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Purchasing housing in Saudi Arabia a behavioral study

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ABSTRACT

Factors affecting the real estate market are of great importance worldwide. This study will investigate the factors influencing Saudis to purchase real estate. The study examines the effect of attitude, subjective norm perceived behavior control on the intention to purchase real estate. A total of 450 questionnaires were distributed to respondents in Jeddah. Based on 322 questionnaires collected, the results show that there is a positive significant relationship between Attitude, and Subjective Norm toward the intention to purchase real estate, while the Perceived Behavior Control had no effect toward the customers' intention to purchase real estate.

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INTRODUCTION

The focus is on Saudi Arabia real estate market for a number of reasons. Firstly, Saudi Arabia is a pivotal country with the largest real estate market in the oil-rich Gulf. In addition, secondly, around 45% of the population is below age 20 years. This and the rapid urbanization rate combined to increase the growth which already happening at real estate market (Opoku & Abdul-Muhmin, 2010). In Saudi Arabia, discovery of oil in commercial quantities in the late 1930s besides the increasing of oil prices during the 1970s, shifted traditional Saudi society to lifestyles of developed societies (Mubarak, 1995). Prior to 1970, the largest segment of the population was rural. Since 1970, the population of Saudi Arabia has boomed dramatically and experienced a new trend, that is, the shift of the population from rural to urban areas (Al-Hathloul 1995). Especially the major urban centers witnessed unmatched growth (Mubarak, 1995). Between 1950 and 1992, the level of urbanization in Saudi Arabia increased parallel with tremendous growth for the population for the same period. For example, the rate of population that live in urban areas increased from 10% to 77% (Al-Hathloul 1995, Mubarak, 1995). Economic improvement for government and citizens resulted in jump in urban development characterizing Jeddah and many other major Saudi cities (Mubarak, 1995). Alotaibi (2006), Jeddah represents one of the largest urban areas in Saudi Arabia. Jeddah's urban population has grown rapidly from 1970 to 2002 to an estimated population of 2,560,000 with annual growth rates of 12.43% in 1970 and a rate of 11.05% in 2000. According to Alotaibi (2006), from 1977 to 2002, the rate of ownership has dramatically increased from 19% to 35%. And for the same period, there is a decrease in the rate of renters, from, 77% to 58%, between 1977 and 2002. As a consequence of Jeddah being the main economic city, it has provided more jobs and high income result with improved opportunities for a better quality of life. All reports on the Saudi real estate market reported there was a high demand on real estate units mainly in the residential sector that will require huge number of units, with almost 1 million units by 2012 (Opoku & Abdul-Muhmin, 2010). Understanding the factors influencing consumers behavior to purchase real estate in Saudi market is important. This will provide crucial insight for decision makers and policy developers in managing the housing demand. According to earlier studies (Gibler & Nelson, 2003, Opoku & Abdul-Muhmin, 2010) this kind of studies may provide results that will also be of importance for real estate developers to satisfy the needs and wants of their customers (Gibler & Nelson, 2003, Opoku & Abdul-Muhmin, 2010).

Literature Review:

Formal involvement in housing in Saudi Arabia started in 1951. The Saudi government used funding to provide housing for its citizens. The government fund called the Real Estate Development Fund (REDF) offers cash loans of up to SR500, 000 (US 133,000), repaid in installments for 25 years to citizens and with zero interest, to construct or buy their own houses. The only two requirements for REDF is that a Saudi citizen must

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be at least 21 years old and he/she did not receive a previous REDF loan without any restrictions to area. REDF has no conditions for location. According to Mubarak, 1995; Susilawati & Anunu, 2001; Alotaibi, 2006, and the Centre for Housing Research, (2008), housing development in Jeddah has changed over the last 50 years. A household's dream for property is highly related to housing choices which take into account changes in social and economic factors that affect Jeddah's housing, must be taken into account in any analysis of the housing market in Jeddah. The housing sector needs to identify these key trends and assess their implications for the housing market. A housing neighborhood and its location in relation to services are important in housing markets. Weak regulations in some areas brought problems in some area like streets capacity, infrastructure, utilization of common facilities and social services which resulted in discomfort to many residents of several units. Demand for housing increased from the seventies of the past century until now. Developers need to know some factors which influenced the decision making process of purchasing a house. In order to develop the most suitable marketing plan. According to Al Hathloul and Edadan,(1995) "the economic contribution of the real estate construction sector during the last twenty years has been very significant. The value-added share of the construction sector had increased from 3.2% to 13.4%, registering an annual compound growth rate of 11.2%. During five years, the real estate sector's contribution to the GDP increased from 2.9% to 3.7%. From 2003 until now, most developed countries are having boom in the housing demand despite there being an increase in residential houses investment.

In order to win the market competition, some factors which influence the decision making process of purchasing real estate need to be determined. Therefore, the purpose of this research is to study Saudi consumer intention to purchase real estate. The attitude, subjective norm and perceived behavioral control of the Saudi housing consumer toward the intention to purchase real estate, will be studied in a sample of consumers.

Theory of reasoned action (TRA):

TRA is a general theory to explain general human behaviour. Fishbein and Ajzen's (1975) have developed theoretical grounds of theory of reasoned action (TRA) which states that beliefs influence attitudes, which lead to intentions, and finally to behaviours. TRA was derived from previous research that started out as the theory of attitude. It has, however, led to the study of attitude and behavior. The components of TRA consists three general constructs: behavioral intention, attitude, and subjective norm. TRA suggests that a person's behavioral intention depends on the person's attitude towards the behavior and subjective norm (Ramayah & Suki, 2006).

Theory of planned behaviour (TPB):

Theory of Planned Behavior (TPB) as proposed by Ajzen (1991) is an extension of the Theory of Reasoned Action (Ajzen & Fishbein, 1980) to predict behavior in real-world mode. During the past decades TPB has been used by many researchers, and it showed it was able to predict intentions. A person's behavior intention is influenced by an attitude toward the behavior, subjective norms and perceived behavior control (Ajzen, 1991). According to Ajzen (1991), the Theory of Planned Behavior (TPB) is used to understand the relationship of intentions to performing a behavior. These intentions are influenced by attitudes towards the behavior, the social pressure to perform this behavior, which is known as subjective norms, and control over the behavior, which is referred to as behavioural control (Ajzen, 1991). TPB was accepted as a theory to explain and forecast human behavior (Numraktrakul, *et al.*, 2012). TPB has been used to investigate the factors influencing consumers to purchase their residential units (Phungwong, 2010; Si, 2012). The Theory of planned behavior is a suitable model to study the factors influencing home purchase intentions (Phungwong, 2010; Numraktrakul, *et al.*, 2012)

Attitude:

Attitude is the person's favor or disfavor toward an action (Tonglet *et al.*, 2004, Al-Nahdi *et al.*, 2008; Al-Nahdi *et al.*, 2009). Attitude is defined as a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor (Ajzen & Fishbein, 1980). Attitude is also defined as the way individuals respond to and are disposed towards, an object (Yusliza and Ramayah, 2011).

Previous studies (Davis *et al.*, 1989; Cronin & Taylor, 1992; French *et al.*, 2005; Gopi & Ramayah, 2007; Han and Kim, 2010; Ing-Long & Jian-Liang, 2005; Jackson *et al.*, 2003; Kim and Han, 2010; and Ramayah *et al.*, 2008) found that there is a strong and steady relationship between attitude and repurchase intention. Customers have the intention to compare the perceived service with the expected service. If customers felt that the service is below their expectation, they would be dissatisfied. However, if customers' feelings were equal to or exceeds their own expectations, they will be satisfied. Accordingly, they intended to purchase from the provider (Kotler & Keller, 2006). The role of feelings of the purchaser influence purchasing process of a custom-made prefabricated house (Koklič & Vida, 2009). A person who has beliefs that result from engaging in a positive behavior will have a positive attitude toward performing the behavior, while a person who has beliefs that result from engaging in a negative behavior will have a negative attitude toward performing the behavior (Ajzen, 1991). Attitudes is one of the determinants that affect individual behavior (Gibler and Nelson, 1998).

Attitude influences consumer intention to purchase durables (Chung and Pysachik, 2000; Summers *et al.*, 2001)
Attitude influences consumer intention to purchase a house (Phungwong ,2010 ;Numraktrakul et, al.,2012).

Subjective Norm:

Subjective Norm results from how the person perceives the pressures placed on him/her to perform or not to perform the behavior (Ajzen, 1991; Tonglet *et al.*, 2004; Han and Kim, 2010; Kim and Han, 2010). Consumers' perception of social pressures put on him by others to purchase a product (Phungwong, 2010). Friends, parents, political parties, and/or agent might be involved in the purchasing decision (Kalafatis *et al.*, 1999). The attitude of others influences the purchase intention and purchase decision. Attitude of others means to which limit the attitude of others affect the customer's purchase decision and of choosing a particular product among different products. When others are close to a customer and have high negativism toward the product, customers will be more likely to adjust his purchase intention. And a customer's purchase intention will increase if others have others preferences to the same product (Ajzen&Fishbein 1980; Kotler& Keller, 2006; Ravis and Sheeran, 2003). Previous studies showed different results regarding the subjective norm as a predictor of intention. There are some studies that showed a significant relationship between subjective norm and intention (Taylor & Todd, 1995; Venkatesh & Davis, 2000; Ramayah *et al.*, 2003, 2004; Chan & Lu, 2004; Baker *et al.*, 2007; Teo & Lee, 2010). Other some studies, again , showed there is no significant relationship between subjective norm and intention (Davis *et al.*, 1989; Mathieson, 1991; Chau & Hu, 2001; Lewis et, al., 2003). Latest studies found that subjective was a predictor of intention at different areas (Alam & Sayuti, 2011; Gupta and Ogden, 2009; Han and kim, 2010 ;Iakovleva *et al.*, 2011; kim and Han, 2010; Wu *et al.*, 2011). Koklič & Vida, (2009) External factors of the purchaser also influence the purchasing process of a custom-made prefabricated house. External factors like reference groups and family purchaser influence purchasing process of a custom-made prefabricated house (Koklič & Vida, 2009). Susilawati *et al.*, (2001) found friends' colleagues and wives have influenced the decision making of purchasing a house by 45%. Social and cultural factors play a significant role in the relative importance of housing preferences which are determined by religion, kinship, and social relations (Jabareen, 2005). Consumers are sometimes influenced by friends' information involved with the actual home decision (Kichen and Roche, 1990). Social factors play significant roles in choosing a house to purchase (Al-Momani, 2000). Subjective norms influence a consumer intention to purchase a house (Phungwong ,2010 ; Numraktrakul et, al.,2012).

Perceived Behavioral Control:

Perceived behavior control is defined as the extent to which the person has control over internal and external factors that facilitate or constrain the behavior performance. Control beliefs are a person's beliefs toward factors available which facilitate or prevent performing a behavior (Ajzen, 2001; Han and Kim., 2010; Kim and Han, 2010; Tonglet *et al.*, 2004;). Latest studies found that perceived behavioral control was a predictor of intention (Iakovleva *et al.*, 2011), (Wu *et al.*, 2011) (Alam & Sayuti, 2011). Various research in various areas, showed that there is a positive relationship between perceived behavioral control and intention (Blanchard *et al.*, 2008; Fang, 2006; Gopi & Ramayah, 2007; Ing-Long & Jian-Liang, 2005; Jen-Ruei *et al.*, 2006; Mathieson, 1991; Ramayah *et al.*, 2008; Shih & Fang, 2004; Taylor & Todd, 1995; Teo & Pok, 2003; Wise *et al.*, 2006; Baker *et al.*, 2007; Teo & Lee, 2010). In the real estate area researchers found perceived behavioral control predictors to purchase housing (Phungwong ,2010; Numraktrakul et, al.,2012). And some researcher found that perceived behavior control has no effect towards intention (Pavlou & Chai, 2002; Ng & Rahim, 2005; Yusliza and Ramayah.,2011).

Intention:

Intention is an indication of a person's willingness to perform the behavior, and it is an immediate antecedent of behavior. Intention is the dependent variable which is predicted by an independent variable namely attitude, Subjective Norm and Perceived Behavioral Control. Intention varies from time to time and 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 strong predictor of behavior. Therefore, the intention to purchase is an antecedent of a purchase decision (Phungwong 2010).

Research methodology:

This study collected data through a survey distributed in Jeddah using a self-administrated questionnaire. The questions were adapted from various researches namely Bredahl *et al* (1999) and Cook *et al.* (2000), Ajzen and Fishbein's (1980), Al-Nahdi (2009); Davis *et al.*(1989); Gopi & Ramayah, (2007); Jahya (2004); Mills (2006); Moor & Benbasat (1991); Norzalila (2004); Numraktrakul *et al.*, (2012); Ramayah *et al.*, (2008); Al-Nahdi (2011) and Numraktrakul *et al.* (2012). The questionnaire consists of two main sections. The first section asks about the respondent's characteristics. The second asking about attitude, subjective norms and perceived

behavior control. To assess attitude, subjective norms, perceived behavior control, the five-point Likert Scale was used (ranging from 1, Strongly disagree to 5, Strongly Agree).

Theoretical framework:

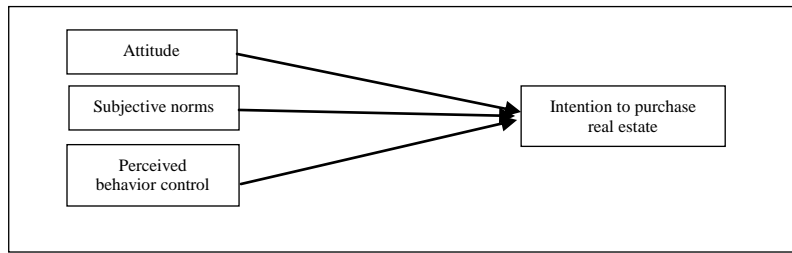


Fig. 1: Effects of independents towards the dependent variable.

Population and data collection:

Population for this study people living in Jeddah and who are above 18 years old. The sample was selected randomly. Where, Data collected by a questionnaire adapted from various researches. The questionnaire was distributed directly to respondents.

Goodness of Measures:

Factor analysis and reliability were used to test the goodness of measures. Factor analysis is a test of how well an instrument measures the concept whereas reliability is a test of how consistently a measuring instrument measures the concept (Sekaran and Bougie, 2010).

Data collection:

The questionnaire was distributed directly to respondents.

Data analysis method:

In this study, the statistical tool SPSS version 21.0 (Statistical Package for Social Science) was applied to analyze the data profile and also the hypotheses testing. The following analysis was used: Descriptive Analysis was used to analyze the demographic information of respondents. As well as Goodness of Measure Analysis factor analysis and reliability analysis were conducted (Hair *et al.* 1998; Sekaran, 2003). This was 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). The Varimax rotation method was also used. Kaiser- Meyer- Olkin (KMO) measure of sampling adequacy, Bartlett's test of sphericity, and anti-image correlation were used as well to verify the assumptions undertaken by the factor analysis. Cronbach alpha was used to analyze the reliability of the instruments. Regression Analysis was used for hypothesis testing, it was used to investigate the relationship between the independent and dependent variables.

Response Rate:

A total of 450 sets of questionnaires were distributed to respondents in Jeddah. Out of the total of questionnaires distributed, 380 sets of questionnaires were returned which represent 84%. Only 322 sets of the questionnaires were usable which represents a rate of 71.5%. Table 1 shows the responses to the distributed questionnaires.

Table 1: Distributions of Questionnaires.

Items	NO.
Questionnaires distributed	450
Total response	380
Unusable response	58
Usable response	322
Total response rate	84 %
usable response rate	71.5%

Results:

Profile of Respondents:

The profile of respondent shows and as depicted in table 2 below, that respondents were aged between 18 to 25 representing 29.2 percent, and between 26-33 representing 24.8 percent, age between 34-40 percent represents 24.8 percent. Respondents aged above 40 percent represent 24 percent of the total respondents. Respondents between 34-40 percent is aged between 26-33 years. 79.2 Percent of respondents are males, where as, 20.8 percent are females, around 64.6 percent of the respondents are married, and 35.4 percent are single.

17.4 Percent have only two family members, 34.5 percent have between 3-4 family members, 31.7 percent have 5-6 family members, and more than 6 family members represents 16.5 percent of respondents. 66.8 Percent of the respondents are Saudis, and 33.2 are Non-Saudis. Respondents educated to primary level represent 2.5 percent, where as 23.3 percent are secondary level, 4.3 percent are diploma level, 55.6 percent are Bachelor degree holders, where as , 14 percent are post graduates, Professional qualification holders represent only 0.3 percent of the respondents. Of the study, 9 percent of the respondents are unemployed or retired, 23 percent own a business, 28 percent work in government, 32 percent work in the private sector, and others 8.1 percent work in different jobs. Respondents with income below SR 10,000 represent 47,5 percent of the study; 34,2 percent of the respondents income is between 10,001 to 20,000, 14 of the respondents income between 20,000 to 50,000, and 4.3 percent of the respondents income is above SR50,001

Table 2: Profile of Respondents.

Respondent's profile	Category	Frequency	Percentage
Age (years)	18-25	94	29.2
	26-33	80	24.8
	34-40	71	22
	above40	77	24
Gender	Male	255	79.2
	Female	67	20.8
Marital status	Single	114	35.4
	Married	208	64.6
Number of family members	2	56	17.4
	3-4	111	34.5
	5-6	102	31.7
	More than 6	53	16.5
Citizenship	Saudi	215	66.8
	Non-Saudi	107	33.2
Education	Primary level	8	2.5
	Secondary level	75	23.3
	Diploma	14	4.3
	Bachelor	179	55.6
	Post graduate	45	14
	Professional qualifications	1	.3
Occupation	Unemployed, Retired	29	9
	Self-employed (own business)	74	23
	Government employee	90	28
	Private sector	103	32
	others	26	8.1
Monthly income	Below SR 10,000	153	47.5
	SR 10,001 to 20,000	110	34.2
	SR 20,000 to 50,000	45	14
	above SR 50001	14	4.3

Factor Analysis:

Factor analysis was used to ensure that the number of items can be reduced to the number of concepts that were initially hypothesized (Hair *et al.* 1998). Minimum acceptable value for KMO is 0.50 with Bartlett's test of sphericity to be significant. Eigenvalue value should be 1 or greater. The cut off point for significant factor loading should be at least 0.50 on one factor.

Factor analysis was done on items of independent variables (Attitude, Subjective Norms and Perceived Behavioral Control). This examination revealed a combined total variance explained of 64.33%. The KMO measures of sampling adequacy stand at 0.814. Table 3 summarized factor loadings and cross factor loadings for independent variables that were extracted from the rotated component matrix. here we have attitude, subjective norms and perceived behavior control. Factor analysis was done on all items measuring independent variables.

Factor analysis was done on items of the dependent variable (Intention). Five questions were introduced to measure the dependent variable. This examination revealed a combined total variance explanation of 64%. The KMO measures of sampling adequacy stand at .844. Table 4 summarizes the factor loadings and cross factor loading which is shown at rotated component matrix.

Reliability Analysis:

Reliability Analysis was conducted to ensure the consistency or stability of the items (Sekeran, 2003). The Cronbachs alpha test was used to analyze the reliability of the instrument. In this section all variables namely attitude, subjective norms and perceived behavior controls will be included in the reliability analysis. Table 5 shows the values of Cronbach's alpha for all the variables.

Table 3: Factor Loadings for Independent Variables.

	Components		
	1	2	3
Factor 1:Attitude			
Buying housing is a beneficial decision.	.851	.157	-.014
Buying housing is a good idea.	.845	.171	.009
Buying housing is a wise decision.	.856	.171	.002
Buying housing is an admired decision.	.781	.207	-.019
Factor 2:Subjective norms			
My family thinks that I should buy housing.	.144	.817	-.011
My family would want me to buy housing.	.053	.868	.067
My family agrees with me to buy housing.	.246	.829	.026
My family thinks that buying housing is a wise decision.	.309	.713	-.003
Factor 3:Perceived behavior control			
I have enough opportunity (I have easy access to the market) in making a decision to buy housing.	.082	.004	.785
I have enough time to make a decision to buy housing	.207	-.105	.653
I have enough money to buy housing.	-.078	-.002	.804
I have enough skills and knowledge about housing to make my own decision. If I would like to buy housing,	-.075	.089	.623
I have complete control over buying housing.	-.109	.065	.692
Eigenvalue	4.051	2.566	1.746
Variance (%)	31.16	19.73	13.43
Total variance		64.33	
Kaiser-Meyer-Olkin MSA KMO		.814	
Bariett's test of sphericity		1755.75	

Table 4: Factor loading for dependent Variable Intention to purchase Real estate.

	Component
Factor: Intention to purchase Real estate	
I will continue to buy housing in the future.	.733
I intend to buy housing frequently in the future.	.836
I plan to buy housing.	.854
I will try to buy housing.	.801
I want to buy housing.	.784
Eigenvalue	3.220
Variance (%)	64.396
Total variance	64.396
Kaiser-Meyer-Olkin MSA KMO	.844
Bariett's test of sphericity	708.985

Table 5: Reliability for independent and dependent variables

Variables	No. of items	No. of items retained	Cronbachs alpha
Attitude	4	4	.879
Subjective norms	4	4	.849
Perceived behavior control	5	5	.756
Intention	5	5	.859

Results:**Descriptive analysis:**

Descriptive analysis for independent variables (Attitude, Subjective Norms and Perceived Behavioral Control), dependents (Intention) is presented in table 6.

Table 6: Descriptive Analysis.

Variable	Mean	Std. Deviation
Attitude	4.1685	.91060
Subjective norms	3.8230	1.02020
Perceived behavior control	2.8267	.86721
Intention	3.6770	.98223

Test of hypotheses:

Hypothesis 1, 2 and 3 predicted that the independent variables which include attitude, subjective norm and perceived behavioral control are positively related to the dependent variable which is intention. The Multiple regression analysis technique was used to test this relationship in this model.

The regression analyses was performed to determine the relationship between the independent variables and dependent variable. The results shows that R square = 31.8% this means that about 31.8% of the variation in the dependent variable can be explained by the independent variables jointly. F value =49.37, and p = 000 <.01 which is very significant, implying the model is adequate. The Durbin-Watson Test D =1.703. Detailed results of the regression analyses is shown in table 7.

Table 7: Multiple regression results between independent variables attitude, subjective norm, and perceived behavioral control with dependent variable intention.

Variable	Standardized Coefficients Beta
Attitude	0.278***
Subjective norm	0.388***
Perceived behavioral control	0.019
R ²	0.318
Adjusted R ²	0.311
F	49.37
Significant	0.000
Durbin-Watson Test	1.703

*p ≤ .05 **p ≤ .01 ***p ≤ .001

H1 the more positive is attitude the greater is the consumer intention to purchase real estate:

Table 7 shows the results between attitude and intention to purchase real estate. Based on the results, attitude was significant $p < .00$ with Standardized Coefficients Beta = 0.278 and have positive effect on Intention. Thus, H1 supported.

H2 the more positive is subjective norm the greater is the consumer intention to purchase real estate:

Table 7 shows the results of the degree of the effect of subjective norm toward intention to purchase real estate. Based on the results, subjective norm was significant $p < .00$ with Standardized Coefficients Beta = 0.388 and have positive effect on intention to purchase real estate. Thus, H2 supported.

H3 the more positive is perceived behavioral control the greater is the consumer intention to purchase real estate:

Table 7 shows the results between perceived behavioral control and intention to purchase real estate. Based on the results, perceived behavioral control was not significant $p > .05$ with Standardized Coefficients Beta = 0.019 and have no effect on Intention to purchase real estate. Thus, H3 not supported.

Conclusion and recommendation:

Conclusion:

The study has illustrated the ability of the TPB to explain the intention to purchase real estate. It was shown that the intention to purchase real estate was influenced by attitude and subjective norm while perceived behavioral control was not, with the subjective norm component being more influential.

The study has shown that attitude and subjective norm are accepted for this study. In conclusion, it is assumed that the outcomes of this study have contributed some valuable information for researchers, customers, marketers and real estate owners. It is expected that the result of the survey will provide information on the intention to purchase real estate and which variables affect this intention. This study provided what influence the intention. So, as a result of this study will serve as a future reference on the study of real estate. Admittedly, there are some limitations which must be given attention.

Limitations:

Several limitations have been identified in this study. Time was limited and the sample size is small so the results of this study couldn't provide a general picture to all customers in Saudi Arabia. This research was only conducted in Jeddah. Thus, the result obtained cannot accurately reflect the actual customers' intention to purchase real estate all over Saudi Arabia.

Future Research:

Including different variable may explain more behavioral intention as Ajzen suggested (1991). Effect of income and in which point consumer decide and actually purchase housing. More research in many different states can be conduct to generalize the findings. In addition, if characteristics of respondents' included in future research it may declare view to some motivators of purchasers.

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