

The Mediating Effect of Individual Characteristics and Culture on Packaging and Consumer Purchase Decision. Evidence from Consumers of Cosmetics, Ghana

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Abstract

While it has been established that packaging influence purchase decision, the mediating effect of individual characteristics and culture on this relationship is uncertain. This study examines the mediating effect of individual characteristics and culture on packaging and consumer purchase decision for cosmetic products in Kumasi, Ghana. The study was quantitative and survey questionnaire was the main research instrument. A sample of 876 consumers was randomly selected while Structural Equation Model-Partial Least Square (SEM-PLS) was the statistical tool employed for the analysis. The result of the study indicated that both individual characteristics and culture play a significant mediating role in the packaging and consumer purchase decision relationship. The study concludes that for both local and multinationals brands to generate the desired positive response from the target customers, culture and individual characteristics of the people should be recognised and incorporated into their packaging designs accordingly. It is recommended that organisations in Ghana and multinationals as well, should factor gender, age, and education status of consumers as well as the religion, language, and colours of dominating political parties into their packaging campaigns if they are to stimulate consumers toward a purchase decision. The academic and managerial implications of these findings are discussed.

Keywords: Packaging, Culture, Individual characteristics, SEM-PLS, Consumer Purchase Decision, Ghana.

1. Introduction

Due to the competitive, vibrant, and turbulent nature of today's business environment, achieving sustainable competitive advantage requires that firms employ lucrative promotional strategies in order to persuade consumers to buy their desired products and services in relation to competing brands. Ranjbarian (1999) noted that one of the methods that companies employ is fashionable and innovative packaging with high-quality. According to Nilsson and Tobias (2005), no single factor is as important at the point of sale as the package itself. Accordingly, packaging has been acknowledged as a powerful communication tool for creating brand character and promoting quality image (Lu, 2008), attracting the attention of consumers (Garber et al., 2000), replacing the salesperson in the role of selling the product to the customer (Saleemi, 2011), the best and the biggest promoters of a company products (Afrasiabi, 2010), and the tool for differentiation and attraction (Olawepo & Ibojo, 2015).

A point worth-noting, however, is that while most of the previous studies on packaging only considered the direct effect of packaging elements on consumer purchase decision, the literature accessed and analysed disclosed that the influence of packaging on consumers purchase decisions can be stronger or weaker depending on some mediating factors such as the consumer's involvement level, time pressure or individual characteristics, or culture of consumers (Butkeviciene et al., 2008; Grossman and Wisenblit 1999; Silayoi & Speece 2004). In view of this gap, Silayoi & Speece (2004) sought to study the moderating effects of time pressure and involvement; Sial et.al (2011) studied the mediating role of brand image on packaging and purchasing behaviour; and Rita, Aiste and Laura (2009), in a follow up to the previous study of (Silayoi & Speece (2004), introduced individual characteristics.

However, there is a scarcity of empirical research that took into account the impact of culture on these relationships for cosmetic products in developing countries, like Ghana. But as Banerjee (2008) postulated, globalization has come to stay with us, hence, culture and individual characteristics, too, have become necessary strategic issues in the market that have to be faced and properly managed. Indeed, we live in an era of fast changes in consumer taste and preference arising from individual difference and cultural background. It is this knowledge gap that the present study seeks to fill. Moreover, this study is different from previous studies in its methodological approach as it utilizes Structural Equation Model-Partial Least Square (SEM-PLS) in its analysis. Hence, the present study simultaneously examines the direct link between packaging and consumer purchase decision as well as the mediating role of individual characteristics and culture on this link. Structurally, the study has five sections. The introduction to the study, literature review, methodology, results, discussion of findings, and conclusions and recommendation.

2. Literature Review

2.1. *The Link between Packaging and Consumer Purchase Decision.*

Packaging has been defined variously in the literature. Rusta et al. (2006) described packaging as a container or package in which the product is marketed for sale or for which necessary information about the product is transmitted to consumers. Package involves designing and producing the container or wrapper for goods (Kotler & Armstrong, 2005). Not much different from the above definitions, Jahre and Johan (2004) noted that packaging is the technology and art of preparing a commodity for convenient transport, storage, and sale. The above definitions convey an idea that packaging is a wrapper or container designed for both functional and marketing purposes in terms smooth transport, protection, storage, and a communication tool for marketing and sale of products. The packaging of the products offers the company many advantages. Packaging has been recognised as a tool for communication (Butkeviciene et al., 2008; Gonzalez, Thornsby & Twede, 2007; Ampuero & Vila, 2007); attract customers' attention and encourage them to examine the product (Venter et al. 2010; Rita, Aiste & Laura, 2009); serves as a promotional tool particularly for convenient goods sold through self-service (Silayoi & Speece, 2004); and as brand positioning especially in this era of heavy competition (Estiri et al., 2010; Rita, Aiste & Laura, 2009).

The literature shows that the elements of packaging could be classified in different ways. According to Smith and Taylor (2004), there are six variables that have to be factored into consideration by producer and designers when deciding on the efficient package: form, size, colour, graphics, material, and flavour. Similarly, Kotler and Armstrong (2005) distinguishes six elements: size, form, material, colour, text, and brand. Since the classification by Smith and Taylor (2004) and Kotler and Armstrong (2005), current scholars have sought to group these elements into blocks. For instance, Ampuero and Vila (2007) and Underwood (2003) characterized two blocks of package elements: graphic elements (colour, typography, shapes used, and images) and structural elements (form, size of the containers, and materials). However, other scholars summarized them into visual and verbal elements (Rita, Aiste & Laura, 2009). In this case, the verbal element includes product information, producer, country-of-origin, and brand. Similarly, Silayoi and Speece (2004, 2007) distinguished the packaging elements into two categories: visual elements (graphics, colour, shape, and size) and informational elements (information provided and technology). Summarizing from the above classifications, the present study adapted the classification based on visual elements and verbal elements. Thus, the packaging elements for which the mediating role of individual characteristics and culture were tested are visual elements (colour, shape and size, graphics) and verbal elements (product information, country of origin, expiry date, and brand). These packaging elements are identified as the main aspect of packaging that has the potential to influence consumers' purchase decision.

Consumer purchase decisions are made at the point of purchase and may be influenced by what takes place there (Paul & James 2007). Consumer behaviour can be influenced by several factors. Experts of consumer behaviour classify these factors into three categories: social factors, situational factors, and marketing factors. According to Paul and Olson (2008 p.g 59), consumer shopping behaviour is defined as 'the dynamic interaction of affect and cognition, behaviour, and the environment, by which human beings conduct the exchange aspect of their lives. Research has shown that consumers go through a five-stage decision-making process when making a purchase decision. However, under routine purchase, the consumers may skip or reverse some of the steps. The stages are summarized below (Kotler and Armstrong (2005); the buying process starts with need recognition. At the need recognition stage, the consumer identifies his or her problem or need. Based on the recognised need or problem, the customer then needs to decide how much information is required. The information can be obtained from various sources (personal sources e.g. friends; commercial sources e.g. advertising, point of sale display; public sources e.g. newspapers, radio, television.). In such way, the task for the marketing team is to pinpoint which information sources are most influential in their target markets. In the evaluation stage, the customer must choose between the alternative brands, products, and services. These brands and products could be heightened by the packaging image of the product (Sial et al. 2011; Thornsby & Twede, 2007; and Ampuero & Vila, 2007). The consumer will then make the purchase decision upon his/her evaluation of alternatives. The post-purchase decision, the final stage, is where the consumer compares his/her experience with the expectation after consumption of the product.

Plenty of empirical studies has examined the role of packaging as a precursor of consumer purchase decision. Zand (2007) explored the impact of food packaging colour on the sale and concluded that packaging colouring is often effective in attracting customers to purchase. Hussain et al. (2015) discovered that packaging influence consumer perception and purchase intention. Deliya (2012) also found out in his studies that 67% of customers are impressed with the packaging while 32% of them are not affected. Karim, Mahdieh, and Rahmani (2013) concluded the existence of a significant relationship between factors of the package or dimensions (visual elements and informational elements) and the purchase behaviour. Similarly, Bed (2008) disclosed from his studies that information regarding the product such as ingredients, guidelines to use, price, produced and expiry date etc. are the major concern of the potential buyer. The present study argues that firms will increase their

brand awareness in the market when they introduce innovative packaging elements in their marketing campaigns. Thus, the author posits the following hypothesis:

H1: Packaging elements relate positively to consumer purchase decision.

2. 2 The Moderating roles of Individual Characteristics and Culture

2.2.1 The moderating effect of Individual Characteristics on the packaging-consumer purchase decision link

Customer individual characteristics are those factors particular to an individual (Kotler 2009 pg. 115). They involve customer's age, gender, income, education, occupation, family size, tastes, and preferences. Though much work has not been done on the mediating role of individual characteristics on packaging and purchase decision, the few studies have identified some individual characteristics variables as influential. Rita, Aiste, and Laura (2009) found in their study that verbal elements of package are the most important elements for both women and men. The outcome of their study further shows that for visual elements, both men and women attach much importance to the size of the package. Regarding the age of the respondents, their studies disclosed that those under 25 years old are more concerned about package size. For those between 26-35 years old respondents' colour, material and product information, 36 -45 years old group more attach importance to form, graphics, and 46-60 years attach more importance to the brand, when buying a product like milk. It was further revealed that verbal elements are most important for respondents having higher education and for full time workers (Rita, Aiste & Laura, 2009).

Wambugu, Musyoka, and Kaluyu (2014) employed 1000 shoppers to assess the influence of packaging on purchase decision depending on individual characteristics. The results of their study divulged that education, age, and family size but shopper's gender had a significant effect on the outcome of behaviour in terms of the amount of milk bought from the supermarkets. Customer's age factor influences purchase decision in that, individuals buy different goods and services over a life-time (Rajan, 2006). Banathy (1992) noted in his study that single men and women are found more than before, always look for smaller packages or single serve options. This means that it is more prudent for firms to make smaller packages for the particular segments. The Kibera and Waruingi (2007) opined that consumers buy different goods and services depending on their gender. Also, Firuziyan et al. (2009), studying the significance of demographic variables on the importance of packaging and purchase decision, found out that only age and educational status of the respondents were essential. The above analysis shows that packaging could influence purchase decision depending on individual characteristics. Against this background, the author posits the below hypothesis:

H2: Individual characteristics positively moderate the relationship between packaging and consumer purchase decision.

2.2.2 The moderating effect of Culture on the packaging-consumer purchase decision link

Because the world economy is becoming increasingly cross-cultural, culture and consumption have been considerably linked (HemaPatil & BBakkappa, 2012). The growing significance of international marketing for both multinational and domestic firms has led marketers, and academicians to find ways of having a deeper understanding of how consumers and markets differ around the globe. Hofstede (2001 pg.23) refers to culture as "the collective programming of the mind which distinguishes the members of one group or category of people from another". In other words, culture refers to the norms, values, artefacts, assumptions, and behaviours and beliefs shared by a common group of people in particular area that differentiate them from the people. Culture has been defined through different categories, including origin, history, religion, language, political affiliation (Huntington, 1996). In Adam Wooten (2011 pg 9.) article daubed, "*International business: Cultural tastes affect international food packaging*," Jeffrey D. Allred noted "A two-liter bag may not be the ideal package for mayonnaise in the United States, and a bucket may not be an appetizing container for fried chicken in Japan. Global marketers must consider cultural preferences when designing food packaging." A research developed by Kotler et al. (2009) concluded that packaging the products according to the cultural variables can bring the competitive advantages to the organization. In the same vein, Alam (2010) opined that when a country's population is more sensitive to their own culture, the domestic firms, as well as multinationals, should concern the packaging according to the culture (Alam, 2010).

Ahmad, Soomro, Ali, and Ali (2015) concluded that cultural variables such as religion, language, norms, and values, etc. have significant influence amongst students' purchase decision. The culture shapes human mind on the product purchasing decision (Cramphorn, 2001; Kotler & Keller, 2006). In another example, Lu, Daniel, and Wong (2008) stated that local language creates a positive impression on the consumer. Theobad and Winder (2006) observed that in different cultures, different meanings exist for colours and that adapting the packaging colours to the local culture can attract customers. For instance, black colour of the product packaging is not accepted in the Hong Kong as this signifies that product is of inferior quality (Ackerman & Frank, 1993). Contrastingly, in Ghana, the colour black is a symbol of maturity and spiritual energy while the colour white means purity. In another example, Taiwanese also perceive the colour purple of the product packaging as low of quality. The study of Ahmad, Billo, and Lakhan (2012) observed that choices of packaging colour are largely

influence by the culture of the consumer. Using different religion symbols and norms allow the organisation to attract customers (Alam, 2010). If the product packaging is done on the basis of the cultural influence, an organization can gain the vast customers in different segments (Pride, Hughes & Kapoor, 2010). This shows that it is important for companies today to incorporate culture into the design of their package. In line with the above sentiments, the present author argues that a firm will have an urge over its competing rivals if it incorporates culture in the design the packaging of its product. Thus, the below hypothesis.

H3: Culture positively mediates the relationship between packaging and consumer purchase decision.

2.3 Theoretical Framework

The theoretical underpinnings adapted for this study are the theory of buyer behaviour and Hofstede's model. Developed originally by Howard in 1963 as the first consumer decision model, but conceptualised by Howard and Sheth (1969) to become the Theory of Buyer Behaviour, the model affords "a sophisticated integration of the various social, psychological and marketing influences on consumer choice into a coherent sequence of information processing" (Foxall 1990 p.10). According to the authors, the buyer behaviour is influenced by four elements: input, significant stimuli, symbolic stimuli. Input variables may be communicated from a variety of sources and include the environmental stimuli that the consumer is exposed to. The external stimuli represent the exogenous variables, which include the importance of purchase, personality variables, social class, time pressure, culture, financial status etc. (Howard & Sheth, 1969). Significant stimuli are actual elements of products and brands that the buyer confronts (Loudon & Bitta 1993). In this study, the actual elements of the product are the packaging element such as size, shape, colour, text, graphics, country of origin etc. and the symbolic stimuli are the products and brands defined by marketers through medium such as advertising, which may indirectly influence the consumer (Foxall, 1990). Social stimuli include the influence of family and other peer and reference groups. This model suggests that the purchase decision of the consumer could be influenced by external variables and well as individual variables. In this study, these variables are recognized as culture and individual characteristics.

Hofstede's model, on the other hand, initially four dimensions, but later revised to include other two, making six, maintained that there are certain cultural dimensions that express national value systems and the attitudes of individual consumers: individualism/collectivism, uncertainty avoidance, masculinity and femininity, power distance, Indulgence, and Long-term orientation. The model avows that if an organization engages in international business, the company would have to customize its marketing approach and strategies, taking into consideration the national values and attitudes of the citizens. According to Hofstedes (1993), if the company finds itself in a culture with a high power distance, with strong hierarchies and powerful leaders, and decisions made by heads of families and top managers, the marketing approach has to appeal to the leadership by stressing how products and its features create benefits for the whole family. However, if the power distance in such countries is low, the focus of the marketing programme can be targeted at individuals across the unit. Further, in the case of cultures with high individualism, according to the model, the marketing campaign should aim at individual units. On the other hand, if there is low individualism, that is, market with high community affinities, the product features and benefits should be stressed on its benefit to the whole community. Again, if the company operate in a culture of high masculinity, the firm should differentiate between men and women. In such case, the firm has to make sure that the product features and benefits correct gender for each product. Thus, markets with low masculinity tolerate sexual equality, and as such, the firm has to adopt a neutral approach to both men and women. Moreover, the model advance that cultures can survive on ambiguity while others attempt to shun it. This way, if there is a high level of ambiguity tolerance, the product characteristics have to be crystally clear with assured benefits and specific features. The packaging features need to be clearly spelt out. On the other hand, if the low level of ambiguity tolerance, the company can generalize its products, implied benefit. Lastly, for markets with high indulgence, that is, values leisure time, sports, relaxed sexual standards, the firm can base its marketing campaign on sexual appeal. However, in the case of low indulgence cultures, the company can stress on social benefits in its promotion. Drawing from above models, the present author conceptually presents that the influence of the packaging on consumer decision could depend on culture and individual features.

3. Methodology

Saunders (2004) indicated that approaches to research could be classified into two main blocks: quantitative and qualitative approaches. According to Rubin and Babbie (2010), quantitative research involves gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon. They further stressed that quantitative data is more efficient and able to test hypotheses. The present author adapted this approach because he sought to establish the association between packaging elements, culture, and individual characteristics through the use of objective measurement and statistical analysis of collected data. In this study, the author followed a descriptive research design through the use of structured questionnaire. The population of

the study consisted of 1,722,806 indigenous living in the Kumasi metropolis of Ghana (Ghana Statistical Service, 2016). But as indicated by (Malhotra, 2010) that, it is impossible to do a survey investigation on the whole population, the present study employed random sampling method to select 915 respondents for the study. This sampling method was adapted to help produce a more accurate and reliable result about how packaging influence consumer purchase decision dependent on culture and individual features. And even more important, to ensure that each member of the population has the same chances of being selected for the sample.

The questionnaire was administered in five major places within the Kumasi metropolis of Ghana. These places were: Tech, Batama, Oforikrom, Tafo, and Kronom. The questionnaire was administered to 915 shoppers of cosmetics. The questionnaire consisted of five sections: Section A (demographic information of respondents), Section B (effect of packaging on purchase decision), Section C (effect of packaging on purchase decision depending on individual characteristics), Section D (effect of packaging on purchase decision depending on culture), and Section E (Consumer Purchase Decision). The questionnaire for section B, C, and D and E were adapted and modified from the literature, specifically from (Silayoi & Speece, 2004; 2007; Rita, Aiste & Laura, 2009; Alam, 2010). This was to build the present study on the theoretical framework of previous studies. A period of one month was used for the distribution and collection of the questionnaires. The data collected was edited and analysed using Structural Equation Model-Partial Least Square (SEM-PLS). The rationales for the chosen method of data analysis are: the aim of the present study is a prediction of dependent variables; the research model involves complex types of relationship in the hypotheses, and the present study employed latent variables' scores for predictive analysis purposes. The outcome of the analysis is presented below:

4. Results

4.1 Demographic Information of Respondents

In all, 915 questionnaires were distributed, but 876 were correctly filled and returned. Thus, the response rate of 95.74% was recorded, which is substantial for a study of this nature.

The background data collected from the respondents were gender, age, educational level, occupation, and marital status. Results from the analysis show that 373 (42.58%) were male while 503 (57.42%) were female. This implies that majority of the opinions revealed in this study come from females. The largest group of the participants were within the age group of 31-35, constituting 349 (39.84%), followed by those below 25 years old, representing 171 (19.52%), followed by 25-30 years representing 158 (18.03%), followed by 36-40 years old, constituting 152 (17.35%), and then 40 years 105 (5.02%). This show that the respondents were averagely 30.5 years and were thus matured enough to express their view on the phenomenon of study. Among the respondents, 27, constituting (3.08%), have had only primary education; 356 (40.63%) were first degree holders, 136, comprising (15.53%) were master degree holders, 207 (23.63%) were diploma/HND holders, 72, representing (8.21%) were Ph.D. holders, and SSCE/WASCE holders were 78 (8.9%). This finding shows that the majority of the respondents were first degree holders and least majority were those who have had only primary education. By implication, it can be said that the respondents have had the basic education needed to understand the underlying theme of the present study. Another important demographic variable considered by the study was the occupation of the respondents. It was revealed that 213 (24.31%) were employed in the government sector as public and civil servants. 305 of the respondents, representing 34.81%, were employed in the private sector. The self-employed, daily wage earners and unemployed of the respondents constituted 147 (16.78%), 125 (14.26%), and 86 (9.82%) respectively. This shows that near about 790 (90.18%) of the respondents were gainfully employed and thus could have the money or purchasing power to make a purchase decision and are thereby could respond reliably to the needs of the current study. Of the 876 respondents, 495, representing (56.50%), were not married, while the remaining 381, constituting (46.5%), were married. The next section presents the result from the PLS-SEM analysis.

4.2 Measurement Model

Since it is essential to assess the reliability and validity of latent variables in order to complete the examination of structural equation model in any study, the results of the reflective outer model are presented in Table 1. According to (Carmines & Zeller, 1979; Nunnally & Bernstein, 1994), reflective individual items are reliable if all standardised loadings are greater than 0.7. As depicted in Table 1, all the standardised loadings or the composite reliability are greater than the threshold of 0.7. Thus, the model is reliable. To check for validity, scholars have proposed the use of Average Variance Explained (AVE) (Fornell & Larcker, 1981). Again, Table 1 shows that the latent variables achieve convergent validity because all of the AVE variables are greater than the acceptable threshold of 0.5.

Table 1: Results of Summary for Reflective Outer Model

Construct/Indicator	Cross Loadings	Composite Reliability	Average Variance Explained (AVE)
PACKAGING		0.959	0.769
PAKG_1	0.786		
PAKG_2	0.987		
PAKG_3	0.745		
PAKG_4	0.919		
PAKG_5	0.876		
PAKG_6	0.882		
PAKG_7	0.944		
PAKG_8	0.871		
PAKG_9	0.834		
PAKG_10	0.723		
INDIVIDUAL CHARACTERISTICS		0.975	0.837
INDC_1	0.856		
INDC_2	0.971		
INDC_3	0.880		
INDC_4	0.792		
INDC_5	0.944		
CULTURE		0.865	0.817
CUL_1	0.854		
CUL_2	0.803		
CUL_3	0.893		
CUL_4	0.867		
CUL_5	0.887		
CUL_6	0.789		
CONSUMER PURCHASE DECISION		0.945	0.698
CPD_1	0.865		
CPD_2	0.901		
CPD_3	0.897		
CPD_4	0.921		

Source: Filed Survey, 2017 Source: Field Survey, 2017; PAKG: Packaging; CUL: Culture; INDC: Individual Characteristics; CPD: Consumer Purchase Decision:

In order to check for discriminant validity, the author used Fornell and Larcker (1981) approach. According to the authors, the square root of AVE in each latent variable can be used to establish discriminant validity, when the value is greater than the other correlation values of the latent variable. In simple words, in order to establish the existence of discriminant validity, the diagonal elements should be greater than the off-diagonal elements in the corresponding rows and columns (Roldan' & Sa'nchez-Franco, 2012). As clearly shown in Table 2, all the variables meet discriminant validity requirements as the diagonal elements (bold) are greater than the off-diagonal elements.

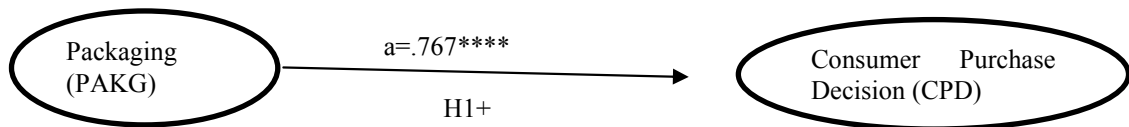
Table 2: Discriminant Validity

Indicators	PAKG	INDC	CUL	CPD
PAKG	0.897			
INDC	0.587	0.963		
CUL	0.711	0.534	0.880	
CPD	0.456	0.345	0.865	0.982

Source: Field Survey, 2017

The present study overarching purpose is to examine the mediating effect of individual characteristics and culture on packaging and consumer purchase decision. In view of this, two models were developed by the author: one with the direct effect of packaging on consumer purchase decision without the mediating variables of the study; and the other with the mediating variables. Figure 1 below displays the output from the structural model of the two models that were developed for the study.

1) Model with Direct Effect or Total Effect



2) Model with the Mediating Variables: Culture and Individual Characteristics

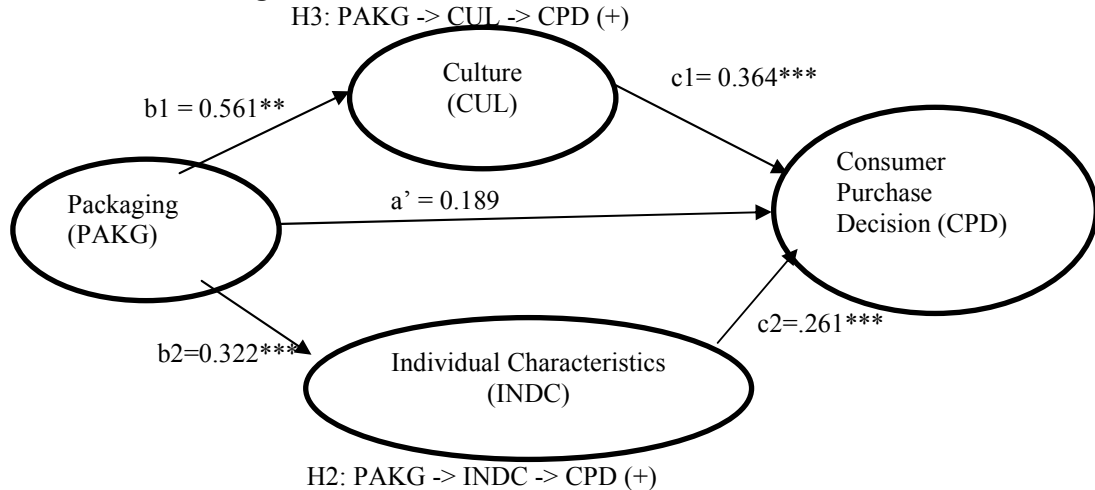


Figure 1: Structural Model

Since it is indispensable to carry out any scientific study without recourse to the goodness of fit, t-statistics, and p-values, bootstrapping was carried out to provide the t-values, path coefficient that facilitates the assessment of the relationships' statistical significance in the research model (Roldan and Sanchez-Franco 2012). The statistical significance of the model is displayed in table 3.

Table 3: Structural Model Results of Hypotheses

Relationship	Model 1	Support	Model 2	Support
	$R^2_{CPD} = 0.598$		$R^2_{CPD} = 0.789$ $R^2_{INDC} = 0.337$ $R^2_{CUL} = 0.534$	
	B		B	
	t-value		t-value	
PAKG -> CPD	0.767**** (45.722)	Yes	0.189 (1.521)	No
CUL -> CPD			0.364*** (9.339)	Yes
INDC -> CPD			0.261*** (6.305)	Yes
PAKG -> CUL			0.567*** (13.367)	Yes
PAKG -> INDC			0.322*** (9.658)	Yes

Source: Field Survey, 2017; PAKG: Packaging; CUL: Culture; INDC: Individual Characteristics; CPD: Consumer Purchase Decision; t-values in parentheses, significant at $t > 1.96****$ on two tail test

As clearly shown in Table 3, in the direct model, packaging explained 59.8% of the variance in consumer purchase decision. This is shown by the R^2 or coefficient of determination, which measures a model's overall goodness of fit. Scholars have argued that R^2 of .75 is substantial, 0.5 is moderate, and 0.25 is weak. Thus, it can be said that packaging moderately explains the variance in consumer purchase decision. When the mediating factors, culture and individual characteristics, were introduced in model 2, packaging explained only 33.7% of the variance in individual characteristics that influence consumer purchase decision. Similarly, packaging explains 53.4% of the variance in cultural factors that influence consumer purchase decision of cosmetics. The total variance explained by packaging, individual characteristics, and culture in consumer purchase decision is 78.9%. Thus, these three variables, packaging, individual characteristics, and culture, substantially explain the variance in consumer purchase decision of cosmetics in Ghana.

Regarding the statistical significance of the model, this was explained using the t-values (parentheses). T-statistics larger than 1.96 is significant at 0.05. Thus, the results support H1 that packaging positively influences consumer purchase decision (path coefficient, $a=0.767$; t -value = 45.722). Model 2 divulges the direct relationship when the mediating variables were included in the research model. As shown in Table 3, packaging did not establish a significant effect on consumer purchase decision of cosmetics when culture and individual factors were introduced in the model ($a'=0.189$; t -value = 1.521). It is, moreover, depicted in Table 3, that,

culture significantly influence consumer purchase decision of cosmetics ($c1 = 0.361^{***}$; $t\text{-value} = 9.339$), and packaging could have significant influence on culture ($b1 = 0.561^{***}$; $t\text{-value} = 13.367$). Again, packaging could have a significant influence on the individual characteristics ($b2 = 0.322^{***}$; $t\text{-values} = 9.658$). Finally, individual characteristics positively influence consumer's purchase decision ($c2 = 0.261^{***}$; $t\text{-value} = 6.305$).

In order to test the mediation effect, the author used bootstrapping technique. According to Chin (2010), this involves a two-step procedure. The first step is to perform N-bootstrap that includes both direct and indirect paths, and the second step is the estimation of significance and the size of the indirect effects in relation to the total effect, by assessing them through Variance Accounted For (VAF). Thereby, the variance of the dependent variable that is indirectly explained by the mediating factors could be determined. $VAF = (b1*c1)/b1*c1 + a$, that is, indirect effect divided by total effect. Accordingly, Hair et al. (2014) postulated that VAF values below 20% denote that the direct effect is very strong and in that case, there is no mediation. Values between 20% and 80% demonstrate the existence of partial mediation. Finally, when the VAF values are equal to or greater than 80%, the presence of full mediation can be confirmed. The outcome from the bootstrapping technique is shown in Table 4. As Table 4 reveals, for H2 and H3, which sought to establish the mediating effect of culture and individual characteristics on packaging and consumer purchase decision respectively, there exists partial mediation. Culture (CUL) VAF is 52.15% while individual characteristics VAF is 30.77%. These all fall within the range of 20% and 80%. This implies that CUL and INDC partially mediate the independent and dependent variables of the present study. However, regarding the total effect, which is 82.92%, VAF is above 80%, which indicates that the joint indirect effect of CUL and INDC fully mediate PAKG and CPD tie. The corresponding T-values of 2.545 and 6.168 for INDC and CUL respectively is significant at $T > 1.96$.

Table 4: Mediation Analysis in PLS-SEM

Effects	Path	B	Indirect Effect	Total Effect	VAF	T-value	Decision
Direct effect without Mediators	PAKG->CPD	0.767	NA	NA		45.722	Yes
H2: PAKG -> INDC -> CPD (+)							
	PAKG ->CPD	0.189	NA			1.521	No
Indirect effect with mediators	PAKG -> INDC	0.322					
	INDC -> CPD	0.261	0.084	0.273	30.77%	2.545	Yes
H3: PAKG -> CUL -> CPD (+)							
Indirect effect with mediators							
	PAKG -> CUL	0.561					
	CUL ->CPD	0.364	0.206	0.395	52.15%	6.168	Yes

Source: Field Survey, 2017 PAKG: Packaging; CUL: Culture; INDC: Individual Characteristics; CPD: Consumer Purchase Decision: t-values in parentheses, significant at $t > 1.96^{****}$ on two tail test.

4. 3 Discussions of Findings

Prior studies have examined the role of packaging as a powerful weapon for influencing consumer purchase decision. Despite the growing empirical study on the mediating role of variables on packaging and consumer purchase decision, the mediating effect of individual characteristics and culture on these links have not been explored yet. This study makes an immense contribution to enhancing the extant literature research on packaging, by simultaneously examining the mediating effect of individual characteristics, and culture on consumer purchase decision, which has been silent in the literature for now.

First and foremost, I find support for *H1 that Packaging elements relate positively to consumer purchase decision*. This, by implication, denotes that in the absence of mediating variables, packaging could have a significant influence on consumer purchase decision. This result corroborates the previous related findings of (Deliya 2012; Firuziyan et al 2009; Karim, Mahdih, and Rahmani 2013; Rita, Aiste and Laura 2009; Silayoi and Speece 2004, 2007; Zand 2007) that significant relationship exists between factors of the package or dimensions (visual elements and informational elements) and the purchase behaviour of consumers, and that components of a package is essential at the point of sale. This provides supporting evidence to support the relevance of packaging as a promotional tool for influencing consumer purchase decision, and therefore, a tool for achieving competitive advantage in relation to competing brands.

Secondly, the results of the study support *H2 that individual characteristics positively moderate the relationship between packaging and consumer purchase decision*. This is consistent with previous studies

(Firuziyan et al. 2009; Rajan 2006; Rita, Aiste, and Laura (2009) that argue that packaging elements influence the individual characteristics in terms of gender, age, education, marital status, and occupation. In this study, for cosmetic products, it was discovered that packaging influence the gender, age, and education of the consumers. It was discovered that both men and women attached much importance to the verbal elements on the product especially the expiry date, instruction for usage, storage conditions etc. Again, the men display a preference for small size or shaped packages. It was further shown that the age group between 25-30 are much concerned about the visual elements, colour, shape, and size but the 30-35 are much concerned about verbal elements, manufactured and expiry date, instruction for use, price. This finding implies that in order to attract customers to their brands, firms must package their products according to the individual features in their market. Moreover, the finding supports the direct relationship between individual characteristics and consumer purchase decision. This is in line with prior studies (Kibera and Waruingi 2007; Rajan 2009; Rita, Aiste and Laura 2009; Kotler, 2009) that individual characteristics influence consumer purchase decision. For instance, Rajan argues that since a consumer buys different goods and services over their life time, such factors as age and education influence their purchase decision. Interestingly, it needs to be stressed that the finding disagrees with the findings of Wambugu, Musyoka, and Kaluyu (2014) that gender as individual characteristic does not have a significant effect on the outcome of behaviour in terms of packaging and purchase decision.

Lastly, the present study finds support for *H3 that culture positively mediates the relationship between packaging and consumer purchase decision*. It needs to be stressed that direct effect of packaging on culture was supported. And the direct effect of culture on consumer purchase decision was also supported. The mediating effect, as shown in the analysis section, was tested using the VAF approach. The statistical significance of the indirect effect of culture on packaging and consumer purchase decision was supported. This is in line with the few prior studies (Ahmad, et al 2015; Alam 2010; Kotelr et al. 2009; Lu, Daniel, and Wong 2008) that postulate that packaging products according to local cultural variables such religion, norms, language, etc. could generate a positive response from consumers. In this study, for cosmetic products, it was discovered that the consumers were sensitive to their religion, language, and political party colours when they are making a purchase decision. Huntington (1996) asserted that political affiliation is one of the many cultural variables that could influence the purchase intention of consumers. Consistently, Alam (2010) opined that blending or using different religion symbols allow the organisation to attract more customers. Similarly, Ahmad, Billo, and Lakhan (2012) noted that choice of packaging colour is largely influence by the culture of the consumer. As the Hofstede's model of cultural dimension reveals, the findings of the study divulge that culturally, there is low individualism in that the consumers emphasize on their religious symbols, language, and political party colours when deciding on their package choice. This means that the cosmetics market in Ghana has high community affinities, signalling companies in the sector about the need for stressing benefits of the product features to the whole community.

5. Conclusions and Recommendations

This study has sought to examine the moderating role of individual characteristics and culture on packaging and consumer purchase decision link, which previous studies never considered. It needs to be stressed that the present study is consistent with the theory in the literature as it shows the influence of packaging on consumer purchase decision. But the present author concludes that this influence of packaging on consumer purchase decision is enhanced through its effect on individual characteristics and culture. This is because, when these moderating variables were introduced into the model, the direct link between packaging and consumer purchase decision was no more supported. This, moreover, shows that both individual characteristics and culture play a significant moderating role on the relationship between packaging and consumer purchase decision. In fact, the joint effect of these two mediating variables discovered through the VAF approach was substantially significant. The present author concludes that individual characteristics partially mediate the packaging-consumer purchase decision link through gender, age, and education status while culture partially mediates the packaging-consumer purchase decision tie in terms of religion, language, and political party affiliation colours. Based on this conclusions, it is recommended that in order for companies competing in the cosmetics businesses in Ghana to achieve a significant competitive advantage, they should incorporate culture and individual characteristics into their packaging designs. Indicatively, for individual characteristics, as the study revealed, the companies should consider the gender, age and education status of their target audience, and in terms of culture, the local companies, as well as the multinationals, should consider the religious symbols, language, and political party colours especially the ruling and largest opposition party colours of their target market. This is because the majority of the respondents argue that their choice of colour for cosmetics is usually based on their party colours.

This study contributes to theory and enhances the literature on packaging and consumer purchase decision by examining the moderating effect of culture and individual characteristics on consumer purchase decision, which is a relevance topic to marketers, multinationals, policy makers and scholars in the field of marketing, but has never been considered by previous scholars. Thus, the study will enable marketers and practitioners in the cosmetics business to understand the variables that they should consider whenever they are planning and

implementing their packaging designs. The major limitation inherent in the study is a generalisation of the results. Since the study was conducted in only one region in Ghana, generalisation should, therefore, be made with caution. It is recommended that future studies should be conducted in other parts of the country to allow for a cross-comparison on how individual characteristics and culture mediates the packaging and consumer purchase decision tie. A similar study should be conducted in other countries to allow for a considerable validation and generalisation of the outcome of this study. Moreover, further research should be carried in the sectors such as the watch industry, food, mobile phone sector to allow for cross-industry comparison.

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