a proportion (.05).

Given the study's population = 3710.

$$s = 3.841 \times 3710 \times .50(1 - .50) \div .05^2(3710 - 1) + 3.841 \times .50(1 - .50)$$

$$s = 3562.5275 \div 10.23275$$

Sample size = 348.

3.2. Scale Items Development and Administration

Multiple scale items with five-point responses anchored on strongly disagreed (1) to strongly agree (5) were employed to measure the perceptions of customers' loyalty, association, quality and packaging of herbal medicinal products. The scale items were developed from previous studies. As a result, the scale items for measuring perceived quality were adapted from Gil, Andres and Martinez (2007) and Yoo et al. (2000), and those of brand associations were from Aaker (1996) and Tong and Hawley (2009). Likewise, the scale items for brand loyalty were obtained from Tong and Hawley (2009) and Yoo et al. (2000) and those of packaging were developed by the researchers.

The questionnaires were self-administered to the customers while shopping via a systematic sampling method. Thus, the first customer was randomly picked and afterwards, one of every eleventh customer was invited to participate in the survey. A systematic sampling strategy was employed as it made it possible to reach the respondents without prior information about them in the sample frame (Malhotra & Birks, 2007). Although 316 questionnaires were distributed, 307 were used for the analysis because of poor responses.

4. Data Analysis and Results

The analytical tool employed to examine the research hypotheses was structural equation modelling (SEM) via SPSS Amos 20.

4.1. Sample Characteristics

The sample characteristics show that a total of (208) 68.4 percent were male, whilst (96) 31.6 percent were female. More so, (124) 40.7 per cent were between the age of 18 and 25 years, (120) 39.2 per cent had completed Senior high school and (110) 36.7 per cent were traders. These results indicate that a large proportion of the samples were young, petty traders and hold secondary education.

Descriptive Statistics

The main purpose of the research was to evaluate the intervening role of brand association in the impact of packaging on perceived quality and brand loyalty in the OTC herbal market. **Table 1** provides the descriptive statistics of how the customers assess the packaging, brand association, quality and loyalty based on their perceptions and experience. Overall, the customers' perceptions are satisfactory. The packaging has the highest mean value, followed by perceived quality and brand association and the least is brand loyalty.

Table 1. Summary results of study' variables descriptive statistics.

Variables	N	Minimum	Maximum	Mean	Standard Deviation
Packaging	307	1	5.00	3.758	.762
Perceived Quality	307	1	5.00	3.691	.886
Brand Association	307	1	5.00	3.691	.785
Brand Loyalty	307	1	5.00	3.670	.872

4.2. Structural Equation Modelling

The SEM was adopted to evaluate the hypotheses formulated in the research due to its capability of examining the individual multiple equations simultaneously, providing the overall fit of the model and a window for the model's modification (Hair et al., 2010; Byrne, 2016). Following Anderson and Gerbing (1988) procedure for conducting SEM, the confirmatory factor analysis (CFA) was performed before the path analysis.

4.3. Confirmatory Factor Analysis

The CFA was conducted to determine whether the scale items load on their respective variables and to assess construct reliability and validity. Twenty (20) scale items were subjected to the CFA.

To enhance the convergent validity, standardised loadings below .50 were eliminated from the analysis (Hair et al., 2010), and hence, 11 scale items were retained. The results in **Table 2** show that the standardised loadings of all the constructs were statistically significant at $p < .001$, and varied from .564 to .878. Furthermore, the model fit indices were quite good except for the Chi-square statistic (CMIN = 110.135, DF = 38, $p < .001$) due to its biasedness toward sample size. The Normed Chi-Square statistic (CMIN/DF) = 2.898; Goodness-of-Fit Index (GFI) = .939; Root Mean Residual (RMR) = .051; Standardised Root Mean Residual (SRMR) = .045; Root Mean Square Error of

Table 2. Summary results of confirmatory factor analysis.

Construct and Scale Items		N	M	SD	Standardised Loadings	t-value
Packaging						
PA2	The packaging preserves the contents of X	307	3.596	.855	.564	— a
PA4	The packaging of X makes X environmentally-friendly	307	3.876	1.075	.712	8.606
PA5	The packaging of X makes X convenient to use	307	3.997	.992	.848	8.760
Brand Loyalty						
BL5	I will keep on buying X as long as I am satisfied with the packaging of X	307	3.896	1.101	.790	— a
BL4	The packaging of X makes me loyal to X	307	3.700	1.121	.757	12.867
BL2	The packaging of X would make me recommend X to my friends	307	3.652	1.009	.745	12.669
Perceived Quality						
PQ1	The packaging of X makes X function well	307	3.336	1.127	.878	— a
PQ2	The packaging of X makes X very reliable	307	3.570	1.037	.823	15.799
PQ4	I can always trust this X's packaging for quality if I want a brand of high quality	307	3.893	1.134	.599	10.859
Brand Association						
BAS2	This X's packaging makes me like the image of X	307	3.678	.948	.711	— a
BAS1	This X's packaging makes X offer good value for money	307	3.430	1.044	.732	8.909

Notes: N = No. of observations; M = Mean; SD = Standard deviation; X = Focal brand; a = path parameter was set to 1, therefore t-values were not estimated; all regression weights are significant at $p = .001$.

Approximation (RMSEA) = .079; Comparative Fit Index (CFI) = .947; Tucker-Lewis Index (TLI) = .924; Incremental Fit Index (IFI) = .948; Normed Fit Index (NFI) = .923, show a good model fit (Hu & Bentler, 1999; Kline, 2005; Hair et al., 2010).

4.4. Psychometric Properties

The psychometric properties investigated in this paper were internal consistency reliability and construct validity, which is determined by convergent and discriminant validity. **Table 3** presents the outcomes of the psychometric properties which indicate that all the variables have satisfactory validity and internal consistency reliability.

The scale items' internal consistency reliability was all satisfactory, ranging

Table 3. Summary results of psychometric properties.

Latent Variables	α	CR	AVEs	PA	BL	PQ	BAS
Packaging (PA)	.832	.756	.515	.718*			
Brand Loyalty (BL)	.873	.808	.584	.305	.764*		
Perceived Quality (PQ)	.861	.816	.603	.253	.576	.777*	
Brand Association (BAS)	.811	.685	.521	.240	.477	.426	.722*

Notes: * = Square root of AVEs; off-diagonal estimates measure the squared inter-construct correlations.

between .811 to .873 (Hair et al., 2010). Not only this but also, the findings of the composite reliability analysis show that all the values are within the required threshold of .70, supporting construct reliability (Fornell & Larcker, 1981; Bagozzi & Yi, 1988). The scores of Average Variance Extracted (AVEs) fall within the acceptable threshold of .50, supporting convergent validity (Fornell & Larcker, 1981). Again, the square roots of the AVEs of the variables exceed the squared correlations between one variable and another, suggesting discriminant validity (Bagozzi & Yi, 1988; Hair et al., 2010). These findings suggest that the variables are reliable and valid for the path analysis.

4.5. Hypotheses Testing

The hypotheses were examined through path analysis. As stated previously, the packaging is a predictor variable, the brand association is a mediating variable, whilst perceived quality and brand loyalty are outcome variables. Moreover, the brand association is considered an independent variable, perceived quality is a mediating variable and brand loyalty is a dependent variable.

Again, the Chi-square test (CMIN = 110.135, DF = 38, $p = .000$) did not validate the path model. However, CMIN/DF = 2.898; GFI = .939; RMR = .051; NFI = .923; TLI = .924; IFI = .948; CFI = .947; RMSEA = .079, supported the model.

The results of the path analysis in Table 4 show that packaging is significant and positively related to perceived quality, brand association and brand loyalty at a $p < .05$ level, supporting H1a, H1b and H1c respectively. Furthermore, brand association has a significant and direct effect on perceived quality and brand loyalty at a $p < .05$, confirming H2a and H2b respectively. Lastly, perceived quality has a significant and positive effect on brand loyalty at $p < .05$ level, supporting H5.

Table 4. Summary findings of path analysis.

Hypotheses	Structural Relations	Standardised Estimate	t-values	p-values
H1a	Perceived Quality <--- Packaging	.240	3.102	.002
H1b	Brand Association <--- Packaging	.490	5.467	.000
H1c	Brand Loyalty <--- Packaging	.164	2.401	.016
H2a	Perceived Quality <--- Brand Association	.536	5.944	.000
H2b	Brand Loyalty <--- Brand Association	.295	3.141	.002
H5	Brand Loyalty <--- Perceived Quality	.483	5.605	.000

4.6. Mediation Testing

The paper was also set out to examine the mediating role of the brand association in the impact of packaging on perceived quality (*H3*), and loyalty (*H4*). More so, the paper sought to identify the mediational role of perceived quality in the path between brand association and loyalty (*H6*).

Baron and Kenny's (1986) model for testing mediation was followed to analyse the mediational relationships posited in the current study. This involves; 1) regressing the mediating variable on the predictor variable; 2) the outcome variable on the predictor variable; and 3) the outcome variable on both the predictor variable and the mediating variable. Hence, the mediational relationships were tested using a bootstrap re-sampling technique of 2000 samples and a bias-corrected confidence level of 95% through SPSS Amos 20.

The findings of the data analysis in **Table 5** show that the direct effect of packaging on perceived quality is significant at $p < .05$ level. Again, the findings reveal that the indirect effect of packaging on perceived quality is significant at $p < .05$. These outcomes suggest that association partially mediates the relationship between packaging and perceived quality. Besides, the findings of the analysis indicate that the direct effect of packaging on brand loyalty is not statistically significant at $p < .05$. However, the indirect effect of packaging on loyalty is significant at $p < .05$ level. These outcomes demonstrate that association fully mediates that the relationship between packaging and loyalty.

Furthermore, the results of the analysis reveal that the direct effect of brand association on loyalty is significant at $p < .05$. The results also show that the indirect effect of brand association on loyalty is significant at $p < .05$. These outcomes show that perceived quality partially mediates the path between association and loyalty.

Table 5. Summary results of mediation model.

Hypotheses	Structural Relations	Direct without Mediator	Direct with Mediator	Indirect Effect
H3	Quality <-- Association <--- Packaging	.240 (.030)**	.490 (.001)**	.262 (.000)**
H4	Loyalty <-- Association <--- Packaging	.164 (.099)*	.490 (.001)**	.387 (.001)**
H6	Loyalty <-- Quality <-- Association	.295 (.009)**	.536 (.001)**	.259 (.000)**

Notes: * = Not statistically significant; ** = Statistically significant.

5. Discussions and Implications

The paper was set out to investigate the mediating role of the brand association in the impact of packaging on perceived quality and loyalty in the OTC market in Ghana. The study found that innovative packaging design positively affects consumers' perceptions of medicinal herbal product quality in the OTC market. This outcome is consistent with previous studies (Underwood & Klein, 2002; Wang, 2013), which suggested that well-designed packaging positively influences the perceived product quality in the market. Thus, herbal medicine customers

judge the quality of the product on how well the packages have been designed in the OTC market. Consequently, the brand managers can increase customers' perceptions of quality by designing consumer-driven packages to provide convenience, preserves the content product and the ecology in the OTC market. More so, consistent with the prior studies (Underwood, 2003; Oppong & Phiri, 2018), the study revealed that packaging contributes to strengthening the brand association in the OTC market. This implies that a well-designed product packaging potentially enhances medicinal herbal products' image because it provides the customers' value for money for their purchases. In this regard, an effort by the brand managers to design and harness innovative packaging will enrich the products' image in the market. Again, the study established that packaging significantly contributes to increasing customers' loyalty in the OTC health market. This outcome concurs with past studies (Dhurup et al., 2014; Oppong & Phiri, 2018), which pointed out that packaging exerts a greater influence on loyalty. Greater satisfaction with a product packaging is a key indicator of customer loyalty, engendering word-of-mouth referral and repurchase intentions. Therefore, developing distinctive product packaging to delight the customers will strengthen their loyalty to herbal medicinal brands in the OTC health market.

Again, consistent with the findings of earlier authors (Listiana, 2015; Falahat et al., 2018), the study revealed that brand association has a direct impact on perceived herbal medicinal brand quality in the OTC market. This suggests that product brands with a favourable image are perceived to be reliable and of high performance. Hence, developing a brand with a positive image will increase its perceived quality, which may be a basis for differentiating the brand from its competitors in a highly competitive OTC health market. Furthermore, brand association was found to have a positive influence on loyalty in the market. This outcome concurs with earlier studies (Oppong et al., 2020; Azadi et al., 2015), which established that favourable brand association positively affects customer loyalty in the market. This implies that a product brand with a distinctive image reinforces customers' loyalty, manifesting in favourable word-of-mouth recommendation and re-patronage of the brands. Realising the immense role of loyalty in a cluttered retail environment, brand managers need to build a strong image of their brands to strengthen customers' loyalty in the market. The study's results also show that perceived quality has a significant and direct effect on loyalty in the OTC health market. This result is similar to the previous studies (Alhaddad, 2015; Oppong et al., 2020), which suggest that perceived quality exerts a strong impact on loyalty. Thus, customers develop loyalty for brands perceived to be more reliable and of greater performance than their counterparts in the market. Consequently, brand managers can increase the customer loyalty base by enhancing the perceived herbal medicinal product quality in the industry.

Again, the results of the analysis demonstrate that brand association fully mediates the impact of packaging and loyalty, but partially on perceived medicinal herbal product quality in the OTC market. This indicates that brand association

fully contributed to the impact of packaging on loyalty, but partly on the perceived herbal product quality. This demonstrates that brand association plays a critical role in designing packaging to strengthen customers' loyalty and perceived herbal medicinal product quality in the OTC market. Thus, brand managers need to consider brand association in their strategic packaging decisions with the view to building favourable perceived quality and greater loyalty in the OTC health market. Finally, the results of the data analysis show that perceived quality perfectly mediates the impact of brand association and loyalty in the OTC health industry. This implies that perceived quality plays an essential role in developing brand association to create a large loyal customer base in the OTC market. Hence, brand managers should enhance perceived quality to fully benefit from exploiting brand association to reinforce customers' loyalty in the OTC industry.

6. Conclusion

The purpose of this paper was to identify the mediational role of the brand association in the impact of packaging on perceived quality and loyalty in the OTC health industry. The paper also sought to ascertain the intervening role of perceived quality in the relationship between brand association and loyalty. The research found that packaging exerts a greater influence on perceived quality, brand association and loyalty, and in turn, brand association positively influences the perceived quality and loyalty. More so, the study's results show that brand association perfectly mediates the impact of packaging on loyalty, and partially, on perceived product quality in the OTC health market. Finally, the results indicate that perceived quality partially mediates the path between brand association and loyalty in the OTC health market. The research, therefore, confirmed that the interplay of packaging and brand association is essential to establish high perceived quality and a large customer loyalty base in the OTC health industry. Not only this but also, the interaction between brand association and perceived quality is critical to reinforcing customers' loyalty in the OTC health industry.

7. Limitations and Direction for Future Research

There are some limitations of this paper that need to be redressed in a similar future to enrich the generalisation of its findings. Herbal medicines retailed in the in-store market were selected. Future research should consider those that are sold online to generate a holistic view of the brand's credibility, image, trust, value and customers' repurchase intentions of herbal medicines in the OTC herbal market in Ghana. Moreover, herbal medicines encompass herbal herbs, herbal materials, herbal preparations and finished herbal products. The current paper considered only the finished packaged herbal products sold at the OTC herbal market. Future studies should investigate all aspects of herbal medicines sold at the OTC market. Furthermore, the current research examined customers' per-

ceptions of packaging, brand association, quality and loyalty in Ghana. Future research should consider collecting data from other parts of the country to enhance the generalisation of this study.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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