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BRAND QUALITY, CONSUMPTION EMOTIONS, AND A DECISION TO PURCHASE WASHING MACHINES

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The largest number of studies on the determinants of the consumer's decision to purchase washing machines have explored the influence of the price, the product quality, the perceived value and related constructs without the effects made by consumption emotions. Therefore, the purpose of this study is to determine the impact of brand quality, consumption emotions and socioeconomic factors on the consumer's decision to purchase washing machines in Nigeria's Delta State. The data used in the study were obtained from a cross-section of 385 consumers drawn from Asaba, Sapele and Warri, the three most populous towns in Delta State. The results show that brand quality, consumption emotions and socioeconomic variables, such as the household size, the education level and income are the significant determinants of a decision to purchase washing machines in the study area. The significance of emotions as predictors of a purchase decision underscores the need for manufacturers of electrical home appliances to ensure that the design and functionality of their products elicit the positive emotions that will foster customers' attachment and loyalty to a brand in order for the manufacturers to maximize their revenue and sustain a profit.

Keywords: consumer purchase decisions, consumption emotions, brand quality, washing machines, demographic factors

JEL Classification: D12, M30, M31

INTRODUCTION

Emotions are multidimensional feelings revealing information about consumers' relationship with their physical and social surroundings and the interpretations related to these relationships (Lambie & Marcel, 2002; Bigdeli, Bigdeli & Bigdeli, 2014). Consumers make some purchases simply for the 'fun and joy of use', and sometimes the emotion of the 'joy of use' has a whole variety of implications. How emotions are evoked can enhance our understanding of what makes us consume an array of products. However, the literature is filled with information on how consumers emotionally respond to products and

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what aspects of the overall product quality trigger their emotional reactions. In this fast-changing and competitive business world, emotional factors have become an important aspect of customer purchasing behavior and are increasingly being incorporated in the advertisement and promotional campaigns of branded products. Therefore, firms strive to establish a strong emotional bond and mutual collaboration with the customer so as to secure competitive advantage, because emotionally connected consumers are very crucial to the brand success (Rossiter & Bellman, 2012). Furthermore, the connection that product brands establish with consumers and the emotions such products/services evoke among customers have become a significant sales performance factor.

In competitive markets, customers' desires are more important than their needs. Therefore, the state of mind and emotions are becoming the predominant influencers of a purchase decision. Apart from the question of the price and quality, the consumer wants trust, love, and dreams, the emotion thus becoming very important with the principle of the consumer pleasure (Jenkins & Molesworth, 2017). Thus, companies must develop the strategies that factor emotions as a distinctive element that must be adopted in order to enhance product/service supply. The consumer does not look for the product/service that meets both the needs and the rational processes, but they seek the object that becomes the center of symbolic meanings, psychological and cultural, and a source of feelings, relationships and emotions. This is the reason why customers' purchase decisions are driven by the two kinds of needs: the functional needs satisfied using a product and the emotional needs associated with the psychological fulfilment of the product ownership (Desmet & Hekkert, 2007). Furthermore, owing to an increasing similarity in products' technical characteristics, the emotions elicited by the consumers of products are becoming more defining factors for manufacturers. Thus, companies are making strategic efforts to enable their products to meet both the functional quality and the consume's emotional needs to gain a competitive edge in the marketplace (McDonagh, Bruseberg & Haslam, 2002; Desmet, 2003).

P. Kotler and G. Armstrong (2021) define product quality (PQ) as "the ability of a product to perform functions, includes the product's overall durability, reliability, precision, ease of operation and repair, and other valued attributes". It could be defined as the customer's assessment of a product's overall performance. This important element in manufacturing the products is considered superior to their competitors. Consumers are increasingly desirous to purchase goods of a high quality. Therefore, the quality of a product brand is considered to be the major contributor to the manufacturer's competitive advantage on the durable goods market. Product quality is the extent to which a product succeeds in meeting its customers' needs, shapes the manufacturer's reputation and influences the consumer's purchase decision in retail stores. Furthermore, it is the consumer's assessment of a product's attributes that will meet their needs and provide them with the expected benefits. Because quality affects product performance, it is closely linked to customer value and satisfaction. Performance is the main characteristic or function of a product and is the main benefit of the products purchased by consumers. Product quality is a specific function of a product, while conformance quality is a measure of how much a product conforms to the previously set quality specifications (Kotler & Keller, 2016).

The purchase decision process includes five stages, implying that the purchasing process begins a long time before the actual purchase is made. Thus, there is the need for marketers to focus on the entire process of making a purchase decision instead of only focusing on the actual purchase decision (Kotler & Keller, 2016). Apart from the product brand quality, consumers' purchase decisions are influenced by their perceptions, motivations, learning, attitudes and beliefs. The process of consumers' making their purchase decisions arises from consumers' realization of the needs and wants they are about to satisfy. From here, the consumer will realize the disparity between his/her actual status and his/her ideal needs which he/ she had a wish to satisfy from social and psychological aspects. Consumers adopt this process regarding market transactions before, during, and after the

actual purchase of a product. Thus, the entire process can be seen as a particular form of a cost-benefit analysis in the presence of multiple alternatives. The consumer comes to the decision based upon the place for the purchase, the brand that he/she wants, the model, the quantity, when to buy, how he/she is prepared to spend, and other factors as well. These decisions are given by the market by sharing the information about products with consumers so as to enable them to make rational evaluations (Hanaysha, 2018). According to L. G. Schiffman and J. Wisenblit (2015), consumers often seek the relevant information connected with their needs based upon their past experiences or the information learnt from other people or external sources. Therefore, the experience of the past purchases is considered to be a vital source of the internal information used prior to making a decision to buy.

Significant economic progress has been made in Nigeria since the onset of democratic governance, namely since the year 1999. It was a situation that has promoted rapid urbanization and a remarkable improvement of the socioeconomic wellbeing of the citizenry. However, with a recent slowdown in the economic conditions of the nation and the rising cost of living, both spouses in many urban households now engage themselves in income generating activities in order to enhance their family's living standards. Specifically, many urban women have been combining traditional roles of home-keeping with the management of their own businesses or paid employment so as to enhance their families' living standards. Therefore, to balance their home and work responsibilities and to reduce the stress they are exposed to, many urban women have purchased home appliances such as washing machines, freezers/ refrigerators and microwave ovens that may help reduce their workload. Beside the utility derived from the functional capacity of washing machines, the emotional fulfilment arising from reduced work stress on consumers and the pleasure of use are the critical factors that may determine a decision to buy. Since consumption emotions are strongly associated with customers' buying behaviors, consumption emotions are thus a very crucial factor for manufacturers and shopping product marketers to maintain and expand their market share on the global market. This study was conceived so as to provide answers to the following research questions: Is there any association between consumers' buying decision, the product brand quality and consumption emotions? What effects do the product brand quality and consumption emotions have on consumers' buying decision? Thus, the major objective pursued in the study is to ascertain the effects of the product brand quality and the positive and negative consumption emotions set on the consumer's decision to buy washing machines. Specifically, the study ascertains the direction and strength of the relationship between the consumer's buying decision and brand quality, the positive emotions and negative emotions sets, the determination of the impact of the independent variables on the consumer's decisions to buy washing machines.

LITERATURE REVIEW

D. B. Grisaffe and H. P. Nguyen (2011) reported that emotional attachment offers a special promise as an affective basis of loyal brand repurchasing, because repeatedly purchased brands consistently contribute to a firm's revenue and profit. Working on a sample of 579 respondents comprising undergraduate and graduate students, as well as the students' acquaintances outside the community of the University of Texas, they developed a multivariate coding system in order to capture all the categories of emotional responses. The results indicated that superior marketing characteristics had created brand attachment through the perceived value, differentiation, and customer satisfaction. Furthermore, marketing communication, such as aggressive advertising, had also produced the strong emotional attachment that stimulated a strong positive attitude towards the product brands. In conclusion, the authors highlighted the five factors that drove emotional attachment to the brands that lead to a continual product repurchase.

Using the data of the online survey of 12.150 restaurant patrons that provided 435 usable responses, J. Song and H. Qu (2017) conducted a

study of the mediating role of consumption emotions on the relationship between hedonic and utilitarian values and Customer Satisfaction (CS) in Asian ethnic restaurants in the United States of America. The results revealed that utilitarian value directly and indirectly affected CS, but hedonic value only affected CS indirectly through the influence of positive emotions. The findings further affirmed that unless customers experienced positive emotions from every value, not every perceived hedonic value would lead to CS. Since negative emotions are evoked from the unfulfilled utilitarian aspects of customer values, therefore restaurant managers should adopt strategies to manage customers' negative emotional reactions by providing high-quality services to their clients.

Consumer behavior is constantly evolving just as consumer needs and desires are changing due to the external and internal factors that determine their buying decisions. W. D. Wahyu, F. Achmad and A. Zainul (2017) studied the effect of the online store atmosphere on emotions and its impact on a purchase decision' in Indonesia, with the data collated from 105 consumers of electronic products by means of an online questionnaire using the 'Google Form'. The collected data were analyzed by means of descriptive and inferential statistics with the help of the Generalized Structured Component Analysis (GSCA) model. The findings revealed that emotions had a significant positive influence on the process of making a buying decision, because the "prospects" emotional state stimulated by the store atmosphere influenced their final purchase. The authors affirmed the fact that, since emotional responses were spontaneous and often unplanned and abrupt, a person's emotions may have a major impact on what is being bought. The authors suggested that, in order for the online marketing firm (Kaskus.co.id) to win new buyers and retain its old ones in the Indonesian online market space, the company needs to improve the design of its website so as to make it simple and dynamic for new users. Which is very crucial because a complex, sophisticated website is likely to dampen a prospective consumer's emotions and negatively affect his/her buying decision.

A similar study by N. Octaprinanta, A. Kusumawati and E. Pangestuti (2017) also examined the influence

of the situational factors on consumers' emotional status and consequently impulse purchase behavior using the data collected from a random sample of 119 respondents in the major supermarket in Malang, Indonesia. The data were analyzed applying descriptive and path analyses. The results indicated that the store environment significantly influenced buyers' emotional states, whereas consumers' emotional condition also had a significant impact on impulse buying behavior. A store design and the environment can stimulate positive emotional responses in an individual, which may lead to unplanned and impulsive purchases (Kim, Kim, Yoo & Park, 2020).

K. Senthilkumar (2018) carried out a study so as to ascertain the influence of emotional and rational factors on decisions to buy children's products in Coimbatore City, India. The data were collected from the 500 respondents who had purchased children's products and a well-structured questionnaire was used for that purpose. Consumers' perceptions were assessed by means of a 5-point Likert scale of strongly disagree (1) to strongly agree (5). The results indicated that although the price, the quality and the value received for the money invested significantly affected the decision to buy children's products, a bigger influence was exerted by the emotional factors. The author suggested that the consumers of children's products should be more rational in the process of making a decision to buy so as to strike a better bargain whenever they make buying decisions with respect to children's products and brands.

M. Simanjuntak, H. R. Nur, B. Sartono and M. F. Sabri (2020) analyzed the effects of the perceived crowding, store image, and shopping motives towards emotions and the repurchase intention in modern retail stores in Indonesia. The study employed a cross-sectional design involving the collecting of data out of a random sample of 244 customers with the help of an online questionnaire. A 5-point Likert scale of (1) strongly disagree to (5) strongly agree was used so as to elicit the consumers' perceptions of all the construct statements. The results showed that the perceived crowding, store image, and shopping motives positively affected the customers' emotions.

Emotions also had a significant and positive effect on the intention to purchase again. The authors concluded that, since the buyers' emotions were the critical factor that positively affected the intention to make a purchase again, efforts should be geared towards making the shopping environment and conditions more conducive so as to elicit positive emotional responses from buyers in order to encourage continued future purchases.

RESEARCH METHODOLOGY

The conceptual framework for the study leaned on the papers found in the extant literature, where it was hypothesized that the consumer's purchase decision was influenced by the sociodemographic characteristics such as the gender, the age, the marital status, the education level, the household size, income, brand quality, and the positive and negative emotions sets (Figure 1).

The research hypotheses

The hypotheses tested in the study are as follows:

- H1: The brand quality has a significant impact on the consumer's purchase decision.
- H2: Positive emotions have a significant effect on the consumer's purchase decision.
- H3: Negative emotions have a significant influence on the consumer's purchase decision.

Causal research design which shows cause-and-effect relationships between variables is the design to have been adopted in this study, because it is particularly useful in identifying, determining and explaining the causality among the measured variables. The goal of the research design is to describe a detailed plan of how a researcher will behave with respect to answering the posed research questions. Research design is not only used to structure the project, but also how all the major parts of a research project work together in order to answer the posed research questions (Pituch & Stevens, 2016). The use of an



Figure 1 The conceptual model for the study

appropriate research design is therefore crucial to the study because it determines the method and nature of the data to be collected, the sampling plan and the time schedule of the research study (Hair, Black, Babin & Anderson 2014). However, the study adopted causal design as structured questions were used to collect data from a cross-section of the buyers of washing machines in Asaba, Sapele and Warri, Delta State, Nigeria, in order to determine the effects of brand quality and the emotions set on the consumer's decision to purchase products.

The used constructs and statements were modified from the extensive literature search. The questionnaire is composed of the five parts. Section A is focused on the consumers' sociodemographic factors. Section B addresses the overall product performance. Section C elicits the information on the consumers' emotions based on the Consumption Emotion Set, which includes both the negative emotions (anger, discontent, envy, fear, guilt, pride, sadness, shame) and the positive emotions (contentment, eagerness, excitement, joy, love, optimism, peacefulness, relief, surprise, worry). Section D is dedicated to the brand quality, whereas Section E deals with the consumer's purchase decision. All the statements were assessed on a 5-point Likert scale of strongly disagree (1) to strongly agree (5) for the sections D and E, whereas it was none (1) to very much (5) for the section C (Appendix). Because the respondent target population is unknown, the R. V. Krejcie and D. W. Morgan (1970) formula for calculating the sample size for an infinite population was employed so as to reach a representative sample as follows:

$$n = \frac{Z^2 p(1-p)}{M^2}$$
(1)

where *n* is the sample size for the infinite population; *Z* is the *Z*-value (e.g. 1.96 for a 95% confidence level), *p* is the population proportion expressed as a decimal and assumed to be 0.5 (50%) and *M* is a margin of error at 5% (0.05)

$$n = \frac{(1.96)^2 \times 0.5(1 - 0.5)}{(0.05)^2}$$

$$n = \frac{3.8416 \times 0.5(0.5)}{0.0025}$$
$$n = \frac{3.8416 \times 0.25}{0.0025}$$
$$n = \frac{0.9640}{0.0025}$$
$$n = 384.16 \approx 385$$

The total population of the three most populous towns in Delta State, namely Asaba (73.374), Sapele (161.686) and Warri (536.023), is 771.083 (World Population Review, 2020). Buyers were drawn using the simple random sampling technique with a proportional allocation to the population size of each town. Therefore, 37 samples were drawn from Asaba, 81 from Sapele, and 267 from Warri. Out of the 421 copies of the distributed questionnaire, only 385 properly filled ones were analyzed. The survey was conducted between October and November 2019, and from August to October 2020.

The collected primary data were analyzed using descriptive and inferential statistics. Descriptive statistics, such as tables, percentages and means, were used to profile the consumers' demographic characteristics, whereas inferential statistics, such as correlation and regression analyses and the Analysis of Variance (ANOVA), were used to determine the effects of the demographic factors, the consumers' emotions and the product brand quality on the consumers' purchase decision. The data were analyzed using the SPSS software.

RESULTS AND DISCUSSION

Different brands of washing machines are currently being used by the respondents in the study area. Table 1 shows the crosstabulation of the functionality and the brands of the appliances: LG, Haier Thermocool and Samsung being the leading brands of washing machines used by 48% of the households. In terms of their functionality, 57.4% of them are automatic machines, whereas 42.6% are manually operated machines. The most manually operated machines are Haier Thermocool, whereas LG dominated the automatic ones. The competitive prices and the availability of after-sales services are the major reason the consumers gave for their purchasing the LG brand, because the company has two such service points within the study location. F. Furaiji, M. Łatuszyńska and A. Wawrzyniak (2012) reported that competitive prices are the major determinant of the choice of home electrical appliances in Iraq, whereas A. Kumar and P. Gupta (2015) found that the brand image, the after-sales service and the price were the determinants of the choice of electronic home appliances (refrigerators, washing machines and microwave ovens) in India. Moreover, the presence of readily accessible service points helps to build consumer trust in the brand as buyers are confident that their appliances will be handled by the companytrained personnel with genuine parts. The finding is in agreement with the report of I. O. Ladokun, S. A. Adeyemo, and P. O. Ogunleye (2013) in Ibadan, Nigeria, who found that the after-sales service was a significant predictor of customer satisfaction (CS), customer retention (CR) and repurchase intention (RI) among the customers of LG electronics. S. Murali, S. Pugazhendhi and C. Muralidharan (2016) also found that the after-sales service significantly influenced CS, CR and loyalty among the buyers of home appliances in their study in India.

The analysis of the consumers' socioeconomic profile shows that the female respondents accounted for the majority (52.7%) of the consumers, whereas the remaining 47.3 % were the male respondents. About 84% of the respondents were between 27 and 56 years of age, the mean age being 46 years (Table 2). The results further indicated the fact that about 65% of them had acquired tertiary education with either a diploma, degree or postgraduate degree. The average number of the persons per household was 6, although the majority (72%) of the consumers of washing machines lived in homes together with other 2 to 7 persons. Public employees accounted for 29.1% of the sample, only to be followed by private workers and self-employed individuals in that order. The income distribution ranged from \aleph = 39,599.75 to \aleph = 201,602.75, the mean monthly income being \aleph = 104,464.29.

The descriptive statistics of the model's variables are presented in Table 3. It shows the mean, minimum and maximum values, the standard deviation, the skewness and kurtosis of the variables in the study. Apart from the gender and the marital status, the other variables are normally distributed: the skewness values range from -0.004 to 0.738, and kurtosis ranges from -0.253 to 0.197. Their values are within the range of -1 to +1 (Hair *et al*, 2014). The reliability and internal consistency of the constructs were determined by Cronbach's coefficient alpha (Table 4). All the values are greater than 0.7, the minimum threshold advocating for an adequate internal consistency (Nunnally & Bernstein, 1994; Hair *et al*, 2014), while

Count										
	The brand of the washing machines used by the respondents									
		Haier	Samsung	LG	Scanfrost	Nexus	Hisence	Ignis	Royal	Total
		Thermocool								
Functionality	Manual	28	25	25	26	18	8	10	22	162 (42.6)
	Automatic	30	28	49	19	12	37	38	10	223(57.4)
Total		58(15.1)	53(13.7)	74(19.2)	45(11.7)	30(7.8)	45(11.7)	48(12.5)	32(8.3)	385

 Table 1
 The cross tabulation of the functionality * the brand of the washing machines used by the respondents

Source: Authors

Variable	Frequency	Percentage (%)	Mean (mode)
Gender			
Male	182	52.7	
Female	203	47.3	(female)
Age			
27-36	75	19.5	
37-46	116	30.1	46 years of age
47-56	132	34.3	
57-66	62	16.1	
Marital Status			
Single	98	25.5	
Married	213	55.3	(married)
Divorced	43	11.1	
Widow	20	5.2	
Widower	11	2.9	
Years of formal education			
Primary education	46	11.9	
Secondary education	87	22.6	
ND; NCE	97	25.2	
HND/First Degree	127	33.0	(HND/First Degree)
M.Sc./Ph.D	28	7.3	
Household size			
2-4	93	24.2	
5-7	184	47.8	6 persons
8-10	108	28.0	
Occupation status			
Artisan	53	13.8	
Trader	61	15.8	
Public sector employee	112	29.1	(public sector employees)
Self-employed	70	18.2	
Private sector employee	76	19.7	
Retiree	13	3.4	
Monthly Income (N= *)			
N = 39,599.75 - N = 80,099.75	99	25.7	
₦= 80,100.75- ₦= 120,600.75	181	47.0	N= 104,464.29
₦= 120,601.75- ₦= 161,101.75	67	17.4	
N = 161,102.75− N = 201,602.75	38	9.9	

Table 2 The respondents' sociodemographic profile (n=385)

* 1US Dollar = ₦= 500 (Nigerian Naira)

Source: Authors

their construct validity was determined by the Pearson correlation coefficient between the items of each construct and the overall construct score (Pituch & Stevens, 2016). The correlation coefficients for brand quality scale items ranged from 0.138 to 0.337, while the consumers' purchase decision was from 0.361 to 0.767 and all were statistically significant (p < 0.01),

thereby confirming the construct validity of the measurement scales.

The results of the correlation analysis

The Pearson correlation analysis showed the direction and strength of the relationship between the brand

	N	Minimum	Maximum	lavimum Moan	Std.	Skev	ness	Kurtosis	
	IN	MIIIIIIIIIIIIIIII	Maximum	Mean	Deviation	Statistics	Std. Error	Statistics	Std. Error
Purchase Decision	385	2.33	5.00	3.7078	0.58772	-0.038	0.124	-0.815	0.248
Brand quality	385	2.80	4.80	3.8984	0.37165	-0.205	0.124	-0.127	0.248
Positive emotions	385	2.30	4.90	3.7244	0.42760	-0.335	0.124	0.081	0.248
Negative emotions	385	1.63	4.88	3.5412	0.52187	-0.665	0.124	0.879	0.248
Valid N (listwise)	385								

Table 3 The descriptive statistics of the model's variables

Source: Authors

quality, the positive emotions and the negative emotions, and the purchase decision. The study used J. Cohen (1992) as the benchmark in interpreting the results. A correlation coefficient between 0.10 and 0.29 indicates a weak correlation, that between 0.30 and 0.49 is indicative of a medium correlation, whereas the one between 0.50 and 0.95 indicates a strong correlation. The results of the correlation between the purchase decision and brand quality, the positive emotions and the negative emotions are shown in Table 5. The brand quality showed a positive and significant relationship with the purchase decision

(r = 0.725, p < 0.01), which implies that the higher the consumers' perception towards brand quality, the higher the purchase decision.

The positive emotions also showed a positive and significant (r = 0.652, p < 0.01) association with the purchase decision. The implication is that, as consumers exhibit high positive emotions towards a product, then the purchase of the product is likely to rise.

Table 5 The Pearson correlation coefficients betweenthe purchase decision and the other variables

Variables		Purchase Decision
Brand Quality	Pearson correlation	0.725**
	sig. (2-tailed)	p< 0.01
	Ν	385
Positive Emotions	Pearson correlation	0.652**
	sig. (2-tailed)	p<0.01
	Ν	385
Negative Emotions	Pearson correlation	-0.302**
	sig. (2-tailed)	P<0.01
	Ν	385

** The correlation is significant at the (P< 0.01) level (2-tailed)

Source: Authors

Table 4	Cronbach's coefficient alpha values of the
	constructs

Construct	No. of items	Cronbach's coefficient alpha
Brand quality	10	0.81
Positive emotions set	10	0.82
Negative emotions set	8	0.72
Purchase decision	12	0.82
Research instrument	40	0.86

Source: Authors

The relationship between the negative emotions and the purchase decision is also significant, the correlation coefficient value being (r = -0.302, p < 0.01). The result implies that the more negative emotions consumers express towards some brands of washing machines, the lesser the likelihood of such products being purchased by such consumers.

The regression results

The regression results of determining the factors of the consumers' purchase decision for washing machines are shown in Table 6. The model fits well with the adjusted R^2 0.74, which is indicative of the fact that 74% of the variance in the purchase

decision is jointly explained by brand quality and the emotions set. The ANOVA results showed the statistical significance ($F_{(8, 376)}$ = 140.235, p < 0.01) of the model. The Durbin-Watson (D.W.) statistics 1.94 indicated the independence of the error terms and the absence of autocorrelation among the variables. The variance inflation factor (VIF) showed that the independent variables were not collinear, given the fact that all the VIF values ranged between 1.02 and 1.607, which is far below the threshold of 10 (Hair *et al*, 2014; Pituch & Stevens, 2016). Furthermore, the results revealed that the household size, the level of attained education, income, brand quality, as well as the positive consumption emotions, had a positive and significant impact on the consumers' purchase

Table 6 The regression results of the determinants of the consumers' purchase decision

A. The m	odel summary	,b								
			Adjusted	Std. error		Change st	tatistio	:s		
Model	R	R²	R ²	of the estimate	R ² change	F change	df1	df2	Sig. F change	Durbin- Watson
1	0.87ª	0.75	0.74	0.298	0.75	140.24	8	376	0.001	1.94
B. ANOV	A ^b									
Model		Sum of squares	df	Mean square	F	Sig.				
	Regression	99.345	8	12.418	140.235	0.001 ^{a*}				
1	Residual	33.296	376	.089						
	Total	132.641	384							
C. Coeffi	cients⁵									
Model		Unstandardized coeffic		efficients	Standardized coefficients	t		Sig.	Collinearity	y statistics
			В	Std. Error	Beta				Tolerance	VIF
1 (Consta	int)	1.0	06	0.166		6.384		0.000		
Age		0.	00	0.002	0.007	0.258		0.796	0.975	1.025
Occupati	on	-0.	001	0.011	-0.002	-0.058	3	0.954	0.858	1.166
Househo	ld size	0.	03	0.008	0.115	4.110**	*	0.001	0.760	1.316
Educatio	n level	0.	07	0.015	0.134	4.507*	**	0.001	0.668	1.498
Monthly	income	2.3	5E-6	0.000	0.142	4.493*	**	0.001	0.622	1.607
Brand qu	ality	0.	33	0.024	0.440	13.44*	**	0.001	0.665	1.504
PCemotio	ons	0.	34	0.032	0.338	10.67*	isk.	0.001	0.873	1.145
NCemoti	ons	-0.	.06	0.027	-0.058	-2.086	**	0.038	0.980	1.020

^a The predictors: (Constant), NCemotion, Age, Leveleduc, Occupation, Hholdsize, Mnthincom, PCemotion, Brndqualty

^b The dependent variable: the consumers' purchase decision.

*** Significant (p < 0.01); ** Significant (p < 0.05)

Source: Authors

decisions. Nevertheless, the negative consumption emotions had a depressing effect on the decision consumers made with respect to the purchase of washing machines.

The number of the persons living in one household is a significant ($\beta = 0.115 \ p < 0.01$) determinant of the purchase decision for washing machines, because the bigger the size of the family, surely the greater the laundry volume, which leads to an increase in demand for the time required to do the laundry in such a growing family. Although the influence of the household size is somewhat low, a 1% increase in the number of the persons living in the family will increase the purchase decision by 0.12 percentage points. The positive impact of the family members on the purchase decision for energy efficient household appliances was reported by M. Baldini, A. Trivella and J. W. Wente (2018) in their study conducted in Denmark. Furthermore, Z. Baoling and A. K. Mishra (2020) reported that the household size determined the purchase decision for refrigerators, washing machines and televisions in rural China, because bigsize families are characterized by greater demand for food storage, consequently increasing demand for refrigerators, as well as washing machines, all in order to reduce the arduous task of washing clothes.

The customers' education level is yet another variable that had a significant ($\beta = 0.134$, p < 0.01) effect on the purchase decision. The research study showed that the attained education level had a significant influence on the individuals' purchasing behaviors, because it is the crucial indicator of acquired knowledge and skills (Mazloumi, Efteghar, Ghalandari, Saifi & Aghandeh, 2013). Highly educated individuals show a high degree of the acceptance of new technologies and innovations that could improve their overall wellbeing compared with their counterparts with a low degree of attained education. Furthermore, the beta coefficient value 0.134 shows the extent to which the purchase decision will increase if there is a unit rise in the education level. The result is in agreement with that of H. Harajli and A. Chalak (2019) in Lebanon, whereby university degrees had a significant and positive impact on the consumers' willingness to buy energyefficient appliances, such as washing machines, airconditioners, and refrigerators. The finding is also supported by the work of Z. Baoling and A. K. Mishra (2020), who found senior high-school education as an important predictor of consumers' purchase decisions for washing machines among rural Chinese households. However, I. Ashofteh and H. Dehghanan (2017) found no significant influence of education on consumers' purchase decisions for home appliances in their study carried out in Iran.

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Income also significantly ($\beta = 0.142$, p < 0.01) affected the consumers' purchase decisions for washing machines as a unit increase in income will drive up the buying behavior by 0.142 points. Households require adequate income to be able to purchase any domestic appliance, because without income no effective demand can be made at all. Thus, as the higher the income, the higher the propensity to purchase more energy efficient appliances for family use. This finding is in consonance with the report of M. Baldini et al (2018) in Denmark, and also with that of Z. Baoling and A. K. Mishra (2020) in China, where high income was a mild predictor of the probability of washing machines being purchased. I. Ashofteh and H. Dehghanan (2017) also found income to have exerted a significant influence on the purchase decision for microwaves and vacuum cleaners in Iran.

The brand quality was yet another variable that significantly affected the purchase decision. In fact, brand quality is the predominant predictor of the purchase decision, with the beta coefficient ($\beta = 0.44$, p < 0.01). The result implies that a unit increase in the product brand will cause a 0.44 increase in the consumer's decision to purchase washing machines. The overall quality of a product in terms of its functionality, reliability, durability, ease of use and the emotional benefits of having it in one's possession and using it are very important determinants of consumer behavior. Therefore, the hypothesis one (H1) is supported by this finding. According to S. S. Alam, C-Y. Lin, M. Ahmad, N. A. Omar & M. H. Ali (2019), the probability that household energy efficient products of good performance and of a good quality will be bought by consumers is greater. The consumers who are satisfied/dissatisfied with the purchase are likely to inform their friends and acquaintances about

their experiences through the word-of-mouth, which may lead to a repeated purchase or to brand hate. This finding is consistent with the report of S. A. Parbadiya (2018), who found that brand quality was a stimulator of the brand preference and the purchase decision for washing machines in rural India. E. T. Mashao and N. Sukdeo (2018) also posited that the product quality was an important determinant of the purchase decision for household products such as refrigerators and television sets among consumers in the Kempton Park Region in South Africa. Nevertheless, R. A. Momani (2015) found no significant influence of brand quality on the purchase decision made by Jordanian consumers for shopping goods.

The influence of the positive consumption emotions is positive and significant ($\beta = 0.338$, p < 0.01), whereas the negative emotions set had an inverse and significant (β = -0.058, p < 0.05) impact on the consumers' purchase decision for washing machines. The results imply that a percentage increase in positive emotions will cause a 0.34 rise in the consumer's purchase decision for washing machines. As users' feelings of fulfilment and joy aroused by their use of a product increase, their decision to purchase the product again in the future is bound to increase as well. This result supports the hypothesis two (H2). A positive consumption emotion is the second most important predictor of the purchase decision in this study, after brand quality. Positive emotions increase the consumer's purchase intention (Tang, Hsieh & Chiu, 2017) and can create positive attitudes in the consumer's mind towards the brand when they buy using hedonic value, which can shorten the purchase decision-making process (Wu, Tipgomut, Chung & Chu, 2019). Therefore, marketers should explore how to stimulate consumers' affective shopping experiences through the consumer-brand relationship in order to influence their positive shopping outcomes. Therefore, the effects of positive emotions on the purchase intention and the purchase decision were studied in the marketing literature on emotional branding. According to T. Curtis, A. Arnaud and B. P. Waguespack (2017), the relationship between consumers' emotions and the purchase decision is affected by an individual's judgement and the fact that a positive emotional reaction is directly and positively related to the purchase intention. S. S. Shariff (2014) also reported that one of the trilogies of emotion (affection) significantly influenced a future purchase decision. Therefore, enhancing the conditions whereby consumers have good thoughts of and feelings for a product has the propensity to stimulate the purchase decision, particularly that of high-involvement consumer products.

The negative consumption emotions set also significantly (β = -0.058, *p* < 0.05) affected the purchase decision for washing machines in the study location, although their effect is quite opposite. Based on the beta value, a 1 percentage increase in the expression of the negative emotions showed a -0.058 depressing effect on the purchase decision for home appliances. When consumers buy a product for the first time, their purchase decision is based on the expectation created by the brand, the product design, the price or the consumer's prior experience of the relevant product. Therefore, the hypothesis three (H3) is supported by the obtained result. However, the feelings of sadness and discontentment arising from a product failure based on personal experiences or a negative word-of-mouth from acquaintances with regard to a brand of home appliances might lead to complaining, a negative word-of-mouth, and consequently brand switching (Romani, Grappi & Dalli, 2012). Such a disconfirmation of an expectation will ultimately reduce the purchase decision and will considerably stifle the repurchase intention and customer loyalty. This result is supported by the findings of N. Abdullah and H. Sharareh (2018) in Iran, who reported that negative emotions led to customers' discontentment and that such a negative emotion had significant negative effects on customer satisfaction and the repurchase decision.

CONCLUSION

The effects of the socioeconomic factors, brand quality and the competitive price as the determinants of the consumer's purchase decision with respect to shopping products has been well researched in the marketing literature. However, given the convergence of technological know-how amongst manufacturers and marketers of household electrical appliances, and relatively insignificant differences in the prices of similar products, manufacturers are exploring customer relationship management as a strategy to apply in order to maintain a competitive advantage in the marketplace. Thanks to the emotions which the usage of or experience with home appliances may evoke, the impact of the product quality and specified consumption emotions on the consumer's purchase decision for washing machines is examined in this study.

According to the obtained results, brand quality is the dominant predictor of the purchase decision, whereas income is the most important socioeconomic variable affecting the consumer's buying behavior with respect to the purchase of washing machines. Apart from brand quality, a positive emotion is the second most significant determinant of the purchase decision. Given the intense competition on household goods market, marketers are presently paying indepth attention to the hedonic value of their products as a means of facilitating a closer bond between consumers and their products. Since emotions drive our behavior, many manufacturers of home appliances have realized the need to understand the key emotions that make consumers connect with their products and brands. Therefore, in order to promote emotional brand attachment on the customers' part, manufacturers have to ensure that their products are comparable in terms of their quality and elicit positive emotions in functionality, coupled with a reliable after-sales service. Furthermore, marketers must deploy adequate resources to nurture and manage the relationship built with consumers over the time, because the service failure may quickly lead to a behavior implying making complaints, a negative word-of-mouth and brand switching, with considerable consequences on the market share and revenue.

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APPENDIX

The research questionnaire

SECTION A: The demographic characteristics

Instruction: Please tick [v] where applicable.

1. Sex: (a) Male [] (b) Female []

- 2. Age (years): (a) 18 25 [] (b) 26 33 [] (c) 34 41 [] (d) 42 49 [] (e) 50 57 [] (f) 58 65 []
- 3. Marital Status: (a) Single [] (b) Married [] (c) Divorced [] (d) Widowed [] (e) Widower []
- 4. Educational Qualification (a) Primary [] (b) SSCE/GCE [] (c) OND/NCE [] (d) HND/B.Sc. [] (e) M.Sc./M.A [] (f) MBA/Professional Certificate [] (g) Ph.D. []
- 5. Employment (a) Artisan [] (b) Trader [] (c) Civil Servant [] (d) Self-employed [] (e) Retiree [] (f) Teacher [] (g) Private sector employee []
- 6. Average monthly income (N) (a) 10000 40000 [] (b) 40001 70001 [] (c) 70002 100002 [] (d) 100003 - 130003 [] (e) 130004 - 160004 [] (f) 160005 - 190005 [] (g) 190006 - 220006 [] (h) 220007 - 250007 []

SECTION B: The overall product performance

Please tick [v] the box that represents your experience of the listed brands of the WASHING MACHINES that you are using/used.

S/No.	Brands of washing machines	Very bad (1)	Bad (2)	Average (3)	Good (4)	Very good (5)
1	HAIER THERMOCOL					
2	SAMSUNG					
3	LG					
4	SCANFROST					
5	NEXUS					
6	HISENSE					
7	IGNIS					

SECTION C: The consumption emotions set (CES)

Please indicate how intensely you have experienced the listed emotions for the washing machine(s) you ticked in Section B above by ticking [$\sqrt{}$] the appropriate box.

S/No.	Consumption emotions set	None (1)	Somewhat (2)	Average (3)	Much (4)	Very Much (5)				
Positive emotions										
1	Contentment									
2	Joy									
3	Peacefulness									
4	Surprise									
5	Eagerness									
6	Love									
7	Pride									
8	Relief									
9	Optimism									
10	Excitement									
Negati	ve emotions									
11	Discontent									
12	Guilt									
13	Anger									
14	Envy									
15	Sadness									
16	Worry									
17	Shame									
18	Fear									

SECTION D: Brand quality

S/No	Construct statements	Strongly disagree (1)	Disagreed (2)	Undecided (3)	Agree (4)	Strongly agree (5)
1	The performance of my brand of washing machines exceeds my expectations in most cases					
2	My washing machine possesses all the supplemental features required for it to effectively work					
3	My brand of washing machines is reliable and consistently works					
4	The washing machine conforms to the standard specifications					
5	This product brand is quite durable; I have used/have been using it for many years and its performance has not					
6	decreased over the time The washing machine is quite serviceable and easy to maintain and repair, unlike some other brands					
7	The aesthetic designs of the product are very appealing to me and influence my choice					
8	I perceive this product brand as high-quality based on its name and other consumers' experiences					
9	This product has the overall best quality due to its consistent performance					
10	The popularity of this product brand among consumers in this region suggests its high quality					

SECTION E: The purchase decision

Please indicate the extent to which you agree or disagree with the statements below by ticking [v] the appropriate boxes opposite them;

S/No	Construct statements	Strongly disagree (1)	Disagreed (2)	Undecided (3)	Agree (4)	Strongly agree (5)
1	A washing machine is very important to me in my daily life					
2	The brand name of the washing machine influences my choice of the product I purchase					
3	The value I receive from the product influences my purchase and repurchase decisions					
4	The perceived quality of this brand is the key determinant in my making my purchase decision					
5	The reliability and durability of the washing machine influences my decision to purchase the product					
6	This brand of the washing machine is of a high quality					
7	The innovative design and aesthetics of the washing machine affect my decision to buy					
8	I feel satisfied with my decision to purchase this brand of the washing machine					
9	Generally, this brand of the washing machine has the best overall quality					
10	I have never regretted buying this brand of the washing machine					
11	I will definitely recommend this brand of the washing machine to other people					
12	If I were to purchase another washing machine, I would definitely purchase any model of this brand					