

## Behavioral Factors Affecting Real Estate Purchasing

**Tawfik Salah Al-Nahdi**

**Omar Hassan Ghazzawi**

Faculty Member  
Prince Sultan College for Business  
Al-Faisal University  
Saudi Arabia

**Abu Hassan Abu Bakar**

Housing Building and planning school  
University science of Malaysia

### Abstract

*Globally, factors affecting the real estate market are of enormous importance. This study will investigate the factors influencing Saudi inhabitants to purchase real estate. The study examine the effect of Attitude, Location, Living Space, Public Service, Reference groups namely (Friends Influence, and other Reference Group) on the intention to purchase real estate. A total of 300 questionnaires were distributed to respondents in Jeddah. Based on 220 questionnaires collected, the results show that Attitude had a positive effect on the intention to purchase real estate, while the Location, Living Space, Public Service, and Reference groups namely (Friends Influence, and other Reference Group) had no effect on the relationship between independents and the customers' intention to purchase real estate among Saudis.*

**Keywords:** Consumer behavior, Behavioral Real Estate, Purchasing Behavior

### Introduction

Understanding factors that affect the real estate market are found to be very important and crucial due to the inability of the Utility Theories which have been used to study consumer behavior to provide convincing explanations to understand the market (Gibler & Nelson, 2003). Globally, few studies on commitment have been conducted but there are still increasing assumptions toward studying the market from behavioral point of view (DeLisle, 2012, Graaskamp, 1991; Megbolugbe et al., 1991; Ratcliff 1965, 1972). From Behavioral perspectives, insights on consumer purchase behavior and explanation were given on what drives consumers to purchase housing (Gibler & Nelson, 2003; Kokli& Vida, 2009). Moreover, Robinson (1993) argues that when individuals act in erratic and predictable way, statistical methods are able to discover the laws of economics but from a large number of complicated motives, the economist must leave the task to the psychologist. Therefore, behavioral research is one of the main method used to understand the driving forces of homebuyers (Graaskamp, 1991). Similarly, there are apparent moves from rational factors to psychological and behavioral factors in understand the driving forces of homebuyers (Bargh, 2002). However, there is a considerable argument on the incorporation of information about consumer attitudes, preferences, and perceptions into economic models of housing and this demand is critical to any reduction of the large margin of unexplained variance in housing consumption behavior (Megbolugbe et. al., 1991). Furthermore, many behavioral theories were developed in the field of psychology which may be applicable to marketing and are also relevant to real estate (DeLisle, 2012). Including consumer behavior concepts from sociology, psychology and marketing can therefore be beneficial to the study of real estate (Gibler & Nelson, 2003). Accordingly, many Behavioral Sciences theories that have been applied in marketing are also relevant to real estate.

### **Attitude**

Attitude can be regarded as the person's favor or disfavor toward an action (Al-Nahdi and Abu 2014; Al-Nahdi 2015; Tonglet *et al.*, 2004,) it can also be termed as a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor (Ajzen & Fishbein, 1980). The way individuals respond to, and are disposed towards, an object can also be used to mean attitude (Yusliza and Ramayah, 2011). Therefore, a person who believed in the result from engaging in a positive behavior will have a positive attitude toward performing that behavior, while a person who believed in the result from engaging in a negative behavior will have a negative attitude toward performing that behavior (Ajzen, 1991). Attitude is one of the determinants that affect individual's behavior and it influences consumer-intention to buy durables (Gibler and Nelson, 2003; Summers *et al.*, 2001). Studies indicated that the attitude of the purchaser influences the purchasing process of a custom-made prefabricated house (Koklič & Vida, 2009, Numraktrakulet, *al.*, 2012), in housing and also that it has a bearing on consumer-intention to purchase green.

### **Location Factor**

In an individual's decision making to purchase housing, location is one of the affecting factors as mentioned by Kaynak and Stevenson (1982). In another study from Canada, Kaynak and Stevenson (1982) found that the location factor is one of the factors of choosing a house for Canadian consumers. Availability of an access road to the building area is one of house buyers' motivations to choose a house (Kartajaya, 1994). When searching for a house, being close to work place and facilities is a considered factor as mentioned by Rossini (1998). In his research Levine (1998) found that the time spent to reach work is a dominant determinant of residential location. In the republic of China, buyers prefer to avoid being close to some facilities while preferring to be nearer to schools or mall parks (Wang and Li, 2004). Rinner and Heppleston (2006) defended location as the proximity to desirable or undesirable facilities which has effect on consumer decision of residential buyers. In the issue of housing selection Al-otaibi (2006) location is one of the factors Jeddah consumers are considering. Studies indicated that, the location of a residential unit has an influence on housing choice (Yusuf & Resosudarmo, 2009; Zabel & Kiel, 2000). Choosing a house in Saudi Arabia can also be affected by its proximity to schools (Opoku & Abdul-Muhmin, 2010). From the previous literature studies, we can see that choosing residential location is based on several factors like proximity to schools (Wachset *al.*, 1993), proximity to relatives (Opoku & Abdul-Muhmin, 2010), proximity to community facilities (Al-Momani, 2000), and traveling time (Levine 1998). In a study conducted by Opoku & Abdul-Muhmin (2010), location was also found to be a factor influencing Saudi consumers when choosing a house.

### **Living Space**

It has been stated in literature (Graaskamp, 1981) that there is relationship between the "space customer" and customers' purchasing decision. Abelson and Chung (2005) found that size of houses is one of the factors that affect Australian real estate purchaser's decisions. In addition, a survey conducted by Opoku & Abdul-Muhmin (2010) found living space to be one of the most important factors Saudi real estate purchasers used to consider when purchasing real estate.

### **Public Service**

Public service happens to be one of house purchasers' motivations to choose a house (Kartajaya, 1994). Availability of public service is one of important factors in searching for a house (Rossini, 1998). Al-Momani (2000) identified public service as one of the key influencing Factors of Jordanian home buyers. According to Susilawati and Anunu (2001) availability of the public transport is the very essential factor used to enhance purchasing housing. Chinese consumers consider public services as one of the most important factor in choosing housing (Wang and Li, 2004). Martz, *et al.*, (2006) found availability of public service as a factor that affects intention to purchase housing. According these authors, public service is an evaluation criterion for home purchaser. Other researchers believed that if the public service for a home purchaser is desirable, it will represent a benefit criterion, while unimportant public service represents a cost criterion (Rinner & Heppleston, 2006). Alotabit (2006) stated that public service is one of important factors of Jeddah consumer in housing selection.

### **Reference Groups**

Attitude of others is another important factor to be considered in choosing a product; it means that to which extent the attitude of others affect the customer's purchase behavior when choosing a particular product among different products.

Consumer behavior implies how he perceives the pressures placed on him/her to perform or not to perform the behavior (Ajzen, 1991; Al-Nahdi and Abu 2014, Al-Nahdi 2015; Han and Kim, 2010; Kim and Han, 2010; Tonglet *et al.*, 2004). Purchasing of a product can be affected by consumers' perception of social pressures put on them by others such as friends, political parties, and/or agents (Kalafatis *et al.*, 1999).

### **The Friends' Influence**

The influence of friends affects consumer behavior whether intentionally or not. Friends unintentionally put pressure on a purchaser who would then adjust his behavior in accordance with his friends' preferences, even if he wants a different choice (Childers *et. a.*, 1991; Sangkakoon *et. al.*, 2014).

### **Other Reference Groups**

Consumers usually belong to one group or the other that influence their behavior (Gibler and Nelson, 1998) which is known as a reference group. According to Al-Jeraisy (2008), reference groups can be formal or non-formal. It is not necessary for a consumer to be a member of any reference group or even to have direct or indirect contact with the reference group. When explaining about the reference group Al-Jeraisy (2008) said reference group can be a group that inspires consumers to follow or symbolize the way of behavior. It can be said therefore, a reference group has its particular values and behavior which unavoidably affect a consumer's behavior to comply with its values. According to Panthura (2011), a reference group has strong influence over a consumer's intention to purchase. Furthermore, customers' opinions can be affected by their compliance with the reference group (Gillani, 2012). Lastly, Razak (2013) in his research argued that a reference group has an influence on intention to purchase housing in Malaysia.

### **Intention**

Intention can be regarded as an indication of a person's willingness to perform the behavior, and it is an immediate antecedent of behavior. From the perspective of academic research, Intention is the dependent variable which is predicted by an independent variable and it varies from time to time; as the time interval increases, the lower is the correlation between intention and action (Ajzen, 1991; Ajzen & Fishbein, 1980; Han and Kim., 2010; Kim and Han, 2010). Davis *et al.*, (1989) and Taylor & Todd (1995) found in their studies that intention is a strong predictor of behavior. Phungwong (2010) concluded that the intention to purchase is an antecedent of a purchase-behavior.

### **Methodology**

In this study data was collected through a survey distributed in Jeddah using a self-administrated questionnaire. The questions were adapted from various researches, namely Numraktrakul *et al.*, (2012); Al-Nahdi and Abu; Al-Nahdi, 2015 and Razaket. *al.*, (2013). The questionnaire consists of two main sections. The first section asks about the respondent's characteristics. The second section covers Attitude, Location, Living Space, Public Service, and Reference groups namely (Friend's Influence, and other Reference Group). The five-point Likert Scale was used to assess variables (ranging from 1, Strongly Disagree to 5, Strongly Agree). The Population for this study comprises of people living in Jeddah who are above 18 years old. Random sampling technique was used in selecting the sample, the data collection was conducted by using a questionnaire which has been adapted from various researches and distributed directly to the respondents. Factor analysis and reliability were used to test the goodness of the measures (Sekaran and Bougie, 2010; Hair *et al.* 1998, 2006; Sekaran, 2010). In this study, SPSS (Statistical Package for Social Science) version 21.0 was applied to analyze the data and also the hypotheses testing. Descriptive Analysis was used to analyze the demographic information of respondents. In order to ensure that the data used to test the hypotheses are both valid and reliable, Factor Analysis was conducted based on Hair *et al.*, (1998, 2006) the Varimax rotation method. The Kaiser- Meyer- Olkin (KMO) measure of sampling adequacy Bartlett's test of sphericity and anti-image correlation were included in the factor analysis in order to verify the assumptions undertaken by the factor analysis. Cronbach's alpha was used to analyze the reliability of the instruments. For hypothesis testing and investigating the relationship between the independent and dependent variables Regression Analysis was employed.

### **Response Rate**

A total of 300 sets of questionnaires were distributed to respondents in Jeddah. Out of the total of questionnaires distributed, Only 220 sets of the questionnaires were usable which represents a rate of 73%.

## Analyses and Results

The result found in this study were put in a tabular form and later explained based on the content of each table.

### Profile of Respondents

Profile of Respondents which consists of age, gender, marital status, family members, nationality, education, job, income and own housing are illustrated in Table 1.

**Table1: Profile of Respondents**

Respondent's profile	Category	Frequency	Percentage
<i>Age</i>	18-25	27	12.3
	26-33	54	24.5
	34-40	74	33.6
	Above 40	65	29.5
<i>Gender</i>	Male	185	84.1
	Female	35	15.9
<i>Marital status</i>	Single	45	20.5
	Married	175	79.5
<i>Family members</i>	2	39	17.7
	3-4	82	37.3
	5-6	59	26.8
	More than 6	40	18.2
<i>Nationality</i>	Saudi	175	79.5
	Non Saudi	45	20.5
<i>Education</i>	Primary level	1	.5
	Intermediate level	6	2.7
	Secondary level	36	16.4
	Diploma/Degree	40	18.2
	Degree	103	46.8
	Postgraduate	34	15.5
<i>Job</i>	Retired	14	6.4
	Private sector	134	60.9
	Government	48	21.8
	Other	24	10.9
<i>Income</i>	Below SR 10,000	108	49.1
	SR 10,001 to SR 20,000	73	33.2
	SR 20,001 to SR 50,000	33	15.0
	Above SR 50,001	6	2.7
<i>Own housing</i>	Yes	113	51.4
	No	107	48.6

### Factor Analysis

Hair et al. (1998) explains that Factor analysis was used to ensure that the number of items can be reduced to the number of concepts that were initially hypothesized. Minimum acceptable value for KMO is 0.50 for Bartlett's test of sphericity to be significant. For the Eigen-value, the value should be 1 or greater. The cut-off point for significant factor loading should be at least 0.35 on one factor. Table 2 summarizes factor loadings and cross-factor loadings for independent variables that were extracted from the rotated component matrix. In this study, the variables include Attitude, Location, Living Space, Public Service, Friends Influence, and Reference groups namely (Friends Influence, and other Reference Group) and intention to purchase real estate; Factor analysis was done on all items measuring the independent and dependent variables.

### Reliability Analysis

Reliability Analysis was conducted to ensure the consistency or stability of the items (Sekeran, 2003). The Cronbach's alpha test was used to analyze the reliability of the instrument.

In this section all variables, namely Attitude, Location, Living Space, Public Service, and Reference groups namely (Friends Influence, and other Reference Group) and intention to purchase real estate, are included in the reliability analysis. Table 2 also shows the values of Cronbach's alpha for all the variables.

### Descriptive Analysis

Descriptive analysis for variables such as Attitude, Location, Living Space, Public Service, and Reference groups namely (Friends Influence, and other Reference Group) and dependents (in this case, Intention) is also presented in table 2.

**Table 2: Results of the Factor Analysis, Reliability and Descriptive**

Variables	Loadings	Eigenvalue	Variance	Reliability	Mean	Standard deviation
<b>Attitude</b>		7.186	24.779	<b>0.895551</b>	4.0960	.75940
Att1	.744					
Att2	.760					
Att3	.755					
Att4	.698					
Att5	.716					
Att6	.710					
Att7	.641					
Att8	.762					
Att9	.638					
<b>location</b>		3.099	10.687	0.762041	3.3606	.99122
Loc1	.728					
Loc2	.831					
Loc3	.790					
<b>Living Space</b>		2.508	8.649	0.828902	3.7664	.87328
LS1	.716					
LS2	.724					
LS3	.809					
LS4	.643					
LS5	.629					
<b>Public service</b>		2.118	7.302	0.781665	4.5727	.70577
PS1	.865					
PS2	.750					
PS3	.691					
PS4	.584					
<b>Friends influence</b>		1.528	5.268	.784	2.4709	.91445
FI1	.733					
FI2	.698					
FI3	.590					
FI4	.770					
FI5	.835					
<b>Reference group</b>		1.430	4.930	.674	3.6348	.94844
RG1	.738					
RG2	.748					
RG3	.713					
<b>Intention</b>		3.656	52.23	0840	3.47	0.92
IN1	.606					
IN2	.808					
IN3	.761					
IN4	.803					
IN5	.807					
IN6	.481					
IN7	.728					

### Testing the Hypotheses

The regression analysis was performed to determine the relationship between the independent variables and dependent variable. The results show that R square = 15 %; this means that about 15% of the variation in the dependent variable can be explained by the independent variables jointly. F value =6.191, and  $p = 000 < .01$  which is very significant, implying that the model is adequate. The Durbin-Watson Test  $D = 1.683$ . A detailed result of the regression analysis is shown in Table 3.

**Table 3: Results of Regression Analysis**

VARIABLE	Standardized coefficients beta
ATTITUDE	0.279***
LOCATION	-0.100
LIVING SPACE	0.113
PUBLIC SERVICE	0.039
FRIENDS INFLUENCE	0.077
REFERENCE GROUP	0.920
R2	0.148
ADJUSTED R2	0.125
F	6.191
SIGNIFICANT	0000
DURBIN-WATSON TEST	1.683

**NOTE.** \* $P \leq .05$  \*\* $P \leq .01$  \*\*\* $P \leq .001$ .

#### Test of Hypotheses

**Ho1** The more positive the Attitude, the greater is the consumers' purchase intention of real estate in Saudi Arabia.

Table 3 shows the results between Attitude and intention to purchase real estate. Based on the results, Attitude was significant at  $***p < .001$  with Standardized Coefficients Beta =0.279, having a positive effect on Intention. Thus, Ho1 is accepted.

**Ho2** The more positive Location, the greater is the consumers' purchase intention of real estate in Saudi Arabia.

Table 3 shows the results of the degree of effect of Location toward intention to purchase real estate. Based on the results, Location was not significant  $p > .00$  with Standardized Coefficients Beta = -0.100 and had no effect on intention to purchase real estate. Thus, Ho2 is rejected.

**Ho3** The more positive Living Space, the greater is the consumers' purchase intention of real estate in Saudi Arabia.

Table 3 shows the results of the degree of effect of Living Space toward intention to purchase real estate. Based on the results, Living Space was not significant  $p > .00$  with Standardized Coefficients Beta = 0.113 and had no effect on intention to purchase real estate. Thus, Ho3 is rejected.

**Ho4** The more positive the Public service, the greater is the consumers' purchase intention of real estate in Saudi Arabia.

Table 3 shows the results of the degree of effect of the Public service toward intention to purchase real estate. Based on the results, the Public service was not significant  $p > .00$  with Standardized Coefficients Beta = 0.039 and had no effect on intention to purchase real estate. Thus, Ho4 is rejected.

**Ho5** The more positive Friends influence, the greater is the consumers' purchase intention of real estate in Saudi Arabia.

Table 3 shows the results of the degree of effect of Friends influence toward intention to purchase real estate. Based on the results, Friends influence was not significant  $p > .00$  with Standardized Coefficients Beta = 0.077 and had no effect on intention to purchase real estate. Thus, Ho5 is rejected.

**Ho6** The more positive Reference group, the greater is the consumers' purchase intention of real estate in Saudi Arabia.

Table 3 shows the results of the degree of effect of Reference group toward intention to purchase real estate. Based on the results, Reference group was not significant  $p > .00$  with Standardized Coefficients Beta = 0.920 and had no effect on intention to purchase real estate. Thus,  $H_06$  is rejected.

### **Conclusion and Recommendation**

Like many other researches of its kind, this study also has the following Conclusion and Recommendation:

#### **Conclusion**

The findings of this study indicated that Attitude had a positive effect on the intention to purchase real estate, whereby Location, Living Space, Public Service and Reference groups namely (Friends Influence, and other Reference Group) had not. It was shown that the intention to purchase real estate was influenced by Attitude while Location, Living Space, Public Service and Reference groups namely (Friends Influence, and other Reference Group) had not. The study has shown that Attitude is accepted in this study. In conclusion, it is assumed that the outcomes of this study will have contributed some valuable information for researchers, customers, marketers and real estate owners. It is expected that the result of the survey will provide clear information on the intention to purchase real estate, and which variables actually affect this intention. This study provided evidence and information as to what really influences the intention to purchase property. The study can thus serve as a future reference on the study of real estate.

Admittedly, there are some limitations which must be given due attention.

#### **Limitations**

Several limitations have been identified in this study. Since this study was conducted in Jeddah only it may not give a general picture to all customers in Saudi Arabia, as such the findings cannot be generalized. Thus, the result obtained may not accurately reflect the actual customers' intention to purchase real estate all over Saudi Arabia.

#### **Future Research**

Including more variables, i.e. other than the ones used in this research, may explain behavioral intention even more succinctly. For example additional research in many different geographical areas in the country can be conducted so as to generalize the findings. And, finally, if characteristics of respondents in the surveys could be included in future research; it might present a clearer view of what motivates purchasers of real estate.

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