# INFLUENCES ON THE BUYING BEHAVIOR OF PURCHASING COMMERCIAL HOUSING IN NANNING CITY OF GUANGXI PROVINCE, CHINA



# INFLUENCES ON THE BUYING BEHAVIOR OF PURCHASING COMMERCIAL HOUSING IN NANNING CITY OF GUANGXI PROVINCE, CHINA

A Thesis Presented to

The Graduate School of Bangkok University

In Partial Fulfillment

of the Requirements for the Degree

Master of Business Administration

by

Qiuxue Luo

2012



©2012

Qiuxue Luo

All Right Reserved

This thesis has been approved by the Graduate School Bangkok University

Title : Influences on the Buying Behavior of Purchasing Commercial Housing in Nanning City of Guangxi Province, China

Author : Qiuxue Luo

Thesis Committee :

Thesis Advisor

Thesis Co-advisor

(pr. Paul TJ James)

(Prof. Dr. Tun Lwin)

Graduate School Representative

External Representative

(Dr. Prapassorn Vannasathid)

(Asst. Prof. Dr. Thanawan Sangsuwan)

(Asst. Prof. Dr. Sivaporn Wangpipatwong)

Dean of the Graduate School

8 , Nov. 2012

Qiuxue Luo. MBA, November, 2012, Graduate School, Bangkok University. <u>Influences on the Buying Behavior of Purchasing Commercial Housing In Nanning</u> <u>City of Guangxi Province, China</u> (161 pp.)

Advisors of thesis: Paul TJ James, Ph.D.

#### ABSTRACT

The aim of the research is to examine consumers' commercial housing buying behavior from the perspective of the consumers. There are four main purposes of this study. Firstly, to study the external influences namely culture, government policies, marketing activities, and reference groups on consumer behavior on purchasing commercial houses. Secondly, to study how internal influences such as perception, attitudes, learning behavior, motivation, and emotions impact on home buying behaviors. Thirdly, to study how self-concept and lifestyle influence commercial house buyers. Finally, to understand the decision making process of buyers of commercial houses. A survey on consumer commercial house buying behavior has been conducted in GuangXi, China. The data are analyzed using multiple regression analysis and the results are in accordance to the expectation of the researcher. All the variables, namely culture, government, marketing activities, reference groups, perception, attitudes, learning, motivation, emotion, self-concept, and lifestyle are simultaneously significant to the dependent variable which is the consumer housesbuying behavior. However, with an R square value of 0.359, 35.9% of the variation in consumer houses-buying behavior can be explained by all the eleven variables.



Approved: Signature of Advisor

#### ACKNOWLEDGEMENTS

The author of this research would like to express her greatest thank to all who have contributed and assisted in the completion of the paper. It has been an exhausting but yet exciting learning experience for the researcher. This paper seeks to provide important and useful information to real estate developers especially on the expectation and demand of home buyers. A good understanding of buying behavior implies a greater chance of selling and buying. This is of course, with satisfaction for all parties. Whether it is in China or in other countries, the researcher believes that the basic "house needs" of people must be met in order for them to lead a happy life in a desired home and in good living environment.

This research has received tremendous support from the real estate companies, their sales personnel and their most important customers. The research would not have successfully collected the crucial data without their help and assistance. The process of collecting the data has been most enriching as the researcher has the opportunity to have direct contact with the people. Thus enhances the learning experience.

I would also like to express my deeper gratitude for Dr. Paul TJ James, and Prof.Dr. Tun Lwin for their endless efforts of motivation and encouragement in the completion of this research paper. I am also grateful to Ms. Genevieve Lim, my "Laoshi" for the translation and editing of the research paper.

Finally, I wish to thank my parents for their ever support and confidence that I will finish my course of study and the successful completion of my final thesis for the MBA course in the Bangkok University.

### TABLE OF CONTENTS

ABSTRACT	iv	
ACKNOWLEDGEMENTS		
LIST OF TABLES	xi	
LIST OF FIGURES	xiv	
CHAPTER 1: INTRODUCTION	1	
1.1 Background	3	
1.2 Statement of Problem	11	
1.3 Intention and Reason for Study	14	
1.4 Research Objectives	15	
1.5 Research Questions	16	
1.6 Assumptions	17	
1.7 Scope of Research	17	
1.8 Benefits of Research	19	
1.9 Limitation of Research	20	
Conclusion	20	
CHAPTER 2: LITERATURE REVIEW	22	
2.1 The Introduction of Consumer Behavior	23	
2.2 Consumer Decision Making Process	25	
2.2.1 Problem Recognition	27	
2.2.2 Information Search	28	
2.2.3 Alternative Evaluation	30	
2.2.4 Decision Making	31	

## TABLE OF CONTENTS (Continued)

viii

CHAPTER 2: LITE	RATURE REVIEW (Continued)	
2.2.5	Post-purchase Behavior	35
2.3 Factors	Influence Consumer Behavior	35
2.3.1	External Influences	36
2.3.2	Internal Influences	42
2.4 Self-co	ncept and Lifestyle	49
2.5 Concep	otual Framework	51
Conclusion.		54
CHAPTER 3: RESI	EARCH METHODOLOGY	57
3.1 Review	of Research Methodology	57
3.1.1	Model of Research Process	57
3.1.2	Identification of Research Problem	58
3.1.3	Establishment of Research Objective	59
3.1.4	Research Design	61
3.1.5	Data Collection	71
3.1.6	Data Analysis	72
3.1.7	Research Result Report	73
3.2 Statem	ent of Research Methodology Utilities	73
3.2.1	Conceptual Framework	73
3.2.2	Hypothesizes	74
3.2.3	Methodology	77
Conclusion.		85

## TABLE OF CONTENTS (Continued)

CHAPTER 4:	DATA PRESEANTATION	88
4.1	Data Base on the Customer's Demographic Characteristics	89
4.2	Data Presentation of External Influences such as Culture,	
	Government, Marketing Activities and Reference Group on	
	House-buying Behavior	96
4.3	Data Presentation of Internal Influences such as Perception,	
	Attitudes, Learning, Motivation, and Emotions on	
	House-buying Behavior	100
4.4	Data Presentation of Self-concept and Lifestyle on	
	House-buying Behavior	104
4.5	Data Presentation of Consumer Decision Making Process on	
	House-buying Behavior	104
4.6	Data Presentation of Buyer's Experience and Acquisitions on	
	House-buying Behavior	105
Conclu	usion	110
CHAPTER 5:	RESEARCH ANALYSIS AND FINDINGS	111
5.1	Descriptive Analysis	112
	5.1.1 Summary of the Demographic Characteristics Analysis	112
	5.1.2 Summary of the Levels of Agreement Analysis	114
5.2	Reliability Analysis	115
	5.2.1 Reliability Analysis of Internal Influences	116
	5.2.2 Reliability Analysis of External Influences	117
	- · · · · · · · · · · · · · · · · · · ·	

page

## TABLE OF CONTENTS (Continued)

Х

CHAPTER 5:	RESEARCH ANALYSIS AND FINDINGS (Continued)	
	5.2.3 Reliability Analysis of Self-concept and Lifestyle	118
	5.2.4 Reliability Analysis of Decision Making Process	119
5.3	Correlation Analysis	120
5.4	Factor Analysis	125
5.5	Hypothesis Testing	131
5.6	Conclusion	145
CHAPTER 6:	CONCLUSION, DISCUSSION, AND RECOMMENDATIONS	146
6.1	Conclusion	146
6.2	Discussion	150
6.3	Implication of this Study	159
6.4	Limitations of this Study	159
6.5	Suggestions for the Future Research	160
6.6	What I have Learned from the Study	161
BIBILOGRA	PHY	162
APPENDICE	S	180
BIOGRAPHY		190
LICENSE AGREEMENT OF DISSERTATION/THESIS PROJECT		191

### LIST OF TABLES

Table 3.1	Commercial Housing Sales in Xingning Area from April to
	September
Table 3.2	Number of Population and Sampling
Table 3.3	Reliability Tests of Each Part by Using Cronbach's Alpha
Table 3.4	Reliability Tests by Using Cronbach's Alpha
Table 4.1	Number and Percentage of Respondents by Gender
Table 4.2	Age Distribution of Respondents
Table 4.3	Number and Percentage of Respondents by Marital Status
Table 4.4	Number and Percentage of Respondents by Education Level
Table 4.5	Number and Percentage of Respondents by Monthly Income
Table 4.6	Number and Percentage by Respondents' Ability to Pay Base on
	Different Unit Pricing
Table 4.7	Chinese Traditional Culture
Table 4.8	Government Influencing Home-Buying Behavior
Table 4.9	Marketing Activities Influence House-Buying Behavior
Table 4.10	Reference Group Data Presentation
Table 4.11	Data Highlighting the Elements that Influence Perception
Table 4.12	Attitude Factor Data Presentation
Table 4.13	Learning Factor Data Presentation
Table 4.14	Motivation Data Presentation
Table 4.15	Data Indicating Emotional Buying Behavior
Table 4.16	Self-Concept and Lifestyle Data Presentation

## LIST OF TABLES (Continued)

Table 4.17	Decision Making Process Data Presentation	105
Table 4.18	Number and Percentage of Buyer's Experience and Acquisition	106
Table 4.19	First-Time Purchaser's Experience and Acquisition Data	
	Presentation	107
Table 4.20	Number and Ratio of First-time Purchaser in Terms of Level of	
	Agreement	107
Table 4.21	Second-time Purchaser Data Presentation	108
Table 4.22	Second-time Purchasers Reactions Based on Experience and	
	Acquisition	109
Table 5.1	Distributions of Demographic Characteristics	113
Table 5.2	Summary of the Levels of Agreement Analysis.	115
Table 5.3	Internal Influences Reliability Analysis	117
Table 5.4	Reliability Analysis of External Influence	118
Table 5.5	Reliability Analysis of Self-Concept and Lifestyle	119
Table 5.6	Reliability Analysis of Decision Making Process	120
Table 5.7	Correlation Matrix	124
Table 5.8	KMO and Bartlett's Test	126
Table 5.9	Extraction of Communalities	127
Table 5.10	Rotated Component Matrix	129
Table 5.11	Rotated Factor Analysis Summary	130
Table 5.12	Total Variance Explained	131
Table 5.13	Decision Making Process Regression Model Summary	134

Page

## LIST OF TABLES (Continued)

Table 5.14	Decision Making Process Model ANOVA	135
Table 5.15	Result of Regression of Consumer Decision Making Process	
	Model	135
Table 5.16	Significant of Research Model	138
Table 5.17	Model Summary (Hypothesis 12.1)	139
Table 5.18	ANOVA (Hypothesis 12.1)	139
Table 5.19	Coefficients (Hypothesis 12.1)	139
Table 5.20	Model Summary (Hypothesis 12.2)	140
Table 5.21	ANOVA (Hypothesis 12.2)	140
Table 5.22	Coefficient (Hypothesis 12.2)	141
Table 5.23	Model Summary (Hypothesis 12.3)	141
Table 5.24	ANOVA (Hypothesis 12.3)	142
Table 5.25	Coefficient (Hypothesis 12.3)	142
Table 5.26	Model Summary (Hypothesis 12.4)	143
Table 5.27	ANOVA (Hypothesis 12.4)	143
Table 5.28	Coefficient (Hypothesis 12.4)	144
Table 5.29	Significant of Research Model	144
Table 6.1	Summary of Results of Hypothesis Testing	147

### LIST OF FIGURES

xiv

Figure 1.1	Average Home Price of Nanning City in 2010	9
Figure 1.2	House Turnover of Nanning City from January to June, 2011	11
Figure 1.3	Models of Problems	14
Figure 1.4	Map of Nanning City	18
Figure 1.5	Map of Xingning District	19
Figure 2.1	Consumer Decision Making Process	26
Figure 2.2	An Overview of the Perceptual Process	43
Figure 2.3	A Conceptual Model of the Research Literature Orientation	56
Figure 3.1	Research Process	58
Figure 3.2	A Classification of Scaling Techniques	68
Figure 3.3	Sampling Design Process	70
Figure 3.4	Map of Eight Commercial Housing Companies of Sampling	82
Figure 4.1	Gender Distribution Chart	89
Figure 4.2	Age Distribution Chart	91
Figure 4.3	Marital Status Distribution Chart	92
Figure 4.4	Educational Background Distribution Chart	93
Figure 4.5	Respondents' Monthly Income Distribution Chart	94
Figure 4.6	Ability to Pay Base on Different Unit Pricing	95
Figure 4.7	Five Points Likert Scale	96
Figure 4.8	First and Second-time Purchasers' Percentage Distribution Chart	106
Figure 4.9	First-time Purchasers Agreement Level Distribution Chart	108
Figure 4.10	Second-time Purchasers Agreement Level Distribution Chart	109

## LIST OF FIGURES (Continued)

Figure 5.1	Scree Plot	128
Figure 6.1	Main Factors in the Conceptual Model of Consumer Buying	
	Process	149



Page

#### CHAPTER 1

#### INTRODUCTION

This chapter introduces the research proposal of this study which includes the background of the study, statement of problem, intention and reason for the study, research objectives, research questions, assumptions, scope of research, benefits of research, and limitations of research. The structure of this chapter is as following:

- 1.1 Background
- 1.2 Statement of Problem
- 1.3 Intention and Reason for Study
- 1.4 Objectives of Research
- 1.5 Research Questions
- 1.6 Research Assumptions
- 1.7 Scope of Research
- 1.8 Benefits of Research
- 1.9 Limitations of Research Conclusion

Consumer behavior has been an important research topic for decades.

However, Koklic and Vida (2009) deems that the research focus for consumer behavior has shifted from rational factors to psychological and social decision factors by reading previous theoretical efforts. Bargh (2002) states that the recent models have not managed to embrace all the knowledge in the field of consumer behavior such as: subconscious processes, the role of needs, goals and emotions. Apart from leaving out these important findings, the existing literature also lack what consumers' consider as 'big' or 'strategic decisions' (Bazerman 2001; Gronhaug, Kleppe, & Haukedal, 1987). Therefore, Bazerman (2001) urges researchers to further explore the most important and challenging consumer decisions, which include house and car purchases, dealing with a building contractor etc.

Strategic decision making refers to the process of decision making with longterm commitments of resources and affecting the budget available for other goods and services (Gronhaug et al., 1987). The characteristics of the strategic purchase: high involvement in the process; long-term commitment of resources; truncated budget available for other goods and services. The purchase of houses may be considered as a good example of such a purchase decision.

It's useful to conduct the empirical research in the commercial house purchase behavior for two important reasons: first, the house is the most important durable goods in the household (Hempel & Punj, 1999); and many studies of consumer decision making for a durable goods indicate that there are similarities among the buying processes related to different durable goods (Punj, 1987). A substantial number of literatures has focused on buying processes of durables by researching individual and organizational customers (Bayus, 1991; Cripps & Meyer, 1994; Grewal, Mehta & Kardes, 2004; Hauser & Urban, 1986; McQuinston, 1989; Punj & Brookes, 2002). Comparing to the buying of convenience products, consumers perceive these kinds of 'large ticket' purchases as riskier; sometimes even 'traumatic' (Bauer, 1960; Chaudhuri, 2001; Mitchell, 1999). The outcomes of such purchases are usually unknown and may be unpleasant. A common attribute of durables is that the buying decision is complex, especially when the price is perceived as high. Buying a house highly involves the consumer, as this decision binds their economic resources in the long run (Arndt, 1976; Gronhaug, Kleppe, & Haukedal, 1987; Grewal, Mehta & Kardes, 1976; Rosenthal, 1997). Both product categories offer a rich variety of price and quality, are complex and relatively well known to consumers (Brucks, Zeinthaml, & Naylor, 2000; Bayus & Carlstrom, 1990).

Similarly, the buying decision for real estate as a subgroup of durables is also complex and demands high involvement (Gibler & Nelson, 2003). In most cases, consumers consider several possibilities; compare them and ultimately making a selection (Bayus & Carlstrom, 1990). In contract to frequently purchased items, learning on a basis of trial-error is uncommon when buying expensive, complex products (Bazerman, 2001).

#### 1.1 Background

China is the world's second largest economy after the United States. It is the world's fastest-growing major economy with an average annual GDP growth rate of 10% over the past 30 years. The gross domestic product (GDP) in 2010 was 397,983 billion CNY at the annual growth rate of 10.3%. The revenue of real estate industry of China contributed more than 10% to GDP in 2010. This reflected that important role the real estate plays in China's economy (Liu & Chen, 2011).

The development of China's real estate industry has undergone five phases (Fung, Huang, & Shen, 2006). The first phase was from 1949 to 1978 in which the Chinese government learned from the Soviet government in carrying out the planned economy policies. During that period, the government just faced the housing problem was the main issue and not the real estate since as the government had the ownership of all estate. In order to solve the housing problem, the welfare house policy was carried out which allowed government agencies, irregularly state-owned or collectively owned enterprises to provide low-rent houses to all employees.

The second phase, start from 1978 to early 1987. It was an experimented era of the "One-Third Housing Sale Model." Under the model, Some whereby cities were selected, in which the government, state-owned enterprises (SOEs), and individuals each bore one-third of the construction and maintenance costs for new units.

The third phase was from year of 1987 to 1991 during which the government started to accept the real estate marketization, especially in the second half of 1987. Some cities and provinces began to try to trade land-use rights. The transfer transaction of land-use rights was formalized in April 1988 with the government of the constitution was amended to allow and encourage the transfer of land-use rights. However the ownership of the land still belonged to the state. At the mean time, the housing Public Accumulation Fund (PAF) was set up in Shanghai. It gradually spread to the whole of China which was the major contributors for employees; it was a mean to relief employers' financial burdens.

The development of China's real estate industry to accelerates to the fourth phases from year of 1992 to 1997. The boost came along with Deng Xiaoping's visiting South China. There were many cities which were classified as economic development zones where EDZ with this relaxed regulations, foliated the easy transfer of land-use rights. Many real estate service firms were set up. It included real estate brokerages and property management agencies. In addition, the primary real estate legislation called "the Urban Real Estate Law " took effect in July of 1994 which drew up the main legal framework of real estate based on the national level.

The ongoing fifth phase started in 1998. During this phase, the old housing system was thoroughly removed and the real estate industry enters into a rapid

developmental period. The State Council terminated the welfare housing policy in 1998 and required employers to convert real housing distribution to financial housing assistance. What this means is that the urban residents able to purchase houses by using their own salaries, applying financial support from the Public Accumulation Funds, personal mortgage loans, and financial housing subsidies of employers.

This phase coincides with the boom in the China's real estate industry. During this period, according to Pan (2009) showed the annual growth rate of China's real estate industry was 22.1%. This was higher than average annual GDP growth rate of 9.4%. The growth trend continued to 2007, with an annual growth rate of over 20%. In 2010, the investment in real estate industry of China was 48,267 billion Yuan. Furthermore, this is an increase of 33.2% over 2009. In particular, the investment of commercial housing was 34,038 billion Yuan at the annual growth rate of 32.9%. The proposition of the investment of commercial housing in the whole real estate industry in 2010 was up to 70.5% (Bureau of Statistics of China, 2010).

The Chinese government released a series of polices to encourage development of real estate industry in 1990s. After two decades, the real estate industry has gradually become a basic and pillar industry to boost the structural pace of urbanization and improve resident's life qualities, however, it is an important force to pull investment demands and consumption demands.

The property tycoon and former chairman of Huayuan group in China, Ren Zhiqiang has cited at the house ifeng in 2010 that the real estate market is extract active and the prices of housing is rising at the same time. He further stated that there are six reasons for the soaring of housing prices. Firstly, the number of Chinese people and the population structure in China determine the demand of high-speed development of housing. China is the world's most populous country. China has to build many more houses to home increasing people. China was not able to effectively solve the problem of housing. Before the reform from 1949 to 1978, the urban per capita living space in 1978 was only 3.6 per square meters. Although the reform and opening-up improve after marketization, it was still unable to meet the growing demand. After carrying out the family planning policy, the average population number of per household had decreased from 3.96 in 1990 to 2.96 in 2008. The high fertility during 70s and 80s further aggregated the demand for houses.

The second more related to the urbanization of China. With urbanization, saw the increase in the migration of rural peasants entering the cities for employment. Many settled down in their cities and set up families as such more living space become an argued issue to solve.

The third is due to the scarcity of land resources has great impact. Generally, the market situation and cost factor determine the housing price. The market factor reflects in the relationship between supply and demand. If the market balance is destabilized due to the supply greater than demand, the housing price will rises followed by the land price increases. The housing cost is determined by the land cost, construction cost, and relevant taxes. If the construction cost and taxes are certain and stable, the housing price will mainly depend on the land cost. Nonetheless, as the land is belonged to the government, in the short term, the supply of land would be limited, this means the gap between the supply of land and demand of land is bigger and bigger when the demand of housing soaring. As a result, the housing price will go up. Another influencing element comes from the improvement of city infrastructure and public service. One of the obvious feature under high-speed of China's economic development is the competition among cities. All cities continuously use the land selling income to increase the investments and inputs to the city's infrastructure and public service in order to improve the city's image. The large numbers of cities are equipped with high-speed rails, light rails, roads, schools, hospitals, sports facilities, and city garden. These constructions drive the surrounding land costs up which in terms affecting the housing prices.

Chinese traditional culture contributes to the fifth factor. In the mind of Chinese, for many Chinese, the possession of a house means that the future generation would be well homed. It is a tradition of therefore for parents to purchase houses for their children.

Hence, house is perceived as immovable property which has the strongest antiinflationary and the highest hedge rate among all of goods. Many people see house as a way to preserve their wealth besides having the residence function. House is also suitable for mortgage. It has the highest mortgage rate, and is easy to liquidate. Meanwhile, buying a house involves in large among of capital investment, government support, and protection from property rights. People prefer to the house because of these functions, in particularly when the supply is greater than the demand, causing appreciation expectation for long-term to be stable. It too facilitates the housing price increase.

Although Ren Zhiqiang tried to explain the growth housing price from different aspects, the housing price without doubt is higher than the consumers' expectation. Therefore, Chinese central government draws up a series of policies to curb the home prices in particular the severest eight new measures in the history were released in January of 2011. These measures included further tightening in mortgages, with the loan-to-value limit of second home mortgages restricted to 40% or lower while interest rate will be at least 1.1x of the benchmark, asking local governments to effectively manage the land supply, and increase constructions for economic housing (i.e. cheaper housing). The central government will required some cities with high home prices has to implement buying limits which include people from buying second or third home. Local governments will have to set the 2011 price growth targets for newly constructed housing by the end of first quarter. Furthermore, people who sell their homes within 5 years of purchasing would be taxed. Interestingly, there has been no mention of the property tax. (Zarathustra, 2011)

The home price in Nanning City also increases rapidly affected by the nationwide real estate market and growing demands, nonetheless its strategic position connecting China with some countries of the Association of Southeastern Asian Nations attracted people's attention. Nanning City is the capital of Guangxi Province located in the Southern-west of China. Nanning City as the economic centre of Guangxi Province achieved the 180 billion Yuan of GDP in 2010 and the individual disposable income in the urban area was 18032 Yuan in 2010. In the first half of 2011, the GDP of Nanning City is 98.1 billion Yuan (Baidu, 2011).

From the Figure 1.1, the average home price of Nanning city in 2010 was 6160.5 per square meters while the individual disposable income for the urban people in Nanning City was 18,032 Yuan in 2010. If a couple who live in Nanning City wants to buy a house as large as 100 square meters, they have to deposit their total disposal income for seventeen years. The housing price-to-income ratio was 17 to 1 which greatly surpassed the rational range from 4 to 6. Ye (2011) states that if a real housing price-to-income ratio is larger than the rational range, the bubblization of the house price will be serious. According to the Ye's perspective, the home price in Nanning City had bubblization in 2010, and the Chinese Academy of Social Sciences published the "Green Paper on Housing in 2010" which pointed out that the housing bubble of Nanning City was ranked in the third position around the whole country (Soufun, 2011).



Figure 1.1: Average Home Price of Nanning City in 2010

Source: Newhouse. (2011). *House prices of Nanning city in 2010*. Retrieved from http://newhouse.nn.soufun.com/house/web/Search\_Result.php

Based on the Chinese central government's requirement, the local government also needs to implement some relevant measures in order to match central government's action to curb the unreasonable home price. Therefore, the municipal government of Nanning City issued a policy of house purchase restriction on February 15<sup>th</sup>, 2011 and it was taken effect from March 1<sup>st</sup>, 2011 until December 31<sup>st</sup>, 2011 (Baidu, 2011). Those people who have the domicile of Nanning City and have one suite of house already are allowed to buy one more suite of house in Nanning City. Those people who don't have the domicile of Nanning City but can provide the tax certificate of one or more than one year in Nanning City are allowed to buy a new suite of house in Nanning City. As for those people who have two or more suites of house in Nanning City already are not allowed to buy one more. Meanwhile, those who cannot provide the tax certificate for one year are not allowed to buy a suit of house.

Figure 1.2 shows the house turnover in Nanning City during the first half of 2011. During the first two months of 2011, the turnover was very high and increased stably; however, when the restriction was in operation, the turnover decreased sharply. The change reflects that consumers are more rational to wait and see the government's adjustment and control to the real estate market and the responses from the market.





Source: Home week. (2011). *House turnover of Nanning city in first half year of 2011*. Retrieved from http://epaper.gxnews.com.cn/ngcb/html/2010-12/16/content\_1740082.htm

#### 1.2 Statement of Problem

Several researchers and questionnaires have been conducted on people perception of housing pricing in Nanning city. The furthering reviews the following information. People's Bank of China did a research that involved 20,000 depositors about the real estate market in 20 cities on June 17<sup>th</sup> of 2011. The result shows that, more than 74% of respondents believed the home price was too high to accept. Meanwhile, the Housing Security and Housing Authority of Nanning City used two months from 29<sup>th</sup> March to 29<sup>th</sup> May to make a research about the real estate market of Nanning City via its website. It had received 1,160 pieces of effective questionnaire, and the findings showed more than 50% of respondents would not like to buy a house in a short term, 33% of them would wait and see, only 18% would consider. At the time to purchase an estimate of the real estate market trend of 2011, only 9% thought the home price would decrease, 25% expected the home price would be stable or increase, and 41% of them thought it would be uncertainty (Home Week, 2011).

Looking back on the house turnover rate in Nanning City during the first half of year in 2011 (Figure 1.2, P.11), it's not optimistic for developers for there are visit buy interest buyer but with less transactions. It shows that consumers are more rational than before. The change is more or less influenced by the government restrictions measures. The restrictions segment the potential buyers accordingly based on ability to purchases and qualification. This helps to explain why and how potential buyers are more rational in terms of buying decision. That is to say some may qualify for first home buyer but don't have finance while some of have the money but can't buy due to the restrictive policies. (Home Week, 2011)

However, Gan Peng (2011), the chairman of Guangxi Hengda Group, thinks the "tangle" will still be the key word in the real estate market since the market will not have great change in the second half year of 2011. He also suggests that for those people who want to buy a house is better to buy in the second half year without considering it's the comparative for the real estate market will still keep growing and development in the long-term. (Home Week, 2011)

Yu Zhongqiang, the general manager of Lianfa Co.Ltd, also suggests those consumers who must buy a house should consider their abilities to bear the finance burden. If the home price is acceptable, they should pay more attention to know and measure other information such as the developer's background and house's surrounding environment. (Home Week, 2011)

Recently there are many developers to resort to promotional tools, such as discount, preferential price, unit buy, and free fitment and parking lot, to attract consumers and stimulate sales to override the situation of lower turnover.

To sum up the above problem statements including issues of most people who will not buy a house since the price higher than their housing affordability, governmental restrictions cause some people who have money but no qualifications to buy a house, on the contrary, who have qualifications but not enough money, and the developers' promotion tools to attract buyers as well as other considerations and factors also can influence consumers behavior. These are the orientations and interests for doing this thesis. Meanwhile, how the consumers will also be affected and behave in purchasing commercial housing will be focus on. Hence this article will combine the consumer behavior theories with practical situation to analyze the house buyers' behavior in Xingning district of Nanning City.



#### 1.3 Intention and Reason for Study

Currently, real estate industry in China is playing an important role to increase GDP's growth, contribute greatly to taxation for the central and local governments. It also boosts relevant industries' development and expansion. Guangxi province is located in the Southern-West of China along the border with Vietnam. Guangxi has the unique strategic position to be a base to link China with ASEAN countries. More ASEAN people and investments are attracted to Guangxi province. Especially due to people from the Beibu Gulf economic zoom. These strategic advantages also attract many domestic capital investments. More investors are optimistic with the declaration of Guangxi's development and its role in the international relationship between China and ASEAN countries. The remarkable reprehensive is that the investment growth rate in the real estate industry in Guangxi province was the second in China and the first one among the western provinces in 2010. Nanning City as the capital of

Guangxi Province is especially attractive. One of feature is that the home price grows rapidly during these years. Although the local government's restriction cools the market to some extent, people are still indecisive whether to buy a home or not. Under this circumstance, the researcher intends to study how the housing purchasers in Nanning City would behave when they make buying decision, especially the factors that influence their decision-making. The researcher also hopes to the results of the study will help real estate firms to have deeper understanding on purchasers' behavior. 1.4 Research Objectives

The research is mainly aimed to identify what factors influence house buyers who want to buy a house in Xingning District of Nanning City. After review other authors' paper about consumer behavior, the researcher combines some valuable theories and perspectives with the actual real estate market of Nanning City in order to set meaningful objectives for following research.

1. To study the perception, attitudes, learning, emotions, and motivations of internal influences that impact consumer behavior on purchasing a commercial house in Xingning District of Nanning City of Guangxi, China.

2. To study the culture, government, marketing activities, reference groups of external influences that impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China.

 To study the self-concept and lifestyle that impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China.

4. To understand consumer decision-making process on purchasing commercial house in Xingning District of Nanning City of Guangxi, China.

When consumers want to buy a house, they would be influenced by internal and external factors. All above factors will be considered in the research.

#### 1.5 Research Questions

The researcher wants to study the consumer's behavior when they buy a house in Nanning City of Guangxi Province. Based on the research requirements, the researcher chooses the Xingning District of Nanning City to study how consumer behaves when they buy a house in this district. Therefore, the main research question is to identify what factors influencing their behavior while the sub-research questions are linked to the research objectives above.

#### Main Research Question

What influences consumer buying behavior when they buy a house in Xingning District of Nanning City, Guangxi Province, China?

#### Sub- research Question

1. How does the culture, government, marketing activities, and reference groups of external influences to impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China?

2. How does the perception, attitudes, learning, emotions, and motivations of internal influences to impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China?

3. What are the effects of the self-concept and lifestyle to impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China?

4. In what ways does consumer decision making process impact on purchasing commercial house in Xingning District of Nanning City of Guangxi, China?

Excellent research questions are useful to conduct the researcher to do a research. The research will use these sub-questions to design a research to identify how they influence consumers' behavior.

#### 1.6 Assumptions

This research can explain whether the internal and external influences, selfconcept and life style would impact consumer behavior on purchasing commercial housing; and in what ways does consumer decision making process impact on commercial house in Xingning district of Nanning city of Guangxi, china.

For this research purpose, the answers from respondents who had experience on purchasing a house in Xingning District will be truthful and the data gathered and analyzed will be appropriate and valid for the research.

The statistical method and techniques for collecting the data would valid for this research study.

#### 1.7 <u>Scope of Research</u>

The research is aimed to identify and study what factors will influence house buyers' behavior and their decision-making. The target populations are those who have buy a house or want to buy a house in Xingning district of Nanning city. Xingning district is a business center and is large as 751 square kilometers.

Figure 1.4: Map of Nanning City.



Source: Home week. (2011). *Map of Nanning city*. Retrieved from http://epaper. gxnews.com.cn/ngcb/html/2010-12/16/content\_1740082.htm

#### Figure 1.5: Map of Xingning District.



Source: Home week. (2011). *Map of Xingning District*. Retrieved from http://epaper.gxnews.com.cn/ngcb/html/2010-12/16/content\_1740082.htm

#### 1.8 Benefits of Research

One of the benefits of this study is to understand consumer behavior on purchasing commercial housing, which includes consumer decision-making process and the factors that impact on their behaviors. To some extent, the findings will benefit the marketing manager of commercial housing company to get better understanding on consumers' behavior and make appropriate strategy from consumers' point of view to meet customers' demands. The findings of research also will benefit people who want to buy a house. They can get some helpful suggestions from this report.

It's also helpful for government to understand consumers' attitudes and behaviors from this report so that it can draw up sound policy to protect consumers' interest and control the market.

Quantitative research method will be used to collect data, which is better to analyze consumers' behavior from quantity so that the report will be more persuasive for future research.

The researcher can according to time put theories into use strengthen understanding. By studying the real estate market, the research provides a length understanding towards consumers' behavior to buy a house.

1.9 Limitations of Research

The research is limited to study the consumer behavior on purchasing a commercial house in Xingning District of Nanning City of Guangxi from May of 2011 to May of 2012. The research targets are limited to those who have the experience of purchasing a suite of commercial houses in the area. Without having experience to buy a house will limit the researcher's understanding and knowledge about the real estate market.

#### **Conclusion**

This chapter has stated the background of the real estate market in China and in Nanning City of Guangxi Province. Based on the background, the researcher found the home prices, government's policies, and developers' promotion activities made house buyers in Nanning City to some extent create conflicts. Therefore, the research therefore intends to identify what factors influence consumers' house buying
behavior. As for the future researchers, the researcher sets the appropriate research objectives, questions, assumptions, benefits, scope, and limitation. The other part of this study comprises of five chapters. Chapter 2 is the literature review which discusses various housing literatures reviews that have addressed issues relating to consumer behavior on purchasing house and buying decision making process. These literatures provide significant internal and external influences that may impact on consumer behavior. Chapter 3 is state the related research methodology, which includes conceptual framework, hypothesis, and method of data collection and interpretation. Chapter 4 is data presentation; chapter 5 analyzes the research data collected by research method. And Chapter 6 is the last chapter which includes research information discussion, and recommendations.



# CHAPTER 2

## LITERATURE REVIEW

This chapter briefly presents the relevant studies and relevant theories related to the consumer behavior. First of all, it will introduce the definition of consumer behavior and its importance. And then consumer decision making process will be gone through step by step. After that both internal and external factors on consumer decision making will be depicted. Internal influences on consumer behavior have perception, learning, motivations, emotions, and attitudes, while external influences include culture, government, reference group, and marketing activities. Finally, the researcher will build a theoretical conceptual framework by combining the existing framework from Hawkins et al and the study topic.

- 2.1 The Introduction of Consumer Behavior
- 2.2 Consumer Decision Making Process
  - 2.2.1 Problem Recognition
  - 2.2.2 Information Search
  - 2.2.3 Alternatives Evaluation
  - 2.2.4 Decision Making
  - 2.2.5 Post Purchase Behavior
- 2.3 Factors Influence Consumer Behavior
  - 2.3.1 External Influences (Culture, Government, Marketing

Activities, and Reference Groups)

2.3.2 Internal Influences (Perception, Attitudes, Learning, Emotions,

and Motivations)

- 2.4 Self-concept and Lifestyle
- 2.5 Conceptual Framework

### Conclusion

#### 2.1 The Introduction of Consumer Behavior

In market economics, businesses stay in business not only by producing products, building systems, and generating dividends for their owners or managing employees but also by attracting and retaining customers. To be successful, marketers and policy makers need to understand the role of consumption activities in the daily lives of consumers. Learning about consumers is the key to successful marketing, and successful marketing strategy depends on a clear understanding of customers with respect to who they are, what they need, what they prefer, and why they buy (Arnould, Price, & Zinkhan, 2001; Ferrell & Hartline, 2008). Furthermore, knowledge why and how people consume products helps marketers understand how to improve existing products, what types of products are needed in the marketplace, or how to attract consumers to buy their products. In essence, consumer behavior analysis helps firms know how to please the consumer and directly impact company revenues (Black, Miniard, & Engle, 2001).

Schiffman and Kanuk, (1997) defined that consumer behavior is the study of how individuals make decision to spend their available resources on consumptionrelated item. It includes the study of what they buy, why they buy it, when they buy it, where they buy it, how often they buy it, and how often they use it.

Consumer behavior is defined as the behavior that consumer display in seeking, purchasing, using, evaluating and disposing of product and services that they expect will satisfy their personal needs by Leon, David, Elizabeth, Aron, Judith and Leslie (2001). It also stated that the study of consumer behavior is the study of how individual make decision to spend their money, time and effort on products and services.

According to Black, Miniard, and Engle (2001), the traditional definition of Consumer behavior is defined as the study of "why people buy"-with the premise that it becomes easier to develop strategies to influence consumers once a marketer knows why people buy certain products or brands. Furthermore, he defined that consumer behavior as "the activities people undertake when obtaining, consuming, and disposing of products and services". There are several activities included in the definition of consumer behavior: obtaining, consuming, and disposing.

Under this definition, obtaining refers to the activities leading up to and including the purchase or receipt of a product. Activities involved in obtaining include searching for information regarding product features and choices, evaluating alternatives or brands, and purchasing. Consuming embeds to how, where, when, and under what circumstances consumers use products. Issues relating to consumption might include decisions about whether consumers use products at home or at the office. Disposing refers how consumers get rid of products and packaging. In this instance, consumer analysts might examine consumer behavior from an ecological standpoint- how do consumers dispose of product packaging or product remains? Consumer might also choose to reuse some products by handing them down to younger children. Or they may resell them in resale shops, swap them on the Internet or classified ads, or sell them again at garage sales or flea markets.

# 2.2 Consumer Decision Making Process

Several researchers such as Engel, Blackwell, and Miniard (1995); Kotler & Keller (2009) claimed that the important part of understanding consumer behavior is to know how consumers make purchasing decisions. The consumer decision-making process begins when a consumer realizes he or she wants to make a purchase to satisfy a need. The decision-making process thus starts with problem recognition which is followed by four other stages. These stages incorporate information search, evaluation of alternatives, the actual purchase decision and post-purchase behavior (Figure 2.1).





Source: Engel, J.F., Blackwell, R.D., & Miniard, P.W. (1995). *Consumer behavior* (8<sup>th</sup> ed.). Texas: Forth Worth, Dryden Press

Solomon, Bomossy, Askegaard, and Hogg (2006) note that the amount of effort that a consumer puts into the process depends a lot on the importance that the subject in question has to the consumer, in other words, it depends on how motivated the consumer is to use time and energy to satisfy a certain need. Sometimes the decision-making process happens almost automatically and all the five stages are not included it. However, sometimes consumers put a lot of effort to going through each step of the process carefully.

## 2.2.1 Problem Recognition

According to Solomon et al. (2006), a consumer purchase is always a response to a problem of some kind. The consumer decision-making process begins with the realization that there is a significant difference between the consumer's current state of affairs and the desired ideal state. In other words, the consumer perceives there is a problem to be solved. Solomon et al. (2006) also state that the recognition of a need or a problem creates motivation which in turn drives the consumer to behave in a certain way in order to satisfy the occurred need.

According to Asch and Wolfe (2001) and Kotler and Keller (2009), a problem or a need can arise based on internal or external stimuli. An internal stimulus is a person's so called normal need such as hunger or thirst, and when this kind of a primary need rises to a threshold level, it becomes a drive that urges a consumer to make a purchase. On the other hand, a problem or a need can also be triggered by external stimuli. A person may admire a friend's new designer clothes or expensive skin care products and this triggers thoughts about the possibility of making a purchase.

While problem recognition sometimes occurs naturally, it is often encouraged by marketing efforts (Noel, 2009). Many advertisers try to create different kinds of needs and problems for consumers to initiate the decision-making process in order to convince them to buy their products. This is often done by attempting to create a new ideal state or to make the consumer unhappy with his or her current actual state. "Before" and "after" imagery is often used with many products to illustrate a new ideal state. This motivates the consumers to want to look different than they currently do and thus find a solution to a problem of reaching the new ideal state. Marketers can influence problem recognition also by creating primary or secondary demand (Solomon et al., 2006). For primary demand creation the aim is to incite the consumer to use a product or a service to solve a problem or fulfill a need regardless of the brand. This type of demand creation works best with new and unique products or services that have few competitors. As for the secondary demand, it is to convince the consumer that a certain brand can solve a problem better than another; the consumer is prompted to prefer a specific brand instead of others. Secondary demand can occur only when primary demand already exists.

#### 2.2.2 Information Search

Hawkins, Mothersbaugh, and Best (2007) highlight that Consumers continually recognize needs and problems, they search for both internal and external searches for information to solve their problems. It is thus an ongoing process. People usually have quite a lot of information stored in their memory as a result of prior experiences and life itself. When a consumer faces a problem or recognizes a need, this prior knowledge is then scanned through and used to help find a solution to the problem (Solomon et al., 2006). Once a problem is recognized, relevant information from long-term memory is used to determine if a satisfactory solution is known, what the characteristics of potential solutions are, what appropriate ways to compare solutions are, and so forth. All there are internal searches.

Internal search is often not enough to gather enough information to make a justified purchasing decision (Noel, 2009). Therefore, it is usually followed by external search. External search encompasses all the possible sources of information outside the consumer's mind; these include for example independent sources, personal sources, marketer-based information, and product experience (Hawkins et al., 2007).

However, it would be wrong to assume that consumers always collect as much information as possible. Instead, they often weight the cost of getting additional information against the benefits that the information can provide such as a better price. Asch and Wolfe (2001) also noted the amount of search a consumer is willing to do, depends on the motivation and interest toward the purchase, the information that the consumer already has about the subject and the ease of obtaining additional information.

Contrary to Noel (2009) and Solomon et al. (2006), Asch and Wolfe (2001) define four different types of consumer information sources which include personal sources (friends, family, colleagues), commercial sources (advertising, sales personnel, displays), public sources (mass media, consumer organizations) and experiential sources (examining and using the products, experiences). Of these four elements, personal, commercial and public sources are external and experiential internal in relation to the consumer as recognized by Noel (2009) and Solomon et al. (2006). In general, consumers get most of the information used in making a purchase decision from commercial sources which are dominated by the firms who make the products (Asch & Wolfe, 2001). People also get a lot of information from personal sources and this type of information usually tends to have the most impact.

Each source of information may serve different purposes in affecting buying behavior; commercial sources are often informal whereas personal sources perform a more evaluative and justifying function. The impact and effectiveness of each source type depends on the characteristics of the consumer and the product category in question.

## 2.2.3 Alternatives Evaluation

After gathering information on how to resolve an occurred problem, a consumer must evaluate the alternatives available and then make a decision of which of them to choose. According to Solomon et al. (2006), evaluation of alternatives is usually the phase in the decision making process to which consumers put the most effort in. In some cases there may be more alternatives available that it is hard to decide which of them to choose. In terms of understanding consumer behavior, it is important to know how consumers make decisions and what kind of criteria they use to choose one product over another. Evaluative criteria are the various dimensions, features, or benefits a consumer looks for in response to a specific problem (Hawkins et al., 2007). Evaluative criteria can differ in type, number, and importance. The type of evaluative criteria a consumer uses in a decision varies from tangible cost and performance features to intangible factors.

The alternatives that a consumer actively considers as being the different purchase options are called the evoked set (Evans, Moutinho, & Van Raaij, 1996; Solomon et al., 2006). The evoked set consists of those products that the consumer already has knowledge of and is thus able to bring to mind when evaluating different alternatives. The evoked set includes both brands that the consumer likes and dislike and indifferences to.

The alternatives that the consumer is able to remember in his or her evoked set but for some reasons would not consider buying are called the inept set (Evans et al., 1996; Solomon et al., 2006). What this means is that products that the consumer has no interest towards form the inert set. The inert set on the other hand consists of those products that the consumer is aware of but would definitely not buy based on bad experience for example. The inert set also includes products that the consumer has heard negative things about and for that reason do not wish to purchase.

In evaluating different alternatives and making a distinction between the different purchasing options, consumers use different evaluative criteria (Solomon et al., 2006). An evaluative criterion is a dimension that a consumer uses to compare and judge product attributes. Consumers tend to see the criteria on which products differ as more important than the criteria on which they are similar. This is especially the case when the alternatives are very much alike and a consumer has to make a justified decision among them.

### 2.2.4 Decision Making

After recognizing a need, searching for information and evaluating different alternatives, consumers often use decision rules in order to make a choice among different product and brand options (Evans et al., 1996). A decision rule, also known as a heuristic, assigns value to a product option and it also determines the criteria based on which a decision is made. Moreover, Solomon et al. (2006) note that in order to make decisions simpler, consumers use heuristics and make assumptions that serve as shortcuts to more complex processing of information.

Kotler and Keller (2009) define two different factors that can come in between of intended purchasing decision and actually executing it. These two intervening issues are attitudes of others and unanticipated situational factors. The attitudes of others can reduce a consumer's preference for a certain product alternative. The greater the other person's negativism is and the closer he or she is to the consumer, the more likely the consumer is to change his or her purchase intention according to the other person's attitudes. Hence, the degree to which another person's attitudes affect a consumer's behavior depends on how negative the other person's attitudes are and how close the consumer and the other person are to each other emotionally. However, the opposite is also true: the more someone the consumer is close to prefers a product the consumer dislikes, the more likely the consumer is to start having positive feelings toward the product.

Unanticipated situational factors are the other reason why consumers often might change their mind about an intended purchase decision. Unanticipated situational factors include things like losing one's job or disliking a salesperson in a store. It is important to note that purchase intentions and preferences toward certain products and brands are not always reliable predictors of consumer buying behavior because of the above mentioned two factors. (Kotler et al., 2009.)

Sometimes consumers do not spend a lot of time looking for information and evaluating alternatives but engage in impulse buying. According to Evans et al. (1996) consumers often purchase products on impulse. In impulse buying consumers purchase something without planning it because of a sudden but powerful urge to obtain a product offering immediately. Because impulse buying is often very sudden, the consumer doesn't usually spend a lot of time or put much effort into the two stages in the consumer decision-making process, information search and evaluation of alternatives, which occur between need recognition and the actual purchase. Evans et al. (1996) also mention that many cultures impulse buying is disapproved of.

In this study, there are two styles of impulse buying that can be seen as relevant (Evans et al., 1996). These are accelerator impulse buying and compensatory impulse buying. In accelerator impulse buying behavior, a consumer purchases things for stock; consumer may purchase a product because it is on sale even though he or she does not have an urgent need for it. Compensatory impulse buying on the other hand occurs when a consumer makes a purchase to reward oneself or when a consumer buys something as a consolation when he or she is feeling down and in low self-esteem.

Consumers may be limited in their ability to determine the optimal choice based on all the salient characteristics (Capon & Kuhn, 1982). They may use simplified methods for comparing alternatives on a limited number of determinant characteristics. One way to simplify the process is to use non-compensatory decision rules. With such rules, consumers use cutoffs to qualify products, such as setting a price range and minimum size to consider. If a property does not possess the minimum required on one important attribute, then it will not be considered despite its attractiveness on other standards. Two commonly used non-compensatory decision rules are the conjunctive rule and the lexicographic rule.

With a conjunctive decision rule, the consumer sets minimum acceptable levels on all important attributes and eliminates any alternative that does not meet all the minimums. If only one property meets all the minimums, then the consumer will select it. If several are acceptable, then the consumer has narrowed down the choices and can either raise the cutoffs or use another decision rule to make the final choice. If none of the properties meets all the cutoff requirements, the consumer must either change the acceptable minimums or change the decision rule (Grether & Wilde, 1983). For example, Louviere and Henley (1977) found that a rental apartment with too high a price, too far a distance from the university or too low quality would not be considered by college students no matter how highly the apartment rated on the other two criteria.

With a lexicographic rule, the consumer ranks the determinant attributes in order of importance. If one property is better than all the others on the most important attribute, then the consumer selects that property. If the consumer perceives two or more as equal on the most important criterion, then the properties are compared on the second most important determinant attribute. This process continues until the tie is broken (Engel, Blackwell & Miniard, 1995). For example, a buyer may decide that the school district is the most important criterion and yard size is second most important. If only one house is for sale in the preferred district, then the buyer would select that house no matter what is available in other districts. If two houses were for sale in the district, then the buyer would choose the house with the larger yard. Another type of decision rule is the compensatory decision rule. With a weighted additive compensatory decision rule, the consumer identifies all the determinant attributes for the product being considered, assigns importance to each attribute, then rates all the alternatives on each attribute, and selects the alternative that generates the highest summated weighted score (Engel, Blackwell, & Miniard, 1995). This model has many similarities to the multi-attribute attitude model that is discussed later. When using this compensatory decision rule, the alternatives are evaluated holistically. Strengths in one area can offset weaknesses in another. A large house in the second best school district might be equally attractive to the buyer as a small house in the best school district. This type of decision rule, however, assumes the consumer has the knowledge and ability to identify determinant attributes, rank them, score the alternatives and calculate a relatively complex answer. The reality may be that a consumer makes a less than optimal decision because of incomplete information or an inability to complete the complicated comparison. This is an area in which

brokers, if they understand consumer decision rules, may be able to assist buyers.

Consumers may use a combination of decision rules in choosing a product, first simplifying the decision by narrowing down the choices with a noncompensatory rule, then using a compensatory process to make the final choice. Dibb (1994) suggests that homebuyers use such a sequential decision strategy. First, they apply a non-compensatory decision rule to eliminate properties that do not possess the minimum requirements on primary issues such as price, size and location. Then they use a compensatory rule to evaluate each property across a wide range of secondary criteria.

However, even though consumers use heuristics and decision rules, their decisions are not always necessarily logical. An important thing to note is that consumer purchasing decisions are very often based on normative and emotional factors rather than purely rational justifications (Evans et al., 1996).

#### 2.2.5 Post Purchase Behavior

The final stage for making decision is post-purchase evaluation. After purchasing consumers would conclude what they have experienced during the process. The conclusion generates two outcomes: satisfaction and dissonance (Tan, 2010). If the product or service experience is beyond their expectations, they would satisfy to their selection. However, the dissonance is caused as the final selections do not meet expectations. If dissonance happens, consumers would search information and evaluate alternatives again to get a better choice.

### 2.3 Factors Influence Consumer Behavior

While all consumers follow the general decision-making models in gathering information, evaluating alternatives, and choosing a product, their individual behavior within this process is greatly influenced by differences among individuals. These differences can be categorized as either internal or external determinants of consumer behavior. The following sections describe some of the most influential internal and external factors that affect consumer behavior during the decision-making process.

2.3.1 External influences

# <u>Culture</u>

Culture is the complex whole that includes knowledge, belief, art, law, morals, customs, and other capabilities and habits acquired by human as members of society (Hawkins, Mothersbaugh, & Best, 2007). Culture as the meanings that are shared by most people in a social group, in a broad sense, culture meanings include common effective reactions, typical cognitions(belief), and characteristics patterns of behavior (Peter & Olson, 2008). Culture is the fundamental determinant of a person's wants and behavior (Kotler, 2003). Culture operates primarily by setting rather loose boundaries for individual behavior and by influencing the functioning of such institutions as the family and mass media. Thus, culture provides the framework within which individual and household lifestyles evolve. Not only is marketing strategy heavily influenced by cultural factors such as values, demographics, and languages, but in turn it also influences aspects of cultures (Hawkins, et al., 2007). Marketers need to understand the culture meanings of their products and brands, while consumers seek to acquire certain cultural meanings in products and use them to create a desirable personal identity (Peter & Olson, 2008).

# Government

According to the Hambleton, (2004) defined that government refers to the formal institutions of the state. Government makes decisions within specific

administrative and legal frameworks and uses public resources in a financially accountable way. Most important, government decisions are backed up by the legitimate hierarchical power of the state.

In recent years, the people in China have begun to complain more about the high price of housing, and government also pays more attention to the real estate industry (Liu &Chen, 2011). In order to cool down the inflationary situation in market and keep the price in a reasonable increase rate, the Chinese government issued a series of policies in 2010 (Liu & Chen, 2010). The state council issued 10 rules on April 16, 2010, the housing market adjustment policies stipulated that down payments for second homes must be at least 50 percent and mortgage rates for second homes should also be raised to 1.1 times the benchmark lending rate. On September 29, 2010, the government ordered all first-home buyers to make a down payment of at least 30 percent, up from the previous requirement of 20 percent. In addition, the government also required commercial banks to suspend loans to third-home buyers (Shigong, 2011).

Zhang, 2010 stated that China's real estate policy is facing uncertainty, to extremely then high demand for developing land, the Chinese government announced a series of policies to control rapid property price increase. However, whether or not these policies will be effective depends on some uncertain factors including heavy reliance of the local governments' fiscal revenue on the housing market, a fix assets investment led economic growth pattern, and closely links between Chinese policy makers and interest groups.

37

## Marketing Activities

Peter and Olson (2008) pinpoints that from a consumer's prospective, price is usually defined as what the consumer must give up to purchase a product or services. The four basic types of consumer costs include money, time, cognitive activity, and behavior effort. When paired with whatever value or utility the product offers, these costs are a convenient way to consider the meaning of price to the consumer.

Peter and Olson (2008) also refers Money to the dollar amount a consumer must spend to purchase a product or services. The time necessary to learn about a product or service and to travel to purchase it, as well as the time spent on a store, can be important costs to the consumer. One frequently overlooked cost of making purchase is the cognitive activity involved. Thinking and deciding what to buy can be very hard work. In addition to all the cognitive work involved in comparing purchase alternatives, the process can be stressful. Anyone who has spent several hours walking around in malls can attest to the fact that purchasing involves behavior effort. Like time and cognitive activity, behavior effort can be a benefit rather than a cost. Information about prices is often attended to and comprehended, and the resulting meanings may influence consumer behavior.

Advertising is any paid, non-personal presentation of information about a product, brand, company, or store. Advertising is intended to influence consumers' affect and cognitions-their evaluations, feelings, knowledge, meanings, beliefs, attitudes, and images concerning products and brands. In fact, advertising has been characterized as image management: creating and maintaining images and meanings in consumers' minds. Even though ads first influence affect and cognition, the ultimate goal is to influence consumers' purchase behavior (Peter & Olson, 2008).

Advertising is a key component of promotion and is usually one of the most visible elements of an intergraded marketing communications program. Advertising is paid, non-personal communication transmitted through media such as television, radio, magazines, newspapers, direct mail, outdoor displays, the internet, and mobile devices (Ferrell & Hartline, 2008).

Personal selling involves direct personal interactions between a potential buyer and a salesperson (Peter & Olson, 2008). Personal selling can be a powerful promotion method for at least two reasons. First, the personal communication with the salesperson may increase consumers' involvement with the product and/or the decision process. Thus, consumers may be more motivated in attending to and comprehend the information the salesperson presents on the product. Second, the interactive communication situation allows salespeople to adapt their sales presentations to fit the informational needs of each potential buyer. Certain consumer products, such as life insurance, automobiles, and houses are traditionally promoted through personal selling.

#### **Reference Groups**

A reference group is a large group whose presumed perspectives or values are being used by an individual as the basic for his or her current behavior (Hawkins et al., 2007). A person's references groups consist of all groups that have a direct (face to face) or indirect influence on the person's attitudes or behavior (Kotler, 2003). A reference group involves one or more people whom someone uses as basis for comparison or point of reference in forming affective and cognitive responses and performing behaviors (Peter & Olson, 2008).

Reference group influence can take in forms of informational, normative, and identification. It is important to distinguish among these types since the marketing strategy required depends on the type of influence involved. Informational influence occurs when an individual use the behaviors and opinions of reference group members as potentially useful bits of information. This influence is based on either the similarity of the group's member to the individual or the expertise of the influencing group member. Normative influence, sometimes referred to as utilitarian influence, occurs when an individual fulfills group expectations to gain a direct reward or to avoid a sanction. Normative influence is reference groups affecting behavior through pressure for conformity and compliance. This influence is most likely when there is strong motivation for social acceptance (Bearden & Rose, 1990) and the product is publicly conspicuous in its purchase and use (Miniard & Cohen, 1983), such as real estate. Identification influence, also called value-expressive influence, occurs when individuals have internalized the group's value and norms (Hawkins et al., 2007). Research consistently demonstrates that personal word-ofmouth influence has a more decisive role in influencing behavior than advertising and other marketer-dominated sources (Herr, Kardes, & Kim, 1991) because of greater perceived credibility. Research has shown that word-of-mouth communication is an important source of information for real estate buyers (Hempel, 1969; Johnson, Salt, & Wood, 1974; Burke, Belch, Lutz, & Bettman, 1986).

The household is the basic consumption unit for most consumer goods, major items such as housing, automobiles, and appliances are consumed more by household units than individuals (Hawkins et al., 2007). A household is composed of individuals living singly or together with others in as residential unit. A family is two or more people living together who are related by blood or marriage. A family is, therefore, a category of a household (Assail, 1998). While the capacity to purchase a house is bounded by a set of economic and financial processes, the actual house purchasing process is an inherently social activity involving considerable negotiation between family members and interactions with housing intermediaries (Levy, Murphy, & Lee, 2008). The family is the most important consumer- buying organization in society, and family members constitute the most influential reference group. Marketers are interested in the roles and relative influence of the husband, wife, and children in the purchase of a large variety of products and services (Kotler, 2003).

The family decision process has come under study, and this should aid in the development and understanding of the home buying decision, as it is typically a complex decision involving both husband and wife (Burke et al., 1986). Levy, et al., (2008) argued that families may respond to life-course changes in specific ways and adopt common strategies in their house searches or in determining the price they will pay for a property, but at the level of an individual purchase, families are swayed by internal negotiation/compromise, emotions and advice from a variety of sources (including property professionals, wider family members, friends and colleagues). In this context individuals are not always the primary decision makers and decisions are often made within wider social collectivities (Munro, 1995).

Changing family size has been shown to have a strong influence on the need for more space and that this increased need is linked to relocation decisions. Consequently, contemporary research has been set in the 'life-course paradigm' (Clark & Dieleman, 1996; Clark & Huang, 2003). Within this perspective it is argued that "changes in households composition are closely linked to changes in occupational careers, and these in turn are translated into changes in housing tenures and housing consumption, so forming the "housing career" (Clark&Huang, 2003, p. 324).

If real estate developers, investment bankers and brokers can identify the most important reference groups influencing real estate purchases, they can design and market their products in ways that assure consumers that the real estate purchase will be accepted and approved of by these group members. Testimonials by experts that express support for a builder or community will boost sales. It is also true for slice-oflife advertisements that describe current community residents as a group to which other buyers would want to belong, such as successful businesspeople, wise investors or family-oriented parents who are involved with their communities and schools (Gibler & Nelson, 2003).

## 2.3.2 Internal Influences

Another critical factor that causes impacts on consumer behavior is internal influences. Internal influences compose of perception, attitudes, leaning, emotions, and motivations.

#### Perception

In terms of studying consumer behavior, people's perceptions are more important than reality because perceptions are what actually affect a consumer's behavior. Asch and Wolfe (2001) note that when a consumer has recognized a need or a want to buy something, the way that the consumer acts is influenced by his or her perception of the situation. Because all people have their subjective way of forming perceptions, different people can have different kind of perceptions of the same object or situation. Perception is the process of selecting, organizing, and interpreting sensations (Hanna & Wozniak, 2001) into information, and stored (Hawkins et al., 2007). Solomon et al. (2006) uses the perceptual process diagram as show in Figure 2.2 to illustrate the perceptual process people normally go through to build their perceptions.

Figure 2.2: An Overview of the Perceptual Process





Environmental stimuli or sensory inputs are received through people's five senses: vision, smell, taste, sound, and touch (Hanna & Wozniak, 2001). First of all, researchers estimate that as much as 80 percent of what people receive from the environment is gained from vision. The first impression that a product, ad, or store makes on consumers depends largely on its physical attractiveness; this fact explains why marketers rely heavily on visual appeals in product design, packaging, ad layout, and store décor. Visual perceptions is a multidimensional phenomenon involving seeing a number of elements of the product, such as its color, size, shape, and movement. One of the most obvious visual qualities people experience in a product is its color. Not only does color help attract people's attention, it also influence people's emotions and affects moods.

Scents play an important role in people's lives. Odors can stir emotions, elicit memories, produce hunger, induce relaxation, or even repel people (Hanna & Wozniak, 2001). Research shows that shoppers tend to stay longer and spend more money in stores that have a pleasant odor. According to Solomon et al. (2006) and Noel (2009, p.97), they also state that odors can evoke memories and therefore create either good or bad feelings in an individual. Most scientists consider the sense of taste to be inseparable from the sense of smell (Hanna & Wozniak, 2001). Receptors (taste buds) that reside on the tongue and palate combine with smell to product familiar taste sensations such as saltiness, sweetness, bitterness, and sourness. Taste has a significant effect on how foods and beverages fare in the marketplace.

Speech and music are two important weapons in the marketer's arsenal. Most marketing communications, including commercials, sales presentations, and stores sound systems, employ speech or music (Hanna & Wozniak, 2001). Making sense of speech is a cognitive process that involves people's knowledge of meaning of words, how people string words together, the frame of reference, and the situation in which the speech is being presented. Music, on the other hand, has the ability to evoke feelings. In commercials, the choice of background music is a sensitive issue, because music can be used to set a desired mood, stir relevant emotions, or influence liking for the message. Touch is a component in many consumer behavior situations (Hanna & Wozniak, 2001). It is part of the exploratory nature of human beings. Physical contact with products provides consumer with vital information.

The whole process of perceiving begins when stimuli are picked up by one or more of the five senses: vision, smell, touch, hearing or taste. In this study, only vision, sounds, and touch are taken into account as they are the three senses that are of relevance in terms of the house buyer perceiving the target house. They can use their eyes to see the house's layout, surrounding environment, and so on. When visiting the house, they can hear the speech from the sales representative. Also buyers can touch the house's wall to feel the material. After being exposed to stimuli and the stimuli has been picked up by sensory receptors, attention is allocated to the sensation. When the stimuli have grabbed a consumer's attention, he or she makes his or her own interpretation of the information. The interpretation is based on personal factors and the same stimulus may be interpreted in a different way by different people. At this point, response and some kind of a meaning are given to the information which means that the stimulus has been perceived.

## Attitudes

The most important determinant of consumer behavior is behavioral intentions and that depends both on a person's attitude toward performing the behavior and the influence of others' opinions about the behavior – that is, a subjective norm (Arnould, Price, & Zinkhan, 2004). Attitude is an evaluation of a concept or object, such as an issue, person, group, brand, or service that expresses a degree of favor or disfavor. An attitude object is the entity that gets evaluated, and it can be abstract or concrete, individual or collective (Arnould et al., 2004). An attitude is a learned predisposition to act in a consistent way toward an object based on feelings and opinions that result from an evaluation of knowledge about the object (Wells & Prensky, 1996).

A person's attitude toward an object is composed of three factors: 1) learned knowledge from the individual's own experiences with the object, as well as information gather from others; 2) an evaluation of the object based on the individual's knowledge of it; and 3) an predisposition to act based on that evaluation (Wells & Prensky, 1996).

Consumers' attitudes have been studied intensively, but marketers tend to be more concerned about consumers' overt behavior, especially their purchase behavior. Most market researchers believe, and operate under the assumption, that the more favorable a persons' attitude toward a given product and brand, the more likely the person is to buy or use that product or brand (Peter & Olson, 2008).

Attitude plays a critical role in consumer behavior, and they are especially important because it motivates people to behave in relatively consistent ways (Babin & Harris, 2009). Attitudes simplify consumer decision making by providing a way for the individual to evaluate alternatives based on his or her knowledge of the attributes and benefits offered by each (Wells & Prensky, 1996). In general, consumers have positive attitudes toward products that provide value, likewise, when products deliver poor value, consumer attitudes are usually negative (Babin & Harris, 2009).

# Learning

Consumer learning refers to any process that changes a consumer's memory and behavior as a result of information processing (Arnould, Price, & Zinkhan, 2001). Similarly, Schiffman, Bednall, Cowley, O'Cass, A., Watson, and Kanuk (2001) defines the consumer learning is the process by which individuals acquire the purchase and consumption knowledge and experience they apply to future related behavior.

Learning continually evolves and changes as a result of newly acquired knowledge (which may be gained from reading, or observation, or thinking) or actual experience (Schiffman et al., 2001). The role of experience in learning does not mean that all learning is deliberately south. Much learning is also incidental, acquired accidentally or without much effort. Both newly acquired knowledge and experiences serve as feedback to the individual and provide the basis for future behavior in similar situations.

Kotler (2003) further stated that learning involves changes in an individual's behavior arising from experience which produced through the interplay of drives, stimuli, cues, responses, and reinforcement. A drive is a strong internal stimuli impelling action, cues are minor stimuli that determine when, where, and how a person responds. Reinforcement increases the likelihood that specific responses will occur in the future as the result of particular cues or stimuli.

#### **Motivation**

According to Hawkins, et al. (2007) a motive is a construct representing an unobservable inner force that stimulates and compels a behavioral response and provides specific direction to that response. Arnould, Price, and Zinkhan (2004), Motivation as an inner drive that reflects goal-directed arousal, a drive is an internal stimulus. The research Solomon et al. (2011) also views motivation as "the processes that lead people to behave as they do". It occurs when a need is aroused that the consumer wishes to satisfy. The need creates a state of tension that drives the consumer to attempt to reduce or eliminate it. This need may be utilitarian which refers to a desire to achieve some functional or practical benefit, or it may be hedonic which is an experiential need involving emotional response or fantasies. The desired end state is the consumer's goal. Marketers try to create products and services to provide the desired benefits and help the consumer to reduce this tension.

Needs and motives influence what consumers perceive as relevant and also influence their feelings and emotions (Hawkins et a., 2007). Consumers are often aware of and will admit to the motives causing their behavior. Within social two opposing motivational tendencies together drive many consumer behaviors. One we may call the motive toward integration or affiliation with other people; the other is the motive toward differentiation or distinction from other people (Arnould, Price, & Zinkhan, 2004).

## Emotions

Emotions are strong, relatively uncontrollable feelings that affect consumer behavior (Hawkins et al., 2007). Emotions are divided into goal-directed and reactive ones (Bagozzi, Baumgartner, & Pieters, 1998). Goal-directed emotions are when customers actively seek to experience something. On the other hand, reactive emotions are the result of service experiences that either exceed the customers' expectations or do not meet customers' expectations (Brown & Kirmani, 1999).

According to Dewey (1934), emotion is the moving and cementing force when two things are interacting. Emotions select what is congruous (Dewey, 1934), changes the way people think, and serves as a constant guide to appropriate behavior, steering people away from the bad and guiding us towards the good (Norman, 2004). According to Norman (2004), emotions are inseparable from and a necessary part of cognition, although much of it is subconscious. Many things in the environment have already been judged and determined as good or bad by the affective system before they reach consciousness; then the cognitive system interprets and makes sense of the world.

Norman (2004) postulates that in emotional reactions surface appearance and behavioral utility play relatively minor roles, but what matters is the history of interaction, the associations people have with the objects, and the memories they evoke. Emotions reflect personal experiences, associations, and memories (Norman, 2004). In addition, they may provide attachment to a product or cause detachment from it (Sava, 2004).

### 2.4 Self-concept and Lifestyle

Self-concept is defined as the totality of the individual's thoughts and feelings having reference to him or herself as an object by (Hawkins et al., 2007). Under the definition, the self-concept can be divided into four basic parts which comprise of actual, ideal, private, and social. The actual / ideal distinction refers to the individual's perception of who I am now (actual self-concept) and who I would like to be (ideal self- concept). The private self refers to how I am or would like to be to myself (private self- concept), and the social self is how I am seen by others or how I would like to be seen by others (social self-concept).

Consumers purchase products that are consistent with the actual self or that are expected to help achieve the ideal (Sirgy, 1980, 1982). Identity may also be reflected in both choice of housing style and neighborhood (Hayward, 1975). For example, residents of Denver who considered themselves "city persons" were more likely to currently live and plan to live in the city (Feldman, 1990). A house can be a viewed as part of the extended self, an object that helps to form identity and present that identity to the world (Cooper, 1974; Hayward, 1977; Csikszentmihalyi & Rochberg-Halton, 1981; Sadalla, Vershure, & Burroughs, 1987). By their very nature, single-family homes usually perform many highly emotional, individualized and personal roles in the lives of their occupants (Downs, 1989). A house being purchased to serve as a "home" is being evaluated for not only physical, but also social and psychological characteristics (Hayward, 1977). The house and household objects frequently become an element in an individual's personal identity as symbols of experiences and relationships, providing a continuous sense of identity over time (Csikszentmihalyi & Rochberg, 1981; Hummon, 1989; Somerville, 1997). A woman's self identity appears to be more intimately linked to the home than a man's in our society (Somerville, 1997).

Lifestyle refers to the distinctive ways in which consumers live, how they spend their time and money, and what they consider important—activities, interests and opinions. Lifestyles evolve over time, so corresponding consumption patterns may change as well (Kelly, 1955; Reynolds & Darden, 1974). Lifestyle frequently provides the basic motivation and guidelines for purchases, although it generally does so in an indirect, subtle manner (Hawkins et al., 2007).

As lifestyles change, the value of various property attributes to consumers will change. For example, the popularity of casual entertaining will reduce the value of houses with square footage devoted to formal living rooms rather than family or great rooms (Ahluwalia, 1996). The trend toward working at least part-time from home will increase the value of home office space. Lifestyle may also affect tenure choice in that residents who like to be mobile are more likely to rent (Boehm, 1981).

## 2.5 Conceptual Framework

Hawkins et al. (2007) draw up a conceptual model of the house buyers' behavior .Hawkins et al states that individuals develop self-concepts and subsequent lifestyle based on a variety of internal (mainly psychological and physical) and external (mainly sociological and demographic) influences. These self-concepts and lifestyle produce needs and desires, many of which require consumption decision to satisfy. As individuals encounter relevant situations, the consumer decision process is activated. This process and the experiences and acquisitions it produces in turn influence the consumers' self-concept and lifestyle by affecting their internal and external characteristics.

The researcher aims to study the commercial house buyer behavior in Nanning City of Guangxi Province. Once the consumer believes that the characteristics of the house can fulfill his/her goals and needs, the choice of a house will also reflect the person's self-concept and his/her lifestyle. In Figure 2.3, it can be seen that lifestyle and self-concept influence goals through needs, desires and preferences, and the goals define the decision making.

Based on Figure 2.3, the antecedents of the house purchasing process include two groups of determinants which influence a buyer's lifestyle and his/her self-concept, which through his/her needs, desires, preferences and goals determine buying behavior pictured in the right box of the model in Figure 2.3. The group of external factors includes culture, government, marketing activities, and reference groups.

According to the traditional Chinese culture, a house not only means a shelter, also reflects the independence thought. Once the child grows up, parents may plan to buy a house for him or her. When a new couple sets up a family, they will buy a new house be independent from their parents. Another situation is that the consumers just want to buy a house used to fixed asset investment or for heritage. While the government plays an important role in Chinese consumer's house purchase, especially these years. Along with the home price rapidly increases, the central and local governments pay more attention and effort to control the over-estimated price in order to balance the home market. In particular, the central Chinese government started to carry out a series of policies at the beginning of 2011 aimed to regulate and control the unreasonable home price among the nationwide. After that some local governments also carry out some restrictions to respond central government's requirements. The first suite of house buyer and the buyers who want to buy more than one suit of house will be influenced by the governments' policies.

When the buyers plan to buy a suite of house and then search relevant information and visit the open house, they will be influenced by developers' marketing activities, including marketing communications and price effects. Real estate companies in Nanning like to use advertising and personal selling as communication tools to urge and persuade potential consumers. Price effect also plays an important role on attracting buyers' interests, and benefits them.

Whatever purchasing a house for marriage or for investment, suggestions from reference groups greatly influence decision maker's judgments. These reference groups mainly include family members, real estate agents, friends, and experts.

The group of internal factors has perception, attitudes, learning, emotions, and motivations. When planning to buy a house, the individuals can see the house development model, layout, and the advertising through TV, billboard, newspaper, Internet, and so on, inspect the house, and hear the speech from the sales representative. If these sensations can link to the memory, the individuals will pay attention to the target house; meanwhile, relevant perception will arise. The twodirectional arrow connecting internal and external influences indicates that each set interacts with the other.

The model suggests that an individual's lifestyle and the meaning a person wants to acquire by owning a product influence his/her needs and desires concerning this product. According to Belk (1988), a house presents a strong source of personal identity. The extended self as part of the self-concept plays a major role. Hence, the researcher posits that a commercial house will reflect its owners' individuality and their personal style.

In this study of consumer behavior, it focuses on the buyer and the immediate antecedents and consequences of the purchasing process. The decision making process including five stages. The first stage of the consumer decision process is problem recognition, which involves the existence of a discrepancy between the consumer's desired state (what the consumer would like) and the actual state (what the consumer perceives as already existing) (Hawkins, Best, & Coney, 2001). The second stage is information search, consumers may engage in extensive internal and external search for information to solve problems are ongoing processes. During and after the time the consumers gather information about various alternative solutions to a recognized problem, they evaluative the alternatives and select the course of action that seems most likely to solve the problem, this is called alternative evaluation as the third stage. The fourth stage is decision making, in this process consumers generally must select outlets as well as products. The last process is post-purchase, consumer experience doubts or anxiety about the wisdom of the purchase.

## **Conclusion**

This literature review has illustrated and explains what consumer behavior is, the complex consumer decision making process, internal and external influences and self-concept and lifestyle. Hawkins, Best, and Coney (2001) had defined the consumer behavior is the study of individuals, groups, or organizations and the process they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society.

The influences of consumer behavior including the internal and external factors, while internal factors composed by perception, attitudes, learning, emotions and motivation. This part begins with a discussion of perception, the process by which individuals assign meaning to environmental stimuli. External factors comprised of culture, government, marketing activities, and reference groups. In this part, it begins with large-scale, macrogroup influences and move to smaller, more microgroup influences.

As a result of the interaction of the external influences described and internal processes examined individuals from self-concepts and desired lifestyle. Self-concept refers to the way individuals think and feel about themselves as well as how they would like to think and feel about themselves. Their actual and desired lifestyles are the way they translate their self-concepts into daily behaviors, including purchases.

The typical buying process consists of the following sequence of events: problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior. To understand the buyer's behavior at each stage and what influences are operating. From the below Figure 2.3, it is better to understand and know about consumer behavior in terms of consumer decision making process and influences of consumer behavior as well.





Figure 2.3: A Conceptual Model of the Research Literature Orientation

Source: Hawkins, D. I., Mothersbaugh, D. L., & Best, R. J. (2007). *Consumer* behavior-building marketing strategy (10<sup>th</sup> ed.). Boston: McGraw-Hill.
# CHAPTER 3

## RESEARCH METHODOLOGY

This chapter explains the overview of research methodology and provides comprehensive explanations of research processes. It comprises review of research methodology and statement of research methodology utilities. It consists of following topics:

- 3.1 Review of Research Methodology
  - 3.1.1 Model of Research Process
  - 3.1.2 Identification of Research Problem
  - 3.1.3 Establishment of Research Objective
  - 3.1.4 Research Design
  - 3.1.5 Data Collection
  - 3.1.6 Data Analysis
  - 3.1.7 Research Result Report
- 3.2 Statement of Research Methodology Utilities
  - 3.2.1 Conceptual Framework
  - 3.2.2 Hypothesizes
  - 3.2.3 Methodology
  - Conclusion

# 3.1 <u>Review of Research Methodology</u>

# 3.1.1 Model of Research Process

The research process provides a systematic, planned approach to the research project and ensures that all aspects of the research project are consistent with each other, which consists of a series of stages or steps that guide the research project from conception through of final recommendations (Aaker, Kumar, & Day, 1998). According to Aaker et al. (1998), the research process is as Figure 3.1.





Source: Aaker, D. A., Kumar, V., & Day, G. S. (1998). *Marketing research* (6<sup>th</sup> ed.). New York: John Wiley & Sons.

3.1.2 Identification of Research Problem

The first step of research process is to identify the research problem. Only when the problem is precisely defined can research be designed to provide pertinent information (Churchill, 2001).

Based on the statement of research problem, the real estate market in Nanning City even in China is tangly (Section 1.2, p.12). Most of house buyers and potential buyers think the home price is higher than their expectation. Government's actions cause the volume turnover of home market decrease since many potential buyers still wait and see. However, experts think that the trend of home price is going up so they suggest buyers it's better to buy as soon as possible. According to the developers, they are trying to use promotion tools to encourage consumers to buy. Under such situation, the research problem is to study how house buyers in Nanning City to behave and make a decision.

# 3.1.3 Establishment of Research Objective

According to Aaker et al. (1998), the research objective is a statement; in as precise terminology as possible, of what information is needed, meanwhile, it should be framed so that obtaining the information will ensure that the research purpose is satisfied. The objectives of this study as follow:

1. To study the perception, attitudes, learning, emotions, and motivation of internal influences that impact consumer behavior on purchasing a commercial house in Xingning District of Nanning City of Guangxi, China.

2. To study the culture, government, marketing activities, reference group of external influences that impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China.

 To study the self-concept and lifestyle to impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China.

4. To understand consumer decision-making process on purchasing commercial house in Xingning District of Nanning City of Guangxi, China.

Research objectives have three components (Aaker et al., 1998). The first is the research question which specifies the information the decision maker needs. The second and third elements help the researcher make the research question as specific and precise as possible. The second element is the development of hypotheses that are basically alternative answers to the research question. The research determines which of these alternative answers is correct. It is not always possible to develop hypotheses, but the effort should be made. The third is the scope or boundaries of the research.

The research question asks what specific information is required to achieve the research purpose (Aaker et al., 1998). The role of research objective is to provide guidance to the research design so the more specific research question is, the more practical guidance will be provided.

According to this study, the researcher designs targeted research questions as following:

#### Main Research Question

What influences consumer buying behavior when they buy a house in Xingning District of Nanning City, Guangxi Province, China?

## Sub-Research Question

1. How does the perception, attitudes, learning, emotions, and motivation of internal influences to impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China?

2. How does the culture, government, marketing activities, and reference group of external influences to impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China?

3. What are the self-concept and lifestyle to impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China?

4. In what ways does decision making process to work on purchasing commercial house in Xingning District of Nanning City of Guangxi, China?

When a research question is set forth, it is sometimes difficult to realize that the question can and should be made specific. The remaining two elements of the research objective---hypothesis development and the research boundaries---provide exercises to help the researcher make the research question more specific.

A hypothesis is a possible answer to a researcher question (Aaker et al., 1998). The researcher should always take time and effort to speculate as to possible research question answers that will emerge from the research.

Hypothesis development helps make the research question more precise, while another approach is to indicate the scope of the research or the research boundaries (Aaker et al., 1998). The research is aimed to identify and study what factors will influence house buyers' behavior and their decision-making. The target populations are those who have buy a house or want to buy a house in Xingning district of Nanning city. Xingning district is a business center and is large as 751 square kilometers.

## 3.1.4 Research Design

A research design is defined as a "detailed blueprint" used to guide a research study toward its objectives (Aaker et al., 1998; Churchill, 2001; Malhotra, 2004). There are many interrelated decisions involved in the process of designing a research study. The most significant decision is to choose the research approach to determine how the information will be obtained for tactical research decisions are made once the research approach has been chosen. The focus of tactical research decision here is on the specific measurements to be made or questions to be asked, the structure and length of the questionnaire, and the procedure for choosing a sample to be interviewed. (Aaker et al., 1998)

#### Selection of Research Approach

The choice of a research approach depends on the nature of the research study. Basically, all research approaches can be classified into three categories: exploratory, causal, and descriptive research (Aaker et al., 1998). These categories differ significantly in terms of research purpose, research questions, the precision of the hypotheses that are formed, and the data collection methods that are used.

When researchers want to seek "insights into the general nature of a problem, the possible decision alternatives, and relevant variables", they will use exploratory approach to do research (Aaker et al., 1997). Under exploratory approach, researcher does not have any preconception for the research results, thus the manner of research methods employed by researcher are highly flexible, unstructured, and qualitative. Researchers don't have to conform to any research structure; therefore, they can pursuit interesting ideas and clues to solve research problems. Hypotheses of exploratory research are either vague or ill defined, or not exist at all. Malhotra (2004) mentions that secondary data analysis and qualitative research are two most populate methods used to do exploratory research. Secondary data is defined by Aaker et al. (1998) as the data collected by people or agencies for other purposes rather than using to solve current problems. The most benefit of secondary data is to help researchers to save cost and time. Therefore, the first thing for researchers before going to use method to research is to look for relevant secondary data under the research topic. Qualitative research attempts to access and get a rough idea about the person's perspective to some issues. Qualitative methods are usually used to collect data that

cannot be directly observed and measured, such as feelings, thoughts, intentions, and behavior took place in the past (Aaker et al., 1998).

Causal research is defined as a type of conclusive research where the major objective is to obtain evidence regarding cause-and-effect (causal) relationships (Malhotra, 2004). Aaker et al (1998) also mention that a causal research approach is used to show that one variable causes or determines the value of other variables. Comparing with exploratory research, causal research requires a planned and structured design, meanwhile, experimentation is the primary method employed in causal designs (Malhotra, 2004). Churchill (2001) defines experiment as scientific investigation in which an investigator manipulates and controls one or more independent variables and observes the dependent variable or variables to the manipulation or the independent variables.

In the experiment studies, there are independent variable(s) and dependent variable will be studied, besides, independent variable(s) is manipulated to test a hypothesis about a dependent variable under controlled conditions (Aaker et al., 1998). Thus, experiments are research investigations in which implementation involves an active intervention by the observer beyond that required for measurement. The key principle of experimental work is manipulation of a treatment variable (X), followed by observation of response variable (Y). If a change in X causes U to change in the hypothesized way, then we are tempted to say that X causes Y. however; this causal inference rests on soft ground unless the experiment has been properly design to control for other variables.

Descriptive approach is used to measure and report characteristics of some population or phenomena under study (Babbie, 2010). Descriptive research is conducted for the following reasons (Malhotra, 2004; Churchill, 2001):

1. To describe the characteristics of relevant groups, such as consumers, salespeople, organizations, or market areas.

2. To estimate the percentage of units in a specified population exhibiting a certain behavior.

3. To determine the perceptions of product characteristics.

4. To determine the degree to which marketing variables are associated.

5. To make specific predictions.

Aaker et al. (1998) stated that hypotheses of descriptive research often will "exist but they may be tentative and speculative". Descriptive research is to answer what, when, where, who, and how questions, while causal approach is applied to answer why questions to discover and report the relationship among different aspects of the phenomenon been studied (Babbie, 2010).

This study is aimed to describe how house buyers in Nanning City to behave influenced by various factors. Therefore, the descriptive approach is chosen as the research approach during the research process. Under descriptive approach, there are four famous methods to collect data: secondary data, surveys, panels, and observational and other data (Malhotra, 2004). Here due to the limitation of cost and time, the researcher will use secondary data to identify main factors to influence house buyers, and then use surveys to collect primary data.

Survey method is defined as "a structured questionnaire given to a sample of a population and designed elicit specific information from respondents" within which respondents are asked a variety of question regarding their behavior, intentions, attitudes, awareness, motivations, and demographic and lifestyle characteristics

(Malhotra, 2004). The survey method has several advantages. First, the questionnaire is simple to administer. Second, the data obtained are reliable because the responses are limited to the alternatives stated. The use of fixed-response questions reduces the variability in the results that may be caused by difference in interviewers. Finally, coding, analysis, and interpretation of data are relatively simple. Meanwhile, the survey method still has some disadvantages. First, the respondents may be unable to unwilling to provide the desired information due to the question design and sensitive or personal question. Also, structured questions and fixed-response alternatives may result in loss of validity for certain types of data such as beliefs and feelings. Finally, wording questions properly is not easy. Yet, despite these disadvantages, the survey approach is by far the most common method of primary data collection in marketing research.

Survey methods can be classified into three major modes, including personal, telephone, and mail surveys, based on method of administration (Aaker et al., 1998; Malhotra, 2004). During a personal interview, the interviewer and the interviewee interact and simultaneously influence one another in an interview environment. The telephone interviewing means that the conversation occurs over the phone. In all these cases, the interviewer asks the questions and records the respondent's answers either while the interview is in progress or immediately afterward. In the mail survey, questionnaires traditionally are mailed to potential study participants, who complete and return them by mail.

In this study, the researcher will use the personal interview of survey method to collect data. In order to access a large amount of raw data, the researcher chooses the self-administered questionnaire among various personal interview methods. During the process of doing research, the researcher will hand out the questionnaire to ask the target respondent to help fill out. In the self-administered questionnaire method, no interview is involved, although this can reduces the cost of the interview process, there is no one present to explain things to the respondent and clarify responses to open-ended questions, which results in the answers to most of the open-ended questions being totally useless (Aaker et al., 1998).

## Information Needed Specification

When the approach to the problem has been formulated, the researcher should have a fair idea of the kind of information needed Malhotra (2004). Furthermore, once the researcher has determined the research design, he or she can specify the precise nature and content of information to be obtained. Specification of the information needed is an important task involved in research design formulation. Precise specification of the information needed is particularly important for descriptive research. The determination of what information is needed should be based directly on the problem definition and the approach, taking into account the nature of the research design adopted. As the research proceeds, the researcher must ensure that all of the required information is obtained and that unnecessary information is not collected.

This article is to study the house buyer's behavior in Nanning City, and the research approach is descriptive research. By combining the research problem and research approach, the information needed here to help research includes information on demographic and socioeconomic characteristics, perception, attitudes and opinions, learning, emotions, motivations, psychographics and lifestyles, and others.

## Measurements

Once the type of research design has been determined, and the information to be obtained specified, the researcher can move on to the next phase of the research design: deciding on measurement and scaling procedures.

There are four primary scales of measurement: nominal, ordinal, interval, and ratio (Malhotra, 2004). A nominal scale is a figurative labeling scheme in which the numbers serve only as labels or tags for identifying and classifying objects. When a nominal scale is used for the purpose of identification, there is a strict one-to-one correspondence between the numbers and the objects. Each number is assigned to only one object and each object has only one number assigned to it. An ordinal scale is a ranking scale in which numbers are assigned to object to indicate the relative extent to which the objects possess some characteristics. In an interval scale, numerically equal distances on the scale represent equal values in the characteristic being measured. A ratio scale possesses all the properties of the nominal, ordinal, and interval scales, and, in addition, an absolute zero point.

The scaling techniques commonly employed in research can be classified into comparative and non-comparative scales (Molhotra, 2004). Comparative scales involve the direct comparison of stimulus objects. Comparative scale data must be interpreted in relative terms and have only ordinal or rank order properties. The major benefit of comparative scaling is that small differences between stimulus objects can be detected. In non-comparative scales, each object is scaled independent of the others in the stimulus set. The resulting data are generally assumed to be interval or ratio scaled. The classification of scaling techniques is as Figure 3.2.

## Figure 3.2: A Classification of Scaling Techniques



Source: Malhotra, N. K. (2004). *Marketing research an applied orientation* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.

This research will mainly use Likert scale to require the respondents to indicate a degree of agreement or disagreement with each of a series of staments about the stimulus objects such as the measurement of attitudes of respondents toward a statement. A Likers scale usually consists of two parts, the item part and the evaluative part (Aaker et al., 2004). The item part is essentially a statement about a certain product, event, or attitude. The evaluative part is a list of response categories ranging from "strongly agree" to "strongly disagree". An important assumption of this scaling method is that each of the items measures some aspect of a single common facor; otherwise, the items cannot legitimately be summed. In other words, the resulting scale is undimensional.

# Questionnaire Design

Questionnaire or form design is an important step in formulating a research design. A questionnaire is defined as a formalized set of questions for obtaining information from respondents (Malhotra, 2004). Any questionnaire has three specific objectives. First, it must translate the information needed into a set of specific questions that the respondents can and will answer. Second, a questionnaire must uplift, motivate, and encourage the respondent to become involved in the interview, to cooperate, and to complete the interview. Third, a questionnaire should minimize response error. (Malhotra, 2004)

Sampling Plan

The sampling design process includes five steps (as Figure 3.3).





Source: Aaker, D. A., Kumar, V., & Day, G. S. (1998). Marketing research (6<sup>th</sup> ed.). New York: John Wiley & Sons.
Malhotra, N. K. (2004). Marketing research an applied orientation (4<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.

Sampling is intended to gain information about a population that is defined as "the set of all objects that possess some common set of characteristics with respect to a research problem" (Aaker et al., 1998). Malhotra (2004) also mentions that the target population should be defined in terms of elements, sampling units, extent, and time. An element is the object about which or from which the information is desired. The sampling frame usually is a list of population members used to obtain a sample (Aaker et al., 1998). The sampling frame for this study is the list of buyers who have signed the house purchase contract already from April to September. The researcher can use personal network to get the list from the sales department of developers in Xingning Area.

The researcher will use the judgmental sampling method of non-probability sampling to select the sample. Judgmental sampling is a form of convenience sampling in which the population elements are purposively selected based on the judgment of the researcher (Malhotra, 2004). Judgmental sampling usually is associated with a variety of obvious and non-so-obvious biases to select the sample (Aaker et al., 1998).

The next step is to calculate the sample size. A survey cannot be planned or implemented without knowing the sample size. Sample size refers to the number of elements to be included in the study (Malhotra, 2004). Sample size really depends on four factors (Aaker et al., 1998). The first is the number of groups and subgroups within the sample that will be analyzed. The second is the value of the information in the study in general, and the accuracy required of the results in particular. The third factor is the cost of the sample. The final factor is the variability of the population.

Execution of the sampling process requires a detailed specification of how the sampling design decisions with respect to the population, sampling frame, sampling unit, sampling technique, and sample size are to be implemented (Malhotra, 2004).

3.1.5 Data Collection

As long as the research design (including sampling plan) has been carried out, it's time to collect data from respondents (Zikmund, 2003). Basically there are two phases to follow during the process of gathering data: pretesting and main study. Before going to main study, pretesting allows researchers to use a subsample to test whether the data collection data plan is an appropriate procedure for main study. The advantage of pretest is to give the investigator a chance to minimize errors from improper design. Meanwhile, investigator also can take advantage of pretest to check the interview instructions, for instance, whether the questionnaire is too long or too short.

# 3.1.6 Data Analysis

An understanding of the principles of data analysis is useful for several reasons (Aaker et al., 1997). First, researcher can get information and insights by analyzing raw data. Second, it can help researcher to make correct conclusion. Third, it can be secondary source to help other researchers to interpret and understand related analysis. Finally, knowledge of the power of data analysis techniques can constructively influence research objectives and research design. The type of data analysis required will be unique to each study; however, nearly all studies involving data analysis will require the editing and coding of data, will use one or more data analysis techniques, and will have to concerned with presenting the results effectively.

Zikmund (2003) defined editing as the "process of making data ready for coding and transfer to data storage". Editing is aimed to ensure the data are completeness, consistency, and reliability. The role of the editing process is to identify omissions, ambiguities, and errors in the responses. It should be conducted in the field by the interviewer and field supervisor, as well as by the analyst, just prior to data analysis (Aaker et al., 1998). Careful editing makes the coding job easier. Coding is defined as the "process of identifying and classifying each answer with a numerical score or other character symbol" (Zikmund, 2003).

After finishing data preparation, the data analysis firstly requires to analyze and measure each question by using tabulation. Tabulation consists simply of counting the number of cases that fall into the various categories. Other than aiding in "data cleaning" aspects, such as identifying the degree of omissions, ambiguities, and errors in the responses, the primary use of tabulation is in 1) determining the empirical distribution (frequency distribution) of the variable in question; and 2) calculating the descriptive (summary) statistics, particularly the mean of percentages. Next, the data are subjected to cross-tabulations to assess if any association is present between two nominal variables. If the variables are measured as interval or ratio, they are transformed to nominally scaled variables for the purpose of cross-tabulation.

#### 3.1.7 <u>Research Result Report</u>

Research report can be an oral presentation or a written statement to submit to special audience (Zikmund, 2003). The general report format includes certain prefatory parts, the body of the report, and appended parts. The report format should be adapted to suit the level of formality of the particular report situation. The contents of report have findings, analysis, interpretations, conclusions, and sometimes recommendations (Cooper & Schindler, 2008).

# 3.2 <u>Statement of Research Methodology Utilities</u>

## 3.2.1 Conceptual Framework

By applying the theoretical framework of "A conceptual model of the research literature orientation" as consumer behavior model has showed in the chapter 2 (page 44). This model is created to gain the consumer profiles and understand about internal and external influences of consumer behavior and their decision making processes towards commercial housing in Xingning District of Ningning city.

## 3.2.2 Hypotheses

The hypotheses are constructed to identify the factors attracting the consumer's decision on buying commercial housing, based on the research model in chapter 2 (page 50) and the explanations of theories of consumer behavior. Theses hypotheses are developed in following sections of this study and test to find out they are accepted or rejected.

# Hypothesis 1:

- H0: Culture has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.
- H1: Culture has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

## Hypothesis 2:

- H0: Government has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.
- H1: Government has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

# Hypothesis 3:

- H0: Company's activities have no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.
- H1: Company's activities have impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

# Hypothesis 4:

- H0: Reference groups have no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.
- H1: Reference groups have impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

# Hypothesis 5:

- H0: Perception has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.
- H1: Perception has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

# Hypothesis 6:

- H0: Attitudes have no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.
- H1: Attitudes have impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

## Hypothesis 7:

- H0: Learning has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.
- H1: Learning has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

#### Hypothesis 8:

H0: Motivations have no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

H1: Motivations have impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

# Hypothesis 9:

- H0: Emotions have no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.
- H1: Emotions have impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

#### Hypothesis 10:

- H0: self-concept has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.
- H1: self-concept has impact on the buyer's behavior when buying a house in Xingning District of Nanning Ci

# Hypothesis 11:

- H0: lifestyle has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.
- H1: lifestyle has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.H12: Each step of decision-making process has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

#### Hypothesis 12:

Each step of decision making process has impact on the buyers' behavior

when buying a house in Xingning district of Nanning city.

## Hypothesis 12.1

H0: problem recognition has no impact on information search process.

H1: problem recognition has impact on information search process.

## Hypothesis 12.2

H0: Information search has no impact on alternative evaluation process.

H1: Problem recognition has impact on information search process.

## Hypothesis 12.3

H0: Alternative evaluation has no impact on decision making process.

H1: Alternative evaluation has impact on decision making process.

#### Hypothesis 12.4

H0: Decision making has no impact on post-purchase behavior.

H1: Decision making has impact on post-purchase behavior.

3.2.3 <u>Methodology</u>

Questionnaire Design

The research instructment used to collect primary data by conducting questionnaire. Questionnaire is designed to fit the objectives and conceptual framework of this study. To ensure the content validity and reliability of questionnaire was developed through the processes as follow:

1. Review of academic literature, text and research articles, and identified the variables that related to the study.

2. Draft questionnaire based on the review of literature, consultation with

experts and personal observations.

3. Pre-test to ensure the respondents understand the questionnaire and as a test to check if it is interpreted as intended.

4. The questionnaires were designed in English and then translate to Chinese by professional translator Ms. Genevieve Lim.

The questionnaire of this study is divided into six parts. First of all, respondents will be required to fill out their basic personal information including gender, age, marital status, educational background, and monthly income. The second part is related to the external influences including culture, government, marketing activities, and reference groups, while the third part is the internal influences which involved in perception, attitudes, learning, emotions, and motivations. These two parts will design several questions and statements to get their answers and measure their attitudes. The fourth part is about the lifestyle and self-concept. Here will mainly ask how they lifestyle and self-concept to influence buyers' behaviors. Fifth, respondents are asked to describe how their behaviors will be influenced during the decision making process, finally, the respondents to answer their experience and acquisitions based on their first or second time purchase experiences.

# Sampling Design

According to this study, the element is the male or female households. A sampling unit is an element, or a unit containing the element, that is available or selection at some stage of the sampling process. The sampling unit of this study is the households who buy a commercial house of the eight real estate companies (1. Han Lin Mei Zhu; 2. Rong He Shan Shui Lv Cheng; 3. Jiang Yu Shi Ji Cheng; 4. Tiancheng Yi Ping; 5. Xiang Zhang Lin; 6. Sheng Tian Guo Ji; 7. Sheng Tian Guo Ling; and 8. Xiang Ti Ya Yuan.) In April, 2012. Extent refers to the geographical boundaries, and the time factor is the time period under consideration. The extent for this study is the Xingning District of Nanning City in Guangxi Province of China, and the time is the period during April to September in 2011. In a word, the target population for this study is average of those people who buy a commercial house in Xingning District of Nanning City during April to September (6 months) in 2011. The Statistic Bureau of Nanning City released the commercial housing sales of Xingning Area from April to September in October (as Table 3.1).

6	Month	Sales (/Suits)
	April	616
	May	944
V	June	687
	July	976
	Aug	915
	Sep	1082
	Total	5220
	Average/Month	870

Table 3.1: Commercial Housing Sales in Xingning Area from April to September

Source: Home week. (2011). *Real estate's market analysis of Nanning city*. Retrieved from http://epaper.gxnews.com.cn/ngcb/html/2010-12/16/content\_ 1740082.htm

Based on the Table 3.1, the number of the target population for this study is 870.

There is a simplified formula (as following) to calculate sample size invented by Yamane (1967).

$n = \frac{N}{1 + Ne^2}$			
Where	n	:	Sample size,
	N	:	population size;
	e	:	Level of precision.
$n = \frac{67}{1+870}$	70 )(0.0	15)	<mark>,2</mark> = 274

Here, the population is 870 and the level of precision sometimes called sampling error, and is the range in which the true value of the population is estimated to be. According to the Yamane (1967), 0.05 is the best accepted precision level for the population between 800 to 900. So the sample size (n) is 274. In other words, the researcher will use judgmental sampling to select 274 respondents from those buyers, who buy a house in Xingning Area in April, 2012.



No.	Company	Sales Manager	Pretest	Sample	Sample	Valid
			Quantity	Rate	Size	Sample
	Han Lin Mei	Mr. Wang Zheng	4	12%	34	32
	Zhu	Feng				
	Rong He Shan	Mr. Luo Chang	4	12%	34	32
	Shui Lv	lan				
	Cheng	5KU				
	Jiang Yu Shi Ji	Ms. Yue Yue	4	12%	34	33
	Cheng					
	Tian Cheng Yi	Mr. Zhou Guo	4	13%	36	36
	Ping	An		<b>O</b>		
	Xiang Zhang	Mr. Liu Yi	3	12%	34	32
	Lin	Cheng				
	Sheng Tian	Ms. Zhang Dong	4	12%	34	33
	Gong Guan	Dong				
	Sheng Tian Guo	Ms. Li Jiao	3	12%	34	30
	Ling			64/		
	Xiang Ti Ya	Mr. Wei Dong	3	12%	34	33
	Yuan	Cheng				
	Total		30	100%	274	261

Table 3.2: Number of Population and Sampling

Source: Newhouse. (2011). Average home price of Nanning city in 2010. Retrieved from http://newhouse.nn.soufun.com/house/web/Search\_ Result.php



Figure 3.4: Map of Eight Commercial Housing Companies of Sampling

The Figure 3.4 shows the eight commercial housing companies (1. Han Lin Mei Zhu; 2. Rong He Shan Shui Lv Cheng; 3. Jiang Yu Shi Ji Cheng; 4. Tiancheng Yi Ping; 5. Xiang Zhang Lin; 6. Sheng Tian Guo Ji; 7. Sheng Tian Guo Ling; and 8. Xiang Ti Ya Yuan) of sampling in the map of Xingning District of Nanning city. The reason for choosing these eight companies as: there are in the selling in years of 2011 and 2012 and their locations are in the central portion of Xingning District.

#### Data Collection Method

The data collection methods of this research are separated into two phases as follow:

## Pilot Study and Reliability Test

The pre – test was conducted to assess the quality, face validity, and content validity of the measurement items in the questionnaires. Basically, pre – test will be

conduct with an attempt to make questionnaire simple and understandable to respondents, at the same time, it is a comprehensive tool to collect required information and data. In order to sure the information collected can be effectively using for data analysis purposes, the feedback of the questionnaires will be most valuable for any further necessary restricting of questionnaire design. That is to say, upon any advices of the experts or respondents, the research questions can be rephrased and or modified if required.

For this study, the pilot research instrument is conducted with 30 peoples to check the clarity of each question on 9 December 2011. It looks about 10 to 12 minutes for each respondent to complete the questionnaires.

Based on the pre- test the research measured the reliability of the question by using Cronbach's Alpha value. Hair et al., (2006) defined reliability as the consistency and stability of the score from the measurement scale. The scare of 0.70 or higher will be accepted as reliable construct. The table shows the alpha value of the all variable. All of the variables scale higher that 0.70 that it can accept.

Table 3.3: Reliability Tests of Each Part by Using Cronbach's Alpha

Item	Variable	No. of items	Cronbach's Alpha
1	External factors	12	0.806
2	Internal factors	16	0.870
3	Self-concept and lifestyle	3	0.737
4	Decision process	3	0.778

## Table 3.4: Reliability Tests by Using Cronbach's Alpha

Cronbach's Alpha	No. of items
0.917	34

#### Survey Research

After pretest and modify the questionnaire, questionnaires will distribute respondents.

# Response Rate

According to Malhotra (2004) defined that the Survey response rate is broadly defined as the percentage of the total attempted interviews that are completed. In this study, the questionnaires will distribute to the respondents by personal interviews. The researcher will distribute questionnaires to the respondents who have experiences of buying house in Xingning District of Nanning city in person. The response rate of this study is 95%.

#### Measurements of conducting questionnaire

#### Liker scale

According to Hair, Bush and Ortinau (2005) defined that the Liker scale is an ordinal scale format that asks respondents to indicate the extent to which they agree or disagree with a series of mental belief or behavioral belief statements about a given object. Thus this study used the Liker scale used for attitude measurement in which the individual are asked to indicate their degree of agreement with each of influences. The five-point Liker scale is as (5= strongly agree, 4= agree, 3= neither agree nor disagree, 2=disagree, 1= strongly disagree).

The means given from each interrelated indicator ranging from 1 to 5 points follow the method of best. This means that items with scores below fall between the ranges of:

Interval of means	Degree of agreement
1.00 - 1.80	is analyzed as strongly disagree
1.81 - 2.60	is analyzed as disagree
2.61 - 3.40	is analyzed as neither agrees nor disagrees
3.41 - 4.20	is analyzed as agree
4.21 - 5.00	is analyzed as strongly agree

Data from questionnaires are processed by SPSS program in terms of frequency and descriptive, mean, standard deviation, correlation, factor analysis, and multiple regressions. The presentation of data analysis is full discussed in next chapters.

## Conclusion

This chapter explains the overview of research methodology and research processes. Malhotra (2004) defined that research process is the systematic and objective identification, collection, analysis, dissemination, and use of information for the purpose of improving decision making related to the identification and solution of problems and opportunities in marketing. It is the function that links the consumer, customer, and public to the marketer. The systematic planning is required at all stages of the marketing research process.

Research process is consisting of six steps that define the tasks to be accomplished in conducting a marketing research study. These include problem definition; establish research objectives, research design formulation, collect data, analysis data, and report preparation and presentation (Aaker et al., 1998; Malhotra, 2004). Marketing research must have clear objectives and definite designs.

A research design is a framework or blueprint for conducting the marketing research project. It specifies the details of how the project should be conducted. Research design may be broadly classified as exploratory, conclusive and descriptive research. The primary purpose of exploratory research is to provide insights into the problem. Conclusive research is conducted to test specific hypotheses and examine specific relationships. The major objective of descriptive research is to describe market characteristics or functions. A descriptive design requires a clear specification of who, what, when, where, why, and way of research.

As with most steps in the research process, the design of the questionnaire is highly iterative. Because it is an integral part of the research design, the objective is to seek consistency with other elements of the design, notably the research purpose, the budget, and the methods of analysis. Additional constrains are imposed by the data collection method and the respondent's ability and willingness an answer questions about the subject.

The two basic means of obtaining primary quantitative data in descriptive research are survey and observation. Survey involves the direct questioning of respondents, whereas observation entails recording respondent behavior. Surveys involve the administration of questionnaires and may be classified, based on the method or mode of administration.

A sample statistics is used to estimate the population characteristics. The sample statistic will have a variance, and this will be a measure of its reliability. The

86

estimate, based on the sample statistic, has an interval associated with it that reflects its variance and the confidence level of the researcher.

These research process and methodology is used to collect data, and then gathering and analyzing the data. It is to guide, operate and support this study.



# CHAPTER 4

## DATA PRESEANTATION

This chapter presents the data collected from 274 respondents in Xingning District of Nanning city. The researcher finds that of the 274 surveyed questionnaires, 261 pieces of answered paper are found suitable while 13 pieces failed to fulfill the research requirements. As such, this chapter focuses on the results findings of the 261 sets of questionnaires. There are six sections in this charter. The first section describes the demography of the respondents. The second looks into the result of the internal influences which embeds perception, attitudes, learning, emotions and motivation. The third section presents the external influences which consist of culture, government, marketing activities and reference groups. The fourth examines the selfconcept and lifestyle and last analyze the data relating to customers' experiences and acquisitions.

4.1 Data base on the customer's Demographic characteristics

4.2 Data presentation of external influences such as culture, government, marketing activities and reference group on house-buying behavior

4.3 Data presentation of internal influences such as perception, attitudes,

learning, motivation, and emotions on house-buying behavior

4.4 Data presentation of self-concept and lifestyle on house-buying behavior

4.5 Data presentation of consumer decision making process on house-buying behavior

4.6 Data presentation of customers' experience and acquisitions on housebuying behavior

## 4.1 Data Base on the Customers' Demographic Characteristics

The researcher uses descriptive statistics to analyze the demographic characteristics of the respondents. The tables below highlight the breakdown of data according to gender, age, marital status, education background, income, and ability to afford units of different pricing.

Table 4.1 and Figure 4.1 present respondents' gender data. Of the 261 respondents, 135 are male and the rest are female.

Table 4.1: Number and Percentage of Respondents by Gender

Gender	Number of	By Percentage	Cumulative Percentage
	Respondents		
Male	135	52%	52%
Female	126	48%	100.0%
Total	261	100.0	

Figure 4.1: Gender Distribution Chart



Table 4.2 and Figure 4.2 present the respondents' age data. According to the data collected, 45% of the respondents are in the age group of 25 to 30 years old. Those less than 25 years old attributed to 20% while and 31 to 35 years old group is 19%.

Age	Number of	Percentage	Cumulative
	Respondents		Percentage
Less than 25 years old	52	20%	20%
25-30	117	45%	65%
31-35	50	19%	84%
36-40	15	6%	90%
41-45	16	6%	96%
More than 45 years old	11	4%	100.0%
Total	261	100.0%	

Table 4.2: Age Distribution of Respondents



Figure 4.2: Age Distribution Chart



Table 4.3 and Figure 4.3 present the results of the survey in terms of

respondents' marital status. Single and married group are 48% and 52%, respectively.

Table 4.3: Number and Percentage of Respondents by Marital Status

Marital Status	Number of	Percentage	Cumulative
	Respondents		Percentage
Single	125	48%	48%
Married	136	52%	100.0%
Total	261	100.0%	



Table 4.4 and Figure 4.4 present the results of the survey by the education background of the respondents. For the purpose of this research, the researcher categorized education into 4 groups namely 'lower than diploma', 'diploma', 'bachelor degree', and 'master degree or higher'. The majority of the respondents (81% or 224) possess 'diploma' and 'lower than diploma'. The 'lower than diploma comprises of 23% while the 'diploma makes up 58%.

 Table 4.4: Number and Percentage of Respondents by Education Level

Education Level	Number of	Percentage	Cumulative
	Respondents		Percentage
Lower than Diploma	47	23%	23%
Diploma	177	58%	81%
Bachelor Degree	26	13%	94%
Master Degree Or Higher	11	6%	100.0%
Total	261	100.0%	


Table 4.5 and Figure 4.5 present the breakdown of data by monthly income. There are six categories of monthly income levels. These levels includes the 'less than 2,000 Chinese Yuan (CNY)', '2,000—3,500 CNY', '3,501—8,000 CNY', '8001—10,000 CNY', and 'more than 10,000 CNY'. The findings base on incomes categories show the following results:

1. The largest group comprising of 38% (99 respondents) belongs to those earning '3,501—5,000 CNY'.

2. Of the total, 24% (62 respondents) earning '2,000-3,500 CNY'.

3. Those earning less than 2,000 CNY comprise of 16% and the rest (12%)

have a monthly income of '5,001-8,000 CNY.

4. The combination of the above four groups form the majority of the total sample with an overall 90% of the total number of respondents.

Income	Number of	Percentage	Cumulative
	Respondents		Percentage
Less than 2,000 CNY	43	16%	16%
2,000-3,500 CNY	62	24%	40%
3,501-5,000 CNY	99	38%	78%
5,001-8,000 CNY	30	12%	90%
8,001-10,000 CNY	11	4%	94%
More than 10,000 CNY	16	6%	100%
Total	261	100%	

Table 4.5: Number and Percentage of Respondents by Monthly Income

Figure 4.5: Respondents' Monthly Income Distribution Chart



Table 4.6 and Figure 4.6 present respondent's ability to pay base on different unit pricing of commercial housing. Most of respondents (34%) prefer to buy a house at the unit price ranging from '6,001 CNY to 8,000 CNY'. As for the categories earning '4501 – 6000 CNY' and 'Under 4,500 CNY', another two largest groups of

respondents are affordable of 4501 CNY to 6000 CNY (29%) and less than 4,500 CNY (28%) per square meters.

 Table 4.6:
 Number and Percentage by Respondents' Ability to Pay Base on

 Different unit Pricing (CNY/m<sup>2</sup>)

Unit Price (CNY/ m <sup>2</sup> )	Number of	Percentage	Cumulative
	Respondents		Percentage
Under 4,500 CNY	73	28%	28.0%
4,501-6,000 CNY	75	29%	57%
6,001-8,000 CNY	88	34%	91%
8,001-10,000CNY	17	6%	97%
Higher than 10,000 CNY	8	3%	100.0%
Total	261	100.0%	

Figure 4.6: Ability to Pay Base on Different Unit Pricing



#### 4.2 Data presentation of External Influences such as Culture, Government,

Marketing Activities and Reference Groups on House-buying Behavior

The second part of questionnaires aims to assess respondents' culture, government, marketing activities, and reference group, factors that impact the consumers' behavior on the commercial housing of Xingning District of Nanning city in Guangxi, China. The researcher employs the 5- point Likert Scale as tool for evaluation. The five scales, which range from "strongly disagree" to "strongly agree", test every statement involved in perception, attitudes, learning exposure, motivation and emotion factors. If the respondent agrees a statement, he can choose 4 to represent his agree level (like Figure 4.7). After collecting questionnaires, the researcher uses frequency tool of descriptive statistics to process 261 respondents' results.





To examine the findings, descriptive statistics is use to calculate the mean and standard deviation of every statements.

4.2.1 Chinese Culture

Table 4.7 mainly studies how the Chinese traditional culture influences buyer's behavior.

Factor		Statements	Mean	Std. Deviation	Level of
					Agreement
	E01.	The necessity for new	3.61	0.837	Agree
		couples to buy new houses			
Culture	E02.	The necessity for people	3.71	0.821	Agree
		to own a home			
	E03.	The necessity of parents to	3.31	0.919	Neutral
		buy a house for			
		inheritance purposes			

The table 4.7 demonstrates the findings in terms of Chinese culture as the external influencing factors on buyers' behavior. There are 3 different items namely 'the necessity for new couples to buy new houses', 'the necessity for people to own a home' and 'the necessity of parents to buy a house for inheritance purposes'.

1. Respondents agree with the E01 and E02 that it is necessary for new

couple is to buy a new house and people desire and think it is necessary to own a house, their mean are 3.61 and 3.71 respectively.

2. The level of agreement of E03 illustrates that parents perceived that it is

necessary to buy a house for inheritance purposes is neutral.

4.2.2 Government Influencing House-buying Behavior

Table 4.8 studies how government plays a role in buyer's buying behavior.

Factor	Statements	Mean	Std.	Level of
			Deviation	Agreement
Government	E04. Purchasing restriction	3.44	0.864	Neutral
	E05. Control policy	3.68	0.771	Agree

## Table 4.8: Government Influencing Home-buying Behavior

This table explains that 'purchasing restriction' with mean of 3.44 states that consumer's agreement level is neutral on this aspect. Government control policy, on the other hand, has a mean of 3.68 which indicates an agreeable level.

4.2.3 Marketing Activities Data Presentation

Table 4.9 is aimed to present the analysis result of developer's marketing activities.

# Table 4.9: Marketing Activities Influence House-buying Behavior

Factor	Statements	Mean	Std.	Level of
			Deviation	Agreement
Marketing	E06. Advertising	3.53	0.772	Agree
Activities	E07. Promotional tools	3.86	0.667	Agree
	E08. Personal selling	3.29	0.821	Neutral
	E09. Brand awareness	3.65	0.768	Agree

The table 4.9 demonstrates reactions of potential buyers towards marketing activities such as advertising, promotional tools, personal selling and brand awareness. The results show that advertising, promotional tools as well as brand

awareness are positive correlated to the buying decision. These three elements all indicate agreeable level towards house buying decision. However, potential consumers reacted neutrally towards personal selling technique.

#### 4.2.4 <u>Reference Group as an Influencing Factor</u>

Table 4.10 seeks to analyze the influence and impact of reference group to buying decision of a house.

# Table 4.10: Reference Group Data Presentation

Factor	Statements	Mean	Std.	Level of
			Deviation	Agreement
	E10. Family members' opinions	4.00	0.629	Agree
	E11. Friends' opinions	3.75	0.694	Agree
Reference	E12. Experts suggestions	3.39	0.818	Neutral
Group	E13. Information source (from	3.86	0.699	Agree
	newspaper, magazine,		$\mathcal{N}$	
	television, internet and so on.)	10		
	<b>NDFD</b>			

The table 4.10 presents the findings based on the statements of reference groups as influencing element to buying houses. These reference groups comprises of family members' opinions, friends' opinions, experts' suggestions and information sources like newspaper, magazine, television, internet and so on.

1. Consumers agree that family members' opinion, with mean of 4.00,

Friends' opinion with mean of 3.75 and information source with mean of 3.86 all have positive impacts on their housing buying behavior.

2. However, experts' suggestions receive a neutral reaction, attaining a mean of 3.39.

# 4.3 Data Presentation of Internal Influences such as Perception, Attitudes, Learning,

#### Motivation, and Emotions on House-buying Behavior

The third part of questionnaire studies the internal influences on buying behavior of house buyers in Xingning District of Nanning city in Guangxi, China. This consists of perception, attitudes, learning motivation and emotions. The following tables show the distributions of respondents' attitudes toward each factor.

#### 4.3.1 <u>The Elements that Influence Perception</u>

The researcher designs six statements to assess the internal influences of perception impact on buyers' behavior when buying a house in Xingning District of Nanning city. The statements includes 1) commercial housing's locations; 2) surrounding traffic conditions; 3) the supporting facilities such as school, shopping mall, convenience store; 4) the overall quality of the residential area including sizes, property management, green area, fitness center etc.; 5) housing type; 6) interior design and building quality. Table 4.11 shows the distributions of respondents' attitudes for each statement.

Factor	Elements	Mean	Std. Deviation	Agreement Level
	I01. Location	4.22	0.550	Strongly agree
	I02. Traffic condition	4.28	0.558	Strongly agree
Perception	I03. Supporting facilities	4.25	0.579	Strongly agree
	I04. Overall quality	4.29	0.594	Strongly agree
	I05. House type	4.21	0.601	Strongly agree
	I06. Interior design	4.30	0.583	Strongly agree

 Table 4.11: Data Highlighting the Elements that Influence Perception

Table 4.11 presents the results of the survey in terms of perception of internal influences. Respondents are asked to make a stand according to their levels of agreement on the statements presented in the questionnaire. The finding indicates a positively skewed response signifying the elements mentioned as important factors influencing consumers' behavior.

#### 4.3.2 Elements that Influence Attitude

Table 4.12 presents the findings regarding the elements that influence attitude towards respondents' attitudes when buying a house. Again, statements are provided for respondents to gauge to their preferences and what influences their attitudes. Questions encompass the elements of utilities, convenience, manner, comfortable, status, securities, confidentiality and potential increment of house. The table 4.8 shows the mean, standard deviation and level of agreement to each statement. Similarly, the response signifies agreement towards the statements, thereby indicating that consumers' attitude are influenced by these elements.

Factor	Statements	Mean	Std.	Agreement
			Deviation	Level
	I07. Utilities and convenience	3.92	0.563	Agree
Attitudes	I08. Manner and comfortable	4.03	0.557	Agree
	I09. Securities and	3.75	0.746	Agree
	confidentiality			
	I10. Increment	4.08	0.516	Agree

 Table 4.12:
 Attitude Factor Data Presentation

## 4.2.2 Learning and Its Influence on Purchasing Behavior

Respondents' learning exposure prior to purchasing means that consumer study and understands different kinds of information during the decisive process of purchasing a house. The learning factors that consumers are expose to consist of two aspects. These aspects are knowledge gain from different information such as developers' status, design, and availability of loans and a comparison of original expectation against the actual situation. Table 4.13 presents the mean, standard deviation and level of agreement of leaning.

 Table 4.13:
 Learning Factor Data Presentation

Factor	Statements	Mean	Std.	Level of
			Deviation	Agreement
Learning	I11. Knowledge gain from	4.25	0.551	Strongly
Exposure	different information			agree
	I12. Original expectation	4.02	0.614	Agree
	vs. actual situation			

The Table 4.13 presents the results of the survey in terms of consumers' learning exposure and how it influence consumers' buying reactions. The findings show that there is a correlation between knowledge gain from different information and the level of agreement. The means of 4.25 signifies that consumers strongly agreed that their learning exposure influence their purchasing behavior. With regards to original expectation and actual situation, the mean of 4.02 indicates that consumers agree that their learning exposure to an extent do influence their initial expectation and real situation.

#### 4.3.4 Motivation Data Presentation

Table 4.14 highlights the mean, standard deviation and levels of agreement of motivation in terms of buying purpose.

Table 4.14: Motivation Data Presentation

Factor	Statement	Mean	Std.	Agreement
		- 1	Deviation	Level
Motivation	I133.Buying purpose	3.98	0.626	Agree

The table shows that buyers agree to buy a house for purposes such own living, for investment and for their parents or children.

#### 4.3.5 Emotion Data Presentation

Table 4.15 exhibits the mean, standard deviation and levels of agreement of emotion towards buying houses. Emotional study emphasizes on consumers' feeling about buying behavior when deciding to purchase a house.

Table 4.15:	Data Indicating	Emotional	Buying Behavior
-------------	-----------------	-----------	-----------------

Factor	Statement	Mean	Std.	Agreement
			Deviation	Level
Emotion	I114. Feeling impact house buying behavior	4.07	0.529	Agree

The above table shows that consumers agree that their emotions are influenced their house-buying behaviors.

4.4 Data Presentation of Self-concept and Lifestyle on House-buying Behavior

Table 4.16 aims to analyze the impact of buyer's self-concept and lifestyle on their house-buying decision.

 Table 4.16:
 Self-concept and Lifestyle Data Presentation

Factor	Statement	Mean	Std. Deviation	Level of agreement
Self-concept	S01. Self-concept	3.89	0.659	Agree
Lifestyle	S02. Lifestyle	3.95	0.631	Agree

The Table 4.16 reveals that self-concept and lifestyle are in agreeable level with the mean of 3.89 and 3.95 respectively.

4.5 Data Presentation of Consumer Decision Making Process on House-buying

**Behavior** 

Table 4.17 displays the finding and analysis of potential buyer's decision making process.

Factor	Statements	Mean	Std. Deviation	Agreement
				Level
	P01. Problem recognition	3.77	0.872	Agree
Decision	P02. Information search	4.13	0.564	Agree
Making	P03. Alternative	4.10	0.555	Agree
Process	evaluation	T N		
	P04. People's suggestion	3.39	0.828	Neutral
	P05. Uncertainties risk	3.80	0.639	Agree
	P06. Post-purchase	3.67	0.660	Agree

 Table 4.17: Decision Making Process Data Presentation

The Table 4.17 highlights 6 types of statements which influence decision making process. These factors are problem recognition, information search, alternative evaluation, people's suggestion, uncertainties risk and post-purchase. Consumers agree that problem recognition, information search, alternative evaluation, uncertainties risk and post-purchase behavior all have an impact on their decision making process. However, with regards to people's suggestions, the responses are neutral with mean of 3.39.

# 4.6 <u>Data Presentation of Buyer's Experience and Acquisition on House-buying</u> <u>Behavior</u>

Table 4.18 illustrates the analysis the level of influence of buyer's experience and acquisition.

Item	Number	Percentage	Cumulative Percentage
First-time Purchaser	193	74%	74%
Second-time Purchaser	68	26 %	100.0%
Total	261	100.0	

Table 4.18: Number and Percentage of Buyer's Experience and Acquisition

Figure 4.8: First and Second-time Purchasers' Percentage Distribution Chart



Table 4.18 and Figure 4.8 show that of the total of 261 respondents, 193 are first-time house buyers and the remaining 26% (68) comprises of second-time housing purchasers.

Item	Statement	Mean	Std.	Agreement
			Deviation	Level
First-time	EA02. Present time purchase	4.33	0.746	Strongly
Purchaser	experience and acquisition			Agree
	may influence your next			
	time buying behavior			

Table 4.19: First-time Purchaser's Experience and Acquisition Data Presentation

The Table 4.19 shows that for first-time purchasers, they strongly agree that their purchasing experience and acquisition influence their next time buying behavior. The mean is 4.33 and standard deviation is 0.746.

Table 4.20: Number and Ratio of First-time Purchaser in Terms of Level of

Agreement

Item	Number	Percentage	Cumulative Percentage
Strongly Disagree		0	0
Disagree	3	2	2
Neutral	17	9	11
Agree	82	42	53
Strongly Agree	90	47	100.0
Total	193	100.0	

#### Figure 4.9: First-time Purchasers Agreement Level Distribution Chart



Table 4.20 and figure 4.9 present the level of agreement of first-time purchasers' in terms of percentage in the sample using Likert scale. The major 47% (90) cited that they strongly agreed that purchasing experience and acquisition aid their decision making. A relative sizeable of 42% (82) also agree to the proposition that their current purchase is influenced.

Item	Statement	Mean	Std. Deviation	Agreement
<u> </u>		4.20	0.064	Q. 1
Second-time	EA03. Buyers' present time	4.38	0.864	Strongly
Purchasers	decision making			Agree
	was influenced by			
	their previous			
	experience and			
	acquisition.			

This table shows that second-time purchasers strongly agree with a mean of 4.38 and standard deviation of 0.864 that their present time decision making was influenced by their previous experience and acquisition.

Table 4.22: Second-time Purchasers Reactions Based on Experience and Acquisition

Item	Quantity	Percentage	Cumulative Percentage
Strongly Disagree		1.5	1.5
Disagree	1	1.5	3
Neutral	8	12	15
Agree	19	28	43
Strongly Agree	39	57	100.0
Total	68	100.0	

Figure 4.10: Second-time Purchasers Agreement Level Distribution Chart



Table 4.22 and figure 4.10 present that majority of the second-time purchasers agree with 28% and strongly agree with 57% that their buying decisions are affected by their past or previous house-buying experiences and acquisitions.

#### Conclusion

This chapter presents the questionnaire results from 261 respondents by using SPSS program. It provides detailed outlook of the information gathered by this study. The information enables the researcher to have an overview of the consumers buying decision of commercial housing in Xingning District of Nanning city in Guangxi province, China.

The data presentation includes demographic data, data from internal influence of perception, attitudes, learning, motivation and emotions; external influences of culture, government, marketing activities and references groups; self-concept and lifestyle; consumer decision-making process; and consumer's experience and acquisitions on consumers housing buying behavior.

However, it is impossible to further understand consumer behavior without greater analysis. And the following chapter seeks to examine these elements in depth for better understanding of consumer house-buying process and decision making.

#### CHAPTER 5

#### **RESEARCH ANALYSIS AND FINDINGS**

This chapter analyzes the collected data and seeks to find out the desired outcome based on the hypothesis in this research paper. The first section summarizes the findings base on descriptive analysis of the demographic data and the levels of agreement towards consumer house-buying behavior. The second section focuses on the reliability of the analysis using coefficient alpha. The reliability analysis is used to examine the internal and external influences, self-concept and lifestyle, and decision making process. The third section reveals the findings based on correlation analysis. The fourth section relates to factor analysis and the last section outlines the testing of the hypothesis.

- 5.1 Descriptive Analysis
  - 5.1.1 Summary of the Demographic Characteristics Analysis
  - 5.1.2 Summary of the Levels of Agreement Analysis
- 5.2 Reliability Analysis
  - 5.2.1 Reliability Analysis of Internal Influences
  - 5.2.2 Reliability Analysis of External Influences
  - 5.2.3 Reliability Analysis of Self-concept and Lifestyle
  - 5.2.4 Reliability Analysis of Decision Making Process
- 5.3 Correlation Analysis
- 5.4 Factor Analysis
- 5.5 Hypothesis Testing

#### 5.1 <u>Descriptive Analysis</u>

This section presents the results of the demographic profile and the agreement levels using descriptive analysis as the analyzing tool.

#### 5.1.1 <u>Summary of the Demographic Characteristics Analysis</u>

The researcher highlights the findings on demographic characteristics based on six major items namely, respondents' gender, age, marital status, educational background, monthly income and ability to pay base on different unit pricing. Table 5.1 provides the basic demographics of respondents. The ratio of male and female are 52% and 48% respectively. In terms of age groups, 45% (117) of the respondents ranges from 25-30 years old while 4% (11) are over 45 years old. Further, more than half of the respondents, that is 52% (136) are married. Most of respondents, 58% (177) hold diploma or college degree. With regard to the monthly income, 38% (99) ranges from 3,501-5,000 CNY while just 4% (11) receives more than 10,000 CNY. Last but not least, on consumers' ability to pay base on different prices of the house, a major 34% (88) can afford to buy at a price ranging from 6,001-8,000CNY and only 3% (8) can pay higher prices which is more than 10,000 CNY. The details are show in table 5.1 on the following page.

Demographic Characteristics	Frequency	Percentage (%)
1. Gender		
Male	135	52
Female	126	48
2. Age		
<25 years old	52	20
25-30	117	45
31-35	50	19
36-40	15	6
41-45	16	6
>45years old	11	4
3. Marital Status		
Single	125	48
Married	136	52
4. Education		• /
Lower than diploma	47	23
Diploma	177	58
Bachelor	26	13
Master or higher	- 11	6
5. Monthly Income		
< 2,000 CNY	43	16
2,000-3,500CNY	62	24
3,501-5,000CNY	99	38
5,001-8,000 CNY	30	12
8,001-10,000 CNY	11	4
>10,000 CNY	16	6

# Table 5.1: Distributions of Demographic Characteristics

(Continued)

6. Ability to Pay Base on Different Unit Pricing				
<4,500 CNY	73	28		
4,501-6,000 CNY	75	29		
6,001-8,000 CNY	88	34		
8,001-10,000CNY	17	6		
>10,000 CNY	8	3		
Total	261	100		

Table 5.1 (Continued): Distributions of Demographic Characteristics

# 5.1.2 <u>Summary of the Levels of Agreement Analysis</u>

The levels of agreement of the respondents on internal influences, external influences, self-concept and lifestyle, and decision-making process when buying a house in Xingning District of Nanning city in Guangxi province of China is presented on the table 5.2 as shown below.

114

Item	Factor	Mean	Std. Deviation	Agreement
				Level
External	Culture	3.54	0.642	Agree
Influences	Government	3.56	0.733	Agree
	Marketing Activities	3.58	0.588	Agree
	Reference Groups	3.75	0.520	Agree
Self-concept	Self-concept	3.89	0.659	Agee
and lifestyle	Lifestyle	3.95	0.631	Agree
Internal	Perception	4.26	0.478	Agree
influences	Attitudes	3.94	0.445	Agree
	Learning	4.13	0.497	Agree
	Motivation	3.98	0.626	Agree
	Emotion	4.07	0.529	Agree

 Table 5.2:
 Summary of the Levels of Agreement Analysis

#### 5.2 <u>Reliability Analysis</u>

Coakes and Steel, (2007) defined that Reliability analysis evaluates the properties of measurement scales and the items that make them up. The procedure calculates a number of commonly used measures of scale reliability and also provides information about the relationship between individual items in the scale. Reliability analysis can determine the extent of the items in research questionnaires related to each other. Internal consistency reliability is aimed to have the homogeneity of items comprising a measurement scale. To verify the reliability of the research constructs, the internal consistency analysis (Cronbach's alpha) and item-to-total correlation are used to identify the internal consistency reliability of the proposed constructs. Cronbach's alpha is a model of internal consistency based on the average inter-item correction. Cronbach'a alpha is suggested to be above 0.70. If a scale has a Cronbach's alpha below 0.60, it could be considered for any roots of measurement errors. The item-to-total correlation value is suggested to be equal or greater than 0. The higher inter-item correlation explains that the items of a scale have a strong relationship to the latent construct.

#### 5.2.1 Reliability Analysis of Internal Influences

The results of reliability tests for measurements are shown in Table 5.3. The overall construct Cronbach's alpha with 0.857 exceeds the generally accepted guideline of 0.70 as suggested. So the measurement items in this construct are considered reliable in measuring internal influence in terms of consumers' perception, attitudes, learning, motivation and emotion. While the item-to-total correlation values for item 107, 108, 111, 112, 113, and 114 don't exceeds the minimum criterion of 0.50, indicating some of scaled items within a factor tend to have a lower coefficient of item-to-total correlation. This also indicates a low degree of internal consistency reliability for factor of attitudes, learning, motivation and emotion of internal influences.

Factor	Construct Item	Item-Total Correlation	Cronbach's
Perception	I01	.628	
	102	.598	
	103	.617	
	I04	.622	
	105	.667	
	106	.641	
Attitudes	I07	.422	057
	108	.520	.857
	109	.290	
	I10	.590	
Learning	I11	.480	
	I12	.472	
Motivation	I13	.358	
Emotion	I14	.283	

### Table 5.3: Internal Influences Reliability Analysis

#### 5.2.2 Reliability Analysis of External Influences

Table 5.4 indicates the results of reliability tests for measurements of external influences. The overall construct Cronbach's alpha exceeds the generally accepted guideline of 0.70. Therefore, the measurement items in this construct are considered reliable in meaning consumers' external influence in aspects of culture, government, marketing activities and references group. Nevertheless, despite the validity, external influences appear to have greater reliability than the internal influences. This can be justified by the findings that the item–to-total correlation values for external items E01, E02, E03, E05, E10, and E13 have a low coefficient don't exceed the minimum criterion of 0.50 meaning.

Factor	Construct Item	Item-Total Correlation	Cronbach's
Culture	E01	.397	
	E02	.342	
	E03	.299	
Government	E04	.520	
	E05	.488	
Marketing	E06	.524	
Activities	E07	.502	.836
	E08	.665	
	E09	.544	
Reference	E10	.434	
Group	E11	.575	
	E12	.589	
	E13	.480	

## Table 5.4: Reliability Analysis of External Influence

# 5.2.3 <u>Reliability Analysis of Self-concept and Lifestyle</u>

The result of reliability tests for measurements in this construct are shown in Table 5.5. All the item-to-total correlation values exceed the criterion of 0.50 and the Cronbach's alpha value of this construct 0.763 in much higher than 0.7 as suggested.

Factor	Construct item	Item-Total Correlation	Cronbach's
Self-concept	S01	0.617	0.763
Lifestyle	S02	0.617	0.705

#### Table 5.5: Reliability Analysis of Self-concept and Lifestyle

#### 5.2.4 Reliability Analysis of Decision Making Process

With the same procedures as described in the previous section, Cronbach's alpha and item-to-total correlation are employed to identify the reliability and interrelationship of the construct. Table 5.6 presents the result of reliability tests on the research items of confirmation. For the construct of decision making process, there are two item-to-total correlation values that are higher than 0.50 as P03 and P05, while P01, P02, P04, and P06 are lower than 0.5. These indicate that most of scaled items within the factors tend to have lower coefficient of item-to-total correlation. The Cronbach's alpha is 0.727 and is higher than 0.7, this means that the internal consistency reliability for this construct valid.

Factor	Construct Item	Item-total Correlation	Cronbach's
Problem	P01	.445	0.727
Recognition			
Information	P02	.490	
Search			
Alternative	P03	.529	
Evaluation	OK	UN	
Decision	P04	.432	
Making	P05	.503	
Post-purchase	P06	.446	

#### Table 5.6: Reliability Analysis of Decision Making Process

#### 5.3 Correlation Analysis

Coakes and Steel, (2007) defined that Correlation analysis is a statistical tool which measures the strength of association between two variables. It measures the linear relation between two or more variables. The sign and the absolute value of correlation coefficient 'r' describe the direction and the magnitude of the relationship between two variables. The details of the measurement of 'r' are as follows:

1. The value of the correlation coefficient r ranges between -1 to 1.

2. The greater the absolute value of correlation coefficient, the stronger relationship is.

3. The strongest linear relationship is indicated by coefficient of -1 or 1.

4. The weakest relationship is indicated by correlation coefficient to 0.

5. The positive correlation means if one variable gets bigger, the other variable trends to get bigger too (direct relation).

6. The negative correlation means if one variable gets bigger, the other variable trends to get smaller (inverse relation).

The Table 5.7 shows the correlation matrix between the dependent variable decision making process and the independent variable which embeds culture, government, marketing activities, reference group, self-concept and lifestyle, perception, attitudes, motivation and emotion. The table also highlights the correlation between the independent and dependent variables as well as among the independents. The interpretation of the correlation is based on the significant of the correlation among the independent variables.

The decision making process based on the correlation matrix between dependent and independents are shown in table 5.7. This table illustrates positive correlation between decision making process and culture (r=0.207, p=0.01), government (r=0.226, p=0.01), marketing activities (r=0.365, p=0.01), reference group (r=0.466, p=0.01), self-concept (r=0.417, p=0.01), lifestyle (r=0.336, p=0.01), perception (r=0.347, p=0.01), attitudes (r=0.339, p=0.01), learning (r=0.419, p=0.01), motivation (r=0.244, p=0.01), and emotion (r=0.247, p=0.01).

As for the correlation between independents variable, the findings show that culture has a positive correlation with government (r=0.225, p=0.01), culture and marketing activities (r=0.290, p=0.01), culture and reference group (r=0.367, p=0.01), culture and self-concept (r=0.271, p=0.01), culture and lifestyle (r=0.163, p=0.05), culture and perception (r=0.230, p=0.01), culture and attitudes (r=0.333, p=0.01), culture and learning (r=0.194, p=0.01), culture and motivation (r=0.232, p=0.01), culture and motion(r=0.138, p=0.05).

Government is also positively correlated with marketing activities (r=0.484, p=0.01), government and reference group (r=0.447, p=0.01), government and self-concept (r=0.327, p=0.01), government and lifestyle (r=0.272, p=0.01), government and perception (r=0.111, p=0.05), government and attitudes (r=0.172, p=0.01), government and learning (r=0.250, p=0.01), government and motivation (r=0.154, p=0.01), and government and emotion(r=0.108, p=0.05).

Marketing activities has positive correlation with references group (r=0.615, p=0.01), marketing activities and self-concept (r=0.308, p=0.01), marketing activities and lifestyle (r=0.290, p=0.01), marketing activities and perception (r=0.245, p=0.01), marketing activities and attitudes (r=0.310, p=0.01), marketing activities and learning (r=0.338, p=0.01), marketing activities and motivation (r=0.297, p=0.01) marketing activities and emotion (r=0.149, p=0.01).

Reference group has positive correlation with self-concept(r=0.426, p=0.01), reference group and lifestyle (r=0.360, p=0.01), reference group and perception (r=0.180, p=0.01), reference group and attitudes (r=0.398, p=0.01), reference group and learning(r=0.342, p=0.01), reference group and motivation (r=0.396, p=0.01) and reference group and emotion (r=0.203, p=0.01).

Self-concept has positive correlation with lifestyle (r=0.617, p=0.01), selfconcept and perception(r=0.365, p=0.01), self-concept and attitudes (r=0.276, p=0.01), self-concept and learning (r=0.249, p=0.01), self-concept and motivation (r=0.283, p=0.01) and self-concept and emotion (r=0.451, p=0.01).

Lifestyle has positive correlation with perception(r=0.388, p=0.01), lifestyle and attitudes(r=0.183, p=0.05), lifestyle and learning (r=0.240, p=0.01), lifestyle and motivation(r=0.251, p=0.01) and lifestyle and emotion (r=0.332, p=0.01).

Perception also has positive correlation with attitudes(r=0.321, p=0.01), perception and learning(r=0.377, p=0.01), perception and motivation(r=0.206, p=0.01), and perception and emotion(r=0.292, p=0.01).

Attitudes has positive correlation with learning(r=0.484, p=0.01), attitudes and motivation(r=0.410, p=0.01) and attitudes and emotion(r=0.118, p=0.05).

Learning has positive correlation with motivation (r=0.270, p=0.01) and learning and emotion(r=0.214, p=0.01). Motivation also has positive correlation with emotion (r=0.109, p=0.05).



# Table 5.7: Correlation Matrix

		r	1	T				1	r			r
	Process	Culture	Government	Marketing Activities	Reference Group	Self-concept	Lifestyle	Perception	Attitudes	Learning	Motivation	Emotion
Process	1											
Culture	.207**	1						Ú				
Government	.226**	.225**	1									
Marketing	.365**	.290**	.484**	1								
Reference	.466**	.367**	.447**	.615**	1							
Group												
Self-concept	.417**	.271**	.327**	.308**	.426**	1						
Lifestyle	.336**	.163**	.272**	.290**	.360**	.617**	1					
Perception	.347**	.230**	.111*	.245**	.180**	.365**	.388**					
Attitudes	.339**	.333**	.172**	.310**	.398**	.276**	.183**	.321**	1			
Learning	.419**	.194**	.250**	.338**	.342**	.249**	.240**	.377**	.484**	1		
Motivation	.244**	.232**	.154**	.279**	.396**	.283**	.251**	.206**	.410**	.270**	1	
Emotion	.247**	.138*	.108*	.149**	.203**	.451**	.332**	.292**	.118*	.214**	.109*	1
I	**. Correlation is significant at the 0.01level (2-tailed);											
*. Correlation is significant at the 0.05 level (2-tailed).												

In sum, consumer decision making process is related to all the independent variables, and all independent variables are related to all other variables.

#### 5.4 Factor Analysis

Coakes and Steed, (2007) also defined that Factor analysis is a data reduction technique used to mainly reduce the large number of variable to a small set of underlying factors summarizing the information contained in the variables. The factor analysis addresses the problem of analyzing the structures of the interrelations by defining a set of underlying dimensions called factors. Thus, the main objective of performing factor analysis is to find the variance of each variable, which is the measure of the variability of the variables across objects and to find out whether these variables can be grouped under common underlying dimensions.

This research uses factor analysis to identify underlying variables and factors which explains the pattern of correlation within a set of observed variables. (Kaiser-Meyer-Olkin, KMO) measure of sampling adequacy and Bartlett's test of sphericity is used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables. The KMO measure of sampling adequacy tests whether the partial correlation matrix is an identity matrix, which would indicate that the factor model is inappropriate. Principle components analysis is used to obtain the initial factor solution. Table 5.8 shows the KMO and Bartlett's Test of this study.

Bartlett's Test of	Kaiser-Meyer-Olkin Measure of Sampling	.819
Sphericity	Adequacy	
	Approx. Chi-Square	816.719
	df.	55
	Sig.	.000

Table 5.8 presents the Kaiser-Meyer-Olkin is more than 0.6(KMO=0.819), and the Bartlett's Test of sphericity is significant by the data less than 0.5 (BTS=0.000).

Hair et al., (1998) stated that factor loading of greater than +/-0.30 are considered minimal level; loading of +/-0.4 are considered more important and factor loading of +/-0.5 are considered significant. Also it states that factor loading of 0.3 as practically significant for sample size of 350 or greater. The factor loading of greater than 0.5 is to be used for this research. The items with factor loading below 0.5 are dropped.

For the purpose of this study, the factor analysis is performed on the following tables. The communalities list information about how much of the variance in each item is explained. The communalities with value less than 0.3 indicate that the item does not fit well with each other items in its components (Hair et al., 1998). The communalities for this research range from 0.314 to 0.715 where degree of confidence in the factor solution is permissible (as Table 5.9).

	Initial	Extraction
Culture	1.000	0.314
Government	1.000	0.653
Marketing Activities	1.000	0.659
Reference Group	1.000	0.706
Self-concept	1.000	0.715
Lifestyle	1.000	0.651
Perception	1.000	0.573
Attitudes	1.000	0.709
Learning	1.000	0.525
Motivation	1.000	0.416
Emotion	1.000	0.556

From the extraction, all the factors with an Eigen value (latent root criterion) of greater than one (1) are considered significant (Hair et al., 2006). Based on the total variance explained with an Eigen value of greater than one, three components are extracted from 11 variables.

Although the latent root criteria extracted three components, the Scree plot (Figure 5.1) illustrates that three components extracted for explaining are the variables. The point at which the curve first begins to straighten out is considered to indicate the maximum number of components to extract. The Scree plot qualifies to extract three components explains about 58.875% (see Table 5.11, page 130) of variables. Consequently, based on the Scree plot, three components are extracted for the objectives of this research, which also fits the hypothesized model.



To achieve a simpler and more meaningful factor pattern, principle component analysis using varimax rotation method applied to distribute the variance. The main objective of the rotation is to make larger loading larger and the smaller loadings than their rotated values. Moreover the rotated loading are useful in naming the rotation was performed as to redistribute the variances more evenly and to make the factor loading more meaningful and easier to interpret (Coakes & Steed, 2007). Table 5.10 rotates component matrix has grouped the 11 variables into three components where the naming and grouping of the variables is made easier.
Variances		Components	
variances	1	2	3
Attitudes	.829		
Learning	.684		
Motivation	.598		
Culture	.435	.341	
Government	AKU	.797	
Marketing Activities		.748	
References Group	.367	.735	
Self-concept	.339		.758
Lifestyle		9	.749
Emotion			.743
Perception	.501		.558

# Table 5.10: Rotated Component Matrix

Based on Table 5.10, the attitudes, continuous learning, motivation and perception are loaded significantly in component one and are grouped in "internal influences". The factor loading for internal influences have loading of 0.829, 0.684, 0.598, and 0.501 respectively for attitudes, learning, motivation, and perception.

The variables culture, government, marketing activities and reference group are significant loaded in component two and was group as "external influences". The factor loading for external influences have loading of 0.341, 0.797, 0.748, and 0.735 respectively.

The variables self-concept and lifestyle is significant loaded in component three and was grouped as "self-concept and lifestyle" group. And the loading factors are 0.758 and 0.749 respectively. However, according to the factor analysis, emotion is group along with self-concept and lifestyle. These factors attain a factor loading of 0.743, 0.758 and 0.749 respectively.

Table 5.11: Rotated Factor Analysis Summary

Components	Variances	Fa	Factor Loading			
		Factor 1	Factor 2	Factor 3		
Internal Influences	Perception	0.501				
	Attitudes	0.829				
	Learning	0.684				
	Motivation	0.598				
External Influences	Culture	0	0.341			
	Government		0.797			
	Marketing Activities		0.748			
	Reference Group		0.735			
Self-concept and Lifestyle	Self-concept			0.758		
	Lifestyle		1	0.749		
NO7	Emotion	107		0.743		

The Table 5.12 displays the factor loadings of the rotated matrix and the percentage of variability for comparison purpose. Ranked and using Eigen value, the researcher tries to explain the statistics of each factor before and after the components are extracted.

The cumulative percentage of variance before and after the rotation remains the same as 58.875%, but the percentage accounted for each factor change. For instance, the before rotation the first component, internal influences accounted for 36.225% of the variance while after rotation only accounted for 20.140% of the variance. Likewise, the second component (external influences) accounted for 12.162% before and after 19.4705; the final component (self-concept and lifestyle) accounted for 10.488% before and 19.264% after rotation. The difference in factor loading before and after rotation was due to the redistribution of factor loading pattern and also the percentage change in variance for each factor variance is different.

Table 5.12: Total Variance Explained

	Initial Eigen Values			Rotation Sum of Squared Loadings		
Factors	Total	% of	Cumulative	Total	% of	Cumulative
		Variances	%		Variances	%
Internal	3.985	36.225	36.225	2.215	20.140	20.140
Influences					$\prec$	
External Influences	1.338	12.162	48.387	2.142	19.470	39.611
Self-concept and Lifestyle	1.154	10.488	58.875	2.119	19.264	58.875

# 5.5 <u>Hypothesis Testing</u>

Hypothesis were developed with an target to identify the effect between independent and dependent variables, to test whether the culture, government, marketing activities and reference group of external influences; perception, learning, attitudes, motivation and emotion of internal influences, self-concept and lifestyle to impact on buyer's behavior when buying a house in Xingning District of Nanning city. The results of hypothesis testing of external influences, internal influences,

self-concept and lifestyle with the consumer buying decision making process by using simultaneous multiple regression analysis.

<u>Hypothesis 1</u>:

H0: Traditional Chinese culture has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

H1: Traditional Chinese culture has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

Hypothesis 2:

H0: Government has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

H1: Government has impact on the buyer's behavior when buying a house in

Xingning District of Nanning City.

Hypothesis 3:

H0: Company's activities have no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

H1: Company's activities have impact on the buyer's behavior when buying a

house in Xingning District of Nanning City.

Hypothesis 4:

H0: Reference groups have no impact on the buyer's behavior when buying a

house in Xingning District of Nanning City.

H1: Reference groups have impact on the buyer's behavior when buying a

house in Xingning District of Nanning City.

Hypothesis 5:

H0: Perception has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

H1: Perception has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

Hypothesis 6:

H0: Attitudes have no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

H1: Attitudes have impact on the buyer's behavior when buying a house in

Xingning District of Nanning City.

Hypothesis 7:

H0: Learning has no impact on the buyer's behavior when buying a house in

Xingning District of Nanning City.

H1: Learning has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

Hypothesis 8:

H0: Emotions have no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

H1: Emotions have impact on the buyer's behavior when buying a house in

Xingning District of Nanning City.

Hypothesis 9:

H0: Motivations have no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

H1: Motivations have impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

Hypothesis 10:

H0: self-concept has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

H1: self-concept has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

Hypothesis 11:

H0: lifestyle has no impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

H1: lifestyle has impact on the buyer's behavior when buying a house in Xingning District of Nanning City.

Table 5.13: Decision Making Process Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.599	0.359	0.331	0.37093

On the Table 5.13, only one fit into the model. R is equal 0.599 which is the correlation between the independent variables and dependent variable. R square value is 0.359, it means that the independent variables can explain 35.9% the change of independent variables with the decision making process. This model adjusted R square of 0.331; std. error of the estimate is 0.37093. This is referred to as the root mean squared error. It is standard deviation of the error term and the square roots of the mean square foe the residuals in the ANOVA table.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	19.208	11	1.746	12.691	0.000*
Residual	34.259	249	0.138		
Total	53.467	260			

# Table 5.14: Decision Making Process Model ANOVA

\*significant at the 0.05 level

OKUN
Table 5.15:         Result of Regression of Consumer Decision Making Process Model

	Unstar	ndardized	Standardized			
Variables	Coefficients		Coefficients	t	Sig.	
	В	Std. Error	Beta			
(Constant)	0.975	0.298		3.269	0.001	
Culture	-0.024	0.040	-0.034	-0.600	0.549	
Government	-0.034	0.038	-0.056	-0.913	0.362	
Marketing Activities	0.045	0.053	0.059	0.854	0.394	
Reference Group	0.241	0.064	0.276	3.737	0.000	
Perception	0.124	0.058	0.130	2.138	0.034	
Attitudes	0.043	0.066	0.043	0.658	0.511	
Learning	0.190	0.057	0.208	3.333	0.001	

(Continued)

# Table 5.15 (continued): Result of Regression of Consumer Decision Making Process Model

	Unstan	dardized	Standardized		
Variables	Coefficients		Coefficients	t	Sig.
	В	Std. Error	Beta		
Motivation	-0.017	0.042	-0.024	-0.411	0.681
Emotion	0.016	0.050	0.019	0.325	0.745
Self-concept	0.128	0.050	0.186	2.555	0.011
Lifestyle	0.012	0.049	0.016	0.240	0.811

Dependent Variable: Decision Making Process

Table 5.15 presents the findings between independent variables and dependent variable.

For culture, in Hypothesis 1, the significant level of 0.549 is greater than 0.05. Therefore, H0 is true. In other words, there is no significant impact between culture and consumer house-buying behavior.

For government, in Hypothesis 2, the significant level of 0.362 is greater than 0.05, H0 is true. Therefore, there is no significant impact between government and consumer house-buying behavior.

For marketing activities, in Hypothesis 3, the significant level of 0.394 is greater than 0.05, H0 is true. As such, there is no significant impact between marketing activities and consumer house-buying behavior.

For reference group, in Hypothesis 4, the significant level of 0.000 is smaller than 0.05, H1 is true. The result is that there is a significant impact between reference group and consumer house-buying behavior.

For perception, in Hypothesis 5, the significant level of 0.034 is smaller than 0.05, H1 is true. Hence, there is a significant impact between perception and consumer house-buying behavior.

For attitudes in Hypothesis 6, the significant level of 0.511 is greater than 0.05, therefore, H0 is true. Then, there is no significant impact between attitudes and consumer house-buying behavior.

For learning, in Hypothesis 7, the significant level of 0.001 is smaller than 0.05, and so H1 is true. There is a significant impact between learning and consumer house-buying behavior.

For motivation, in Hypothesis 8, the significant level of 0.681 is greater than 0.05, therefore, H0 is true. There is no significant impact between motivation and consumer house-buying behavior.

For emotion, in Hypothesis 9, the significant level of 0.745 is greater than 0.05, therefore, H0 is true. Hence, there is no significant impact between emotion and consumer house-buying behavior.

For self-concept in Hypothesis 10, the significant level of 0.011 is smaller than 0.05, H1 is true. Therefore, there is a significant impact between self-concept and consumer house-buying behavior.

For lifestyle, in Hypothesis 11, the significant level of 0.811 is greater than 0.05, therefore, H0 is true. Thus, there is no significant impact between lifestyle and consumer house-buying behavior.

Hypothesis	Factors (Hypothesized)	Sig.	Result at 95% Confidence Level				
	External	I Influenc	es				
H1	Culture	0.549	Not Supported (H0 Accepted)				
H2	Government	0.362	Not Supported (H0 Accepted)				
Н3	Marketing Activities	0.394	Not Supported (H0 Accepted)				
H4	Reference Group	0.000	Supported (H1 Accepted)				
Internal Influ	Internal Influences						
H5	Perception	0.034	Supported (H1Accepted)				
H6	Attitudes	0.511	Not Supported (H0 Accepted)				
H7	Learning	0.001	Supported (H1 Accepted)				
H8	Motivation	0.681	Not Supported (H0 Accepted)				
H9	Emotion	0.745	Not Supported (H0 Accepted)				
Self-concept	Self-concept and Lifestyle						
H10	Self-concept	0.011	Supported (H1 Accepted)				
H11	Lifestyle	0.811	Not Supported (H0 Accepted)				

# Table 5.16: Significant of Research Model

Hypothesis 12:

Each steps of decision making process has impact on the buyers' behavior

when buying a house in Xingning district of Nanning city.

# Hypothesis 12.1

H0: Problem recognition has no impact on information search process.

H1: Problem recognition has impact on information search process.

Table 5.17: Model Summary (Hypothesis 12.1)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.394	0.156	0.152	0.520

- a. Predictors: Problem Recognition
- b. Dependent Variable: Information Search

Table 5.18: ANOVA (Hypothesis 12.1)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	12.881	1	12.881	47.698	0.000
Residual	69.946	259	0.270		
Total	82.828	260			

- a. Predictors: Problem Recognition
- b. Dependent Variable: Information Search

Table 5.19: Coefficients (Hypothesis 12.1)

	Unstandardized		Standardized		
Model	Coef	ficients	Coefficients		
	В	Std. error	Beta	t	Sig.
1 (Constant)	3.163	0.143		22.095	0.000
Problem Recognition	0.255	0.037	0.394	6.906	0.000

Dependent Variable: Information Search

From Table 5.17 (page 139), It shows that R is equal 0.394 which is the correlation between the observed and predicted values of information search (dependent variable). R square is 0.156; it means the independent variable (problem recognition) can explain 15.6% the change of information search. From table 5.18 and Table 5.19 (page139), the P value is 0.000 which is smaller than 0.05, hence, the null hypothesis cannot be accepted at the level of significant of 0.05.

# Hypothesis 12.2

Ho: Information search has no impact on alternative evaluation process.

H1: Information search has impact on alternative evaluation process.

 Table 5.20:
 Model Summary (Hypothesis 12.2)

Model	R	R Square	Adjusted R Square	Std.Error of the Estimate
1	0.682	0.465	0.463	0.407

a. Predictors: Information Search

b. Dependent Variable: Evaluation

Table 5.21: ANOVA (Hypothesis 12.2)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	37.304	1	37.304	225.204	0.000
Residual	42.903	259	0.166		
Total	80.207	250			

- a. Predictors: Information Search
- b. Dependent Variable: Evaluation

Model	Unstandardized		Standardized		
	Coefficients		Coefficients		
	В	Std. Error	Beta	t	Sig.
1.(Constant)	1.334	0.186		7.163	0.000
Information Search	0.671	0.045	0.682	15.007	0.000

# Table 5.22: Coefficient (Hypothesis 12.2)

Dependent Variable: Evaluation

From Table 5.20 (page 140), it shows that R is equal 0.682 which is the correlation between the observed and predicted values of evaluation (dependent variable). R square is 0.465 which means the independent variable (problem recognition) can explain 46.5% the change of information searched. From Table 5.21 (page 140) and Table 5.22 (page 141), the P value is 0.000 which is smaller than 0.05, hence, the null hypothesis cannot be accepted at the level of significant of 0.05.

Hypothesis 12.3

Ho: Alternative evaluation has no impact on decision making process.

H1: Alternative evaluation has impact on decision making process.

Table 5.23: Model Summary (Hypothesis 12.3)

Model	R	R Square	Adjusted R Square	Std.Error of the Estimate
1	0.301	0.090	0.087	0.60319

a. Predictors: Alternative Evaluation

b. Dependent Variable: Decision Making Process

Model	Sum of	df	Mean Square	F	Sig.
	Squares				
Regression	9.370	1	9.370	25.752	0.000
Residual	94.236	259	0.364		
Total	103.605	260			

- a. Predictors: Alternative Evaluation
- b. Dependent Variable: Decision Making Process

Table 5.25: Coefficient (Hypothesis 12.3)

Unstandardized Coefficients		Standardized			
Model			Coefficients		
	В	Std. error	Beta	t	Sig.
1.(constant)	2.193	0.1279		7.864	0.000
Alternative	0.342	0.067	0.301	5.075	0.000
evaluation		NDER	19/		

Dependent Variable: Decision Making Process

From Table 5.23 (page141), it shows that R is equal 0.301 which is the correlation between the observed and predicted values of decision making (dependent variable). R square is 0.090; it means the independent variable (problem recognition) can explain 9% the change of information search. From Table 5.24 and Table 5.25 (page 142), the P value is 0.000 which is smaller than 0.05, hence, the null hypothesis cannot be accepted at the level of significant of 0.05.

# Hypothesis 12.4

Ho: Decision making has no impact on post-purchase behavior.

H1: Decision making has impact on post-purchase behavior.

Table 5.26: Model Summary (Hypothesis 12.4)

Model	R	R Square	Adjusted R Square	Std.Error of the Estimate
1	0.407	0.166	0.163	0.604

- a. Predictors: Decision Making
- b. Dependent Variable: Post-purchase Behavior

Table 5.27: ANOVA (Hypothesis 12.4)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	18.807	1	18.807	51.539	0.000
Residual	94.511	259	0.365		
Total	113.318	260			

- a. Predictors: Decision Making
- b. Dependent Variable: Post-purchase Behavior

Model	Unstar	dardized	Standardized		
	Coefficients		Coefficients		
	В	Std. Error	Beta	Т	Sig.
1.(Constant)	2.142	0.217		9.888	0.000
Decision Making	0.426	0.059	0.407	7.179	0.000
Process					
OKUN					
Dependent Variable: Post-purchase Behavior					

# Table 5.28: Coefficient (Hypothesis 12.4)

From Table 5.26 (page 142), it shows that R is equal 0.407 which is the correlation between the observed and predicted values of decision making (dependent variable). R square is 0.166; it means the independent variable (problem recognition) can explain 16.6% the change of information search. From Table 5.27 (page 143) and Table 5.28 (page 144), the P value is 0.000 which is smaller than 0.05, hence, the null hypothesis cannot be accepted at the level of significant of 0.05.

Table 5.29: Significant of Research Model

Hypothesis	Factors (Hypothesized)	Sig.	Result at 95% Confidence
			Level
Decision Mal	king Process		
H12.1	Problem Recognition	0.000	Supported (H1 Accepted)
H12.2	Information Search	0.000	Supported (H1 Accepted )
H12.3	Alternative Evaluation	0.000	Supported (H1 Accepted)
H12.4	Decision Making	0.000	Supported (H1 Accepted)

## 5.6 Conclusion

The result of the analysis of the data gathered by this study has provided a clear picture of the consumer buying house behavior in Xingning District of Nanning city.

This chapter used the descriptive analysis to analysis the demographics characteristics, which include six major items: customer gender, customer age, customer marital status, customer educational background, customer monthly income and customer offer price for buying house.

It is also used correlation analysis to measures the strength of association between two variables. The result presents that the decision making process is related to all the independent variables, and all the independent variables are related to all other variables.

The factor analysis presents the Kaiser-Meyer-Olkin is 0.819 which is greater than 0.60, and the Bartlett's Test of sphericity is significant by the data less than 0.05 (BTS=0.000). The variable attitudes, learning, motivation and perception are loaded significantly in component one and are grouped in internal influences. The variable culture, government, marketing activities and reference group are significantly loaded in component two and are grouped as external influences. The variable self-concept and lifestyle are loaded in component three.

For hypothesis testing in this study, the reference group as the external factor, the perception and learning as the internal factors and self-concept have impact on buyers' behavior when buying a house in Xingning District of Nanning city. Each step of consumer decision making process also works for consumer behavior when buying a house.

## CHAPTER 6

#### CONCLUSION, DISCUSSIONS, AND RECOMMENDATIONS

This study integrates descriptive analysis, reliability analysis, correlation analysis, factor analysis and regression analysis for hypothesis test to explain consumer behavior on commercial house buying. This research investigates the impact of external influences, internal influence, self-concept and lifestyle, and consumer decision making process when consumers buy a house in Xingning District of Nanning city. In this chapter, the results derived from the data analysis are summarized in the first section. Following the discussion of the results is the section evaluating the contribution of this study. Next, the implication of this study is described as well. Follow by the section of limitation of this study. Finally, the suggestions for the future research are addressed in the last section.

- 6.1 Conclusions
- 6.2 Discussions
- 6.3 Implications of This Study
- 6.4 Limitations of This Study
- 6.5 Suggestions for the Future Study
- 6.6 What I have learned from the study
- 6.1 Conclusions

The objective of this research is to study the perception, attitudes, learning, motivations, and emotions of internal influences that impact consumer behavior on purchasing a commercial house in Xingning District of Nanning City of Guangxi, China; To study the culture, government, marketing activities, reference groups of external influences that impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China; to study the self-concept and lifestyle that impact consumer behavior on purchasing commercial house in Xingning District of Nanning City of Guangxi, China; and To understand consumer decisionmaking process on purchasing commercial house in Xingning District of Nanning City of Guangxi, China.

Hypothesis	Factor	Result
External Influences		$\langle \mathbf{v} \rangle$
H1	Culture	×
H2	Government	×
H3	Marketing Activities	×
H4	Reference Group	$\checkmark$
Internal Influences		
H5	Perception	$\checkmark$
H6	Attitudes	×
H7	Learning	$\checkmark$
H8	Motivation	×
H9	Emotion	×
Self-concept and Lifestyl	e	1
H10	Self-concept	$\checkmark$
H11	Lifestyle	×
Decision Making Process	3	
H12.1	Problem Recognition	$\checkmark$
H12.2	Information Search	$\checkmark$
H12.3	Alternative Evaluation	$\checkmark$
H12.4	Decision Making	$\checkmark$

Table 6.1: Summary of Results of Hypothesis Testing

 $\checkmark$  = there are fluencies of factors impact on buyers' behavior when buying a house in Xingning district of Nanning city.

 $\times$  = there are no fluencies of factors impact on buyers' behavior when buying a house in Xingning district of Nanning city.

Table 6.1 presents that the results of research model, for external influences, reference group has impact on buyers' behavior when buying a house in Xingning district of Nanning city. As for internal influences, perception and learning have impact on buyers' behavior when buying a house in Xingning district of Nanning city. For self-concept and lifestyle, only self-concept has impact on buyers' behavior when buying a house in Xingning district of when buying a house in Xingning district of Nanning city. In the decision making process, each step has impact on the buyers' behavior when buying a house in Xingning district of Nanning city. This result also shows by the final model of the research in Figure 6.1.

148





## 6.2 Discussions

The research finding are according to the objectives of study on consumer house buying behavior, the internal influences, external influences, and self-concept and lifestyle impact on buyers' behavior when buying a house, and each step of consumer decision making process all have impact on house-buyers' behavior.

## 6.2.1 <u>Research Question 1 (Page 16)</u>

How does the culture, government, marketing activities, and references groups of external influences to impact on consumer behavior on purchasing commercial house in Xingning District of Nanning city of Guangxi, China.

The result from chapter 5 (Table 5.15, page 135) reveals that culture has no impact on the buyers' behavior when buying a house in Xingning District of Nanning city. Kotler (2003) stated that culture is the fundamental determinant of a person's wants and behavior, culture operates primarily by setting rather loose boundaries for individual behavior and by influencing the functioning of such institutions as the family and mass media. So the culture to impact on consumer house buying behavior may not just including that: it is necessary for a new couple to buy a new house, it is necessary to have you own house, or it is necessary for the parents to buy a new house for their children as inheritance (Table 5.16, page 138). It may emphasize on the other aspects to impact buyers' consumer but this research doesn't approach it.

The result in Table 5.15 (page 135) also shows that government has no impact on the buyers' behavior when buying a house in Xingning District of Nanning city. This has been cited by Zhang (2010) that China's real estate policy is facing uncertainly, to extremely then high demand for developing land, and the Chinese government announced a series of policies to control rapid property price increase. However, whether or not these policies will be effective depends on some uncertain factors including heavy reliance of the local government's fiscal revenue on the housing market, a fix assets investment let economic growth pattern, and closely links between Chinese policy makers and interest groups. This study confirmed that government's house purchasing restriction and control policies have no impact on buyers' behavior when buying a house in Xingning District of Nanning city (Table 5.16, page 138).

For marketing activities, this research result from Table 5.15 (page 135) presents that result as it's no impact on buyers' behavior when buying house in Xingning District of Nanning city. This is not support Peter and Olson (2008) who indicated that advertising is intended to influence consumers' affect and cognitiontheir evaluations, feeling, knowledge, meaning, beliefs, attitudes, and images concerning products and brands. In fact, advertising has been characterized as image management: creating and maintaining images and meanings in consumers' minds. Even though advertising first influence affect and cognition, the ultimate goal is to influences consumers' purchase behavior. On the other hand, Peter and Olson (2008) figure out that personal selling can be a powerful promotion method; it involves direct personal interactions between a potential buyer and a salesperson. While this research result has given an answer that marketing activities such as advertising, promotional tools, personal selling and brand awareness have no impact on buyers' behavior when buying a house in Xingning District of Nanning city (Table 5.16, page 138).

The result in Table 5.15 (page 135) of this research supports the claim that references group has impact on buyers' behavior when buying a house in Xingning District of Nanning city. It means that the result coincide with the opinion of Burke, Belch, Lutz & Bettman (1986). They claim that the family decision process aid in the development and understanding of the home buying decision, as it is typically a complex decision involving both husband and wife. It also come in line with Gibler and Nelson (2003) findings that if real estate developers, investment bankers and brokers can identify the most important reference groups influencing real estate purchases, they can design and market their products in ways that assure consumers that the real estate purchase will be accepted and approved of by these group members. Testimonials by experts that express support for builder or community will boost sales. In this study (Table 5.16, page 138) shows that the reference groups such as family members, friends, experts, and media like newspapers, magazines, televisions, internet etc. have impact on buyers' behavior when buying a house in Xingning District of Nanning city.

#### 6.2.2 <u>Research Question 2 (Page 16)</u>

How does the perception, attitudes, learning, motivation and emotions of internal influences to impact on consumer behavior on purchasing commercial house in Xingning District of Nanning city of Guangxi, China?

This research from chapter 5 (Table 5.15, page 135) support that perception has impact on buyers' behavior when buying house in Xingning District of Nanning city. The whole process of perceiving begins when stimuli are picked by one or more of the five senses: vision, smell, touch, hearing or taste indicated by Hanna and Wozniak (2001). In this study only vision, sounds, and touch are taken into accounts as they are three senses that are of relevance in terms of the house buyer perceiving the target house. They can use their eyes to see the houses' layout, surrounding environment, and so on. When visiting the house, they can hear the speech from the sales representative. Also buyers can touch the house's wall to feel the material. After being exposed to stimuli and the stimuli has been picked up by sensory receptors, attention is allocated to the sensation. When the stimuli have grabbed a consumer's attention, he or she makes his or her own interpretation of the information. The interpretation is based on personal factors and the same stimulus may be interpreted in a different way by different people.

At this point, response and some kind of a meaning are given to the information which means that the stimulus has been perceived. For this study, the perception of location of house, traffic condition, the supporting facilities such as school, shopping mall, convenience store etc., the overall quality of the residential area including sizes, property management, green area, fitness center etc., house type, and interior design and building quality have impact on buyers' behavior when buying a house in Xingning District of Nanning city.

For attitudes, this research result in Table 5.16 (page 138) doesn't support that attitudes has impact on buyers' behavior when buying house in Xingning District of Nanning city. Attitudes simplify consumer decision making by providing a way for the individual to evaluate alternatives based on his or her knowledge of the attributes and benefits offered by each (Wells & Prensky, 1996).

In general, consumers have positive attitudes toward products that provide value, likewise, when products deliver poor value, consumer attitudes are usually negative (Babin & Harris, 2009). The study emphasized on the attitudes of consumers in terms of they would choose utilities and convenience house, choose manner and comfortable house, choose confidentiality and securities house, or potential increment house, while the result show that these are statements have no impact on buyers' behavior when buying a house in Xingning District of Nanning (Table 5.15, page 135).

For learning, the study result in Table 5.15 (page 135) is support that learning has impact on buyers' behavior when buying a house in Xingning District of Nanning city. Even Schiffman et al. (2001) defines the consumer learning "is the process by which individuals acquire the purchase and consumption knowledge and experience they apply to future related behavior". Kotler (2003) further stated that learning involves changes in an individual's behavior arising from experience which produced through the interplay of drives, stimuli, cues, responses, and reinforcement. But in this study the outcome shows that the learning comprise of have a deeper understanding about the home price among different developers, and have a deeper understanding in different kind of information such as developers' status, design, loan specified etc. have impact on buyers' behavior when buying a house in Xingning District of Nanning city.

For motivation, this research illustrates that motivation has no impact on buyers' behavior when buying a house in Xingning District of Nanning city (Table 5.15, page 135). Even the motivation is a need arousing a drive for a consumer to take action in an attempt to reach a goal (Engel, Blackwell & Miniard, 1995).

A more complete real estate valuation model will incorporate the psychological benefits the property is providing as well as the physical and financial benefits. In this research, the house buying purposes including living, investment and for parents or children have no impact on buyers' behavior when buying a house in Xingning District of Nanning city.

154

For emotion, the study outcome in Table 5.15 (page 135) indicates that emotion has no impact on buyers' behavior when buying house in Xingning District of Nanning city. Emotions reflect personal experiences, associations, and memories (Norman, 2004). In addition, they may provide attachment to a product or cause detachment for it (Sava's, 2004). In this study, the buyers' felling has no impact on their behavior when buying a house in Xingning District of Nanning city (Table 5.16, page 138).

## 6.2.3 <u>Research Question 3 (page 16)</u>

What are the effects of the self-concept and lifestyle to impact consumer behavior on purchasing commercial house in Xingning District of Nanning city of Guangxi, China?

For self-concept, this research result from Table 5.15 (page 135) support that self-concept has impact on buyers' behavior when buying a house in Xingning District of Nanning city. Consumers purchase products that are consistent with the actual self or that are expected to help achieve the ideal (Sirgy, 1980, 1982). Identity may also be reflected in both choice of housing style and neighborhood (Hayward, 1975). For example, residents of Denver who considered themselves "city persons" were more likely to currently live and plan to live in the city (Feldman, 1990). A house can be a viewed as part of the extended self, an object that helps to form identity and present that identity to the world (Cooper, 1974; Hayward, 1975; Csikszentmihalyi & Rochberg-Halton, 1981; Sadalla, Vershure, & Burroughs, 1987). By their very nature, single-family homes usually perform many highly emotional, individualized and personal roles in the lives of their occupants (Downs, 1989). A house being purchased to serve as a "home" is being evaluated for not only physical, but also social and psychological characteristics (Hayward, 1977). The house and household objects frequently become an element in an individual's personal identity as symbols of experiences and relationships, providing a continuous sense of identity over time (Csikszentmihalyi & Rochberg-Halton, 1981; Hummon, 1989; Somerville, 1997). A woman's self identity appears to be more intimately linked to the home than a man's in our society (Somerville, 1997).

Except all these previous research results, in this study has a outcome that the buyers' self-concept such as become a man with good tastes, become a man of figure, become a man with responsibility etc. have impact on buyers' behavior when buying a house in Xingning District of Nanning city.

For lifestyle, the research result shows that lifestyle has no impact on buyers' behavior when buying a house in Xingning District of Nanning city in Table 5.15 (page 135). The research's outcome shows no consistent with previous result that lifestyles change, the value of various properties attributes to consumers will change. For example, the popularity of casual entertaining will reduce the value of houses with square footage devoted to formal living rooms rather than family or great rooms (Ahluwalia, 1996). The trend toward working at least part-time from home will increase the value of home office space. Lifestyle may also affect tenure choice in that residents who like to be mobile are more likely to rent (Boehm, 1981).

#### 6.2.4 <u>Research Question 4 (page 16)</u>

In what ways does consumer decision making process impact on purchasing commercial house in Xingning District of Nanning city of Guangxi, China?

According to Solomon et al. (2006), a consumer purchase is always a response to a problem of some kind. The consumer decision-making process begins with the realization that there is a significant difference between the consumer's current state of affairs and the desired ideal state. Hawkins, Mothersbaugh, and Best (2007) highlight that Consumers continually recognize needs and problems, they search for both internal and external searches for information to solve their problems. Contrary to Noel (2009) and Solomon et al. (2006), Asch and Wolfe (2001) define four different types of consumer information sources which include personal sources (friends, family, colleagues), commercial sources (advertising, sales personnel, displays), public sources (mass media, consumer organizations) and experiential sources (examining and using the products, experiences).

Of these four elements, personal, commercial and public sources are external and experiential internal in relation to the consumer as recognized by Noel (2009) and Solomon et al. (2006). Thus, in the step one, from the research result in chapter 5 (Table 5.18 and Table 5.19, page 139) the problem recognition has impact on the next step of information search, the problem recognition and information search are the continuous process of consumer decision making process.

According to Solomon et al. (2006), evaluation of alternatives is usually the phase in the decision making process to which consumers put the most effort in. Evaluative criteria are the various dimensions, features, or benefits a consumer looks for in response to a specific problem (Hawkins, et al., 2007). In the research result from chapter 5 (Table 5.21, page 140 and Table 5.22, page 141) supports that After recognizing a need, searching for information and evaluating different alternatives, consumers often use decision rules in order to make a choice among different product and brand options (Evans et al., 1996). With a lexicographic rule, the consumer ranks the determinant attributes in order of importance. If one property is better than all the

others on the most important attribute, then the consumer selects that property. If the consumer perceives two or more as equal on the most important criterion, then the properties are compared on the second most important determinant attribute. This process continues until the tie is broken (Engel, Blackwell, & Miniard, 1995). After information search, consumers have an alternative evaluation and then make a decision (Table 5.24 and Table 5.25, page 142).

After purchasing, consumers would conclude what they have experienced during the process. The conclusion generates two outcomes: satisfaction and dissonance (Tan, 2010). Therefore, in the whole consumer decision making process, each step have a impact to next step and work for the buyers' behavior when buying a house in Xingning District of Nanning city (Table 5.29, page 135).

6.2.5 <u>Research Main Question (Page 16)</u>

What influences consumer buying behavior when they buy a house in Xingning District of Nanning city of Guangxi, china?

The key influences including reference groups of external factor, perception and learning of internal factor, and self-concept are all significant factors that impact on consumer buying behavior when buy a house in Xingning District of Nanning city of Guangxi, China. The research results from Table 5.16 (page 138) sustain that null hypothesis4, hypothesis 5, hypothesis 7, and hypothesis 10 (section 5.5, page 131). Meanwhile, the research outcome also indicates there are the factors such as reference group, perception, learning, and self-concept are definite influences of house-buying behavior in the Hawkins et al. (2007) drawn up a conceptual model of the house buyers' behavior.

## 6.3 Implications of this Study

The findings of this study offer implications for consumers who are making a strategic purchase, such as buying a house. Gronhaug, Kleppe, and Haukedal (1987) have warned that households may have serious problems in making wise strategic purchase decisions. Buying a house is a long-term decision from at least two aspects: it is financially blinding, and it is the sort of product "consumed" in the long run. So this report will benefit people who want to buy a house.

The research will be most useful for real estate developers and property marketers as it allows deeper understanding of consumer decision making on purchasing commercial housing (Zhang, 2003). To some extent, the findings give a good guiding direction of potential home buyers' needs and expectations. This knowledge thus enables the home-developing companies to better match their customers' desires with their offerings (Zeithaml, Berry, & Parasuraman, 1990). Given the high level of buyer involvement, housing and developers' companies should focus on building confidence and satisfaction in their potential and existing house owners. According to Hao (2011) and Yang and Zhu (2006), it's also helpful for government to understand consumers' attitudes and behaviors from this report so that it can draw up sound policy to protect consumers' interest and control the market.

Quantitative research method has been used to collect data, which is better to analyze consumers' behavior from quantity so that the report will be more persuasive for future research.

## 6.4 Limitations of the Study

This research study deals with consumers at real estate sales center. The limitation of this study is the researcher is unable to deal with every developer

companies' customers directly by interview. However, with the assistance from the real estate company personal sales team, the researcher is able to distribute the questionnaires to 274 respondents. Time constrains is also a limitation in this research. The sales personnel have to take care of customers and at the same time ensuring that their customers filled the survey forms. Some consumers are not committed to answering the questions as reflected in the 13 rejected surveyed questionnaires.

## 6.5 Suggestions for the Future Study

Future study should look further in studying the element of consumers' selfconcept and lifestyle. This is because, the two factors act as the mediation among internal influences, external influences and consumer decision making process based on the research conceptual framework.

The studies also should analysis the relationship between demographic characteristics and consumer behavior. It is crucial to incorporate more bio-data of the respondents for in depth analysis. The bio-data should be extended to include consumers' occupation. The research thinks that it would be interesting to see how and to what extend how various occupations have impacts on potential home buyers. It would be of great help for house estate developer to evaluate the significant of the correlation between first-home buyer and second-time home buyers in terms of their occupation. There are of course many other numerous factors and elements which instigate buying decision. Another suggested area the researcher would like to add on is the way communication message and channels are designed to prompt or speed up buying decision. Perhaps there is a need to look into advertising and promotional activities via the internet. In sum, this is a crucial area whereby researchers should explore, considering the gargantuan implications in terms of business transactions. Future research in these aspects will definitely provide valuable information to all related supply chain industry of the real estate business as well as for the government in their future housing and taxation policies.

#### 6.6 What I have Learned from the Study

The researcher have benefitted tremendous in the learning experience not just in terms of research methodology, but also insight to people perception and thinking process. It is difficult initially to make judgment and the research work has proven that scientifically findings are justifiable and reliable.

The home buying process as proven is a complex process that is influence by various internal and external factors. Being able to identify these factors is critical as it provide essential information for future home and landscape development.

What is more important that I have learnt in this research is that people have ever changing expectations and demands. Hence, this research calls for real estate developers to be more consumer oriented and perhaps less profit orientated in their management and planning processes. The research findings is crucial as it path the way for sustainable business and environmental development. This research is thus a learning tool for property developers and government agencies.

#### BIBLIOGRAPHY

- Aaker, D. A., Kumar, V., & Day, G. S. (1998). *Marketing research* (6<sup>th</sup> ed.). New York: John Wiley & Sons.
- Adkins, R. A. & Julie, L. O. (2005). Critical consumer education: Empowering the low-literate consumer. *Journal of Micromarketing*, 25(2), 153-162.
- Ahluwalia, G. (1996). What today's new home buyers want. *Housing Economics*, 44, 6-7.
- Arndt, J. (1976). Reflections on research in consumer behavior. Advances in Consumer Research, 3, 213-221.
- Arnould, E. J., Price, L., & Zinkhan, G. (2001). *Consumers*. New York: McGraw-Hill.
- Arnould, E., Price, L., & Zinkhan, G. (2004). Consumers. New York: McGraw-Hill.
- Asch, D., & Wolfe, B. (2001). New economy- new competition: The rise of the consumer? London UK: Palgrave Macmillan.
- Assail, H. (1998). *Consumer behavior and marketing action* (6<sup>th</sup> ed.). Concennti, OH: South Western College.
- Atherton, M., & Wells, J. (1998). Consumer education: Learning for life. *Consumer Policy Review*, 8(4), 127-131.
- Babbie, E. (2010). The practice of social research (12<sup>th</sup> ed.). Belmont: Wadsworth.

- Babin, B.J., & Harris, E.G. (2009). Consumer behavior. Mason, OH: South Western Cengage Learning.
- Bagozzi, R. P., Baumgartner, H., & Pieters, R. (1998). Goal-directed emotions. *Cognition and Emotion*, 12(1), 1-26.
- Baidu. (2011). *Nanning city's GDP continually increase in nine years*. Retrieved from http://finance.ifeng.com/city/nnyw/20110112/3190677.shtml
- Baidu. (2011). *The trend of housing prices of Naning in 2011*. Retrieved from http://nanning.anjuke.com/market/#mode=1&hm=0&period=12
- Baker, S. M. (2006). Consumer normalcy: Understanding the value of shopping through narratives of consumers with visual impairments. *Journal of Retailing*, 82(1), 37-50.
- Bargh, J. A. (2002). Losing consciousness: Automatic influences on consumer judgment, behavior and motivation. *Journal of Consumer Research*, 29(2), 280.
- Bauer, R. A. (1960). *Consumer behavior as risk taking*. Boston: Harward University Press.
- Bayus, B. L. (1991). The consumer durable replacement buyer. *Journal of Marketing*, 55(1), 42-51.
- Bayus, B. L., & Carlstrom, C. C. (1990). Grouping durable goods. *Applied Economics*, 22(6), 759-73.

- Bazerman, M. H. (2001). Reflections and reviews: Consumer research for consumers. *Journal of Consumer Research*, 27(4), 499-504.
- Bearden, W. O., & Rose, R. L. (1990). Attention to social comparison information. Journal of Consumer Research, 16(4), 461-72.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(2),139-68.
- Bereau of statistics of China. (2010). *The report of China's GDP in 2010*. Retrieved from http://www.stats.gov.cn/was40/gjtjj\_detail.jsp? searchword=GDP& channelid=6697&record=105
- Bettman, J. A., & Park, W. C. (1980, December). Effects of prior knowledge and experience and phase of the choice process on consumer decision making processes: A protocol analysis. *Journal of Consumer Research*, 7, 223-248.
- Blackwell, R.D., Miniard, P.W., & Engel, J.F. (2001). *Consumer behavior* (9<sup>th</sup> ed.). Ohio: Harcourt Asia.
- Boehm, B.W. (1981). *Software engineering economics*. Englewood Cliffs, NJ: Prentice Hall.
- Boehm, T. P., & Mark, J. (1980). A principal component logistic analysis of the mobility. *Journal of the American Real Estate and Urban Economics Association*, 8, 299-319.
- Brown, L. A., & Moore, E. G. (1970). The intra-urban migration process: A perspective. *Geografiska Annaler*, *52*, 1-13.
- Brown, T. J., & Kirmani, A. (1999). The influence of preencounter affect on satisfaction with an anxiety provoking service encounter. *Journal of Service Research*, 1, 333-46.
- Brucks, M., Zeinthaml, V. A., & Naylor, G. (2000). Price and brand name as indicators of quality dimensions for consumer durables. *Journal of the Academy of Marketing Science*, 28(3), 359-74.
- Burke, M., Belch, G. E., Lutz, R. J., & Bettman, J. R. (1986). Affirmative disclosure in home purchasing. *The Journal of Consumer Affairs*, *13*, 297-310.
- Burns, D. J., & Neisner, L. (2006). Customer satisfaction in retail setting-The contribution of emotions. *Journal of Retail & Distribution Management*, 34(1).
- Capon, N., & Kuhn, D. (1982). Can consumers calculate best buys? *Journal of Consumer Research*, 8(4), 449-53.
- Chaudhuri, A. (1998). Product class effects on perceived risk: The role of emotion. International Journal of Research in Marketing, 15, 157-68.
- Chaudhuri, A. (2001). A study of emotion and reason in products and services. *Journal of Consumer Behavior*, 1(3), 267-79.

Churchill, G. A. (2001). Basic marketing research (4<sup>th</sup> ed.). Chicago: Dryden Press.

Clark, W. A. V., & Dieleman, F. M. (1996). Households and housing: Choice and outcomes in the housing market. New Brunswich, NJ: Center for Urban Policy Research.

- Clark, W. A. V., & Huang, Y. (2003). The life course and residential mobility in British housing markets. *Environment and Planning A*, *35*, 323-339.
- Clark, W. A. V., Deurloo, M. C., & Dieleman, F. M. (2006). Residential mobility and neighborhoods outcomes. *Housing Studies*, 21, 323-342.
- Coakes, S. J., & Steed, L. (2007). SPSS version 14.0 for windows: Analysis without anguish. Milton, Australia: John Wiley & Sons.
- Cohen, T. R., Lindblad, M. R., Paik, J. G., & Quercia, R.G. (2009). Renting to owning: An exploration of the theory of planned behavior in the homeownership domain. *Basic and Applied Social Psychology*, *31*, 376-389.
- Commuri, S., & Gentry, J. W. (2000). Opportunities for family research in marketing. *Academy of Marketing Science Review*, 8, Retrieved from www.amsreview.org/articles/commuri08-2000.pdf
- Commuri, S., & Gentry, J. W. (2000). Opportunities for family research in marketing. *Academy of Marketing Science Review*, 8, Retrieved from www.amsreview.org/articles/commuri08-2000.pdf
- Cooper, C. R., & Schindler, P. S. (2008). *Business research methods* (10<sup>th</sup> ed.). Boston: McGraw-Hill.
- Cooper. (1974). The house as a symbol of the self, In L. Jon (Ed.), *Designing for human behavior* (130-146). Stroudsburg, PA: Dowden, Hutchinson & Ross.
- Cripps, J. D., & Meyer, R. J. (1994). Heuristics and biases in timing the replacement of durable products. *Journal of Consumer Research*, 2(2), 304-18.

Csikszentmihalyi, M., & Rochberg, H. E. (1981). *The meaning of things*. Cambridge University Press.

Dewey, J. (1934). Art as experience. New York: Penguin Group.

- Dibb, S. (1994). Modeling in new housing choice: An application, omega. International Journal of Management Science, 22(6), 589-600.
- Downs, A. (1989). Irrational buyers are crucial sale elements. *National Real Estate Investor*, 31, 42.
- Dube', L., & Menon, K. (2000). Multiple roles of consumption emotions in postpurchase satisfaction with extended service transactions. *International Journal of Service Industry Management*, 11(3), 287-304.
- Engel, J. F., Kollat, D. T., & Blackwell, R. D. (1968). *Consumer behavior*. New York: Holt, Rinehart and Winston.
- Engel, J.F., Blackwell, R.D., & Miniard, P.W. (1995). *Consumer behavior* (8<sup>th</sup> ed.). Forth Worth, TX: Dryden Press.
- Evans, M., Moutinho, L., & Van Raaij, W. F. (1996). Applied consumer behavior. London: Addison-Wesley.
- Feldman, R. M. (1990). Settlement-identity: Psychological bonds with home places in a mobile society. *Environment and Behavior*, 22(2), 183-229.
- Ferrell, O. C., & Hartline, M. D. (2008). *Marketing strategy* (4<sup>th</sup> ed.). Mason, OH: South-Western Cengage Learning.

- Fung, Huang, & Shen. (2006). China's real estate industry through five stages' development. Retrieved from http://www.chinavalue.net/Investment/Blog/ 2010-10-28/504324.aspx
- Gan Peng. (2011). *Hengda's sixteen years anniversary report*. Retrieved from http://news.nn.soufun.com/2011-01-21/4412423\_all.html. \
- Gangliano, K. B., & Hathcote, J. (1994). Customer expectations and perceptions of service quality in retail apparel specialty stores. *Journal of Service Marketing*, 8(1), 60-69.
- Gibler, K. M., & Nelson, S. L. (2003). Consumer behavior applications to real estate education. *Journal of Real Estate Practice and Education*, 6(1), 63-89.
- Girard, T., Korgaonkar, P., & Silverblatt, R. (2003). Relationship of type of product, shopping orientations, and demographics with preference for shopping on the internet. *Journal of Business Psychology*, 18(1), 101-20.
- Grether, D., & Wilde, L. (1983). An analysis of conjunctive choice: Theory and experiments, forthcoming. In J. *Consumer Research* (March 1984), 508-522.
- Grewal, R., Mehta, R., & Kardes, F. R. (2004). The timing of repeat purchases of consumer durable goods: The role of functional bases of consumer attitudes. *Journal of Marketing Research*, 41(1), 101-15.
- Gronhaug, K., Kleppe, I. A., & Haukedal, W. (1987). Observation of a strategic household purchase decision. *Psychology & Marketing*, *4*(3), 239-253.

- Hair, J. F., Bush, R. P., & Ortinau, D. J. (2005). Marketing research: Within a changing information environment. Boston: McGraw-Hill.
- Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate data analysis* (5<sup>th</sup> ed.). New Jersey: Prentice Hall.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2006).*Multivariate data analysis* (6<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.

Hambleton, R. (2004). Beyond New Public Management- city leadership, democratic renewal and the politics of place. Paper presented at the City futures international conference. May 3, 2010. Retrieved from http://www.uic.edu/cuppa/cityfutures/papers/webpapers/cityfuturespapers/ session8\_1/8\_1beyondnew.pdf.

- Hanna, N., & Wozniak, R. (2001). *Consumer behavior: An applied approach*. Upper Saddle River, N.J.: Prentice-Hall.
- Hao, J. (2011). Property developers buy land more carefully and try to fully understand customer needs. Retrieved from http://www.wolai.com/news/ 2011-05-22/36819/
- Hauser, J. R., & Urban, G. L. (1986). The value priority hypothesis for consumer budget plans. *Journal of Consumer Research*, 12(4), 446-62.
- Hawkins, D. I., Mothersbaugh, D. L., & Best, R. J. (2007). *Consumer behaviorbuilding marketing strategy* (10<sup>th</sup> ed.). Boston: McGraw-Hill.

- Hawkins, D., Best, R., & Coney, K. (2001). Consumer behavior: Implications for marketing strategy. United states of American: Richard D. Irwin.
- Hawkins, D.I., Mothersbaugh, D.L., & Best, R.J. (2007). *Consumer behavior: Building marketing strategy*. New York: McGraw-Hill.
- Hayward, D. G. (1975). Home as an environmental and psychological concept. *Landscape*, 20(2-9).
- Hayward, D. G. (1977). Housing research and the concept of home. *Housing Educators Journal*, 4(3), 7-12.
- Hempel, D. J. (1969). Search behavior and information utilization in the home
  buying process. *Proceeding of the American Marketing Association*, 30, 241249.
- Hempel, D. J., & Punj, G. N. (1999). Linking consumer and lender perspectives in home buying: A transaction price analysis. *Journal of Consumer Affairs*, 33(2), 408-35.
- Herr, P. M., Kardes, F. R., & Kim, J. (1991). Effects of word-of-mouth and productattribute information on persuasion. *Journal of Consumer Research*, 17(4), 458-62.
- Hoch, S. J., & Deighton, J. (1989). Managing what consumers learn from experience. *Journal of Marketing*, *53*(1-20).

Home week. (2011). Chinese government's policy impact on real estate industry.

Retrieved from http://epaper.gxnews.com.cn/ngcb/html/2010-12/16/content\_

1740082.htm

- Home week. (2011). *Commercial property*. Retrieved from http://news.letfind.com. cn/news/2011-4/152111.html.
- Home week. (2011). *Customers' survey result*. Retrieved from http://epaper.gxnews. com.cn/ngcb/html/2010-12/16/content\_1740082.htm
- Home week. (2011). *House turnover of Nanning city in first half year of 2011*. Retrieved from http://epaper.gxnews.com.cn/ngcb/html/2010-12/16/content\_ 1740082.htm
- Home week. (2011). *Map of Nanning city*. Retrieved from http://epaper.gxnews. com.cn/ngcb/html/2010-12/16/content\_1740082.htm
- Home week. (2011). *Map of Xingning district*. Retrieved from http://epaper.gxnews. com.cn/ngcb/html/2010-12/16/content\_1740082.htm
- Home week. (2011). *Real estate's market analysis of Nanning city*. Retrieved from http://epaper.gxnews.com.cn/ngcb/html/2010-12/16/content\_1740082.htm
- Hummon, D. M. (1989). *House, home and identity in contemporary American culture*. University of Pennsylvania Press.
- Hutchinson, J., Wesley, Kalyan, & Murali. (1994, November). Finding choice alternatives in memory: Probability models of brand name recall. *Journal of Marketing Research*, 31, 441-461.

- James E. F. (1987). Social class and consumer behavior: The relevance of class and status. *Advances in Consumer Research*, *14*, 492-96.
- Janiszewski, C., & Stijn, M. J. (2000). A connectionist model of brand-quality associations. *Journal of Marketing Research*, *37*, 331-50.
- Johnson, J. H., Salt, J., & Wood, P. A. (1974). *Housing and the migration of labour in England and Wales*. Farnborough, England: Saxon House.
- Kauko, T. (2006). Expressions of housing consumer preferences: Proposition for a research agenda, housing. *Theory and Society*, 23(2), 92-108.

Kelly, G. A. (1955). The psychology of personal constructs. New York: Norton.

- Kempf, D. S., & Smith, R. E. (1998). Consumer processing of product trial and influence of prior advertising: A structural modeling approach. *Journal of Marketing Research*, 35(3), 325-338.
- Kokic, M. K., & Vida, I. (2009). A strategic household purchase: Consumer house buying behavior. *Managing Global Transitions*. 7(1), 75-96.
- Kotler, P. (2003). Marketing management. Upper Saddle River, NJ: Prentice-Hall.
- Kotler, P., & Keller, K. L. (2009). *Marketing management* (13<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.
- Krampf, R., Ueltschy, L., & D'Amico, M. (2003). The contribution of emotion to consumer satisfaction in the service setting. *Marketing Management Journal*, 13(1), 32-52.

- Lavidge, R. J., & Steiner, G. A. (1961). Model for predictive measurements of advertising effectiveness. *Journal of Marketing*, 25, 59-62.
- Leon, S., David, B., Elizabeth, C., Aron, O. C., Judith, W., & Leslie, K. (2001). *Consumer behaviour* (2<sup>nd</sup> ed.). Australia: Prentice Hall.
- Levy, D. S., & Lee, K. C. (2004). The influence of family members on housing purchase and decision. *Journal of Property Investment & Finance*, 22, 320.
- Levy, D., Murphy, L., & Lee, C. K. C. (2008). Influences and emotions: Exploring family decision-making processes when buying a house. *Housing Studies*, 23(2), 271-289.
- Li, H., Daugherty, T., & Biocca, F. (2003). The role of virtual experience in consumer learning. *Journal of Consumer Psychology*, *13*(4), 395-408.
- Liu, Z., & Chen, L. (2011). Research on Chinese real estate development and the future trends. *Asian Social Science*, 7(9).
- Louviere, J. J., & Henley, D. (1977). Information integration theory applied to student apartment selection decisions. *Geographical Analysis*, *9*, 130-41.
- MacInnis, D. J., & Jaworski, B. J. (1989). Information processing from advertisements: Toward an integrative framework. *Journal of Marketing*, 53, 1-23.
- Maksudunov, A. (2008). Family influence on consumer home appliances purchasing behavior: An empirical study in Kyrgyzstan. Soyal Bilimler Dergisi and savi, 19, 63.

- Malhotra, N. K. (2004). *Marketing research an applied orientation* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.
- Martins, M., & Monroe, K. (1994). Perceived price fairness: A new look at an old construct. *Advances in Consumer Research.* 21, 75-78.
- McGregor, S. (2003). Globalising and humanising consumer education: A new research agenda. *Journal of the Home Economics Institute of Australia*, 10(1), 2-9.
- McKenzie, S. B., Scott, B., & Lutz, R. J. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of Marketing*, *53*, 48-65.
- McQuiston, D. H. (1989, April). Novelty, complexity and importance as causal determinants. *Journal of Marketing*, *53*, 66-79.
- Miniard, P. W., & Cohen, J. E. (1983). Modeling personal and normative influences on behavior. *Journal of Consumer Research*, *10*(2), 169-80.
- Miranda, M. J., Konya, L., & Havrilla, I. (2005). Shoppers satisfaction levels are not the only key to store loyalty. *Journal of Marketing Intelligence & Planning*, 40(1/2), 310-322.
- Mitchell, V. W. (1999). Consumer perceived risk: Conceptualisations and models. *European Journal of Marketing*, *33*(1-2), 163-95.
- Munro, M. (1995). Homo-economics in the city: Towards an urban socio-economic research agenda. *Urban Studies*, *32*, 1609-1621.

- Naylor, G., & Frank, K. E. (2000). The impact of retail sales force responsiveness on consumers' perception of value. *Journal of Service Marketing*, 14(4), 310-322.
- Ndubisi, N.O., & Koo, J. (2006). Family structure and joint purchase decisions: Two products analysis. *Management Research News*, 29(1/2), 53-64.
- Nedungadi & Prakash. (1990). Recall and consumer consideration sets: Influencing choice without altering brand evaluations. *Journal of Consumer Research*, 17, 263-276.
- Nedungadi, P., Amitava C., & Muthukrishnan, A. V. (2001). Category structure, brand recall and choice. International Journal of Research in Marketing, 18, 191-202.
- Newhouse. (2011). Average home price of Nanning city in 2010. Retrieved from http://newhouse.nn.soufun.com/house/web/Search\_Result.php
- Newhouse. (2011). *House prices of Nanning city in 2010*. Retrieved from http://newhouse.nn.soufun.com/house/web/Search\_Result.php
- NICE, M. (2003). Communicating with young people (Sweden). *NICE-Mail*, *19*, 9-10.
- Noel, H. (2009). Consumer behavior. Lausanne: AVA.
- Norman, D. (2004). Emotional design. New York: Basic Books.
- Oliver, R. L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of Consumer Research*, 20(3), 18-30.

Oxford English Dictionary. (n.d.). Retrived from http://oxforddictionaries.com.

- Pan. (2009). *China's average annual GDP growth rate in five years*. Retrieved from http://www.economicdaily.com.cn/a/201210/11251.html
- Peter, J. P., & Olson, J. C. (2008). *Consumer behavior and marketing strategy*. New York: Irwin McGraw-Hill.
- Punj, G. N. (1987). Presearch decision making in consumer durable purchases. Journal of Consumer Marketing, 4(1), 71-82.
- Punj, G. N., & Brookes, R. (2002). The influence of pre-decisional constraints on information search and consideration set formation in new automobile purchases. *International Journal of Research in Marketing*, 19(4), 383-400.
- Reynolds, F., & Darden, W. (1974). *Constructing life style and psychographics*. Chicago: American Marketing Association.
- Rosenthal, L. (1997). Chain-formation in the owner-occupied housing market. *The Economic Journal*, 107(441), 478-88.
- Rossi, P. H. (1955). Why families move. New York: Macmillan.
- Sadalla, E. K., Vershure B., & Burroughs, J. (1987). Identity symbolism in housing. *Environment and Behavior*, 19(5), 569-87.
- Sava, s. Ö. (2004). A perspective on person-product relationship: Attachment and detachment. In D. Medonagh, P. Hekkert, J. van Wrp & D. Gyi (Eds.), *Design* and emotion: The experience of everyday things (317-321). London: Taylor & Francis.

- Schiffman, & Kanuk. (1997). *Consumer behavior: Motivation research*. Upper Saddle River, N.J.: Prentice Hall.
- Schiffman, L., Bednall, D., Cowley, E., O'Cass, A., Watson, Jj. & Kanuk, L. (2001). *Consumer Behavior* (2<sup>nd</sup> ed.). Sydney: Prentice-Hall.
- Shaw, D., & Haynes, B. (2004). An evaluation of consumer perception of FM service delivery. *Journal of Facilities*, 22(7/8), 170-177.
- Sheinin, D. A., & Wagner, J. (2003). Pricing store brands across categories and retailers. *Journal of Product and Brand Management*, 12(4), 210-219.
- Sheridan, J. C., & Lyndall, S. (2007). SPSS 14.0 vision for windows analysis without Anguish. Brisbane: John Wiley & Sons .
- Shigong, L. (2011, March). Should home buying be tied to Hukou? *Beijing Review*, 13. Retrieved from http://www.bjreview.com.cn/forum/txt/2011-03/27/ content\_346980.htm
- Sirgy, M. J. (1980). Self-concept in relation to product preference and purchase. Developments in Marketing Science, 3, 350-355.
- Sirgy, M. J. (1982, December). Self-concept in consumer behavior: A critical review, Journal of Consumer Research, 9, 287-300.
- Smith, S. J., Munro, M., & Christie, H. (2006). Performing (housing) markets. Urban Studies, 43, 81-98.
- Solomon, E. P., Berg, L. R., & Martin, D. W. (2011). *Biology* (9<sup>th</sup> ed.). United States: Thomson Learning.

- Solomon, M., Bamossy, G., Askegaard, S., & Hogg, M. K. (2006). *Consumer behavior: A European perspective* (3<sup>rd</sup> ed.). London: Pearson Education.
- Somerville, P. (1997). The social construction of home. *Journal of Architectural and Planning Research*, *14*(3), 226-45.
- Tan, C. S. (2010). Understanding consumer purchase behavior in Japanese personal grooming sector. *Journal of Yasar University*, 17(5), 2821-2831.
- Van, O, Stijn, M. J., & Chris, J. (2001). Tvi'o ways of learning brand associations. Journal of Consumer Research, 28, 202-23.
- Van, O., Stijn M. J., & Joseph, W. (2000). Consumer learning and brand equity. Journal of Consumer Research, 27, 1-16.
- Wells, W.D., & Prensky, D. (1996). Consumer behavior. NY: John Wiley and Sons.
- Wyer, Jr., Robert, S, & Thomas, K. (1989). Memory and cognition in its social context. Hillsdale, N. J.: Erlbaum.
- Yamane, Taro. (1967). *Statistics: An introductory analysis* (2<sup>nd</sup> ed.). New York: Harper and Row.
- Yang, S., & Zhu, Y. (2006). Customer satisfaction theory applied in the housing industry: An empirical study of low-priced housing in Beijing. *Tsinghua Science and Technology*, 11(6), 667-674
- Ye. (2011). Property developers' oponion in Nanning housing. Retrieved from http://www.gxnews.com.cn/staticpages/20100419/newgx4bcb9f43-2878249. shtml

- Zarathustra. (2011). *Chinas' property prices*. Retrieved from http://news.rexian.net. cn/2012/0828/460679.shtml
- Zeithaml, V.A., Berry, L.L., & Parasuraman, A. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. New York: The Free Press.
- Zhang, W. (2010). Policy focus: China's real estate policy is facing uncertainty. Modern China Studies, 17(1).
- Zhang, X. F. (2003). *Customer segmentation analysis in real estate marketing*. Retrieved from http://house.focus.cn/news/2003-05-09/45599.html
- Zikmund, W.G. (2003). Business research methods (7th ed.). Mason: Thomson

South-Western

## APPENDICES

## SURVEY QUESTIONNAIRES

### Questionnaire in English version

Dear Respondents :

This is an academic questionnaire to investigate the influences on the buying behavior of purchasing commercial housing in Xingning District of Nanning city, China. Your individual information and participation in this survey is totally confidential and will not be disclosed to the public. This questionnaire is very important to the research. Deeply appreciate your kind cooperation and help in advance.

Yours faithfully,

Advisor: Dr. Paul TJ James Prof.Dr. Tun Lwin

MBA English Program Graduate School Bangkok University

Please complete below background information.	Items					
D01.Gender	1. $\Box$ Male 2. $\Box$ Female					
D02.Age	1. □ < 25 2. □25-30 3.□31-35					
	4. □36-40 5. □41-45 6.□>45					
D03.Marital status	1. □Single 2.□Married					
D04.Education	1. □Lower Than Diploma					
	2. □Diploma					
	3. □Bachelor Degree					
	4. Master Degree Or Higher					
D05.Income	1. □under 2,000 CNY					
	2. □2,000-3,500CNY					
	3. □3,501-5000CNY					
	4. □5,001-8,000CNY					
	5. 🗆 8,000-10,000 CNY					
	6. □More than 10,000CNY					
D06.Ability to pay base on	1. □Under 4,500 CNY					
different unit pricing	2. □4,501-6,000 CNY					
(CNY/sq.m)	3. □6,001-8,000 CNY					
	4. □8,001-10,000 CNY					
	5.					

Section 1 : demographics of consumer sample

Section 2 : external influences on consumers' house- buying behavior

Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	Factor 1. C	Culture			
E01. The necessary for new	1	2	3	4	5
couples to buy new houses.					
E02.The necessary for people to	1	2	3	4	5
own a home.					
E03.The necessary of parents to	1	2	3	4	5
buy a new house for inheritance					
purposes.					
F	actor 2.Gov	vernment			
E04.House purchasing restriction.	1	2	3	4	5
E05.The government's control	1	2	3	4	5
policies.					

Factor 3. Marketing activities									
E06.The advertising of the	1	2	3	4	5				
developer company.									
E07.The promotional tools (such	1	2	3	4	5				
as discount, offer gifts, free									
parking etc.) .									
E08.Personal selling	1	2	3	4	5				
E09.brand awareness of the real	1	2	3	4	5				
estate company.									
Fac	tor 4.Refer	ence group							
E10.Family members' opinions.	1	2	3	4	5				
E11.Friends' Opinion.	1	2	3	4	5				
E12.Experts' Opinion.		2	3	4	5				
E13.newpapers,magazine,		2	3	4	5				
televisions, internet, etc.									
Section 3 : internal influences	on consum	ers' housing	a huvina h	ahavior					

C		• • • 1	· 11		consumers'	1		1 .	1 1 .
Noction 3	•	internal	intilioncos	nn	consumers	n	$\gamma \eta \eta \eta \sigma$	nuvino	nonaviar
		inicinai	infinences	$u_{i}$	Constances	110	JUSTIC	UNVILLE	ocnavior

Please mark a "circle" on the	Strongly	Disagree		Agree	Strongly
number of 1 to 5 that closest to the	Disagree		l`(P)		Agree
word that best reflects appears in					
your mind.					
H	Factor 1. Pe	rception			-
I01. Locations of house.	1	2	3	4	5
I02.Traffic condition.	1	2	3	4	5
I03. The supporting facilities (	1	2	3	4	5
such as school, shopping mall,					
convenience store.) .			$\neg$		
I04. The overall quality of the	1	2	3	4	5
residential area (including sizes,					
property management, afforested	$h \Gamma \Gamma$				
area, fitness center etc.)	ノヒレ				
I05.House type	1	2	3	4	5
I06.Interior design and building	1	2	3	4	5
quality.					
	Factor 2. A	ttitude			
I07.Chosse utilities and	1	2	3	4	5
convenience house.					
108. Choose manner and	1	2	3	4	5
comfortable house.					
I09.Choose confidentiality and	1	2	3	4	5
security house.					
I10.Choose potential increment	1	2	3	4	5
house.					

	Factor 3.le	arning			
I11.Have a deeper understanding	1	2	3	4	5
about the home price among					
different developers.					
I12. Understand different kind of	1	2	3	4	5
information (such as developers'					
status, design, loan specified etc.).					
F	actor 4 : M	otivation			
I13.House buying purposes are	1	2	3	4	5
living, investment, for parents or					
children.					
	Factor 5.E	motion			
I14.Your felling impact on your	1	2	3	4	5
house buying behavior.					

Section 4 : self-concept and lifestyle influence on consumers' housing buying behavior

	-									
Please mark a "circle" on the	Strongly	Disagree	Neutral	Agree	Strongly					
number of 1 to 5 that closest to the	Disagree				Agree					
word that best reflects appears in										
your mind.										
Factor 1. Self-concept										
S01. Your self-concept (such as	1	2	-3	4	5					
become a man with good taste, a										
man of figure, a man with										
responsibility) impact on your										
house buying behavior.										
	Factor 2.lif	festyle								
S02.your lifestyle impact on your	1	2	3	4	5					
house buying behavior.										
Section 5 : Decision Making Process										
Please mark a "circle" on the	Strongly	Disagree	Neutral	Agree	Strongly					
		Disagree	Neutral	Agree	Strongly Agree					
Please mark a "circle" on the	Strongly	Disagree	Neutral	Agree	•••					
Please mark a "circle" on the number of 1 to 5 that closest to the	Strongly	Disagree	Neutral	Agree	•••					
Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind.	Strongly Disagree			Agree	•••					
Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind.	Strongly			Agree 4	•••					
Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind.	Strongly Disagree	recognitior	1		Agree					
Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind. Step P01. You realize that you want or need a house.	Strongly Disagree	recognition 2	1		Agree					
Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind. Step P01. You realize that you want or need a house.	Strongly Disagree 1. Problem 1	recognition 2	1		Agree					
Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind. Step P01. You realize that you want or need a house. Step	Strongly Disagree 1. Problem 1	recognition 2 tion search	n 3	4	Agree 5					
Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind. Step P01. You realize that you want or need a house. Step P02.search and collect information when you plan to buy a house.	Strongly Disagree 1. Problem 1	recognition 2 tion search 2	n 3 3	4	Agree 5					
Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind. Step P01. You realize that you want or need a house. Step P02.search and collect information when you plan to buy a house.	Strongly Disagree 1. Problem 1 2.informat	recognition 2 tion search 2	n 3 3	4	Agree 5					
Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind. Step P01. You realize that you want or need a house. Step P02.search and collect information when you plan to buy a house.	Strongly Disagree 1. Problem 1 2.informat	recognition 2 tion search 2 e evaluation	n 3 3 n	4	Agree 5					
Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind. Step P01. You realize that you want or need a house. Step P02.search and collect information when you plan to buy a house. Step 2 P03.make a serious evaluation	Strongly Disagree 1. Problem 1 2.informat	recognition 2 tion search 2 e evaluation	n 3 3 n	4	Agree 5					

Step 4.decision making									
P04.you will change your initial	1	2	3	4	5				
decision due to other people's									
suggestions.									
P05.some uncertainties risks make	1	2	3	4	5				
you change, delay, or cancel your									
decision.									
Step 5.post- purchase behavior									
P06.your fell that house your buy is	1	2	3	4	5				
same as your expectation.									

Section 6 : consumer experience and acquisitions

EA01. This is your first or second time buy house.	1.□first time			2.□second time		
For first time purchaser, please fill in EA02, for second time purchaser please fill in EA03.Please mark a "circle" on the number of 1 to 5 that closest to the word that best reflects appears in your mind.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Exper	rience and A	Acquisition	s		1	
EA02. Present time purchase	1	2	3	4	5	
experience and acquisitions may						
influence your next time house-		(	h. /			
buying behavior.						
EA03.buyers' present time house-	1	2	3	4	5	
buying behavior was influenced by						
their previous experience and	$) + \langle \rangle$					
acquisitions.						

I sincerely gave thanks to your great effort in these questionnaires. Thank you.

您好:

是一份学研究卷, 南宁市 宁区消 者 房行 的 研究,包 括外在因素,内在因素,自我定位和生活方式及在决策 程中各因素 消 者 房行 的影响.您的的个人 料与所回答的 将受到保密,不会运用于本 研究以外, 放心填写。您所填写的卷是本研究成功的 因素, 感 您的配合与 助。

此致

D01.性 1. 口男 2.口女 D02.年 1. □25 以下2.□25-30 3. □31-35 4. □36-40 5. 🛛 41-45 6. □45 以上 D03.婚姻状况 2. □已婚 1. □未婚 D04.教育程度 1. □ 科及 科以下 2. □本科 3. 口研究生 4. 口研究生以上 2. □2000-3500元 D05.月收入 1. □2000以下 3. □3501-500元 4. □5001-8000元 5. □8000-10000元 D06.所能承受房价 1. 口4500元/ 平米以下 2. □4501-6,000元/ 平米 3. □6001-8000元/ 平米 4. 28001-10000元/ 平米 5. □10000元/ 平米以上

第一部分:客本人口料

第二部分:外在因素 你 房行 的影响

您 外在因素 您 房行 的影响, 从1 到5圈一个数字来代表您的同意程度。	很不同意	不同意	一般	同意	很 同 意
因素1. 文化					
E01. 婚前有必要有一套属于自己的房屋。	1	2	3	4	5
E02.无 在何 情况下, 有一套属于自己的 房 很重要。	1	2	3	4	5
E03.父母有必要 子女 一套房子作 。	1	2	3	4	5

因素2.政府					
E04.政府"限 令" 您 房的决定影响很大。	1	2	3	4	5
E05.政府的 控政策 您的 房决定影响很大	1	2	3	4	5
0					
因素3. 南	Ħ				
E06. 商的宣 广告 您 房行 影响很大	1	2	3	4	5
0					
E07. 商提供的促 手段(如打折 售,礼	1	2	3	4	5
品送,免 位等) 您影响很大。					
E08. 商 售人 的 售技巧 您 房决定	1	2	3	4	5
影响很大。					
E09. 商的行 地位以及品牌知名度 您	1	2	3	4	5
房的决定影响很大。					
因素4.参照群	体				
E10.家人意 您 房行 影响很大。	1	2	3	4	5
E11.朋友意 您 房行 影响很大。	1	2	3	4	5
E12. 家推荐 您 房行 影响很大。	1	2	3	4	5
E13. 刊, 志, , 网 等媒体 您 房	1	2	3	4	5
行影响很大。					

第三部分: 内在因素 您 房行 的影响

您 内在因素 您 房行 的影响, 从1 到5圈一个数字来代表您的同意程度。	很不同	不同意	一般	同 意	很 同 意
(//////////////////////////////////////	意				
因素1. 知能	力				
I01. 小区所在地理位置很重要。	1	2	3	4	5
102.小区的所在区域的交通条件很重要。	1	2	3	4	5
I03.小区的周 配套 施(如学校, 医院, 商	1	2	3	4	5
,便利店等)很重要.					
I04.小区的整体 量(包括 模,物 管理,	1	2	3	4	5
化面 ,健身 所等)很重要。					
I05. 型很重要。	1	2	3	4	5
I06.室内 和房屋 量很重要。	1	2	3	4	5
因素2. 度					
I07.您会 方便且 用型房屋。	1	2	3	4	5
108.您会 舒适气派型房屋。	1	2	3	4	5
I09.您会 安全秘密型房屋。	1	2	3	4	5
I10.您会 增 潜力型房屋。	1	2	3	4	5

因素3.学								
I11.在做出 决定前, 您会 各 商及房	1	2	3	4	5			
价有着深入的了解。								
I12.在 房 程中, 您会了解各 (如	1	2	3	4	5			
商的信,小区划,款,交房手								
等。)								
因素4: 机								
I13.您的 房目的(如自住, 投 , 或 父母	1	2	3	4	5			
及子女) 您 房行 影响很大。								
因素5.情								
I14.您在 房 程中, 个人情 您的 房行	1	2	3	4	5			
影响很大。								

第四部分:自我定位及生活方式 您 房的影响

您 自我定位及生活 您 房行 的影响,	很	不 -	-	同	很					
从1到5圈一个数字来代表您的同意程度。	不	同舟	л Х	意	同					
	同	意			意					
	意									
因素1.自我定位										
S01. 您的自我定位会影响您的 房行 。	1	2	3	4	5					
因素2.生活方式										
S02.您的生活方式会影响您的 房行 。	1	2	3	4	5					
第五部公・油業 租由久田寿 你 尾的影										

# 第五部分:决策 程中各因素 您 房的影响

	1								
您 决策 程中各因素 您 房行 的影响	很	不	<b>.</b>	同	很				
, 从1到5圈一个数字来代表您的同意程度。	不	同	般	意	同				
	同	意			意				
	意								
因素1.									
P01. 因 有了 房需要,所以您才会去看房。	1	2	3	4	5				
因素2.信息收集									
P02.当您想要 房的 候,您会可以去收集相	1	2	3	4	5				
信息。									
因素3. 估									
P03.您会根据已收到的信息做出 真的 估。	1	2	3	4	5				
因素4.决定									
P04.他人的 度会改 你之前的 决定。	1	2	3	4	5				
P05.未知 会影响改 , 推 , 或者取消您	1	2	3	4	5				

的	房决定。									
				因素6.	后行	ŕ				
P06	.您已	好房了,	您最	得到的房桌	手您	1	2	3	4	5
的	期相比是	相符合的。								

第六部分: 房

EA01. 本次是您第一次 是第二次 房。	1.	.□第二	次		
若 第一次 房 填写EA02, 若 第二次	很	不	<b></b>	同	很
房 填写EA03。 从1到5圈一个数字来代表	不	同	般	意	同
您的您的 房 及所 程度。	同	意			意
OKUN	意				
及所					
EA02. 您本次的 房 及所 将会影响到您	1	2	3	4	5
以后得 房行 。					
EA03.您本次的 房决定受以前的 及所	1	2	3	4	5
影响很大。		U'			

本 卷到此 束, 的感 您完成以上 卷。

#### BIOGRAPHY

Ms. Qiuxue Luo is born on 3<sup>th</sup> November, 1986 in Guangxi province of China. She graduated with Bachelor Degree in Business Administration from the University of the Thai Chamber of Commerce in Thailand. She is currently doing her Master Degree at Bangkok University.

She has worked at Eastern Polypack Company (EPP) in Thailand gaining substantial experience in trade between China and Thailand. She also teaches Chinese to young children in Bangkok for the past five years while studying in Thailand.

