

# The Role of Extrinsic Product Cues in Consumers' Preferences and Purchase Intentions: Mediating and Moderating Effects

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**Abstract:** The main purpose of this study is to investigate the roles of several information-cues setting on consumers' purchase intention by highlighting the intervening roles of brand preferences and the moderating roles of social factors. This study was conducted in Yemen, as a representative of consumers from less-developed countries. A multistage cluster-sampling was employed. A total of 600 questionnaires were distributed. This study found that in high-involvement products, consumers used three-way extrinsic cues interaction as indicators for brand quality. This suggests that there is an intervening role of brand preferences which enhances the purchase intention according to consumers' roles and status.

**Keywords:** Extrinsic cues, Brand preferences, Purchase intention, Social factor.

## 1. Introduction

The globalization of the universal economy and the expansion of international trade in the past few decades have exposed consumers of all nations to a wider range of foreign products [1]. Increased globalization has created strong growth in the internationalization of consumer and industrial markets. The growth of the global markets causes the increase of countries of origin and brand names.

Usually, customers rely on both intrinsic and extrinsic cues to judge or anticipate products and service quality [2,3]. Customer judgments represent how they perceive different dimensions of intrinsic and extrinsic of product attributes. Intrinsic attributes or cues refer to the fundamental characteristics of the products which cannot be converted or managed on a trial basis without converting the physical attributes of the products. Extrinsic attributes or cues are the non-physical characteristics of the products [4]. For example, in the case of the automobile products: durability, engine capacity, performance, and colour are the intrinsic cues. While, the price, country of origin and brand name would be extrinsic attributes that serve to influence consumers' perceptions toward automobiles.

The literature shows that, in general, the intrinsic cues are usually more reliable, unless the intrinsic cues are insufficiently predictive in the minds of the consumers, or they have slight confidence in their ability to assess and evaluate them [5-8]. The studies also established that consumers cannot always accurately or objectively assess these cues before buying or judge the quality after purchase evaluation [9]. Perhaps the most important reasons are the inability to judge, misunderstanding, insufficiency of self-confidence and inability to gain information [10-14].

In fact, the extrinsic cues theory has been drawing attention for many researchers [15-20]. Besides, some of the extrinsic cues have been found to significantly influence the evaluation of the product performance and quality to the customers' perceptions; these include country of origin, brand and price [21],[5], [22].

Recently, several studies have investigated the effectiveness of price and brand image across several countries of origin to evaluate the consumers' perceptions of brand and products' quality [15], [23], [5]. However, the repetition of similar studies in other emerging or pre-emerging markets (non-Western, emerging consumer market contexts), is

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required in order to generalize the results, according to many researchers' suggestions [21],[24],[19].

Thus, review of the literature suggests that there is a lack of studies that examine the consumers' brand preferences in the Third World Countries toward developing and developed countries' brand names. The relationship between several information cues-setting on consumers' brands preferences and purchase intention has rarely been investigated there [25]. This study attempts to bridge this gap using several information cues-setting such as country of origin, brand name and price on consumers' purchase intention by highlighting the intervening role of brand preferences and the moderating role of social factors.

## 2. Construct of the Research Model

Based on critical review of studies related to consumer behaviours and purchase decision-making and depending on previous models and theories such as the theory of reasoned action [26], the consumer socialization theory and the high-involvement decision process theory [27], the cue utilization theory [28], [4] and important models such as means-end chain model of consumer perceptions of price, quality and value[29] and the model of relationship of brand name, store name and price effects[22], a synthesis model was proposed for the current study. The model takes into consideration the advantages of other criticisms and important recommendations by previous studies.

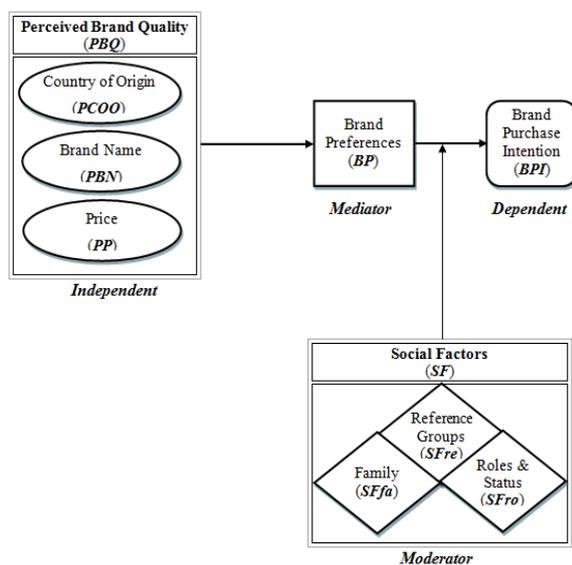


Figure 1. The Proposed Model

The conceptual model (shown in Figure 1.) hypothesizes that extrinsic product cues *i.e.* brand name, country of origin, and price would have a positive effect on consumers' perceptions for brand quality. These three extrinsic cues are frequently associated with perceived quality in literature, as well as other extrinsic cues [5],[21-23],[30-31].

In addition, it is hypothesized that brand preference has an intervening role between perceived brand quality and brand purchase intention. Researchers of consumers' buying behaviours have found that brand preference is a key determinant of purchasing decisions and crucially influences consumers' brand choice and buying behaviours[32-35]. Furthermore, it is hypothesized that social factors *i.e.*, family, reference groups, roles and status could moderate the relationship between brand preferences and brand purchase intention. Thus, the effect of perceived brand quality is going to be indirect on consumers' purchase intention through consumer brand preferences as intervening variable. The growing interest of the relationship between social factors and buying certain products/brands have drawn the attention of many researchers[36-38],[34],[39].

### 2.1. Rationale for the Mediating Role

Many marketers would like to win brand preference, which means that the targeted consumers usually choose their brands over the other brands, perhaps because of habit or favourable past experience [40]. Brand preferences are a comparative judgment among a set of brands, which leads to a more favourable attitude toward one or more of the brands[41].

One of the most widely-used concepts in the study of brand preferences is the cue utilization theory. The theory proposes that product's cues in decision-making could be derived from the actual physical product (intrinsic cue) or from product-related attributes apart from the physical product (extrinsic cue) [4],[28]. In general, consumers rely on extrinsic product cues rather than intrinsic product cues when he/she is operating without enough information about the product in question [29].

Review of literature suggests that, brand preferences may be considered to have a mediator function if it explains the relation between the antecedents and the results [42]. Despite a substantial amount of researches on brand preferences of the consumers' buying behaviours literature, hitherto, no studies are devoted to examine the mediating effects of brand preferences on predicting the behavioural intention.

The relationship between brand preferences and brand purchase intention can be considered to be a consequence of the extrinsic product cues of people with high-involvement products. In high-involvement products, consumers consider a wide range of cues to add value and translate them into preferences and purchase behaviours. These cues (*i.e.*, price, brand name, country of origin) are more likely to exhibit high levels of brand preferences which in turn affect brand purchase intention. Thus,

it is expected that the relationship between extrinsic product cues and brand purchase intention may be mediated by brand preferences.

## 2.2. Rationale for the Moderating Role

Social factors indicate an individual's perceptions of the social pressure to get involved in a certain behaviour [26]. Social factors play an important role in the decision of buying certain products/brands, including the most sensitive products such as automobiles. Researchers of consumer socialization literature have attempted to identify the various factors that influence brand preferences [37]. However, one of the most important groups that affect buyers' behaviours is the social factors group which includes reference groups, family, roles and status [43].

The consumer socialization theory is the starting point for the explanation of brand preferences because this perspective provides a useful conceptual framework for investigating consumers' consumption-related behaviours, skills, and attitudes [44]. Review of the literature suggests that, there seems to have been some increasing interest in the relationship between social factors and buying certain products/brands [36-39].

Based on this discussion, it is expected that the positive relationship between consumer's brand preferences and buying certain products/brands may be moderated by the social factors. Social influence may cause a significant influence on buying certain products/brands. These factors were found to have a significant effect in the decision of buying certain products/brands [36-38], [45-48].

## 3. Methodology

In executing this study, multistage cluster sampling was employed to determine the research respondents. Building the clusters sampling is the first stage. Then, the authors randomly chose the elements of the study from each cluster in the second stage. Thus, urban households in five cities in Yemen were chosen for this study. To reach the minimum appropriate sample size for 805,716 households in urban areas, the appropriate sample size should be 384 [49]. However, to obtain a high response rate and more accurate results, the questionnaires were distributed to a sample size of 600. Several drafts were evaluated in order to increase the content validity of the research instrument. Two pre-tests were performed (for the English & Arabic versions) to ensure the validity and reliability of the instrument used. Suggestions and feedback from academic panel, as well as Cronbach's alpha results were considered. Some of the instrument items were

revised to produce them in a more suitable way or to be more convenient for the subjects' investigation before reaching the final version of the questionnaire.

The final questionnaire covers different parts of research objectives and is divided into five parts. Part one: seeks the opinions of the consumers on extrinsic product cues information of automobile attributes; contains 21 statements. Part two: seeks the consumers' opinions about his/her brand preferences; contains 6 statements. Part three: seeks the degree of influence the social factors have on consumers' brand preferences and purchase intention; contains 12 statements. Part four: seeks the likelihood of the respondents who will purchase an automobile; contains 6 statements. Part five: demographic profile; contains 7 statements. The scale was evaluated by using 5-point agreement or disagreement based on the consumers' opinions about automobile purchase behaviour. A self-administered method was used for data collection. Structural equation modelling was utilized in this study by conducting Confirmatory Factor Analysis (CFA) and path analysis using AMOS 18.

## 4. Data Analysis

Approximately six hundred questionnaires were distributed in this study in five main cities in Yemen. After utilizing a widely-used method and examining for missing data and outliers, a total of 97 cases were dropped from the data. The finishing count of usable questionnaires was 375 cases with a percentage of 62.5%.

To assess the structural model, the authors need to ensure of the goodness of model fit by following Hair et al.'s (1998) and Torkzadeh, et al.'s (2005) recommendation [50, 51]. Accordingly, the authors first assessed the measurement model in terms of its overall fit of the data using confirmatory factor analysis (CFA). Second, they examined the discriminant validity of the factor loadings using average variance extracted (AVE) and square correlation. Third, they examined the construct reliability of the factor loadings using composite reliability (CR) and Average Variance Extracted (AVE). Having assessed the measurement model, the structural model was then tested according to the objectives of the study.

In the first step; by following Hair, et al. (1998) suggestion, this study dropped 10 items as standardized regression weights did not load as expected, below 0.5 (*i.e.*, PBN6, BPI5, PP7, PP6, BP1, PCOO1, BPN3, PP1, BP4, BPI4). The descriptive statistics of these items and the standardized regression weights are shown in (*Table 1*).

Table 1. Items Dropped (Indicator Standardized Regression Weights Less than 0.5)

Code	Item	Mean	SD	β weights
PP7	I am very concerned about low prices, but I am equally concerned about brand quality.	4.221	.8219	0.057
BPI5	If another brand name is not different from (favorite brand name) in anyway, it seems smarter to purchase this brand.	3.829	.9934	0.093
PP6	Good automobile brand offers reasonable price.	3.656	.9560	0.121
PBN6	Seeking brand name information is less important for inexpensive goods than for expensive goods like automobiles.	4.072	.9661	0.330
BP1	If I was to buy an automobile, I would prefer (favorite brand name) if everything was equal.	4.360	.7984	0.339
PBN3	If faced with choosing between two or more automobiles with similar features, I would select the better known brand name.	4.467	.7796	0.422
BPI4	I will be glad to recommend others to purchase automobile carrying (favorite brand name).	4.272	.7462	0.452
PCOO1	When buying an expensive item, such as an automobile I always seek to find out what country the product was made in.	4.496	.7047	0.457
BP4	(Favorite brand name) is attractive me if it has suitable price compared to other automotive brands.	4.424	.7268	0.469
PP1	The old saying "you get what you pay for" is generally true.	3.837	.9352	0.487

The overall  $\chi^2$  dropped from (1603.405/917) to (938.518/532). But, other fit indices revealed that the model did not fit the data very well. Checking for the modification indices was also needed in order to fit the model data very well. Thus, a second confirmatory factor analysis using the retained 35 items was run. Accordingly, another seven items (*i.e.*, SFre4, PCOO4, PCOO8, PBN5, PCOO2, SFro2, SFfa1) were dropped as they loaded highly on other factors (multi-access). The descriptive statistics of the items and their cross-load with different factor are shown in (Table 2).

A third CFA using the retained 28 items was run. Each confirmatory factor analysis run, demonstrated an improvement in the overall fit of the measurement model. The overall Chi-square  $\chi^2$  dropped from (1603.405) to (443.614), and the degree of freedom (df) dropped from (917) to (321). In addition, the RMR, GFI, AGFI, CFI, IFI, TLI and RMSEA values for the final model also indicate a better fit and exceed the common acceptance levels as suggested by Hair, et al. (1998) (*see Table 3.*).

Table 2. Items Dropped (Cross-Load with Different Factors)

Code	Item	Mean	SD	Item load on another item
SFre4	I rarely purchase the automobile until I am sure my peers approve of it.	2.699	1.063	e35 «-» SFro, SFre, SFfa, BP, e39, e35, e34, e33, e32, e9
PCOO4	When I am buying a new automobile, the country of origin is the first piece of information that I consider.	3.997	1.056	e4 «-» SFre, BP, e33, e16, e13, e6, e5, e4, e3
PCOO8	When purchasing a product, I believe country of origin will determine the technological sophistication of the automobile.	3.912	1.062	e8 «-» SFre, PP, e34, e20, e10, e6, e5, e4, e3
PBN5	Regardless of what features competing automobiles may offer, I would buy the brand of cars that I most trust.	4.259	0.840	e13 «-» e40, e36, e35, e31, e17
PCOO2	To make sure that I buy the highest quality of automobile, I look to see what country the product was made in.	4.37	0.784	e2 «-» e36, e8, e6
SFro2	An automobile is more valuable to me if it has 'high status' appeal.	3.128	0.929	e37 «-» BP, e32
SFfa1	I often follow my family decisions by buying the same brand name of the automobile.	2.675	1.063	e29 «-» e39, e13

Table 3. Fit Indices for the Measurement Models

Model	$\chi^2$	df	RMR	GFI	AGFI	CFI	IFI	TLI	RMSEA
Base Model (45 items)	1603.405	917	.047	.836	.815	.833	.836	.820	.045
Refine Model (35 items)	938.518	532	.046	.873	.849	.882	.884	.868	.045
Final Model (28 items)	443.614	321	.040	.925	.906	.951	.952	.942	.032

Notes: df= Degrees Of Freedom.  
 RMR= Root Mean Square Residual.  
 GFI= Goodness of Fit Index.  
 AGFI= Adjusted Goodness of Fit Index.  
 CFI= Comparative Fit Index.  
 IFI= Incremental fit index  
 TLI= Tucker-Lewis index  
 RMSEA= Root Mean Square Error of Approximation.  
 Recommended value: GFI, AGFI, CFI, IFI & TLI > 0.90, and RMR & RMSEA < 0.05

After conducting a confirmatory factor analysis (CFA) of the measurement model, another assessment was run using the retained 28 items to confirm the goodness of the model fit. Thus, performing factor analysis was the next step (*see Table 4.*)

KMO criterion is used to measure the sampling adequacy, by comparing the magnitude of the observed partial correlation coefficients to those of the magnitude of the partial correlation coefficients. The results in (*Table 4.*), indicate that KMO for the retained items got a score of 0.79 and the Bartlett's test of Sphericity shows to be significant with value less than 0.001. These results indicate an acceptable model fit and exceed the common acceptance levels[52]. Besides, using factor analysis for structure detection, eight factors in the initial solution have eigenvalues greater than 1. They accounted for almost 60% of the variability in the original variables. This suggests that eight latent influences are associated with this study.

The calculation of the composite reliability (CR) and the average variance extracted (AVE) were based on the formula given by Fornell and Larcker (1981)[53]. Composite reliability is used to check the internal consistency, which should be greater than the benchmark of 0.7 to be considered adequate [53; 50]. The average variance extracted reflects the overall amount of variance in the latent construct accounted for by the indicators. It measures the variance captured by the indicators relative to the measurement error, and it should be at least 0.50 [53]. As shown in (*Table 4.*), all constructs had (CR) greater than 0.70 and the (AVE) were equal or above 0.5.

In summary, the fit indices demonstrated good overall fit of the measurement model to the data. Based on these statistical results, the measurement model has high reliability and validity [50-53], and the retained items are able to measure the constructs under study.

Table 4. Factor Analysis

Total Variance Explained		Eight factors in the initial solution have eigenvalues greater than 1 (60.252%)							
Kaiser-Meyer -Olkin & Bartlett's Test		Variable	Item	KMO	Approx. Chi-Square	df	Sig.		
		8	28	79.0%	2809.124	378	.000		
Code	Variable	Component							
		1	2	3	4	5	6	7	8
PCO03	Perceived of Country of Origin				.729				
PCO05					.706				
PCO06					.752				
PCO07					.665				
PBN1	Perceived of Brand Name							.738	
PBN2								.740	
PBN4								.624	
PP2	Perceived of Price		.764						
PP3			.752						
PP4			.737						
PP5			.694						
BP2		Brand Preferences			.754				
BP3				.747					
BP5				.596					
BP6				.727					
SFfa2	Family						.709		
SFfa3							.780		
SFfa4							.785		
SFre1	Reference Groups					.833			
SFre2						.820			
SFre3						.682			
SFro1	Roles & Status							.707	
SFro3								.685	
SFro4								.730	
BPI1	Brand Purchase Intention	.660							
BPI2		.721							
BPI3		.733							
BPI6		.802							
CR		0.820	0.826	0.803	0.806	0.824	0.803	0.745	0.750
AVE		0.534	0.543	0.503	0.510	0.611	0.576	0.495	0.500

In order to test the mediating-effect of the brand preferences (BP) between the independent variables, *i.e.*, perceived brand quality (PBQ) and dependent variable, *i.e.*, brand purchase intention (BPI), this study followed Baron and Kenny’s (1986) and Holmbeck’s (2006) recommendations[42; 54]. Accordingly, this study examines three possible models, *i.e.*, direct, indirect and saturated effects. As illustrated in (Figure 2.), the structural model contains three possible paths; firstly, from independent variables to the mediator variable; secondly, from independent variable to the dependent variable, lastly, from the mediator variable to the dependent variable.

At the same time, the results in (Figure 2.), show that the overall structural model fit is acceptable in terms of Chi-square ( $\chi^2$ ) 69.724 and the degree of freedom (df) 40. In addition, the GFI, AGFI, CFI, IFI, TLI and RMSEA exceed the common acceptance levels as suggested by Hair, et al. (1998). Thus, this proves that, perceived brand quality (PBQ) is completely mediated by brand preferences (BP) and strongly impacted the brand purchase intention (BPI).

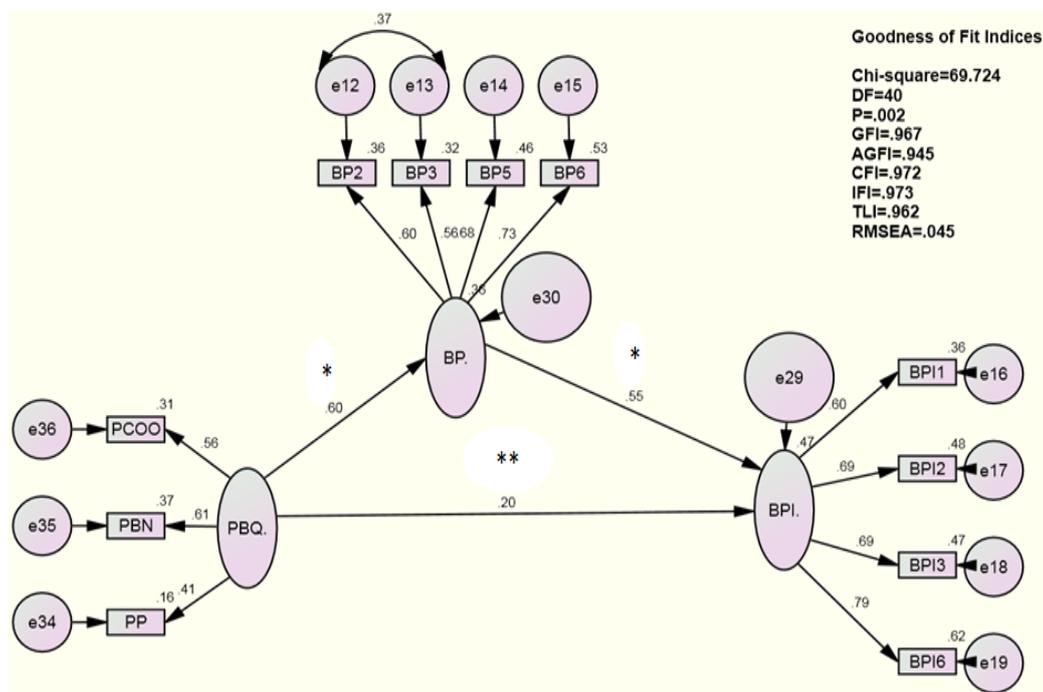


Figure 2. The Mediating Effect  
 \*Significant standardized path coefficients  $p < 0.001$   
 \*\*Not significant standardized path coefficients

The results show that the standardized regression coefficient of the path from PBQ to BP is significant at .60, and from BP to BPI is also significant at .55. While from PBQ to BPI is insignificant at .20. Thus, this indicates strong effects between (PBQ to BP) and (BP to BPI).

In order to test the moderating effect of the social factor (SF) between brand preferences as a mediating variable and brand purchase intention as a dependent variable; this study followed Baron and Kenny’s (1986) and Holmbeck’s (2006) recommendation (*see Figure 3.*)[42,54]. Accordingly, a total of four structural models were conducted to test the overall relationships among variables. Firstly, the interaction of the moderator variables together tested as one variable. Then, secondly, the moderator variables were individually tested.

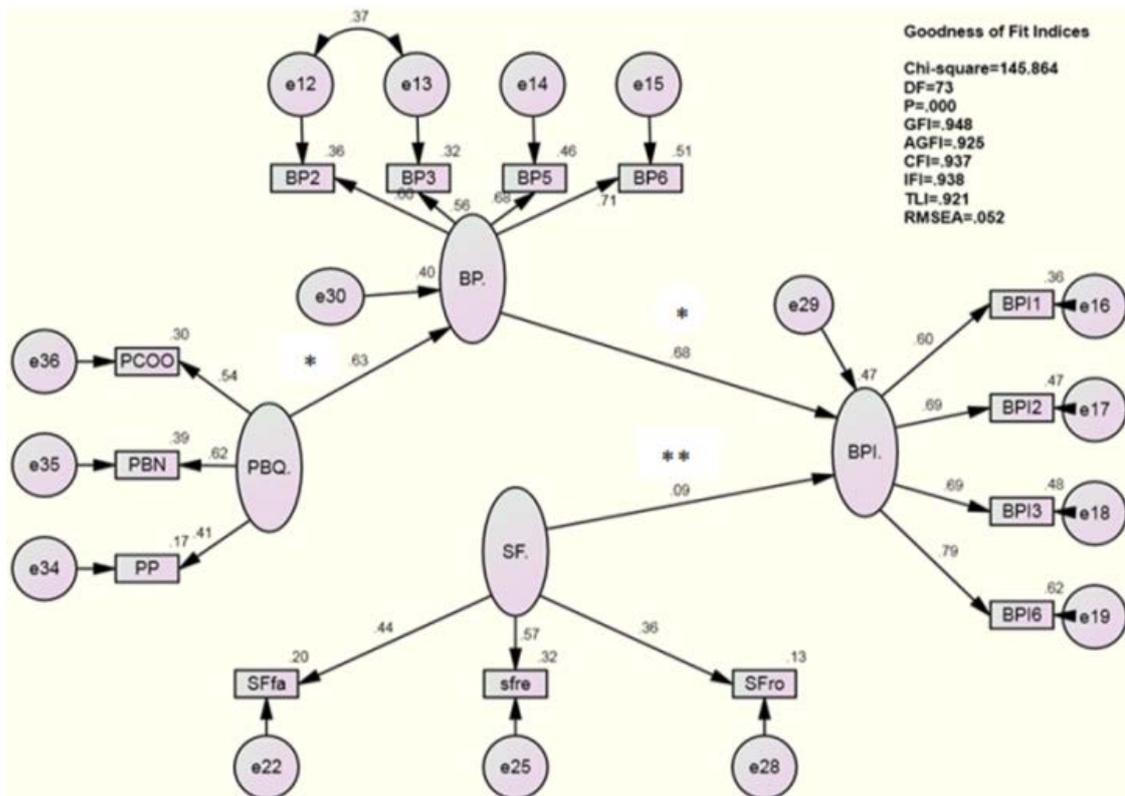


Figure 3. The Moderating Effect  
 \*Significant standardized path coefficients  $p < 0.001$   
 \*\*Not significant standardized path coefficients

The results showed that the standardized regression coefficient of the path from PBQ to BP was significantly .63 and from BP to BPI was significantly .68, but from SF to BP was insignificantly .09.

Although the above results showed that the relationship between SF to BPI was insignificant and did not impact the relationship between BP and BPI, the authors investigated the relationship between brand preferences and brand purchase intention by examining the role of the social factors individually.

Among the three sub-structural moderating models, only one model (*i.e.*, SFro model) was significant. As shown in (Figure 4.), the standardized regression coefficient of the path from PBQ to BP was significantly .62, from BP to BPI was significantly .68, and from SFro to BP was significantly .18.

Lastly, a graphic representation of the final structural model, which includes the standardized path coefficients, is displayed in (Figure 5.). Overall, the results indicate that the model provides a good understanding of factors that influence the intention to purchase a brand. The model explains that brand preferences (BP) completely mediated and positively influence the relation between perceived brand quality (PBQ) and brand purchase intention (BPI). Also, the model explains that roles and status variable (SFro) significantly and positively moderated the relation between brand preferences (BP) and brand purchase intention (BPI).

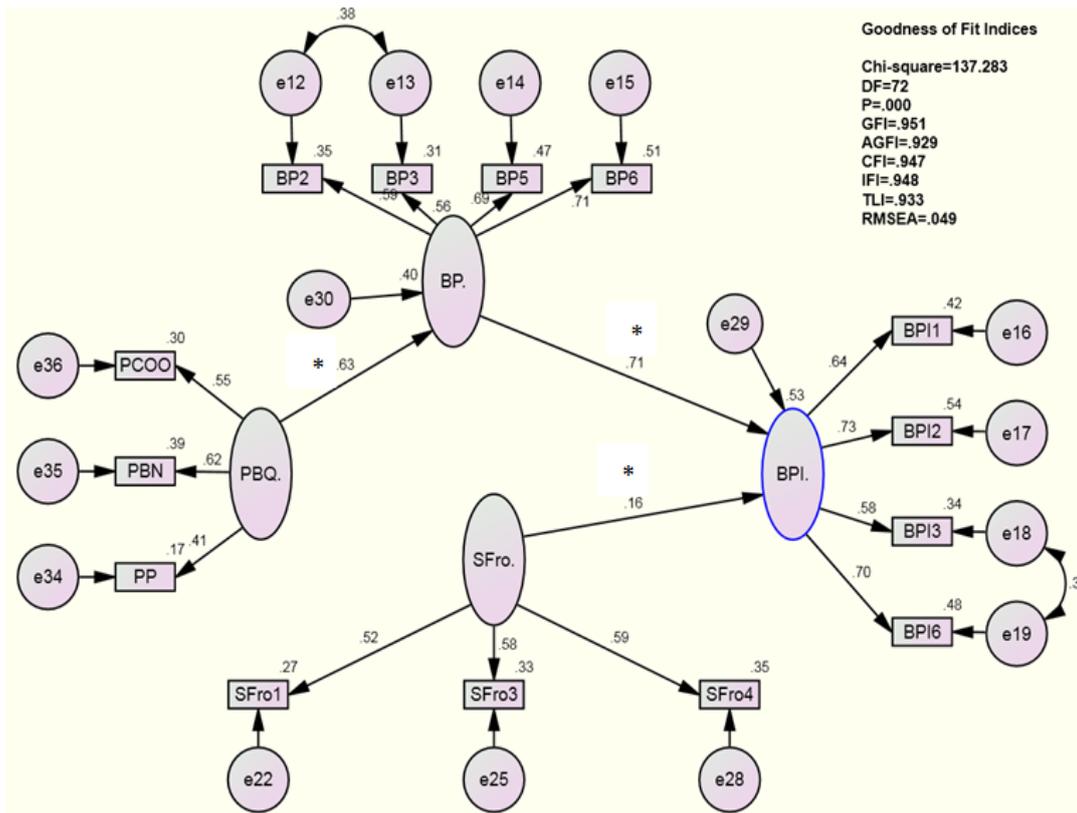


Figure 4. The Moderating Effect (Roles & Status)  
 \*Significant standardized path coefficients  $p < 0.01$

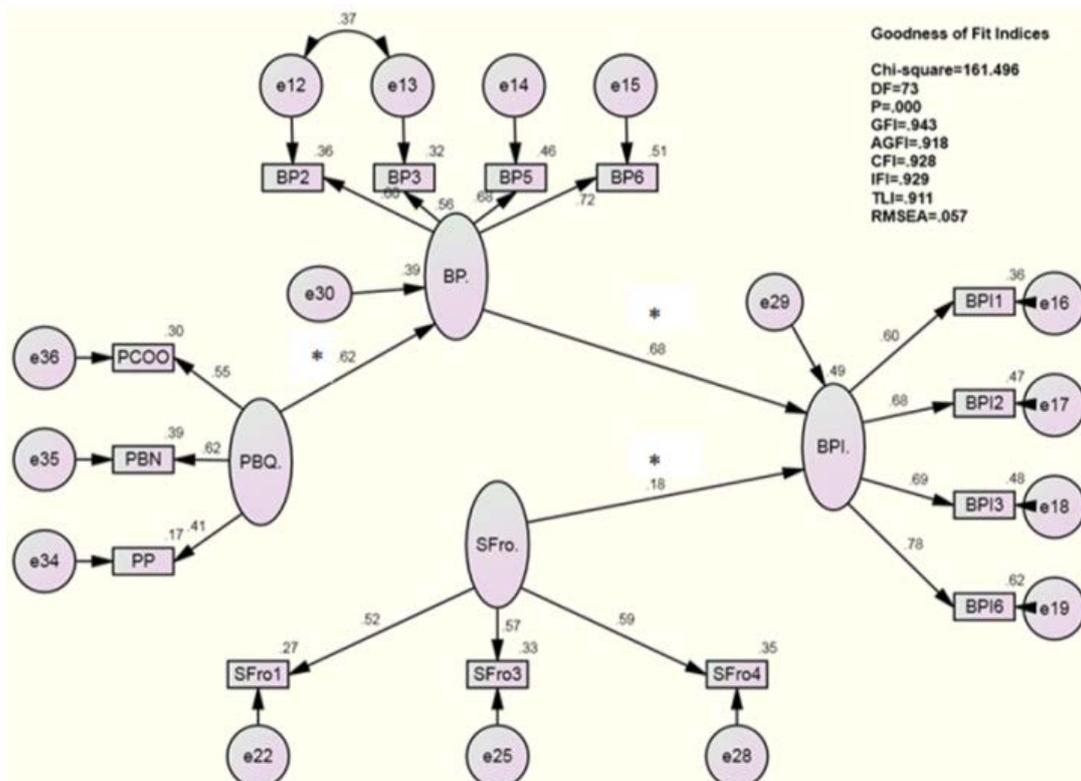


Figure 5. The Final Model  
 \*Significant standardized path coefficients  $p < 0.01$

The fit measures of the full structural model are generally accepted. The model could explain 53.0 percent of variance in brand purchase intention. Thus, the final structural model fits the data very well as shown in (*Table 5.*).

*Table 5. Fit Indices for the Final Model*

Model	$\chi^2$	df	$\chi^2/df$	GFI	AGFI	CFI	IFI	TLI	RMSEA
Assessment Criteria	.....	....	< 2	>.90	>.90	>.95	>.9	>.90	< .05
Final Model	137.282	72	1.91	.951	.929	.947	.948	.939	.049

**Notes:** *PBQ* (PCOO, PBN& PP): Independent Variables  
*BPI*: Dependent Variable;  
*BP*: Mediator;  
*SFro*: Moderator.

Finally, multiple regression test was performed to examine the explanatory contributions of both mediating and moderating effects (*see Table 6.*). After checking for the multicollinearity, the authors performed a hierarchical multiple regression using SPSS17 to run the analysis. This test allows the researchers to specify a fixed order of entry for variables in order to control the effects of covariates or to test the effects of certain predictors that influence others.

*Table 6. Model Summary for Multiple Regression*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	.337	.114	.111	2.34318	.114	47.763	.000
2 <sup>b</sup>	.542	.293	.289	2.09498	.180	94.616	.000
3 <sup>c</sup>	.551	.304	.298	2.08209	.011	5.623	.018

#### ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1 <sup>a</sup>	Regression	262.242	1	262.242	47.763	.000
	Residual	2047.955	373	5.490		
	Total	2310.197	374			
2 <sup>b</sup>	Regression	677.506	2	338.753	77.183	.000
	Residual	1632.691	372	4.389		
	Total	2310.197	374			
3 <sup>c</sup>	Regression	701.883	3	233.961	53.969	.000
	Residual	1608.315	371	4.335		
	Total	2310.197	374			

**Notes:** a. Predictors: (Constant), *BPQ*  
b. Predictors: (Constant), *BPQ*, *BP*  
c. Predictors: (Constant), *BPQ*, *BP*, *SFro*  
Dependent Variable: *BPI*

As illustrated in (*Table 6.*), the F statistic for the third model (*i.e.*, when brand preferences, roles and status are included) is 53.969 with a p value of 0.000, indicating a significant model. Consistent with the SEM analysis, the regression results show that perceived brand quality, brand preferences, roles and status, all significantly affect brand purchase intention. Regarding the explanatory contributions of both mediating and moderating effects, the regression results in the third model suggest that brand preferences, roles and status add about 19.1% unique explanation of the overall variance as indicated by the change in R2.

## 5. Conclusions and Recommendations

Research results may provide manufacturers and marketers with some insights into understanding the process of high-involvement decisions, especially a decision about automobiles and how consumers behave when retrieving a particular brand from memory toward understanding the underlying determinants of consumers' brand preferences and purchase intentions.

As predicted, a positive evaluation of several information cues-setting of brand quality yielded substantially higher levels of buyers' brand preferences and purchase intentions. However, consumers' perception for brand quality comes from many sources, but essentially it is based on several information cues-setting such as; price, country of origin and brand name )[5], [15],[23].

The findings of this study support the conceptual model. The fit measures of the full structural model are generally accepted ( $\chi^2= 137.282$ ;  $df = 72$ ;  $GFI = .951$ ;  $AGFI= .929$ ;  $CFI= .947$ ;  $IFI= .948$ ;  $TLI= .939$  and  $RMSEA= .049$ ), the model could explain 53.0 percent of variance in brand purchase intention. These results indicate that the model provides a good understanding of factors that influence the intention to purchase a brand. The model explains that in high-involvement products, consumers used three-way extrinsic cues-interaction such as country of origin, brand name and price as indicators for brand quality rather than individual cue to enhance the behavioural intention. This suggests that there is an intervening role of brand preferences between the variables which enhances the purchase intention according to consumers' roles and status. These findings should be of particular importance and might help manufacturers and marketers to build a positive stereotype impression and to understand the process of complex decision-making.

One of the most important findings of this study is the importance of roles and status in enhancing buyers' brand preferences and purchase intentions. The results suggest that the positive relationship between brand preference and brand purchase intentions can be built by providing signs of roles and status to enhance one's level of purchase intention. These results may provide manufacturers and marketers with some insight into the relative importance of this variable. Thus, the more the status of the consumers' desire, the more the consumption of status signs, in order to grow their status towards enhancing their level of purchase intention.

Furthermore, this study can give ideas to marketing managers in order to develop strategies targeting the most influential information cues of brand quality that yield substantially higher levels of buyers' brand preferences. The individual cue-effect on perceived

brand quality does not impact the consumers' purchase intention which suggests that in the complex decision-making, especially a decision of high-involvement products such as automobiles, consumers consider a wide range of cues to add values and translate them into preferences and purchase behaviours. The respondents appeared to be influenced by the three-way interaction in their evaluation of brand quality rather than an individual cue.

## 6. Direction for Future Study

Further research should be done in an attempt to clarify the impact of demographic information such as age, gender, and education on consumers' overall evaluation for brand quality towards preferences and purchase intention. Further research should be replicated using a number of other brands and product categories, such as low-involvement products or even other high-involvement products, to determine whether these results can be extended to other conditions. Finally, the findings of this research confirm that roles and status have a significant moderating effect between the relationship of brand preferences and brand purchase intention. Therefore, future research is required that includes additional moderating factors that may influence consumers' behaviours and based on the classified formula of Kotler and Armstrong (2001)[43]. For example, psychological factors (*i.e.*, motivation, perception, learning, belief and attitude) are one of the most important factors affecting buyers' behaviours and gaining grounds in many markets in the world [45]. Interest in marketing alone cannot control such factors, but they must be taken into considerations and must be made aware of, in order to develop an appropriate strategy for its target market.

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