

RESIDENTS' SATISFACTION ON PROPERTY  
MANAGEMENT SERVICE IN PUBLIC RENTAL  
HOUSING: A STUDY OF CHONGQING, CHINA

TANG HAOLING

MASTER OF BUSINESS ADMINISTRATION

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT

AUGUST 2022

Residents' Satisfaction on Property Management Service in  
Public Rental Housing: A Study of Chongqing, China

TANG HAOLING

A research project submitted in partial fulfilment of the  
requirement for the degree of

Master of Business Administration

Universiti Tunku Abdul Rahman

Faculty of Accountancy and Management

August 2022

Residents' Satisfaction on Property Management Service  
in Public Rental Housing: A Study of Chongqing, China

By

TANG HAOLING

This research project is supervised by:

Chin Hon Choong

Assistant Professor

Department of Building and Property Management

Faculty of Accountancy and Management

Copyright @ 2022

ALL RIGHTS RESERVED. No part of this paper may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, graphic, electronic, mechanical, photocopying, recording, scanning, or otherwise, without the prior consent of the authors.

## DECLARATION

I hereby declare that:

- (1) This Research Project is the end result of my own work and that due acknowledgement has been given in the references to all sources of information be they printed, electronic, or personal.
- (2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) The word count of this research report is 19926.

Name of Student: TANG HAOLING

Student ID: 21UKM06116

Signature: TANG HAOLING

Date: 11/August/2022

## ACKNOWLEDGEMENTS

First, I would like to thank my supervisor, Dr. chin, for his guidance in my studies. Dr. chin gave me a lot of valuable advice during the whole process of writing my dissertation, from choosing the topic, to writing the opening report, and finally to writing the text. What I felt most deeply was Dr. chin's rigorous attitude, from formatting, essay points, and essay structure, Dr. chin never tired of giving me timely help, so that I could finish my thesis successfully.

In addition, I would like to thank my friends and classmates for their great support and help in the preparation of the thesis, which gave me great inspiration. I would also like to thank the authors in the references for giving me a good starting point for my research topic through their research articles.

Finally, I would like to thank my thesis reviewers for their hard work. I would like to thank my family, friends, and classmates for their encouragement and support in completing this thesis.

## DEDICATION

I would like to dedicate my work to my parents, beloved pregnant wife and young daughter. Without your unwavering support and care during this difficult time, I may not be able to complete the research smoothly.

In addition, I also hope that this study will reach those property management companies of public housing and will be able to make suggestions for their construction.

## TABLE OF CONTENT

	Page
Copyright .....	ii
DECLARATION.....	iii
ACKNOWLEDGEMENT .....	iv
DEDICATION.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES .....	x
LIST OF FIGURES .....	xi
LIST OF ABBREVIATIONS .....	xii
LIST OF APPENDICES .....	xiii
ABSTRACT .....	xv
CHAPTER 1 INTRODUCTION .....	13
1.0 Introduction.....	13
1.2 Research Background .....	13
1.3 Problem Statement.....	16
1.4 Research Questions.....	17
1.5 Research Objectives.....	18
1.6 Significance of the Study .....	18
1.7 Study Scope .....	20
1.8 Research Flow Chart.....	21
1.9 Chapter Layout.....	22
CHAPTER 2 LITERATURE REVIEW.....	25
2.1 Introduction.....	25
2.2 Property Management in China .....	25
2.2.1 Current Problem in Property Management.....	27
2.3 Customer Satisfaction .....	30
2.4 Residents' Satisfaction .....	31
2.5 Service Quality Evaluation Model.....	34
2.4.1 SERVQUAL.....	35
2.4.2 SERVREF Model.....	37



2.6 Relationship Between Service Quality and Customer Satisfaction .....	38
2.7 Property service quality evaluation system.....	39
2.7.1 Tangible.....	39
2.7.2 Reliability.....	40
2.7.3 Responsiveness. ....	40
2.7.4 Assurance. ....	41
2.7.5 Empathy .....	41
2.8 Proposed Theoretical Framework .....	42
2.9 Conclusion .....	44
CHAPTER 3 METHODOLOGY .....	45
3.1 Introduction.....	45
3.1.1 Sample Overview .....	45
3.2 Research Design.....	46
3.2.1 Quantitative Research .....	47
3.3 Data Collection Method.....	47
3.3.2 Data Analysis Methods .....	48
3.4 Research Instrument.....	49
3.4.1 Survey Questionnaire.....	49
3.4.3 Variables and Respective Measurement Statements .....	50
3.5 Data Analysis .....	52
3.6 Conclusion .....	55
CHAPTER 4 FINDINGS AND DISCUSSION.....	56
4.1 Introduction.....	56
4.2 Descriptive Statistical Analysis.....	56
4.2.1 Gender.....	56
4.2.2 Age .....	57
4.2.3 Income.....	58
4.2.4 Origin of The Respondents .....	59

4.2.5 Basic Information in Chongqing.....	59
4.2.6 Current Distance from Downtown Of Chong Qing.....	61
4.2.7 Current Distance from The Company.....	62
4.3 PIs-Sem Analysis .....	63
4.3.1 Validity and Reliability Results Of Measurement Model.....	64
4.3.2 Validity and Reliability Results of Structure Model.....	66
4.3.3 Coefficient of Determination .....	68
4.4 Conclusion .....	68
CHAPTER 5 CONCLUSION.....	70
5.1 Introduction.....	70
5.2 Findings in Analysis.....	70
5.2.1 Relationship Between Reliability Level And Property Management Satisfaction.....	70
5.2.2 Relationship Between Responsiveness Level and Property Management Satisfaction.....	71
5.2.3 Relationship Between Assurance Level and Property Management Satisfaction.....	71
5.2.4 Relationship Between Empathy Level and Property Management Satisfaction.....	72
5.2.5 Relationship Between Tangible Level and Property Management Satisfaction.....	73
5.3 Implications of The Study.....	73
5.4 Limitations of The Study .....	75
5.5 Recommendations for Future Research .....	76
5.6 Conclusion .....	77
REFERENCE.....	78
APPENDIX A .....	84

## LIST OF TABLES

	Page
Table 3.0 Measurement Statements.....	38
Table 4.0 Table of Basic Information in Chongqin.....	49
Table 4.1: Reliability and validity of measurement model.....	53
Table 4.2 Shown the illustrates the HTMT ratios for the relevant results. ....	55
Table 4.3: Significance testing results.....	56

## LIST OF FIGURES

	Page
Figure 1.0 China Population Growth Rate 1978-2022.....	2
Figure 1.1 The size and growth rate of migrant workers Survey Report,2021.....	3
Figure 1.2 Research flow chart.....	10
Figure 2.0 The five key service dimensions of the SERVQUAL model.....	23
Figure 2.1 Theory Framework in this Research.....	31
Figure 4.0 Respondents' Gender Distribution.....	45
Figure 4.1 Respondents' Age Distribution.....	47
Figure 4.2 Respondents' Income Distribution.....	47
Figure 4.3 Respondents' Origin of the respondents Distribution.....	48
Figure 4.4 Current distance from the downtown.....	50
Figure 4.5 Current distance from the company.....	52
Figure 4.6 Structural Equation Model.....	52

## LIST OF ABBREVIATION

PLS-SEM	Partial Least Squares – Structural Equation Modelling
HTMT	Heterotrait-Monotrait
AVE	Average Variance Extracted
REL	Reliability
RES	Responsiveness
ASS	Assurance
EMP	Empathy
TAN	Tangible
PMS	Property management satisfaction

## ABSTRACT

Based on the theory of property service quality and customer satisfaction theory, focusing on the actual problems between the insured public housing and property management services, this paper uses the SERVQUAL model based on the actual situation of Chongqing where public housing is located, and establishes 37 indicators through the service quality model, and selects the three earliest public housing communities in Chongqing as the research object to implement the research, from the overall level. The research was conducted from the overall level to the subdivision of 5 dimensions to investigate the satisfaction and discuss and analyses the problems in the public housing property services.

Based on the identified problems into in-depth analysis, this paper concludes with constructive suggestions for improvement. Firstly, to strengthen the ability to fulfil the service commitment to the public and provide reliable guidance services, property companies need to invest more human and material resources in this area and should adopt a series of systems and supporting measures to continue to maintain high-quality service content and meet the needs of tenants. Secondly, property companies should pay more attention to the complaints arising from tenants' enjoyment of property services, to facilitate real-time monitoring of problems in property management services and solve them at any time, which will play an important role in improving the quality of property services. Finally, the property management company should pay more attention to the individual needs of the tenants, try to understand the general requirements of the tenants, and start from the best interests of the tenants. At the same time, the property management team understands the special needs of the residents and meets the individual needs of the residents mentioned earlier.

# CHAPTER 1 INTRODUCTION

## 1.0 Introduction

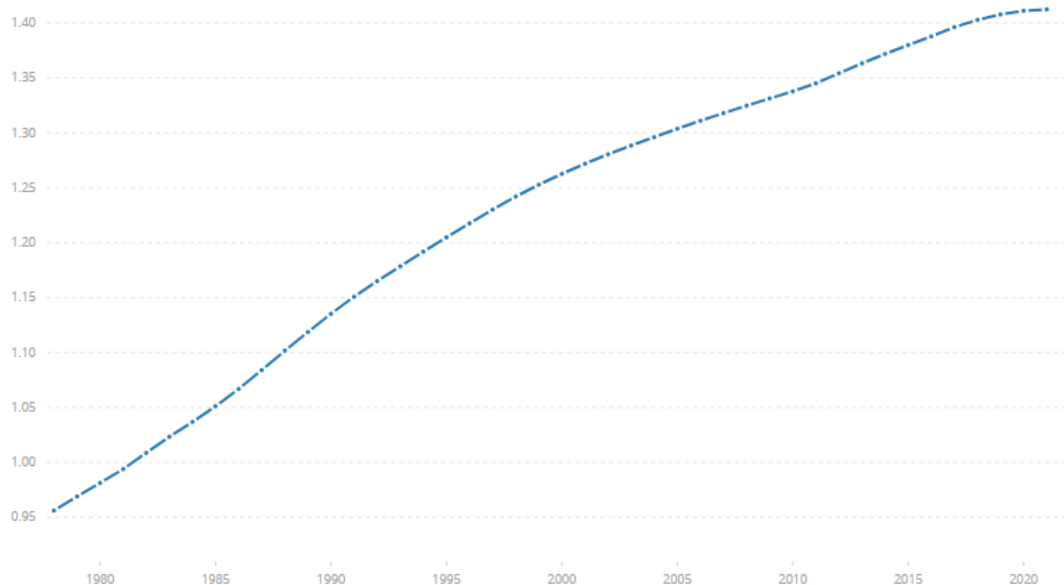
In this chapter, the specific research context will be described, followed by the problem statement, as well as the research questions and research objectives, and finally the specific scope of the research, the significance of the research, and the research outline to address the research questions.

## 1.2 Research Background

In the 44 years from 1978 to 2022, China has made great strides in implementing reform and opening-up policies, the national economy has developed rapidly, the comprehensive national power has improved significantly, the international status has been raised significantly, and the living standard of the residents has been greatly improved (Hwang et al. 2018), and it is also the 44 years when China's urbanization process and urban construction have made very remarkable achievements. During these 44 years, according to the national population census regulation in 2022 (National Bureau of Statistics, 2022), China's population increased rapidly from 963 million in 1978 to 1411 million in 2022; In 1978, total population of 962.59 million, with an urban population of 172.45 million and an urbanization rate of 17.92%. With the continuous urbanization process, the number of Chinese cities has increased rapidly in recent years, reaching 687 cities in 2022 from 190 cities in 1978, GDP 367.87 billion yuan, equivalent to \$213.695 billion, GDP per capita 382.2 yuan, equivalent to \$222 (official exchange rate 1 USA dollar = 1.72 yuan, 1978); fixed asset investment 47.9 billion yuan; mainly for industrialization construction and large municipal engineering construction investment. In

2022, the GDP is 19.91 trillion USD, the total population of China is estimated to be 1.405 billion, the urbanization rate is 64.7%, and the resident population in urban areas is 914.25 million. Fixed asset investment of 56.1 trillion RMB, housing completion area of over 4 billion square meters, including real estate investment of 13.22 trillion RMB, real estate completion area of 960 million square meters; real estate investment accounts for 23.56%; the contribution of China's real estate industry to GDP is 696.31 billion RMB, equivalent to 1009.36 billion USD, accounting for 7.03% of China's GDP (National Bureau of Statistics,2022).

Figure 1.0 China Population Growth Rate 1978-2022



Source: World Bank Data,2022

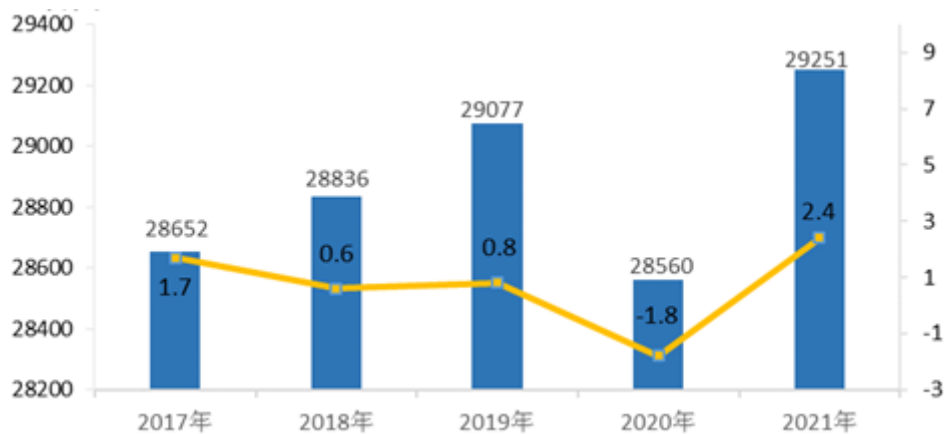
Along with the improvement in the level of urbanization, the construction of urban infrastructure has made significant progress, urban utilities have been improved, and the living standards and civilization of city dwellers have been greatly improved.

With the advancement of urbanization in China, the increase in the number of cities and the continuous expansion of city scale directly lead to the rapid expansion of urban population, and the population growth leads to the increasing demand for residential housing, meanwhile, as people's living standard improves, people's demand for living comfort is also getting higher



and higher, and the per capita living area keeps growing, and the total housing demand of urban population grows rapidly, thus generating a large number of real estate development industry. At same time, with the development of China's social economy and the acceleration of urbanization, the movement of rural workers is becoming more and more frequent and common, And the tracking survey record on migrant people launched via way of means of the National Bureau of Statistics currently indicates that the cutting-edge wide variety of migrant people in China is ready 178 million, and the number of rural laborers employed in local township enterprises is about 200 million(Migrant Worker Monitoring Survey Report,2021). Many rural surplus laborers are pouring into cities, which also increases the demand for housing. In the past few decades, almost all major cities have experienced substantial housing price growth.

Figure 1.1 The size and growth rate of migrant workers



Source: Migrant Worker Monitoring Survey Report,2021

For example, the average house price in China more than 8 times between 1998 and 2022: from to 1,854 RMB per square meter to 16179 RMB per square meter in 2020(National Bureau of Statistics,2022)). As housing prices continue to increase, China's low-income population cannot afford the expensive housing prices (Mok and Lau 2014) and urbanization advancement becomes slow.

### **1.3 Problem Statement**

The urban habitat environment is mainly reflected in the community as a complex system of community habitat (Li,2003). Residents' lives are closely related to the community habitat environment, and the satisfaction status of all aspects of the community habitat environment will have an impact on the improvement of overall satisfaction (Xu,2006). Property management, as an important part of the living environment, has become an important part of residents' lives, and their satisfaction with property management largely determines their overall satisfaction. Due to the special characteristics of public housing, there are certain differences in property management between public housing and ordinary residential areas, mainly in the following aspects: firstly, the construction scale is large and the construction period is long, which poses a greater challenge to the quality and efficiency of property management after occupation(Chen et al. 2014; Dang et al. 2014), Secondly, the planning, design, construction and management standards and norms for public housing do not take into account the needs and aspirations of residents (Ibem and Aduwo 2013; Ibem and Amole 2013a; b). Thirdly, compared to ordinary residential areas, public housing has a complex tenant group structure, and a diverse staff mix. fourth, the service targets are mainly low- and middle-income people; Fourthly, tenants have a poor sense of ownership, and as the property rights of public housing belong to the government, the inconsistency between the main body of use and ownership leads to a great difference in the maintenance of their properties.

As a result of these differences, the property management of public rental housing differs to a certain extent from traditional property management. At the same time, as the occupancy of public rental housing is carried out after completion, the subsequent problems of property management of public rental housing gradually come to the fore, including the problem of the difference between the property management fee and the psychological price of the tenants, the problem of housing quality defects and the supervision and guidance of the housing management center on the property management of public rental housing, which leads to Tenants' satisfaction with property management is not high. Therefore, it is necessary to

investigate and understand the current situation of property management satisfaction in public rental housing, which is of great significance to improve the satisfaction of property management in public rental housing and promote the development of public rental housing.

Since the completion of public rental housing on a large scale, how to make the residents from living in the housing to living in the satisfaction, facing the problem of late property management, there are few studies in this area, especially the research related to improving the service quality of the property companies of the housing protection is still relatively rare. Accordingly, this paper will combine the characteristics of public housing and the current management situation of property companies to provide a more in-depth exploration of public housing property management. From the perspective of public rental housing, it is of great theoretical significance to further enrich the property service quality management system and total quality management theory. At present, property management in the community has become a hot spot for residents to reflect their problems, and most of the problems reflected by residents in the living area are related to property. should have public welfare. Property management companies should first give priority to improving the quality of property services.

The purpose of this study is to discuss customer satisfaction theory in the field of public rental housing property management, through literature research then a suitable survey model of public rental housing satisfaction is established, the satisfaction index of public rental housing property management in Chongqing is derived, the unsatisfactory factors in property management are screened out, the current situation of public rental housing property management and the actual needs of tenants are understood, and reference is provided for the future construction and management of public rental housing.

## **1.4 Research Questions**

Based on the above problem statement, the following questions were proposed.

- i. How satisfied are the current tenants of public housing with the current property

management?

ii. What are the factors affecting public housing tenants' satisfaction with property management services?

## **1.5 Research Objectives**

i. To investigate the satisfaction of public rental housing residents with property management.

ii. To investigate the factors affecting the satisfaction of property management services.

## **1.6 Significance of the Study**

Since the large-scale construction of public rental housing in Chongqing, how to make the tenants live from the housing to the satisfaction of living, facing the problem of post-property management, there are few studies in this area, especially the research related to improving the service quality of public rental housing property companies is still relatively rare. Accordingly, this paper will combine the characteristics of public rental housing and the current situation of property management companies to provide a more in-depth exploration of public rental housing property management.

Currently, community property management has become a hot spot for residents to reflect their problems, and most of the problems reflected by residents in the living area are related to property, and because public housing is more complicated in terms of property rights and tenants have different demands in terms of interests, it increases the difficulty of property management, and often there are also safety hazards, which fully illustrates that property companies play an important role in social stability, and property companies have both Property

companies should have both profitability and public welfare. Property management companies should first give priority to improving the quality of property services. This paper will help property management companies' service quality system to be effectively established in public housing communities and has important practical application value for improving the property management level of protected housing. The practical experience of this paper also has important reference value for the development of social enterprises.

There are many studies on services in China, mostly focusing on the satisfaction of commerce, catering, accommodation and tourism, etc. The purpose of the research in this paper is to take the tenant as the center, from the practical feelings of the tenant to study the property service quality satisfaction survey of public housing is more innovative, and provides a new perspective for the subsequent research on the service industry.

Innovation of research content. The content of this thesis adopts the organic combination of theory and empirical analysis, mainly based on the SERVQUAL model to construct the index system of evaluation, SERVQUAL model is a common quality management method, which can accurately evaluate the performance and quality management ability of various organizational services, and is currently applied in various enterprises and public sectors, based on the public housing residents of Chongqing City The questionnaire, based on each service in the proposed countermeasures for improvement. therefore, this paper is innovative in terms of research content. Therefore, this paper is innovative in terms of research content.

## 1.7 Study Scope

The scope of this paper is to focus on the property management service satisfaction of three public rental housing communities in Chongqing, Min Xin jia yuan f Kang Zhuang Mei di and Min an Hua fu.

Chongqing is a provincial-level administrative region, a municipality directly under the central government, a national core city, and a megacity in the People's Republic of China. After various adjustments, it was expanded to 82,402.95 square kilometers in 1997.

As of 2022, Chongqing has 26 districts, 8 counties and 4 autonomous counties: 204 streets, 611 towns, 193 townships and 14 ethnic townships. Chongqing Municipal Government is located at No. 232 Renmin Road, Yuzhong District.

At the beginning of 1949, Chinese government agencies, institutions and state-owned enterprises were responsible for the design and construction of housing in towns and cities, and when the houses were completed, they were distributed in kind to the residents, and the housing distribution system was implemented in the country. In 1998, Circular on Further Deepening the Reform of the Urban Housing System and Accelerating Housing Construction was issued by the State Council of China, which stipulated that the allocation of housing in kind should be stopped, and monetary allocation of housing should be gradually carried out, while the housing provident fund system should be comprehensively promoted and continuously improved. At the same time, to solve the housing problems of low-income people, the idea of building and managing low-cost housing was already proposed in 1998, followed by a series of subsidized housing policies, including the allocation of low-cost housing, affordable housing and the renovation of dilapidated houses and shantytowns. A housing supply system covering the high-, middle- and low-income groups was formed, it means the high-income group bought commercial housing, the middle- and low-income groups bought affordable housing and the lowest income group rented low-cost housing and new system, public rental housing (Li,2011).

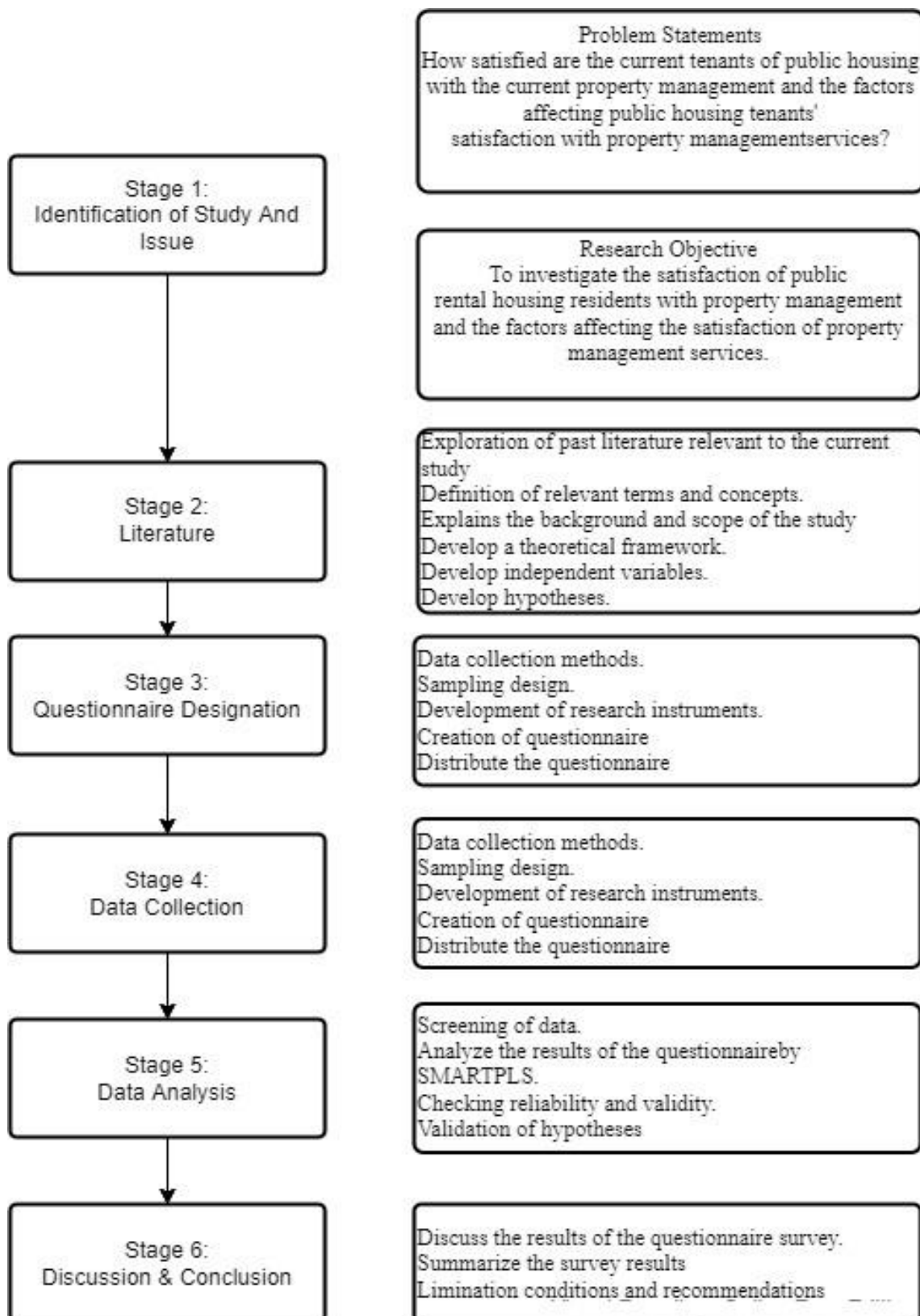
In 2009, China officially started the construction of public rental housing (PRH), to improve the traditional public housing system and to improve the living conditions of Chinese

nationals. (Li et al. 2014a, b; Shi et al. 2016). This PRH system was the first attempt to use non-ownership housing to solve the housing problems of the general population, focusing mainly on relieving the relatively low income of young local employees and migrant workers in their accommodation (Li, 2011).

A past study found (Chongqing daily, 2010): In 2010, Chongqing took the lead in launching the large-scale construction of PRH, with a plan to build 40 million square meters in three years. The sites for public rental housing projects are all concentrated in the nine main urban areas, six regional central cities and two satellite cities with high population density and outstanding contradictions between housing supply and demand; calculated based on 20 square meters per capita, 40 million square meters can effectively solve the housing problems of 2 million people. By the end of 2012, a total of 45.29 million square meters of public rental housing had been built and 13.15 million square meters completed, with 210,000 units allocated, benefiting more than 580,000 people. Among them, 64,000 public rental housing units in six districts in the main urban area are gradually entering the peak period of occupation, as of 2010, more than 12 million square meters of public rental housing projects have been started in Chongqing, and these public rental housing units can start to be rented in 2011. By 2020, a total of 40 million square meters of public rental housing will be built in Chongqing's main city and distant suburban counties. And their management system, neighborhood environment and property management are facing great challenges.

## **1.8 Research Flow Chart**

Figure 1.2: Research flow chart



## 1.9 Chapter Layout



The first chapter of this paper provides the general direction of the entire study, including the research background, problem statement, research questions, research objectives, hypotheses of the study, and implications of the study, which will be investigated based on the factors influencing the satisfaction of property management in Chongqing public rental housing as the center.

The second chapter of this paper explores the past literature relevant to the current study, reviews the issues identified in past studies and the knowledge derived from them, and elaborates on the definitions of relevant terms and concepts. The background and scope of the study is explained; a theoretical framework is developed, independent variables are formulated, and research hypotheses are developed.

In the third chapter, the paper will describe the specific research methodology, the questionnaire design, and the specific data collection methods, the scope of the distributed questionnaire. Data analysis methods, data processing and the specific analysis program SMARTPLS will also be discussed.

The fourth chapter of this paper will provide a detailed analysis and explanation of the collected data, a descriptive analysis of the demographic characteristics of the respondents, and specific reliability analysis and inference analysis will be discussed further.

The last chapter will discuss the main findings of this study, all the data obtained will be summarized and the main findings of the study will be analyzed and discussed, and recommendations will be given to elaborate the main implications. At the end, the limitations of this study will be discussed, as well as recommendations for future researchers.

## **1.8 Conclusion**

In general, this chapter describes the dramatic changes in China from the approach to land reform laws and the problems that have arisen in real estate as a result of population growth, and describes the current issues that motivated this study, listing the research questions and

objectives, and finally outlining the implications of the study.

# **CHAPTER 2 LITERATURE REVIEW**

## **2.1 Introduction**

This chapter will present the main research directions and contents, extensively collect the theories and literature studies related to them at home and abroad, and comprehensively sort out the current relevant research progress and research results and analyze the existing theories and studies in the article.

## **2.2 Property Management in China**

The term "property" has a broad meaning and includes not only buildings, but also their related facilities and equipment. There is no specific definition of the scope of property. Properties can be divided into many categories according to their ownership. Property contains a variety of businesses such as office buildings, commercial buildings, residential communities, villas, industrial parks, hotels, factories and warehouses, and other forms of property. Properties are divided into four categories according to their form and function: residential properties, commercial properties, industrial properties, and properties for other purposes. The term "property" has not been used in mainland China for a long time, but was first spread from Hong Kong (Wang,2013), where it is used in Hong Kong law to refer to unitary real estate. In most cases, the meaning of "property" in Hong Kong is basically equivalent to the definition of "real estate" in Mainland China, which is different from the meaning of the term "property" in Mainland China.

Currently, the definition of property in most property management regulations in China mainly refers to all kinds of houses and their related equipment, facilities and sites that have

been completed and accepted for use; before 1994, the first definition of "property" was all kinds of houses and their attached equipment and supporting facilities in residential areas (Zhou, 2014). With the development of social economy, especially real estate, the connotation, and extension of the concept of "property" were gradually expanded and no longer limited to residential areas. The property refers to all kinds of buildings in use and ready to be put into use, as well as their appurtenant equipment, supporting facilities and related sites. The appurtenant equipment, supporting facilities and sites refer to various equipment inside and outside the buildings, public municipal facilities, and adjacent sites and roads, etc. The area and volume of different properties may vary greatly, from small residential units to large factory buildings can be called properties, and the same property can be divided into many small properties.

The meaning of property management in China is both broad and narrow(Chen,2005): property management in the broad sense refers to services related to real estate development, sales, leasing and after-sales; property management in the narrow sense is what people usually refer to as property management, which refers to the professional management of houses and their attached equipment and supporting facilities by property management companies for normal use to meet the requirements of people's work, life and living.

The property mentioned in this article refers to residential property. Subdivision properties include residential buildings and public use parts, while public use parts are the usual common area, public infrastructure equipment, such as parking spaces, greenery, and other related contents. Since people's needs are growing and their requirements for living environment and facilities are gradually increasing, it is very common to choose to entrust the management of residential properties to property companies, which is not only beneficial to the development of property companies, but also saves the time and cost of residents (Chen,2005).

### **2.2.1 Current Problem in Property Management**

The main problems reflected in the current property management services can be divided into legal stability, lack of mutual trust, poor performance ability of property companies, and non-payment of fees by property owners.

The laws and regulations are not sound, and the judicial effectiveness is not high. In recent years, although the legislation of property management has made considerable progress, the introduction of "Property Management Regulations" and "Measures for the Management of Property Service Charges" has played a certain role in regulating the operation of property management. However, some deep-seated issues in property management, such as the handling of the relationship between owners' organizations and other organizations and the handover of property management authority, still lack operable regulations (Wang, 2013). This makes it difficult for many properties management disputes to be solved through legal means. And the current judicial proceedings in China are lengthy, time-consuming, and ineffective, and disputes such as unpaid property services (Wei,2010) and poor receivership are often delayed for a long time, which can easily turn small disputes into big disputes and even lead to collective petitions, violent conflicts and other events that seriously affect social harmony (Huang, 2004).

The lack of trust between property companies and owners makes it difficult to establish a harmonious relationship at present, some property companies rely on the support of development and construction units and often ignore the voices of owners and violently interfere with the rights of owners, which causes owners to resent and distrust the property companies affiliated with development and construction units. The property company of the development and construction unit cannot really protect the interests of the owners and does not play the role of supervising the gatekeeper on the important matters such as building quality, function, and support (Gao and Huang,2002). As a result, property owners are often angry with property companies for housing quality problems and unfulfilled promises by construction units, and they do not trust property companies and do not handle relationships well (He and Shen, 2005). Many communities in Guangzhou and Shenzhen have experienced violent

conflicts as a result.

Poor awareness and ability of property companies to perform, property services are not in place (Gao and Huang,2002). Some property companies, after obtaining property management rights, do not provide property services seriously according to the contract, lowering service levels, reducing service items, and lowering service standards and requirements without authorization; some companies cannot even meet the minimum service contract requirements to reduce costs and increase profits. Some companies cannot even do a good job in cleaning and security.

According to the report of "China Property Management" magazine, the Chongqing Municipal Resident District Management Office conducted a survey on 28 commercial housing districts, and only 14 districts had a property charge rate of 80%, and the average property charge rate of commercial housing districts was only 65%. The property management fee rate is less than 80%, and property companies will have difficulty in maintaining normal management activities. All these problems appear in the public rental housing communities.

Then again, the reasons for property management service problems can be divided into lack of property management concept, property companies operating at a loss, lack of talents in the property management industry, and improper management.

Property owners and property management companies are lagging in their concepts. Today, there are still many people whose understanding of property management is stuck in the unit management or housing management mode of the planned economy, and both property companies and property owners are immature in their understanding of property management. This situation is especially common in mainland China. According to a survey conducted by China's Huashang News, the problems of property management can be summarized into six aspects: 97% of the owners said that the property management department of the district was not selected and hired fairly according to the owners' wishes, but was "appointed" by the developer, so the legitimate rights and interests of the district owners could not be protected; 86% of the owners thought that the district property charges were not More than 60% of the owners said they did not understand the use of the property department's fees, and there is no

way to talk about the guidance of the administrative department; more than 70% of the owners who participated in the survey were not satisfied with the property service, and at the same time thought that the owners could not exercise their rights; more than half of the people who participated in the survey said they did not know who the government administrative department of the district property management was; nearly 90% of the participants said that the district property management department could not hold the owners' meeting on time. Many of them said that the owners' meeting was not held but the owners' committee was formed, and they suspected that the property management department was operating secretly; in the survey item of "What kind of solution do you take when you are dissatisfied with the property management of the district? In the survey item, nearly 30% of the district owners resolved property disputes through "quarrels".

Property management is small in scale, uneconomical in scale, difficult to operate and manage, and uneconomical in scale. The property management industry has a saying, such as residential community management area of 50,000 square meters or less is often a loss, 50,000-80,000 square meters to break even, 80,000 square meters to have the possibility of profit. But at present, many property management projects are small in area, and it is difficult to reach the scale of operation overall. According to statistics, the data of the CMI Institute estimates that the area under management of residential properties nationwide will be 19.3 billion square meters in 2020, and assuming that the area of urban housing stock in China will be 36 billion square meters in 2020, the total stock of residential properties will have a penetration rate of only 53.5% in 2020, an increase of 10.2 percentage points from 2015, but there is still much room for improvement. (CMI, 2020)

In the end, the quality of the property management industry team is low and there is a shortage of talents. Property management, as a specialized management, requires all kinds of high-quality management talents (Gao and Huang,2002). However, due to the late start of professional property management education in China and the limited number of talents cultivated, coupled with the fact that perfect industry management standards and codes of conduct for practitioners have not yet been established, the lack of training for in-service

professional property management personnel and the lack of supervision of various induction professional training, as well as the misconception that property management does not require high-quality personnel, the overall quality of property management personnel in China is low. This restricts the benign development of the industry and affects the improvement of the status of the industry.

## **2.3 Customer Satisfaction**

The development of customer satisfaction in the field of consumer psychology began in the early 20th century (Cardozo, 1965). Along with the rapid development of commodity economy, the research direction of satisfaction theory slowly changed from theoretical research to empirical research, and through decades of accumulation, customer satisfaction has developed into a more mature theory. In the research of customer satisfaction, it is mainly to explore the evaluation method of customer satisfaction and determine the main factors affecting satisfaction. After establishing the satisfaction measurement system, found out the reasons for the change of the result through dynamic monitoring of the influencing factors, and then take effective measures to improve customer satisfaction. Early research on customer satisfaction focused on determining the influencing factors of customer satisfaction and calculating the results of customer satisfaction and establishing customer satisfaction models. After the research on satisfaction models became more mature, the research on customer satisfaction theory shifted to the estimation and testing of models and the methods of determining the sample size of empirical research on customer satisfaction.

A number of literatures consider the formation of satisfaction as a process of multiple comparisons, and the comparison of customers' expected and actual quality of the product will have a direct and important impact on customer satisfaction, in addition, satisfaction is also influenced by the product and service (Howard and Jagdish, 1969; Hempel, 1977; David and Petter, 2006 Anderson and Sullivan conducted an empirical study with SCSB data to develop



a model linking the causes and outcomes of customer satisfaction, in addition to showing that customer satisfaction can be represented by constructing a function of quality perceptions and expectations (Anderson and Mary, 1993). In addition, Oliver also proposed a performance expectancy model based on the level of adaptation theory and dynamic dyadic theory (Oliver, 1981; Wenerfelt, 1987).

Tsay and Wang initially developed the model by summarizing the empirical studies on customer satisfaction. Immediately afterwards, Johnson suggested improvements to the above satisfaction model and tested it with customer satisfaction data from Norway (Johnson, 2001).

With the establishment of the satisfaction model, the research point of scholars shifted to the direction of comparability of customer satisfaction measurement and evaluating customer satisfaction from more aspects. The Fomell logical model was developed by Dr. Fomell by combining customer expectations. The model is constructed by Dr. Fomell by composing factors such as customer expectations, quality perceptions, and purchase price, etc. The model combines customer purchase product or service. The model combines customer expectations, quality perceptions and customer satisfaction through mathematical operations, and measures the customer satisfaction index through structural equations (Fomell, 1921).

## **2.4 Residents' Satisfaction**

Satisfaction as a subjective psychological judgment applied to the test of overall feeling was first applied in the field of sociology and psychology, and then gradually became popular and widely used in management, such as customer satisfaction, performance satisfaction, etc. This satisfaction is directly related to whether an individual receives self-esteem and trust in social interactions and exchanges, which will then escalate to the concept of loyalty, and social relationships are further consolidated and developed (Lewin, 1936).

The emergence and later popularity of customer satisfaction has led to the deepening of its principles, especially the application of the model has made the concept of satisfaction

more acceptable, and the field of application has been extended to consumption, service, work, and salary, etc. The credibility of the government and the performance of policies have also started to use the term metric continuously. Specifically in the study of housing satisfaction, the main indicators involved include the following dimensions: firstly, individual differences: income, education level, occupation, social status, etc., which determine people's consumption habits, aesthetic perceptions, requirements for quality and quantity of housing, and even predictions for investment (Galster, G. and G. Hesser.) Secondly, the environment of housing, mainly There are neighborhoods and characteristics, the environment and property management of the community, commercial facilities, and the surrounding physical environment (Ozo, 1990; Crill, 1991), all of which influence residents' choice to buy and affect satisfaction. The third is the house's own characteristics, mainly the size of the house, the quality of construction, the rationality of the layout, the ease of use, light and ventilation, etc. (Garrod and Willis, 1992). Housing affordability and housing price (Trigwell and Barron, 2004, the more affordability the more satisfaction and the more cost effective the more satisfaction (Malpass and Anderson, 2005). The relationship between affordability and psychological ability of residents on satisfaction with the living environment was revealed using socioeconomic variables, revealing the contribution of both to satisfaction. There is also Mohit who synthesized the above dimensions that affect satisfaction, the impact of satisfaction on overall satisfaction from multiple dimensions of household structure, amenities, public facilities, social environment, and daily living facilities, and the factors included in each satisfaction and the degree of contribution (Mohit, 2010). There is also some literature indicating that Amerig and Aragoes (1990) studied the relationship between the following variables and satisfaction: courting with neighbors, residential safety, simple residential infrastructure, community infrastructure, deterioration, city sports and noise, open herbal space, and miscellaneous items. It is particularly noteworthy that they used psychological factors, such as relationship with neighbors, in addition to physical factors related to the living environment. Leslie (2008) attempted to measure satisfaction with housing placement through surrounding community environmental factors, such as "safety and pass ability", Leslie (2008)

tried to measure the satisfaction about the housing through the surrounding community environment factors such as "safety and passage", "destination of visit", "social work", "tourist work", "traffic and noise".

Compared with property management, there are relatively fewer studies on the satisfaction of public rental housing. The essence of property management is service and improving service awareness is a prerequisite for the healthy development of the property management industry. There are also some papers that discuss the role of introducing the concept of "customer satisfaction" in property management in terms of service evaluation methods and analyze the establishment of a customer satisfaction evaluation system for property management, hoping to provide property management companies with a scientific tool to investigate and analyze the degree of satisfaction of owners with their services, and to promote the improvement of service levels.

Peter Barrett's (2003) theory of property management system refers to the owner-centered approach to improve the quality of service and living conditions, which guides the development of property management. Peter Barrett's theory focuses on the owner's information feedback and the timely processing of the process in the property management process, which is applied to the actual management services, resulting in a highly efficient, satisfying, and Joseph W. Decarlo (1997) stated that property management refers to the property management enterprise operating and managing the related property activities under the condition of the property owner's commission to create more property value, so as to achieve the revenue goal of property management operation. Ferdinand (2002) stated that the harmonious and stable development of the community is one of the driving forces of social progress and is crucial to social construction, and it is of great practical significance to conduct an in-depth study on it. Richard et al. (2017) argue that the property service industry has a low entry barrier and a large gap between the quality and education level of personnel and other high-tech industries, in addition to actively acquiring customer needs and service content that is unsatisfactory to property services, in order to provide more customers with high added value and low complaint rate, it is also necessary to actively improve the service quality of property

service enterprises themselves and regulate the service attitude and business quality of property companies.

In conclusion, there are more studies on public housing surveys and analyses, but there are relatively few papers from the perspective of tenant satisfaction. Based on the real needs and subjective feelings of the households, we can truly reflect the current situation of public housing development and management, combine qualitative and quantitative information to reflect the degree of satisfaction of the households with the current housing and the related factors affecting housing satisfaction, and make a comprehensive evaluation of the overall situation of the current housing.

## **2.5 Service Quality Evaluation Model**

With the in-depth research on property service industry, it is found that property service quality is very important to the development of the industry, and more and more scholars begin to pay attention to the evaluation of property service quality, and the main methods of evaluating property service quality are: SERVQUAL evaluation model, SERVPERF evaluation model and non-Difference model. Among them, the most widely used is SERVQUAL and SERVPERF evaluation model, and most of the external studies on property service quality are also based on SERVQUAL model.

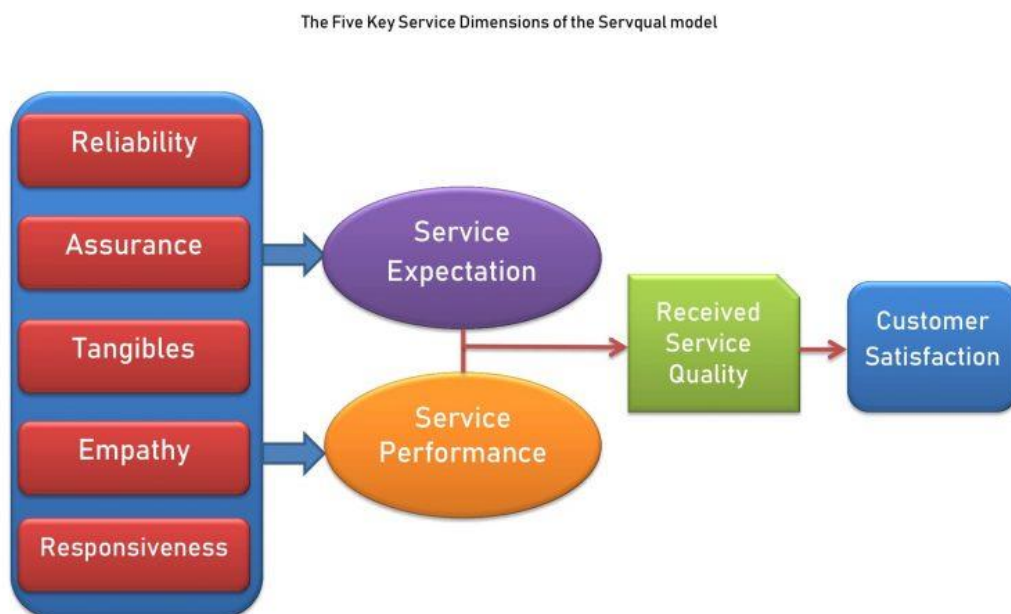
The principle of SERVQUAL model is to calculate the difference between customer's expectation and perception of service quality, and then judge the service quality according to the difference. Later, Cronin and Taylor (1992) argued that the SERVQUAL model lacked empirical evidence and proposed the SERVPERF model, which replaced "perceived expectations" with "perceptions of performance". Brown, Churchill and Peter (1993) proposed the non-Difference model to eliminate the influence of customers' prior consumption experience on expectations, which follows the indicators of the SERVQUAL model and directly measures the difference between customer perceptions and expectations. Baharum (2009) used the

SERVQUAL model to evaluate the quality of property services by measuring the difference between expectations and perceptions and proposed practical measures to improve the quality of property services. The results confirmed that SERVQUAL model is a robust tool for measuring the quality of property services.

### 2.4.1 SERVQUAL

Parasuraman, Zeithaml and Berry (1988) proposed the SERVQUAL model for measuring service quality, which includes 22 specific indicators in five aspects: tangibility, responsiveness, assurance, reliability, and empathy.

Figure 2.0: The five key service dimensions of the SERVQUAL model



Source: Kobiruzzaman, 2020

Property management satisfaction research has a long history, as early as the 1960s, some scholars conducted research on property management models, but most of them were at

the qualitative level until Zeithaml (1988) proposed the SERVQUAL model, which brought property management satisfaction evaluation into a new era. According to their findings, property management in low-income public housing areas in Yemen is poor because property management companies have difficulty in managing the property due to low management costs on the one hand, and low-income groups do not care much about the content of property management on the other. Cheng et al. (2007) conducted a survey with customized property management, and based on the results, they concluded that customized property management can help improve customer satisfaction, but the high cost of customized property management may prevent the expansion of this approach. Influence Factor et al. (2013) conducted a survey on property management in Chinese cities and concluded that the scores of property management in Chinese cities were significantly weaker than those in the U.S. This was due to the backwardness of the service concept of property management in China on the one hand and the lack of community awareness among Chinese urban residents on the other. Oletub et al. (2014) conducted a survey on the property management satisfaction of Nigerian residents, and based on their findings, they concluded that property management in Nigeria has not been effectively carried out, and there are monopolistic practices such as mandatory fees, and this high fee-low output model makes the property management satisfaction scores in Nigeria very low. -tat et al. (2015) conducted a survey on property satisfaction in commercial centers in Hong Kong, which according to the survey results showed that property satisfaction in commercial centers is generally higher than in other regions, but the difficulty of property management also shows a geometric increase due to the excessive flow of people. From the perspective of importance, owners of shopping centers in Hong Kong generally consider the image of property services to be more important.

In conclusion, by combing through the above literature, since Zeithaml proposed the service quality model in 1988, most of the studies have been conducted using the service quality model applied to different property management models. From the research content, it is observed that there are service quality evaluations based on various models of properties in different regions such as Yemen, Hong Kong China, and mainland China, which shows that the

evaluation results are less referable for the evaluation of property management satisfaction in China, and the evaluation of property management satisfaction should start from China's national conditions.

#### **2.4.2 SERVREF Model**

Cronin & Taylor (1992) found some shortcomings in the SERVQUAL model through their research and analysis and introduced the SERVPERF model to overcome the shortcomings of the SERVQUAL model. The SERVPERF model follows the dimensions and measures of the SERVQUAL model and proposes to use only "performance perceptions" to evaluate service quality. Brown, Churchill and Peter (1993) pointed out that the SERVQUAL model has some errors in evaluating service quality, because the SERVQUAL model evaluates service quality based on the calculation of perceived and expected differences, which can lead to Haksik Lee (2000) used the SERVPERF and SERVQUAL models to measure service quality in three types of service industries in the market and found that the SERVPERF scale yielded higher R<sup>2</sup> values. Fang (2012) also compared the two evaluation methods through empirical analysis and showed that there was no significant difference between the findings obtained from the two evaluation methods, while the SERVPERF scale had the advantages of short time, low error and high stability.

The SERVPERF model follows the five-dimensional scale of the SERVQUAL model. SERVPERF model only measures the customer's perceived performance and does not measure the difference between perceptions and expectations, so it increases the reliability and degree of evaluation. SERVPERF The formula for the evaluation method is  $SQ$  (Service Quality) =  $P$  (actual perception).

## **2.6 Relationship Between Service Quality and Customer Satisfaction**

Service quality is the independent variable and customer satisfaction is the dependent variable. both Parasuraman, Zeithaml and Berry (1988) and Rust & Oliver (1994) showed that service quality has a direct impact on customer satisfaction. Gordon (2000) concluded through empirical studies that service quality has a positive effect on customer satisfaction. Gronroos (2000) in his study of the relationship between the two relationships, it was pointed out that the perception of service quality is formed before the customer evaluates the service satisfaction. Wei (2003) also confirmed the interrelationship between the two in his empirical study.

Service satisfaction is the independent variable and service quality is the dependent variable. oliver (1980) argues that the formation of service quality evaluation is a long process, and customers will have different satisfaction with the service or product in their previous consumption experience and continuously adjust their evaluation of service quality accordingly. As satisfaction with the service or product is superimposed, higher service quality evaluations are formed, indicating that satisfaction affects service quality. Bitner & Hubbert (1994) argued that customers' perceptions of service quality are determined by continuous consumption. Bitner & Hubbert (1994) argue that customers' perception of service quality is an emotion that arises through continuous consumption and that the accumulated satisfaction determines the overall evaluation of service quality.

In summary, There is no consistent, definitive research on the relationship between service quality and customer satisfaction, but most scholars prefer the first type of view, they believe that the scope involved in service quality generally includes only service factors, while the scope involved in customer satisfaction is broader, including not only service factors, but also product price, quality, and personal factors, etc. Therefore, they agree with the first view. Most people buy houses and choose properties for a limited number of times, and since people are generally not easy to change their living communities and reduce the comparison between similar property services, the first type of view is more suitable. This paper also examines property service quality by treating it as an antecedent variable, and then identifies important



factors that affect owners' satisfaction.

## **2.7 Property service quality evaluation system**

In this paper, the complete SERVQUAL model and SERVPERF model are referred to when constructing the property service quality evaluation system. after analysis and screening, Parasuraman et al. (1988) By examining and studying four service industries, such as credit card, banking, securities trading, and product repair and protection, they tried to explore the commonality of service The results showed that service quality is composed of the following five elements and the overall includes five dimensions, which are tangibility, reliability, responsiveness, assurance, and empathy.

### **2.7.1 Tangible**

For the property category, its connotation can be summarized as the perceived quality of the property company's staff, equipment, and the space it serves to the owner. Specific indicators include (Parasuraman et al,1985,1988,1991,1994). Parasuraman et al (1994) pointed out that tangential interest has the same importance as empathy.

Tangible items include physical facilities, equipment, and a list of service personnel. Its components are

1. the availability of modern service facilities.
2. attractive service facilities.
3. the employees have neat clothing and coats.
4. the company's facilities match the services they provide

### **2.7.2 Reliability**

Reliability refers to the ability of property companies to fulfill their promises and ensure the reliability of their services. Property companies provide customers with complex services such as security, cleaning, landscaping and maintenance of building facilities, and the reliability of the property affects the daily life of owners. Specific indicators include (Parasuraman et al,1985,1988,1991,1994). Lam (2002) considers reliability to be the most important of the five dimensions. Reliability means the most basic quality assurance in the service industry and is the most perceptible part to customers.

Parasuraman et al (1985) elaborated that reliability means that the organization performs a service correctly and in a timely manner and strives to fulfill its commitments.

1. What the company promises to the customer is completed in a timely manner
2. The ability to show concern and help when the customer is in trouble.
3. The company is reliable.
4. The ability to deliver promised services on time.
5. The relevant records are correctly recorded.

### **2.7.3 Responsiveness.**

Responsiveness means that when the owner encounters difficulties and needs help, the property company can quickly and effectively help the owner solve problems and provide timely and considerate services (Parasuraman et al,1985,1988,1991,1994).

Responsiveness refers to the disposition to assist customers and improve service levels quickly (Parasuraman et al,1994). The part things are:

- 1.They cannot be expected to tell customers the punctuality of service delivery.
2. It is unrealistic to expect them to provide prompt service.
3. Employees are not always willing to help customers.

4. Employees are too busy to provide immediate service to meet the customer's needs.

#### **2.7.4 Assurance.**

Assurance means that the staff of the property company, such as security guards, housekeepers, plumbers, electricians, etc., have their own certain professional ability and knowledge and experience, with the aim of enhancing the owner's trust in the property service staff. Specific indicators include (Parasuraman et al,1985,1988,1991,1994). Researchers have different views on assurance, Gronroos (1998) arguing that assurance should be ranked first and in Parasuraman et al (1994) that assurance should be ranked fourth, and in general, assurance implies the ability of service personnel to provide a friendly, courteous, and competent service.

Assurance refers to an employee's knowledge, courtesy, and ability to express trust and honesty(Parasuraman et al,1985,1988,1991,1994). Its components are

1. employees are trustworthy.
2. customers feel at ease when engaging in transactions.
3. the employee is courteous.
4. Employees can receive reasonable support from the company to provide better service.

#### **2.7.5 Empathy**

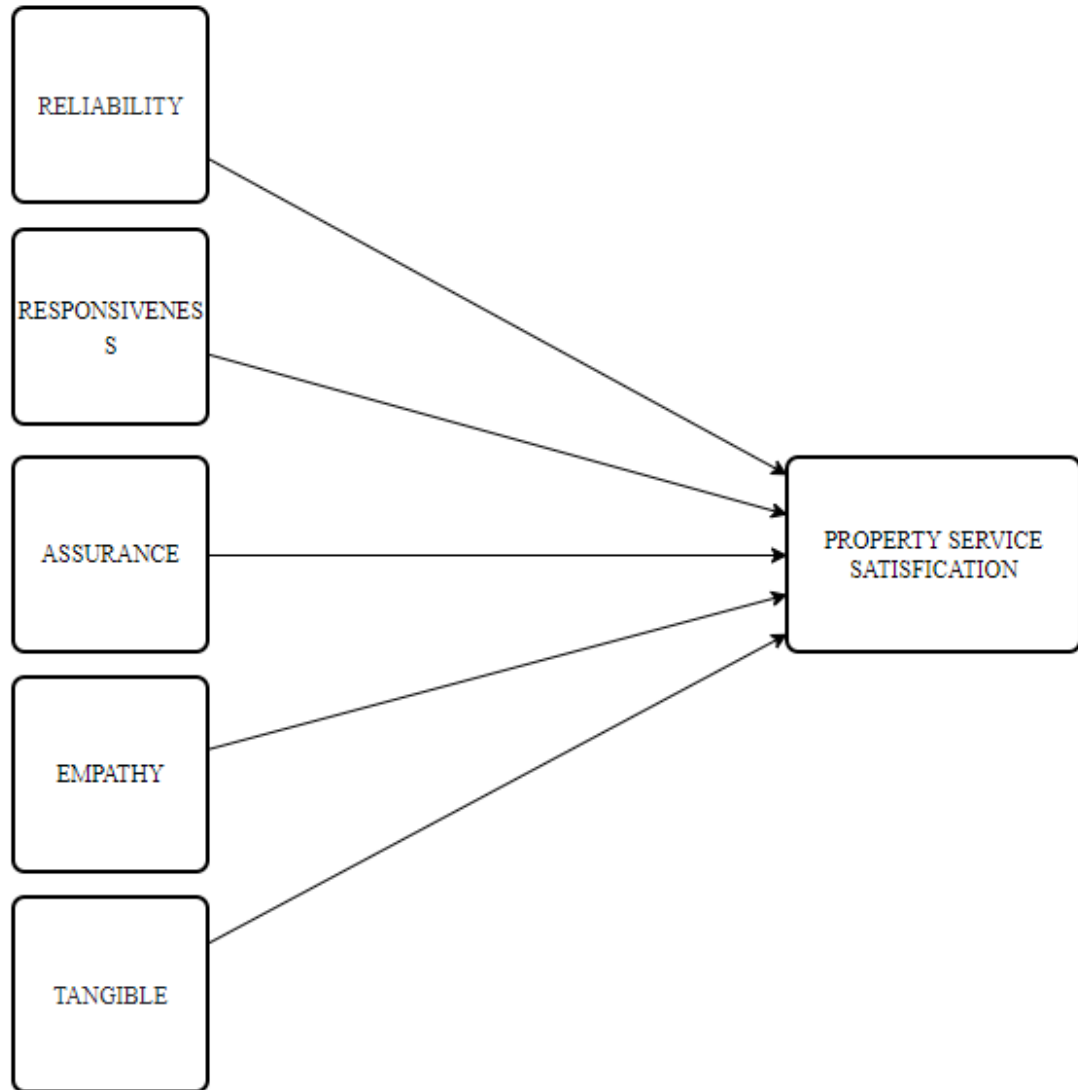
Empathy means that the service staff can care about the owners' daily life and provide them with personalized services. In the process of providing services, owners should be given enough attention to provide idiosyncratic services according to their different needs, so that customers feel respected in the process of receiving services, specific indicators include (Parasuraman et al,1985,1988,1991,1994).

Empathy refers to caring and providing personalized service to customers. Its component items are.

1. The company does not offer individual customer service.
2. Employees do not take care of customers individually.
3. Employees cannot be expected to understand customer needs.
4. The company does not put the customer's interests first.
5. The company does not offer service hours that meet the needs of all customers.

## **2.8 Proposed Theoretical Framework**

Figure 2.1: Theory Framework in this Research



Based on the theoretical model, we derive the following hypothesis.

H1: The Reliability dimension of property service quality has a significant positive impact on resident's satisfaction.

H2: The Responsiveness dimension of property service quality has a significant positive impact on resident's satisfaction.

H3: The Assurance dimension of property service quality has a significant positive impact on resident's satisfaction.

H4: The Empathy dimension of property service quality has a significant positive influence on resident's satisfaction.

H5: The tangible dimension of property service quality has a significant positive impact

on resident's satisfaction.

## **2.9 Conclusion**

In general, this chapter begins with definitions of terms and concepts relevant to this study. Then the main issues of property management in Chongqing are described. After that, a survey and review of past literature and studies are asked. The independent and dependent variables of this study are explained, as well as their applications, and then they are elaborated. At the end, the theoretical framework is described and explained, and the five hypotheses of this study are presented, and the Theoretical Framework in this Research is established.

## CHAPTER 3 METHODOLOGY

### 3.1 Introduction

With the theory of customer satisfaction becoming more and more formed and stable, it has been increasingly developed to public products from its early application to enterprise management. At present, there are some achievements in the research of customer satisfaction in property management in China and abroad, but they are limited to commercial houses, office buildings or shopping malls, and less involved in public housing such as public rental housing. Because of its characteristics, public housing is different from traditional commercial housing, and tenants do not have much room for choice. This paper introduces the index system of property management satisfaction measurement into the property management of public rental housing, hoping to provide some reference suggestions for the study of public rental housing.

In this paper, the survey was conducted in July 2022 by distributing questionnaires remotely to the tenants of three earliest public rental housing estates in Chongqing, namely "Min xin jia yuan", "Kang Zhuang mei di" and "Min an hua fu". The property management companies in the above communities have the following four characteristics: a wide range of services, a large resident population, more complete facilities, and a wide variety of services.

#### 3.1.1 Sample Overview

Chongqing's public housing is the most built and houses the largest number of residents in China. The earliest phase of public rental housing includes: "Min xin jia yuan", "Kang Zhuang mei di" and "Min an hua fu", At the same time, the property management mechanism is relatively perfect, and the credibility of the research will be higher, while the sample size is

also more adequate. Through the questionnaire survey, the questionnaire data will be compiled, and then the fuzzy comprehensive evaluation will be conducted, and the evaluation results will be analyzed to provide suggestions for the construction and improvement of public housing property management.

Min xin jia yuan is in the plot south of Yuan yang Outlet in the Northern New Area of Chongqing, which is a modern high-rise elevator housing complex with 20-33 floors and a total designed construction area of 1.08 million square meters and is a famous public rental housing project in Chongqing. The project broke ground for construction on February 28, 2010 and was fully completed in 2012. The project, with 54 residential buildings, has about 17,700 sets. The house types are single room packages, one room, one hall, two rooms and one hall and three rooms.

Kang zhuang Mei di, also known as Da zu lin public housing, is the second public housing community in Chongqing to begin construction, which started on March 25, 2010. "Located next to the main road of Jintong Avenue, Kang Zhuang mei di public housing has a total investment of 3.616 billion yuan, covers an area of 53.5 hectares, and has a total construction area of about 1.2 million square meters, with more than 50 high-rise elevator buildings enclosed in a "7" shape and a floor area ratio is 3.49.

Min an Hua fu, which started construction on May 22, 2010, is located on the east side of Fugai Road in Huayan District, Jiulongpo District, Chongqing, with 54 residential buildings and a total construction area of 1.25 million square meters, about 19,200 sets, and 2 kindergartens (about 13,000 square meters), 1 elementary school (about 10,000 square meters), community management and commercial buildings. Among them, the area of commercial buildings is about 56,000 square meters, and there are more than 2,100 parking spaces.

### **3.2 Research Design**

The questionnaire consists of three parts, the first is some basic information about the personal



situation of the respondents, containing gender, average income, age, etc.; the second investigates the questions based on five dimensions of SERVQUAL; the third part, as in -depth questions of the five dimensions, refers to Tangibility, reliability, responsiveness, assurance, and empathy. has a total of 70 questions. The answers to the questionnaire are based on seven levels, from 1 to 7. The 7-level scale is a more refined version of the 5-level scale, divided into "very disagreed, disagreed, relatively disagreed, average, relatively agreed, agreed, and very agreed".

### **3.2.1 Quantitative Research**

Quantitative research, or data quantifiable research, is a method of quantitative representation of data through statistical analysis, that's a studies approach and system of expressing troubles and phenomena in quantitative terms, after which analyzing, testing, and decoding them to acquire meaning (GOODWIN & GOODWIN, 1984). Quantitative research evaluates and analyzes phenomena and is a kind of research that speaks with integrated data from multiple samples, and answers, "How much", not "Why". Its core features are large sample size, structured questions and answers, "how much" is measured, and the core elements are numbers and statistics. Data mining for quantitative research requires specialized tools, and the techniques used in these tools can also form their own discipline. Often, quantitative research does not stand alone in a real research project, and once a brand new scientific research is considered, quantitative research is usually preceded by acceptable qualitative research, and typically qualitative research is placed at the rear finish to clarify the results obtained from quantitative analysis.

### **3.3 Data Collection Method**

This research is based on a questionnaire survey of residents from three public rental housing

communities in Chongqing. The non-probability sampling method of convenience sampling is used as it is easier and convenient. The respondents are not confined to any race, gender, ethnicity, or culture. The amount of sample size is expected to be 300, which are randomly distributed to respondents through online platforms such as WeChat, QQ and email. 390 questionnaires were sent out, 311 were returned, of which 309 were valid, and the number of valid questionnaires met the criteria for model analysis.

This paper focuses on property service quality and owner satisfaction, and the measurement of these two quantities is highly subjective, so the selection of a reasonable survey sample is an important prerequisite to ensure that the results are true and reliable.

At the same time, to avoid invalid questionnaires from affecting the measurement results, invalid questionnaires are therefore eliminated. In determining the invalidity of the questionnaire, the following criteria are used.

(1) The same options were selected for 7 consecutive questions or there were missing answers.

(2) The time taken to complete the questionnaire is too short (less than 1 minute to complete the questionnaire).

The questionnaires that meet any of the above criteria are judged as invalid.

### **3.3.2 Data Analysis Methods**

Statistical analysis is a common method used to analyze and process data, and the author used SMARTPLS statistical software to analyze and process the data in the study. Algorithm results are directly available in Cronbach's alpha, convergent validity, AVE, discriminant validity, and in SMARTPLS Bootstrapping is a non-parametric procedure that allows testing the statistical significance of various PLS-SEM results, such as path coefficients, Cronbach's alpha, HTMT, and  $R^2$  values.

### **3.4 Research Instrument**

Quantitative research is a research method that uses realistic data obtained through highly structured questionnaires (GOODWIN & GOODWIN, 1984) and draws conclusions through statistical analysis, modeling, etc. The general direction includes various types of questionnaires, A/B tests, and to some extent big data analysis. In practice, the most used quantitative research method is the "questionnaire survey method", which collects information from a large sample size of users to produce data results with confidence.

#### **3.4.1 Survey Questionnaire**

Survey research is the most basic tool for all quantitative outcome research methods and studies (Wilkinson & Birmingham, 2003). Survey research is the most basic tool for all quantitative outcomes research methods and studies (Wilkinson & Birmingham, 2003). intercept surveys, etc. All organizations, big or small, want to know what their customers think about their products and services, how new features are evolving in the market, and other such details. of themes facilitate the generalization of the results; Convenience, high degree of automation in the data collection process, digital and mobile devices allow respondents to take the survey anywhere at the same time and get the results quickly; Objectivity and precision, the data come from closed information and are not subject to human intervention or the subjective influence of the researcher, so there is less Variables and more objectivity (Wilkinson and Birmingham, 2003).

#### **3.4.2 QUESTIONNAIRE DESIGN**

According to the needs of the study, this questionnaire was distributed to the residents of three communities in China through Tencent questionnaires, and Google questionnaires and Microsoft questionnaires were not used in this case because of network limitations. The questionnaire was in Chinese and divided into three sections, A, B AND C.

First, section A includes 11 questions, which are designed to investigate the basic information of the respondents, including age, gender, income, hometown, and the basic information of Chongqing, where the questionnaire was administered, to ensure the authenticity of the respondents.

Section b is based on SERVQUAL's five dimensions and set of questions, respectively Tangibility, reliability, responsiveness, assurance, and empathy, a total of 37 questions, is based on 7-Points Likert the measurement questions on the 7-Point Likert Scale, from 1 to 7, represent the seven levels of strongly disagree to strongly agree.

Then, section c also uses the 7-Point Likert Scale Measurement questions. It is based on the four dimensions of Place Identity, Place Dependence, Place Affect, Place Social Bonding to set questions (Chen et al. 2018; Hesari et al. 2018; Song, et al. 2019) for a more subjective observation of the respondent's underlying situation.

### 3.4.3 Variables and Respective Measurement Statements

Table 3.0 Measurement Statements

<b>Latent Variable</b>	<b>Measurement Statements</b>
SERVQUAL – Reliability (6 items)	Property management firm maintains a good reputation
	Property management firm has high quality references from previous clients
	Property management firm maintains an open and honest relationship with residents

		Property management firm shows a sincere interest in solving problems confronted by the residents
		Property management team promises to do something by a certain time, they will do so
		Property management services are done right first time
SERVQUAL Responsiveness (6 items)	–	Property management team informs resident exactly when the work will be carried out
		Property management team responds promptly to resident’s requests and problems
		The property management team is always willing to help
		The property management team is flexible to accommodate variation
		The property management team develops a system to attend to complaints, immediately.
		The property management team accords priority to complaints by residents.
SERVQUAL Assurance (5 items)	–	The property management team has staff whose behavior instils confidence in residents
		The property management team has competent staff to perform technical duties
		The property management team has staff who have the knowledge to answer resident’s questions
		The property management team has staff who are consistently courteous with resident
		The property management team has staff available to cover inquiries of residents after working hours
SERVQUAL Empathy (5 items)	–	The property management team has staff to give individual attention to resident
		The property management team tries to understand the general requirements by resident
		The property management team has the resident’s best interests at heart
		The property management team understands the specific needs of resident

	The property management team is always contactable
SERVQUAL – Tangible (6 items)	The property management team has in-housed or external technical expertise
	The property management team has a motivated and united workforce
	The property management team possesses the required skill and knowledge
	The property management team has up-to-date equipment including IT support
	The property management team has visually appealing physical facilities
	The property management team has innovative design and reputation methods in handling residents' complaints.
Residence Satisfaction (4 items)	I am absolutely satisfied with my life in this residence
	I am willing to live in this residence for a long time
	If I decide to move, I would like to live in a similar residence
	I would recommend this place to a friend of mine searching for a new place
Resident's Satisfaction on PM Services (5 items)	Overall, I am happy with the service provided by the property management firm that managing my residence
	Overall, I am satisfied with the service of the property management firm
	I am likely to recommend the property management firm to my friends and relative whose residence are looking for property management services
	I am satisfied that the services delivered by the property management team is meeting my expectation
	My interaction with the property management team is very satisfying.

Total items: 37

### 3.5 Data Analysis

This study is planned to use a random questionnaire form, based on the questionnaire distribution, the application of SMARTPLS to enter the data of the valid sample in the returned paper to form a database, and this paper adopts composite reliability, convergent validity and discriminant validity and other statistical methods.

In terms of the composite reliability, it will have a value between 0 and 1, where a value between 0.7 and 0.9 is considered positive because it shows the reliability of internal consistency (Sekaran & Bougie, 2016).

Descriptive statistics analysis, which is a basic analysis of the characteristics of the sample population and variables. The frequency, concentration trends, and distribution of the data can be analyzed by using statistical software, and the results can be visualized by drawing statistical graphs. The data collected from the questionnaires were analyzed after sorting the sent questionnaires and pre-processing the data (Bader, 2019). This analysis method enables to understand the satisfaction of the public with the property management of public rental housing in Chongqing.

Convergent validity was assessed based on external loadings, indicator reliability, and average extracted variance (AVE). External loadings must be greater than 0.7; indicator reliability should not be less than 0.708; and AVE should exceed 0.5 (Hair et al., 2014; Fornell, & Larcker, 1981).

Reliability analysis is an analytical method that analyzes the collected information to examine whether it is credible and reliable, and its measure is the reliability coefficient (Sekaran & Bougie, 2016). Usually, most people use Likert scales when designing questionnaires. After designing the questionnaire and selecting the respondents to distribute it, the quality of the returned questionnaires often varies due to the respondents' personal situation and time and place. This is where the method is needed to make a comprehensive consideration of the smoothness and consistency of these data, to analyze whether the data surveyed are the true intentions of the subjects, whether the results are true responses, and whether the results are reliable (Sekaran & Bougie, 2016). In this thesis, Cronbach's alpha coefficient reliability analysis was used in the analysis to examine whether the data obtained were credible and

reliable. It is generally accepted that if the reliability coefficient of the examined data exceeds 0.7, then the data is more credible, and the higher the coefficient the more credible the data obtained from the survey. Validity analysis is to examine whether the questionnaire designer considers the question comprehensively when designing, whether the questions in the questionnaire are relevant, whether the predicted hope data are measured, i.e., the accuracy of the questionnaire, whether it can reflect the measured questions and the true situation, as well as the perceptions of the respondents, i.e., the validity of the questionnaire. The analysis examined whether the respondents were able to clearly understand the purpose and intention of what the questionnaire was trying to investigate, and only if this condition were met would the study be able to reflect the full and true picture. The value after the test is between [0, 1] (Saunders et al., 2012), the larger the value the higher the validity, and when the value is greater than 0.5, the questionnaire design is reasonable and valid.

Analysis was conducted to try to understand which factor has a significant effect on property management satisfaction to suggest improvement strategies. Correlation analysis is a method to study whether there is a correlation between variables. In the study, a variable is not influenced by only one other variable factor, but may also be influenced by other variables, resulting in changing values. And there will be one of these variables that will significantly affect the value of that variable, and the high correlation coefficient and strength of the relationship between these two variables indicates a high degree of closeness between them as well. This method can be used to visualize the relationship between the variables in a scatter plot and then to detect it. When the coefficient is greater than or equal to 0.5, the two show a significant correlation and this result can be accepted (Sekaran & Bougie, 2016). In this paper, the relationship between the dimensions of property management satisfaction is analyzed to understand which factor has a significant impact on the quality of property management in order to propose improvement strategies.

HTMT (heterotrait-monotrait ratio), which is the ratio of between-trait to within-trait correlation. Henseler et al. (2015) proposed the HTMT and suggested that if the HTMT value is higher than 0.90 it indicates poor discriminant validity. Gold et al. (2001) and Teo et al. (2008)



also used the HTMT less than 0.9 as the Clark & Watson (1995) and Kline (2011) adopted a more stringent criterion of less than 0.85.

The t-test is one of the simplest statistical methods for assessing statistical differences between up to two different samples. It is a statistical tool used to assess the difference between the means of variables from up to two samples. The variables must be quantifiable, such as height, yield, weight change, etc. The t-test reflects whether the difference you observe is "significant" based on the expected level of significance. t-test uses a t-distribution to assess the expected level of variation. t-test results,  $p > 0.05$ , can be considered A no difference between the two overall means the difference between the means of the two samples is not significant.

Goodness of fit test is to test the prediction models that have been made and compare the degree of agreement between their prediction results and the actual situation. The magnitude of the R-squared error means how well the model fits. The R-squared error ranges from 0 to 1. The closer the value is to 1, the better the fit of the model.

### **3.6 Conclusion**

This chapter takes the SERVQUAL scale as the main evaluation basis, combines the actual survey and previous research, and further improves the evaluation index system by amending alternative indicators through pre-survey, and finally determines 37 indicators in 5 dimensions. The questionnaire survey takes urban people in Heilongjiang province as the research object to obtain data, in the form of a random questionnaire survey, and since questionnaire distribution, SMARTPLS is applied to enter the data of the valid samples in the returned papers to form a database, and this thesis adopts descriptive statistics, reliability validity analysis and other statistical methods for statistical analysis.

## **CHAPTER 4 FINDINGS AND DISCUSSION**

### **4.1 Introduction**

In this chapter, after data analysis based on the data obtained from the questionnaire, necessary elaborations and interpretations will be made, and the data and results will be presented in appropriate tables and graphs.

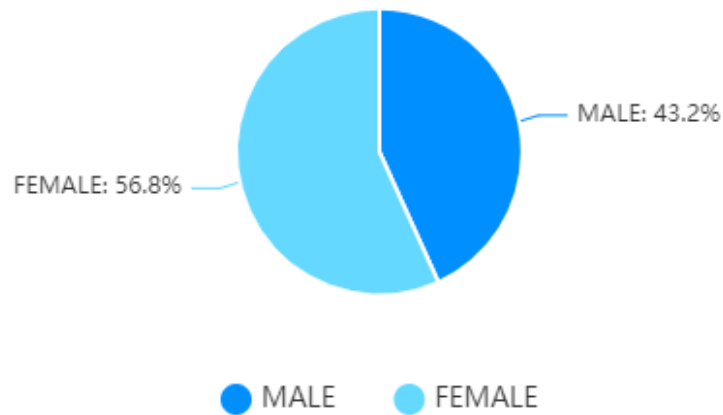
### **4.2 Descriptive Statistical Analysis**

In the questionnaire survey conducted in this paper, all the basic information of the respondents has a large span, no matter age and education level are very different, which means that the data obtained from this questionnaire survey are more realistic and This means that the data obtained from this questionnaire is more realistic and effective. On the personal information of the survey respondents.

#### **4.2.1 Gender**

In terms of gender, 43.2% of the respondents were male, total 134 respondents and 56.8% were female, total 176 respondents. The number of female respondents was higher than that of male, but the reason for this could not be determined whether it was related to the high motivation of women to participate in questionnaires.

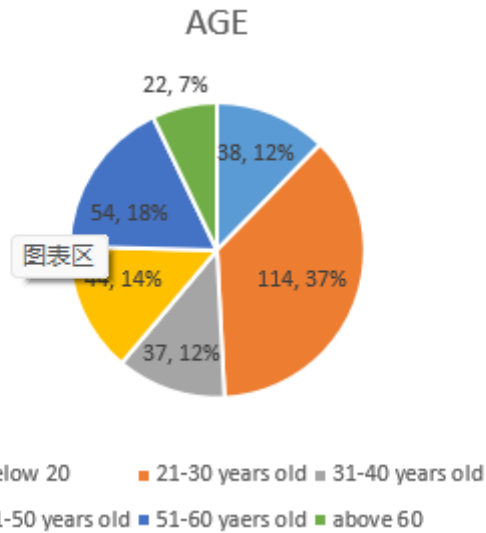
Figure 4.0 Respondents' Gender Distribution



#### 4.2.2 Age

In terms of the age group of the sample, the questionnaire was divided into 5 classes, with 12% of respondents aged 20 and below, totaling 38; 37% of respondents, aged 21-30, totaling 114; 12% of respondents aged 31-40, totaling 37; 14% of respondents aged 41-50, totaling 44; 18% of respondents aged 50-60 and above, totaling 54; 7% of respondents aged 60 and above, totaling 22. In terms of the age group of the sample, the highest proportion of the sample was between 20-30 years old, with 37% respectively.

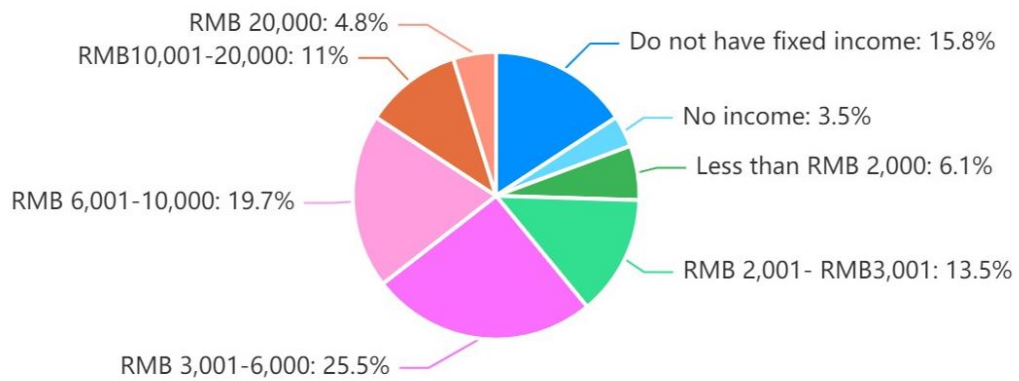
Figure 4.1 Respondents' Age Distribution



### 4.2.3 Income

In terms of the monthly income of the sample, the questionnaire was divided into 8 levels, namely Do not have fixed income, 49 respondents, 15.8%; No income, 11 respondents, 3.5%; Less than RM2,000, 19 respondents, 6.1%; RM2,001-RM3,000, 42 respondents, 13.5%; RM3,001-RM6,000, 61 respondents, 25.5%; RM10,000 - RM20,000, 34 respondents, 11%; More than RM20,000, 15 respondents, 4.8%.

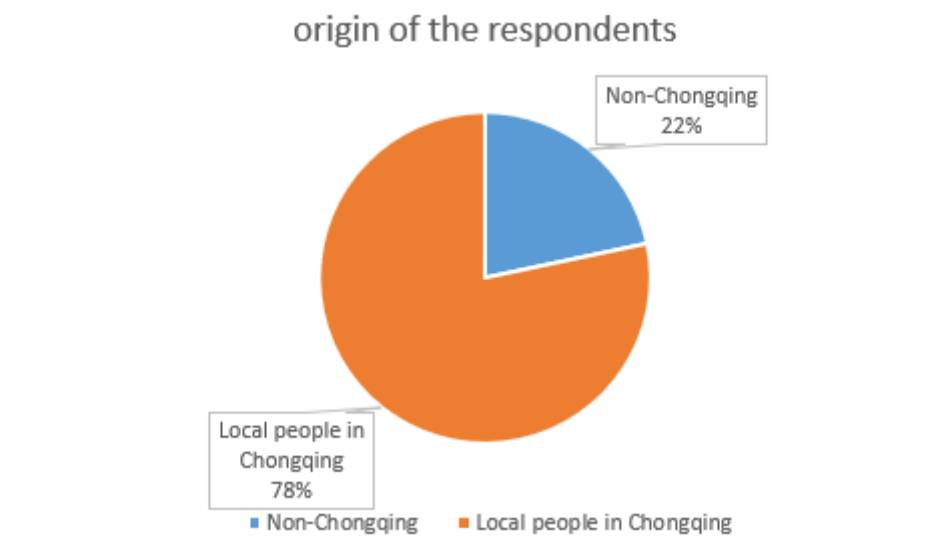
Figure 4.2 Respondents' Income Distribution



#### 4.2.4 Origin of The Respondents

In terms of the origin of the respondents in the sample, most of the respondents were Chongqing locals, with a total of 242 respondents, accounting for 78%, and 67 non-Chongqing people, accounting for 22%. The number of respondents who are Chongqing locals is higher than that of non-Chongqing people, and its distribution belongs to the basic situation of respondents.

Figure 4.3 Respondents' Origin of the respondents Distribution



#### 4.2.5 Basic Information in Chongqing

Respondents' basic information is divided into 3 sections: how they stayed in Chongqing, how many years they have stayed in Chongqing, their current rental plan, their future, and the reasons for staying in Chongqing.

The reasons for staying in Chongqing are: Working opportunities; Looking for better opportunities for my children; Following family members who move to here; I am here since my childhood.

How long have you been in Chongqing, is divided into: Less than 1 year; More than 1

years but less than 5 years; More than 5 years but less than 10 years; More than 10 years.

Current rental plan is divided into: Less than 1 year; 1 - 2 years; More than 2 years but less than 5 years; More than 5 years.

Future plans are divided into: Yes, I plan to move out within 1-2 years' time; Yes, I plan to move out within 3-5 years' time; No, I wouldn't move out within short period of time, but, no, I wouldn't move out within short period of time, but, maybe someday in the future; No, I don't have the intention to move out.

Table 4.0 Table of Basic Information In Chongqing

The reasons for staying in Chongqing		
Working opportunities	136	43.9%
Looking for better opportunities for my children	31	10%
Following family members who move to here	39	12.6%
I am here since my childhood	104	33.5%
How long have you been in Chongqing?		
Less than 1 year	33	10.6%
More than 1 years but less than 5 years	65	21%
More than 5 years but less than 10 years	48	15.5%
More than 10 years	164	52.9%
How long will you expected to stay at this residence?		
Less than 1 year.	15	4.8%
1 - 2 years	35	11.6%
More than 2 years but less than 5 years	52	16.8%
More than 5 years	208	67.1%

Will you move to other places within the following time period?		
Yes, I plan to move out within 1-2 years' time.	28	9%
Yes, I plan to move out within 3-5 years' time.	38	12.3%
No, I wouldn't move out within short period of time, but, maybe someday in future.	104	33.5%
No, I don't have the intention to move out.	140	45.2%

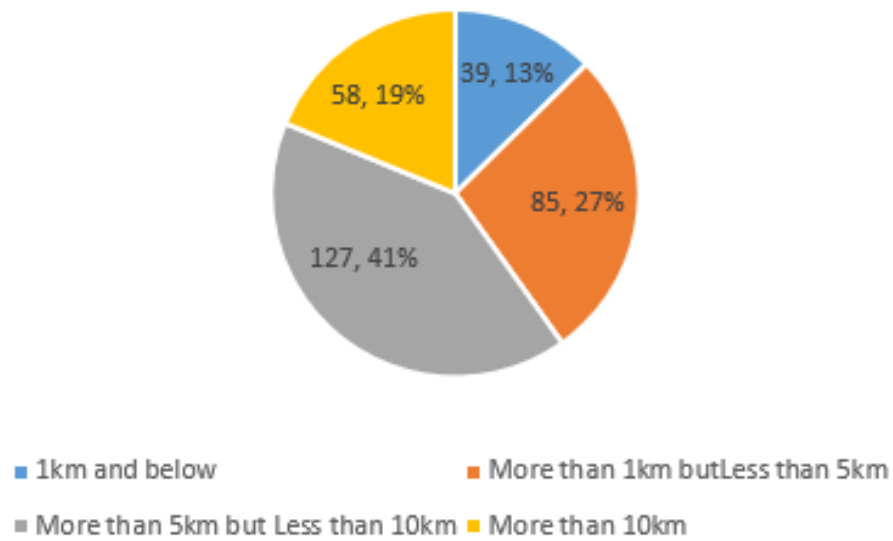
From the data collected, there were 100 Chongqing locals as respondents, accounting for 33.5%, and 136 respondents became tenants for work reasons, accounting for 43.9%. Most of the tenants stayed in Chongqing for up to 10 years, with a total of 164 respondents, or 52.9%. And more than 208 respondents will not leave Chongqing in the next five years at least. Among them, 140 respondents do not have any plans to leave Chongqing.

#### **4.2.6 Current Distance from Downtown Of Chong Qing**

In the questionnaire survey, each respondent was asked about the distance from their current residence to the center of Chongqing, and according to figure 4.5, 39 respondents were at 1km and below (13%); More than 1km but less than 5km were 85 respondents (27%). 127 respondents (41%) were at More than 5km but less than 10km. 58 respondents (19%) for More than 10km.

Figure 4.4 Current distance from the downtown

### Current Distance from the Downtown



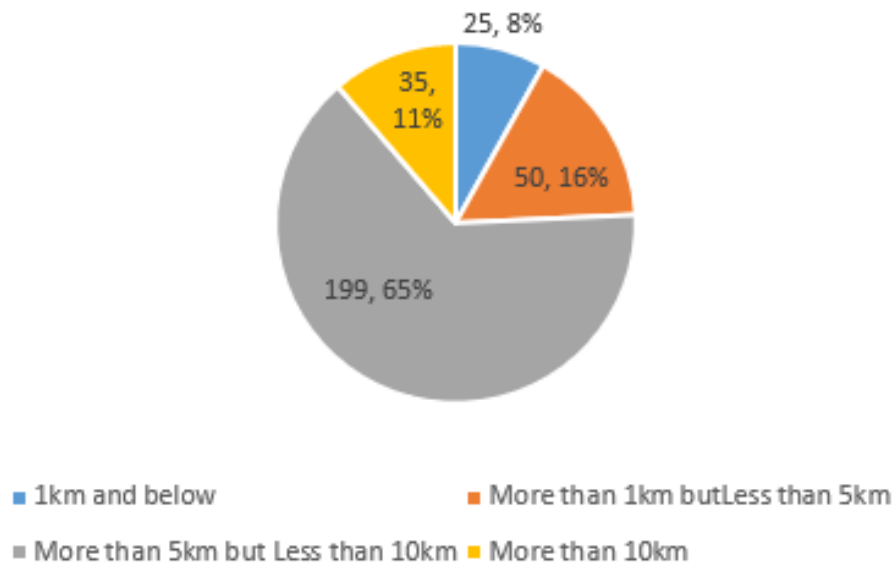
#### 4.2.7 Current Distance from The Company

In the questionnaire survey, according to figure 4.6, 25 respondents were at 1km and below (8%); More than 1km but less than 5km were 50 respondents (16%). 199 respondents (65%) were at More than 5km but less than 10km. 10km for 127 respondents (41%). 35 respondents (11%) for More than 10km.

Figure 4.5 Current distance from the company



## CURRENT DISTANCE FROM COMPANY



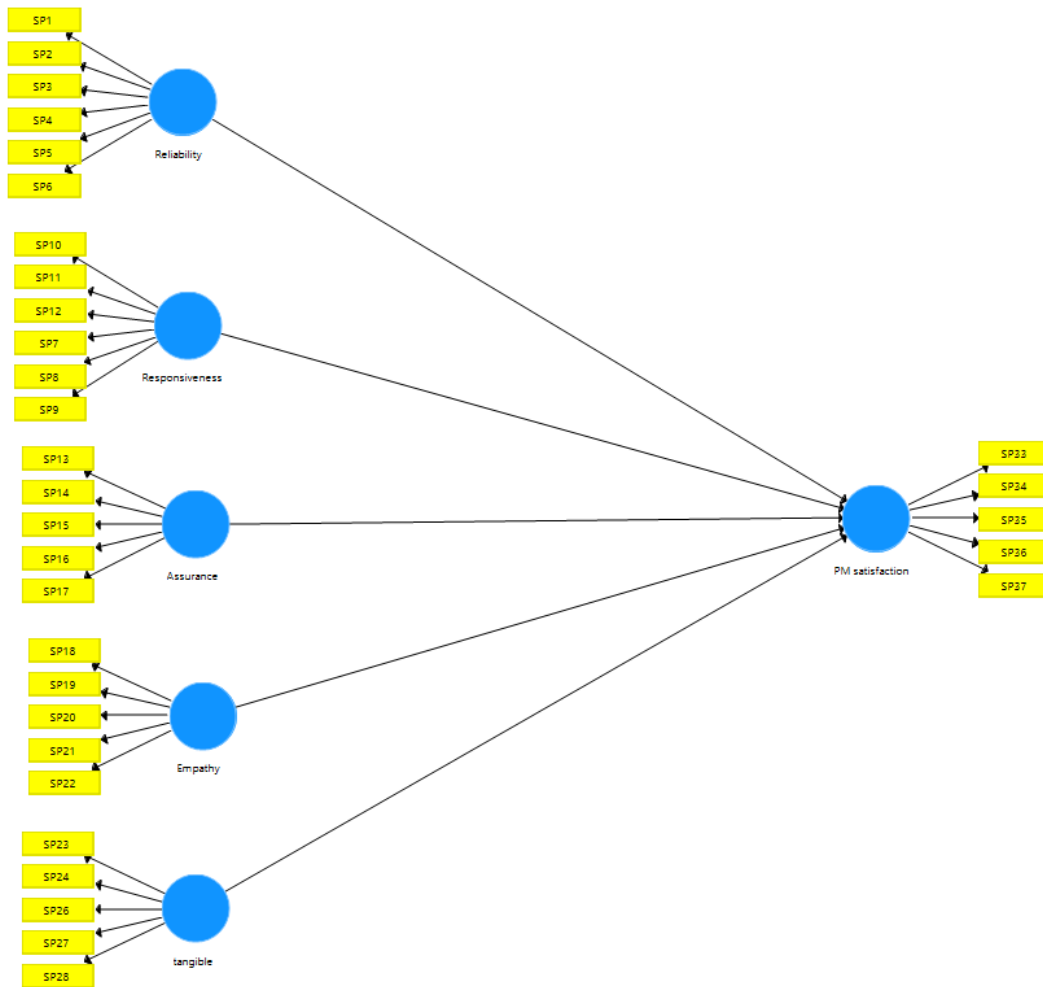
### 4.3 PIs-Sem Analysis

The PLS-SEM for this case was analysis using SMARTPLS, the figure 4.7 shown the Structural Equation Model of 5 dimension of SERVQAUL model to the satisfaction of property management service.

Main job in SMARTPLS:

- (1) Measurement models to test the reliability and validity of the questionnaire and data.
- (2) Structural equation modeling analysis was used to observe the coefficients and significance of the paths between variables.

Figure 4.6 Structural Equation Model



#### 4.3.1 Validity and Reliability Results Of Measurement Model

The AVE is known as the average variance extracted and is used to measure the convergent validity of the model, while the CR is the reliability of a new variable made from the sum of more than one variable for a combined variable. Both are commonly used in convergent validity analysis, where an AVE greater than 0.5 and a CR value greater than 0.7 indicate high convergent validity. Table 4.2 provides the validity and reliability results of the measurement models.

Table 4.1: reliability and validity of measurement model

<b>Variable</b>	<b>Indicator</b>	<b>ITEM IN SURVEY</b>	<b>Outer Loadings</b>	<b>Composite Reliability</b>	<b>AVE</b>
Reliability	Rel_1	SBQ1	0.861	0.946	0.745
	Rel_2	SBQ2	0.860		
	Rel_3	SBQ3	0.858		
	Rel_4	SBQ4	0.878		
	Rel_5	SBQ5	0.872		
	Rel_6	SBQ6	0.849		
Responsiveness	Res_1	SBQ7	0.856	0.955	0.780
	Res_2	SBQ8	0.898		
	Res_3	SBQ9	0.891		
	Res_4	SBQ10	0.898		
	Res_5	SBQ11	0.875		
	Res_6	SBQ12	0.880		
Assurance	Ass_1	SBQ13	0.896	0.944	0.773
	Ass_2	SBQ14	0.894		
	Ass_3	SBQ15	0.887		
	Ass_4	SBQ16	0.862		
	Ass_5	SBQ17	0.855		
Empathy	Emp_1	SBQ18	0.854	0.938	0.753
	Emp_2	SBQ19	0.892		
	Emp_3	SBQ20	0.892		
	Emp_4	SBQ21	0.886		
	Emp_5	SBQ22	0.811		
Tangible	Tan_1	SBQ23	0.880	0.951	0.796
	Tan_2	SBQ24	0.901		
	Tan_3	SBQ26	0.886		
	Tan_4	SBQ27	0.882		
	Tan_5	SBQ28	0.913		
Satisfaction towards Property Management	PMS_1	SBQ29	0.892	0.948	0.786
	PMS_2	SBQ30	0.888		
	PMS_3	SBQ31	0.890		
	PMS_4	SBQ32	0.884		
	PMS_5	SBQ33	0.878		

\* REL-Reliability

RES-Responsiveness

ASS-Assurance

EMP-Empathy

TAN-Tangible

PMS-Property management satisfaction

From the above table, each dimension of property service quality and satisfaction corresponds to the AVE values are all greater than 0.5 and and CR values are all higher than 0.7 which all indicate good convergent validity of the data for this analysis.

A bootstrapping procedure had been performed to further confirm that the HTMT ratio is statistically below 1.0 (Henseler et al., 2015).

Table 4.2 Shown the illustrates the HTMT ratios for the relevant results.

	<b>Assurance</b>	<b>Empathy</b>	<b>MSatisfaction</b>	<b>Reliability</b>	<b>Responsiveness</b>	<b>Tangible</b>
<b>Assurance</b>	0.879					
<b>Empathy</b>	0.894	0.868				
<b>PMsatisfaction</b>	0.814	0.843	0.886			
<b>Reliability</b>	0.843	0.797	0.774	0.863		
<b>Responsiveness</b>	0.901	0.850	0.809	0.874	0.883	
<b>Tangible</b>	0.875	0.902	0.882	0.801	0.819	0.892

#### **4.3.2 Validity and Reliability Results of Structure Model**

Correlation analysis is the study of whether there is dependence between variables, and to explore the direction of correlation and the degree of correlation. The correlation analysis includes scatter diagram and correlation coefficient method. The correlation coefficient method is more intuitive to see the direction and magnitude of correlation, so this paper adopts the correlation coefficient method to conduct the correlation analysis of variables. The correlation coefficient is between -1 and 1, and the positive and negative coefficients are consistent with the direction of correlation between variables, with positive coefficients representing positive

correlation and negative coefficients representing negative correlation, and the larger the absolute value, the stronger the correlation. In order to analyze the influence of property service quality on owners' satisfaction and its degree of influence, this paper first conducts the correlation analysis between control variables and In order to analyze the influence of property service quality on owners' satisfaction and its degree of influence, this paper first conducted correlation analysis between the control variables and the research variables, followed by correlation analysis between each dimension of property service quality and satisfaction, and obtained correlations between the verification variables. After using SMARTPLS software to analyze the correlation between the variables, the significance testing results were obtained in the table 4.3.

**Table 4.3: Significance testing results.**

<b>Path</b>	<b>Path Coefficient</b>	<b>t-value</b>	<b>Hypothesis</b>
H1: REL → PMS	0.060	0.883	Reject
H2: RES → PMS	0.228	2.828*	Supported
H3: ASS → PMS	-0.101	1.029	Reject
H4: EMP → PMS	0.151	1.498	Reject
H5: TAN → PMS	0.600	7.585**	Supported

\*p<0.05; \*\*p<0.001

REL-Reliability

RES-Responsiveness

ASS-Assurance

EMP-Empathy

TAN-Tangible

PMS-Property management satisfaction

### 4.3.3 Coefficient of Determination

The R-squared error ranges from 0 to 1, and the closer the value is to 1, the better the fit of the model. In this case, the R<sup>2</sup> value obtained shows that there is a significant good fit for the model, R<sup>2</sup> value for the model is 0.804. It means that all 5 dimensions of property service quality can explain owner satisfaction well.

## 4.4 Conclusion

In this chapter, through descriptive statistical analysis, validity analysis, reliability analysis, and correlation analysis of the data, it was found that all five dimensions were significantly and positively correlated with the quality of property services, and the fit of the indexes was tested and was as expected.

After the analysis of the data, it is found that the path coefficient of Reliability is 0.060, t-value is 0.883, the path coefficient of Responsiveness is 0.228, t-value is 2.828, the path of Assurance coefficient is -0.101, t-value is 1.029; path coefficient for empathy is 0.151, t-value is 1.498; path coefficient for tangible is 0.600, t-value is 7.585. According to the data demonstrated, H2 and H5 were supported, H1, H3 and H4 were rejected.

This means that tangibility, responsiveness, and empathy dimension of property service quality have a significant positive impact on resident's satisfaction. However, reliability and assurance dimension of property service quality has a significant positive influence on resident's satisfaction

Based on the data analysis, derive the following new hypothesis.

H1: The Reliability dimension of property service quality has a significant negative impact on resident's satisfaction.

H2: The Responsiveness dimension of property service quality has a significant positive impact on resident's satisfaction.

H3: The Assurance dimension of property service quality has a significant negative impact on resident's satisfaction.

H4: The Empathy dimension of property service quality has a significant negative influence on resident's satisfaction.

H5: The tangible dimension of property service quality has a significant positive impact on resident's satisfaction.

# CHAPTER 5 CONCLUSION

## 5.1 Introduction

This paper refers to the findings of past experts and scholars as well as theoretical analysis to put the SERVQUAL model into the survey of public housing property management satisfaction in Chongqing. According to the specific evaluation data

Based on the specific evaluation data feedback, this chapter will continue the discussion from the previous chapter and will further discuss the findings of this study, and the limitations and implications of this study will be explained. Finally, suggestions will be made for the future of public rental housing property management in Chongqing, and general ideas for improvement will be presented from the perspective of the five dimensions that affect public satisfaction.

## 5.2 Findings in Analysis

The subsection will illustrate the relationship between independent variables and the dependent variable. Conduct detailed analysis and evaluation based on specific data.

### 5.2.1 Relationship Between Reliability Level And Property Management Satisfaction.

Based on the results of the data analysis, the current reliability dimension has a negative impact on the satisfaction of public rental housing properties in Chongqing. This indicates that the services provided by the property companies in these areas have fallen short of the standards



expected by the tenants. This indicates that the staff of the property companies are no longer able to fulfill their service commitments to the public, as well as provide reliable guidance services. Therefore, property companies need to invest more human and material resources in this area and should adopt a series of systems and supporting measures to continue to maintain high quality service content and meet tenants' needs.

### **5.2.2 Relationship Between Responsiveness Level and Property Management Satisfaction.**

According to the statistical feedback on the data of responsiveness evaluation index, the Assurance dimension of property service quality has a significant negative impact on resident's satisfaction. Responsiveness refers to the provision of quick and convenient services to tenants and is an important indicator of the quality of property management. For public housing communities, property companies improve their responsiveness to tenants and provide quick assistance to tenants with problems that arise, and these may make tenants more satisfied. Therefore, property companies should pay more attention to the complaints generated by tenants in the process of enjoying property services to facilitate real-time monitoring of problems in property management services and solving them at any time, which will play an important role in improving the quality of property services. At the same time, it is recommended that entity companies establish a property management system to deal with tenants' problems in property management quickly and flexibly, prioritize tenants' complaints, and improve the satisfaction of property management services.

### **5.2.3 Relationship Between Assurance Level and Property Management Satisfaction.**

According to the statistical feedback on the data of the assurance evaluation index, the quality

of property management services of public housing in Chongqing is currently influenced by this, but the satisfaction of the public in this regard is not high. This may be since the attitude, expertise and competence of the property management service personnel in serving the public do not meet the expected standards of the residents. In other words, property companies should ensure the competence of their service personnel, their awareness and the quality of their property management services. Also, property companies need to provide regular training to their staff and conduct performance appraisals on the training results so that they can keep up to date with the latest teaching knowledge and skills and have enough expertise to serve the residents. At the same time, property companies should further train and improve the basic working skills of service staff, such as service attitude, explanation, and language expression, to be polite and friendly, and to listen patiently so that they can cope with various problems well.

#### **5.2.4 Relationship Between Empathy Level and Property Management Satisfaction.**

According to the results of data analysis, the current satisfaction of public housing property management services in Chongqing is influenced by the level of empathy, but tenants' satisfaction in this regard is low, which indicates that property companies do not meet the standards expected by the public in this regard. Empathy refers to the ability to think from the public's perspective in property services, to be empathetic, to think what the public thinks, and to meet the individual needs of residents. Property management companies should pay more attention to the individual needs of residents, try to understand the general requirements of residents, and act in the best interests of residents. At the same time, the property management team understands the special needs of the tenants and meets the individual needs of the tenants mentioned earlier.

### **5.2.5 Relationship Between Tangible Level and Property Management Satisfaction.**

Based on the results of the data analysis, the current tangibles have a positive impact on the satisfaction of property management services. The existing tangibles can meet the needs of the public. Property companies still need to further strengthen the relevant services. Tangible dimension is something that can directly affect the sensory perception of the masses. Therefore, it is necessary to continuously improve and maintain the existing community facilities, such as setting up eye-catching and beautiful reminder signs in the community, setting up instructions for using equipment in public areas, maintaining good environmental hygiene, and issuing uniform work uniforms and work permits for staff, to make the best efforts to bring the value of existing facilities and places into play. At the same time, property management companies should provide more professional technical training to team members to create a positive, united, and collaborative workforce. At the same time, property teams should have innovative designs and credible approaches in handling residents' complaints.

### **5.3 Implications of The Study**

With the accelerated urbanization and expansion of real estate market, property service industry plays an increasingly important role in the modern service industry. To stand out in the fierce competition, property management companies must start from improving the quality of property services, and then enhance customer satisfaction, create a good reputation, and increase their competitiveness in the market. This paper takes property management companies in Chongqing as the research background and tenants in public rental housing communities as the research objects to explore the evaluation of property service quality, the evaluation of tenant satisfaction and the relationship between property service quality and owner satisfaction.

Based on the mature customer satisfaction models in foreign countries, we further improve the satisfaction evaluation model applicable to domestic public housing tenants

according to the actual situation in China, after field research and literature combing method for screening indicators, so as to establish the satisfaction evaluation system of Chongqing public housing tenants and investigate the current situation of satisfaction of Chongqing public housing tenants. The subjective feeling and objective evaluation indexes of tenants' living are added, so as to obtain more comprehensive and objective satisfaction evaluation results, to understand the needs of public housing tenants for different aspects of public housing, to provide ideas and references for improving the quality of public housing and corresponding services, to maintain and continuously improve the indexes for residents' satisfaction, and to improve the factors for residents' dissatisfaction, so that they can operate better in the market.

Also, for the innovation of research perspective. There are many studies on services in China, most of them focus on the satisfaction of financial industry, insurance industry, public utilities, residential service industry, tourism industry, and information and consulting service industry, and there is a lack of relevant information on property management service industry in residential service industry. It is very novel to study the service quality evaluation of urban residential service industry from the practical feelings of public housing tenants. At the present stage, with the increasing scale of public rental housing and the increasing number of years in use, the problem of unbalanced development of public rental housing has become more and more significant, and some outstanding problems are waiting to be solved, As, Wang (2013) elaborates the problems, such as the handling of the relationship between owners' organizations and other organizations and the handover of property management authority, still lack operable regulations, Huang (2004) elaborates to the difficulty of resolving property management disputes through legal means. As well as the fact that property owners are often angry with property companies because of housing quality problems and the failure of construction units to fulfill their promises, they do not trust property companies and are not good at handling relationships (Ho and Shen, 2005). Min Xin jia yuan fully completed in 2012; Kang Zhuang Mei di was started in 2010; Min an Hua fu was the construction was started in 2010. The more the tenants demand for the quality of property management services, These three public housing communities have been put into use for almost a decade, and the problems surfacing

in the properties themselves are increasing. Property management services will naturally decline with the property problems, and in this case, the property companies have not yet developed a good new management plan. In China's first-tier, second tier and other large and medium-sized cities, the demand for public rental housing is far greater than its supply in the face of the high housing costs of ordinary housing for newly employed ordinary residents and migrant workers with stable jobs but low salary levels, and the supply far exceeds the demand. These problems not only affect the quality of life of the tenants and reduce their satisfaction, but also limit the development of the public housing system. Because of this, it is important to investigate the actual problems reflected by the tenants in detail, analyze the causes, and find feasible countermeasures to improve the tenants' satisfaction.

#### **5.4 Limitations of The Study**

This paper has achieved partial results on the evaluation of household satisfaction of public rental housing in Chongqing, but the object of this paper is too single, not fully considering the property management of different regions and different building ages, focusing the research on the three early property districts, the number of studies is not extensive enough, the survey is not comprehensive enough, and the coverage of public rental housing areas is limited.

However, due to the pandemic, this paper did not conduct field research and distribute questionnaires, but distributed virtual questionnaires through an online platform, which did not allow for the audit of respondents like physical questionnaires, and thus the sample size was limited. Moreover, the tenants also experienced a decrease in income or lost their jobs, and changes in work, life, and environment, to a certain extent. The changes in work, life, and environment may also have different effects on the perception of satisfaction with living, so a regular and dynamic survey should be formed. The study should be conducted on a regular and dynamic basis.

This paper mainly focuses on the five dimensions of SERVQUAL, the research method

is not comprehensive enough, the five dimensions of SERVQUAL are widely used in the evaluation of the service industry, With the continuous development of the property industry, People's demand for services is increasing, and the situation of public housing is different from that of ordinary households, so a single study using the SERVQUAL model is not enough.

## **5.5 Recommendations for Future Research**

Throughout this paper, there are certain limitations in the research method, research scope, and research direction, and the future research The future research can be expected from the following aspects.

This paper is relatively single in terms of sample selection, mainly taking tenants of public housing property communities in Chongqing as the survey objects, without fully considering the differences in selective preferences and perceptions of residents between different regions, so the research findings do not fully reflect the current situation of the entire public housing property management industry. Future research needs to improve on the selection of research subjects and further expand the scope of the study.

In this paper, the survey and research on the living satisfaction of public housing tenants, in terms of questionnaire design, the design indexes are mainly through literature review, and the index design is not comprehensive and reasonable. The questionnaire survey lacks comprehensiveness, and the subsequent survey research should conduct separate comprehensive surveys for public rental housing in different areas within Chongqing to increase the sample size and broaden the coverage, to understand the needs of public rental housing tenants more comprehensively in all aspects.

The time of the survey study is relatively special. This year, due to the impact of the new crown pneumonia epidemic, all regions have been strictly managed, and residents' access to the community has been restricted and strictly controlled, and tenants have experienced a reduction in income or unemployment. The survey should be a regular and dynamic study.

Finally, in the subsequent research, the scope of research should be further expanded. The evaluation system obtained from this paper can be applied to public rental housing communities of different regions and levels, and the applicability of the evaluation system can be tested by using these research objects to expand the application scope of the research findings.

## **5.6 Conclusion**

The development of property management services is not only related to people's livelihood, but also reflects the capacity of national governance. Property management services can protect the basic housing rights of tenants as well as meet the basic requirements of tenants for housing. Building a new type of property management service company that can satisfy the public is also a sure way to improve human development. Therefore, it is of theoretical and practical significance to analyse the influencing factors and characteristics that affect the satisfaction of property management and to explore the evaluation index system of property management.

## REFERENCE

- Amérigo, M., & Aragonés, J. I. (1990). Residential satisfaction in council housing. Australian Council of Social Service,
- Bader Almohaimmed. (2019). Internal Service Quality and External Service Quality Using Two Versions of SERVQUAL Scale: An Empirical Evidence from Five Malls in the Capital City of Saudi Arabia[J]. *Business: Theory and Practice/Verslas: teorija ir praktika*,20(20).
- Baharum, Abdul Hadi Nawawi, Zainal Mat Saat. (2009). Assessment of Property Management Service Quality of Purpose-Built Office Buildings[J]. *International Business Research*, 2(1).
- Bitner, M.J, and Hubbert, A.R. (1994). Critical Service Encounters: The Employee's Viewpoint[J]. *Journal of*
- Brown T J , Churchill G A , Peter J P . (1993). Improving the measurement of service quality[J]. *Journal of Retailing*, 69(1):127-139.
- Brown T J , Churchill G A , Peter J P.(1993)proving the measurement of service quality[J]. *Journal of etailing*, , 69(1):127-139.
- Chen, D. H. (2005). Current problems of property management in China and countermeasures to solve them, 2005, Vol. 7, No. 136-137, pp. 2
- Cheng, H., Wei, S., & Wang, X. (2007). Study on Customer Satisfaction of House Property Management Based on Customization. 2007 International Conference on Wireless Communications, Networking And Mobile Computing.  
<https://doi.org/10.1109/wicom.2007.838>
- Chongqing will put 200,000 square meters of public rental housing applications are not restricted by household registration. Gov.cn. (2022). Retrieved 11 August 2022, from [http://www.gov.cn/govweb/jrzg/2010-02/22/content\\_1538537.htm](http://www.gov.cn/govweb/jrzg/2010-02/22/content_1538537.htm).
- Chun-Tat Ha and Xia,J,D(2017). Property Management Service Quality of Shopping Centers in Hong Kong: A Study of Tenant's and Customers' Satisfaction.  
countriesahe example of Nigeria, *Third World Planning Review*, 12(3):261-279
- Crill, S. R., M. E. Bode, and E. W. Morris. (1991). Two tests of the housing adjustment model



of residential mobility. *Housing and Society*.18(3):53 — 64.

Cronin,Taylor .(1992). The Marketing Aspects of Service Quality in Emerging Perspectiveson Services Marketing. *American Marketing*, 22:99-107.

Crompton, J. L., & MacKay, K. J. (1991). Identifying dimensions of service quality. *Journal of Park and Recreation Administration*, 9(3), 15-27.

David K. Tse, Peter C. Wilton. (2006). Models of Consumer Satisfaction Formation

DeCarlo. (1997). Property management. Prentice Hall.

Djebarni, R. and Al-Abed, A. (2000), "Satisfaction level with neighborhood's in low-income public housing in Yemen", *Property Management*, Vol. 18 No. 4, pp. 230-242. <https://doi.org/10.1108/02637470010348744>

FANG, Y, T.(2012). Empirical comparison of customer-perceived service quality evaluation methods to re-discuss SERVPERF and SERVQUAL [J]. *Journal of Ningbo Institute of Technology*, 24(04):53-57.

Ferdin Tnnies.and Socie. (2002). Courier Dover Publications,230-241.

Fomell C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*.1992, 1: 6-21.

Galster,G. and G. Hesser. (1981). Residential Satisfaction:Contextual and compositional correlates,*Environment and Behavior*, 16(November):737-758

Gao, F. P., Huang. W. S. (2002). Property ownership and property management [M]. Beijing: China Legal Publishing House, 2002. 188-194.

Garrod,G.and Willis,K. (1992). Valuing the goods characteristics-an application of the Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of management information systems*, 18(1), 185-214.

GOODWIN, L., & GOODWIN, W. (1984). Qualitative Vs. Quantitative Research or Qualitative and Quantitative Research? *Nursing Research*, 33(6), 378-384. <https://doi.org/10.1097/00006199-198411000-00022>

Gordon. (2000). Cost structure, customer profitability and retention implications of self-

service distribution channels: evidence from customer behavior in an online banking channel[J]. *Management Science*, 56(1):4-24

Gronroos (2000). Relationship between store image, store satisfaction and store loyalty[J]. *Journal of Consumer Marketing*, 2000,32(5/6): 499-512

He, X. R., Shen, L. Z. (2005). Review of typical cases of property disputes [M]. Beijing: Law Publishing House, 2005. 63.

hedonic price method to environment attributes, *journal of environment management*, Vo1.34, No.1:59-76.

Hempel, Donald J. (1977). Consumer Satisfaction with the Homo Buring Process Conceptualization and Measurement. *The Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction Cambridge*[M]. Marking Science Institute. 1977,7-9.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.

Howard John A, Jagdish N Sheth. (1969). *The Theory of Buyer Behavior*. New Year Wiley[J]:27-28.

Hwang, B. G., Krishnankutty, P., Zhu, L., Caldas, C. H., Shounak, A., & Mulva, S. (2018). Improving labour productivity in process construction maintenance and shutdown/turnaround projects. *International Journal of Construction Management*.  
<https://doi.org/10.1080/15623599.2018.1492664>

Indigenous Communities: Undertaken on Behalf of the Western Australian Council

Jiang, A. L. (2004). Research on the coordinated development of urbanization, industrialization and informatization [M]. Beijing: China Earth Publishing House, 2004. 45 – 47

Johnson Michael D, Anders Gustafsson. (2001). The Evolution and Future of National Customer Satisfaction Index Models[J]. *Journal of Economic Psychology*.22: 217-245.

*Journal of Environmental Psychology*, 10(4), pp.313-325

Lam, T.K. (2002). Making sense of SERVQUAL's dimensions to the Chinese customers in

Macau. *J. Market Focused Manag.* 2002, 5, 43–58.

Lee H, (2000). The determinants of perceived service quality and its relationship with satisfaction[J]. *Journal of Service Marketing*,2000, 14(3): 217-231.

Leslie, E., & Cerin, E. (2008). Are perceptions of the local environment related to

Lewin,K. , (1936). *Principles of Topological Psychology*, New York: Mc Graw-Hill.

Li, C. J. (2003). Public and Private Space: A Sociological Consideration of Urban Residential Space [[J]. *Journal of Jianghai Studies*,P 109-112.

Li, D., Chen, H., Hui, E. C. M., Yang, H., & Li, Q. (2014a). A methodology for ex-post assessment of social impacts of an affordable housing project. *Habitat International*, 43, 32–40.

Li,X. (2011) , *Public Rental Housing Development in China* .

Malaysia[J], *Habitat International*, 2010, (34): 18-27.

Malpass P. (2005). Housing and the welfare state. The development of housing policy in Britain[M]. *Marketing*, 58,95-104.

Mohammad Abdul Mohit, Mansor Ibrahim, Yong Razidah Rashid. (2010) Assessment of residential satisfaction in newly designed public low-cost housing in Kuala Lumpur,

Mok, K. H., & Lau, M. (2014). The quest for sustainable livelihoods: Social development challenges and social policy responses in Guangzhou, China. *Social Policy and Society*, 13(2), 239–250.

National Bureau of Statistics, ed. *China Statistical Abstract* (2008). Beijing: China Statistical Publishing House, 2008. 32 - 34.

National Bureau of Statistics. (2022). National Real Estate Development and Sales in January to June 2022. from

[http://www.stats.gov.cn/english/PressRelease/202207/t20220718\\_1886646.html](http://www.stats.gov.cn/english/PressRelease/202207/t20220718_1886646.html)

National Bureau of Statistics>>Census Data. Stats.gov.cn. (2022). Preliminary Accounting Results of GDP for the Second Quarter and the First Half Year of 2022. Retrieved 10 August 2022, from [http://www.stats.gov.cn/english/PressRelease/202207/t20220722\\_1886739.html](http://www.stats.gov.cn/english/PressRelease/202207/t20220722_1886739.html)

Neighborhood satisfaction and mental health in adults? *Preventive Medicine*, (2002) .47(3),

pp. of Social Service for the Department of Family and Community Services[M]. Western  
Oyedokun, T.B. , Oletubo, A. and Adewusi, A.O. (2014) Satisfaction of occupiers with  
management of rented commercial properties in Nigeria. *Property Management*, 32(4), pp.  
284-294. <https://doi: 10.1108/PM-06-2013-0036>

Ozo,A. (1990). *The private rented housing sector and public policies in developing*  
Palgrave Macmillan, MA Mohit,M Ibrahim,RR Yong,MA Mohit.(2010). *Assessment of*  
*Residential Satisfaction in Newly Designed Public Low-cost Housing in Kuala*  
*Lumpur,Malaysia*[J].*Habitat International*1, 34( 1):18-27

Parasuraman A , Zeithaml V A , Berry L L . (1988). *SERVQUAL: A Multiple-Item*  
*Scale for Measuring Consumer Perceptions of Service Quality*[J]. *Journal of Retailing*,  
64(1):12-40.

Parasuraman, Berry, and Zeithaml (1988) - *SERVQUAL: A multiple-tem scale for measuring*  
*customer perceptions of service quality - Journal of retailing* 64 (1) Spring. 12-40

Parasuraman, Berry, and Zeithaml (1991) - *Refinement and reassessment of the SERVQUAL*  
*scale - Journal of retailing* 67 (4) Winter. 420-450

Parasuraman, Zeithaml, and Berry (1985) -*A conceptual model of service quality and its*  
*implications for future research - Journal of marketing* 49 (4) Fall. 41-50

Parasuraman, Zeithaml, and Berry (1994) - *Alternative scales for measuring service quality:*  
*A comparative assessment based on psychometric and diagnostic criteria - Journal of*  
*marketing* 70 (3) Fall. 201-230

Peter Barrett, David Baldry. (2003). *Facilities Management: Towards Better*  
*Practice*[M].Wiley-Blackwell.

Richard E, Suzanne V, Howard R. (2017). *Property Management Competencies for*  
*mamement trainees* [J]. *The Cornell Hotel and Restaurant Administration Quarterly*, 37(4):90-  
96.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6<sup>th</sup>  
ed.). Pearson.

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach*

(7<sup>th</sup> ed.). Wiley.

Shi, W., Chen, J., & Wang, H. (2016). Affordable housing policy in China: New developments and new challenges. *Habitat International*, 54, 224–233.

Shi, W., Chen, J., & Wang, H. (2016). Affordable housing policy in China: New developments and new challenges. *Habitat International*, 54, 224–233.

Sun, X., Wang, C., & Shi, J. (2013). Study on the Influence Factors of Satisfaction Level to City Property Management in China. *Advanced Materials Research*, 709, 695-698.

<https://doi.org/10.4028/www.scientific.net/amr.709.695>

Teo, T. S. H., Srivastava, S. C., & Jiang, L. (2008). Trust and electronic government success: an empirical study. *Journal of Management Information Systems*, 25(3), 99–132

Trigwell J, Barron L. (2000) Childcare Models and Options in Rural and Remote

United Nations Population Division. *World Population Prospects*0. (2019). Total Population of China. from

<https://data.worldbank.org/indicator/SP.POP.TOTL?end=2021&locations=CN&start=1978>

WANG, J. H. (2013). Research on the development strategy of Junzhian Property Management Company [D], Changsha: Xiangtan University

Wei, F. X. (2003). An empirical study on the relationship between customer perceived service quality and customer satisfaction[J]. *Journal of Tianjin Business School*, (01):21-25.

Wei, X. P. (2010). Exploration of property service enterprises' right to request property fees [J]. *Law and Order Series*, 2010, (6): 133.

Wilkinson, D., & Birmingham, P. (2003). *Using research instruments*. Routledge/Falmer.

Xu, M. Y. (2006). Actively building a new type of community neighborhood [f]. *Journal of Inner Mongolia University of Electricity* 5: 2-3.

Xu, S. G. (2010). Some thoughts on the legal issues of property services in China (Master's thesis) [D]. Dalian: Dalian Maritime University, 2010. 12.

Zeithaml, V., Parasuraman, A., & Berry, L. (1990). *Delivering quality service*.

Zeitham Parasuraman Berry. (1998). *Delivering Quality Service: Balancing Customer Perceptions and Expectations*.

# APPENDIX A

## SURVEY QUESTIONNAIRE USE IN THE STUDY



**Universiti Tunku Abdul Rahman**

### **Introduction**

This survey is aimed to investigate the households' satisfaction towards their current residence. To help us to have a better understanding about your view and opinion in relation to your current residence, please take few minutes (10-15 minutes) to complete and return this questionnaire.

Your response will be kept confidential and we will only share the compiled information from many questionnaires we collected. For any suggestion and inquires for this survey, please contact Tang Haoling at Ricardot@lutar.my

**Thank you for your time and your input in this research**

I hereby consent on my voluntary participation in this survey which will be conducted anonymously. (As proposed accordingly by Personal Data Protection Statement - UTAR)

- Yes - proceed to the questionnaire.  
 No - thank you for your time.

---

**Section A: Please tell us more about your current status and experience in Kuala Lumpur by answering the following questions**

1. Where is the origin place before you moving to ChongQing? \_\_\_\_\_

2. How do you end up to stay in ChongQing?

- Working opportunities  
 Looking for better opportunities for my children  
 Following family members who move to here  
 I am here since my childhood

3. How long have you stay in ChongQing?

- Less than 1 year.  
 More than 1 years but less than 5 years  
 More than 5 years but less than 10 years  
 More than 10 years

4. Do you own the premise you currently stay at?

- Yes, I own this property.
- Yes, I own this property with others as co-owner
- No, the house is owned by my spouse
- No, the house is owned by my parents
- No, I rent the property from owner
- Other, please state: \_\_\_\_\_

5. How long will you expected to stay at this residence?

- Less than 1 year.
- 1 - 2 years
- More than 2 years but less than 5 years
- More than 5 years

6. Will you move to other places within the following time period?

- Yes, I plan to move out within 1-2 years time.
- Yes, I plan to move out within 3-5 years time.
- No, I wouldn't move out within short period of time, but, maybe someday in future.
- No, I don't have the intention to move out.

7. In your opinion, please state the distance between your current residence and your working station  
\_\_\_\_\_KM


8. In your opinion, please state the distance between your current residence and the Central City of ChongQing  
\_\_\_\_\_KM

---

**Section B The following statements are related to your opinion towards the property management firm that currently managing your current residence. Please indicate the extent to which you agree or disagree with the following statements.**

**Remarks: There is no correct or wrong answer for the following questions. It simply an opinion from you.**

	Strongly Disagree $\longrightarrow$ Strongly Agree						
	1	2	3	4	5	6	7
1. Property management firm maintains a good reputation	1	2	3	4	5	6	7
2. Property management firm has high quality references from previous clients	1	2	3	4	5	6	7
3. Property management firm maintains an open and honest relationship with residents	1	2	3	4	5	6	7
4. Property management firm shows a sincere interest in solving problems confronted by the residents	1	2	3	4	5	6	7
5. Property management team promises to do something by a certain time, they will do so	1	2	3	4	5	6	7
6. Property management services are done right first time	1	2	3	4	5	6	7
7. Property management team informs resident exactly when the work will be carried out	1	2	3	4	5	6	7
8. Property management team responses promptly to resident's requests and problems	1	2	3	4	5	6	7

	Strongly Disagree  Strongly Agree						
	1	2	3	4	5	6	7
9. The property management team is always willing to help	1	2	3	4	5	6	7
10. The property management team is flexible to accommodate variation	1	2	3	4	5	6	7
11. The property management team develops a system to attend to complaints, immediately.	1	2	3	4	5	6	7
12. The property management team accords priority to complaints by residents.	1	2	3	4	5	6	7
13. The property management team has staff whose behavior instils confidence in residents	1	2	3	4	5	6	7
14. The property management team has competent staff to perform technical duties	1	2	3	4	5	6	7
15. The property management team has staff who have the knowledge to answer resident's questions	1	2	3	4	5	6	7
16. The property management team has staff who are consistently courteous with resident	1	2	3	4	5	6	7
17. The property management team has staff available to cover inquiries of residents after working hours	1	2	3	4	5	6	7
18. The property management team has staff to give individual attention to resident	1	2	3	4	5	6	7
19. The property management team tries to understand the general requirements by resident	1	2	3	4	5	6	7
20. The property management team has the resident's best interests at heart	1	2	3	4	5	6	7
21. The property management team understands the specific needs of resident	1	2	3	4	5	6	7
22. The property management team is always contactable	1	2	3	4	5	6	7
23. The property management team has in-housed or external technical expertise	1	2	3	4	5	6	7
24. The property management team has a motivated and united workforce	1	2	3	4	5	6	7
25. The property management team possesses the required skill and knowledge	1	2	3	4	5	6	7
26. The property management team has up-to-date equipment including IT support	1	2	3	4	5	6	7
27. The property management team has visually appealing physical facilities	1	2	3	4	5	6	7
28. The property management team has innovative design and reputation methods in handling residents' complaints.	1	2	3	4	5	6	7
29. I am absolutely satisfied with my life in this residence	1	2	3	4	5	6	7
30. I am willing to live in this residence for a long time	1	2	3	4	5	6	7
31. If I decide to move, I would like to live in a similar residence	1	2	3	4	5	6	7
32. I would recommend this place to a friend of mine searching for a new place	1	2	3	4	5	6	7
33. Overall, I am happy with the service provided by the property management firm that managing my residence	1	2	3	4	5	6	7
34. Overall, I am satisfied with the service of the property management firm	1	2	3	4	5	6	7
35. I am likely to recommend the property management firm to my friends and relative whose residence are looking for property management services	1	2	3	4	5	6	7



	Strongly Disagree $\longrightarrow$ Strongly Agree						
36. I am satisfied that the services delivered by the property management team is meeting my expectation	1	2	3	4	5	6	7
37. My interaction with the property management team is very satisfying.	1	2	3	4	5	6	7

**Section C The following statements are related to your opinion towards your current residence. Please indicate the extent to which you agree or disagree with the following statements.**

**Remarks: There is no correct or wrong answer for the following questions. It simply an opinion from you.**

	Strongly Disagree $\longrightarrow$ Strongly Agree						
1. I identified strongly with my residence	1	2	3	4	5	6	7
2. I feel commitment to my residence	1	2	3	4	5	6	7
3. I feel that I can really be myself in this residence	1	2	3	4	5	6	7
4. This residence is very special to me	1	2	3	4	5	6	7
5. I feel this residence is part of me	1	2	3	4	5	6	7
6. Living in this residence says a lot about who I am	1	2	3	4	5	6	7
7. My residence is the best place for doing the things that I enjoy most	1	2	3	4	5	6	7
8. As far as I am concerned, there are no better places to be than my residence	1	2	3	4	5	6	7
9. I prefer my residence than others	1	2	3	4	5	6	7
10. I really miss my residence when I am away from it too long.	1	2	3	4	5	6	7
11. The utilities and facilities provided by surrounding neighborhood of my residence are the best	1	2	3	4	5	6	7
12. I could not imagine anything better than the utilities and facilities at my residence.	1	2	3	4	5	6	7
13. I feel relaxed when I am at my residence	1	2	3	4	5	6	7
14. I feel happiest when I am at my residence	1	2	3	4	5	6	7
15. My residence is my favorite place to be	1	2	3	4	5	6	7
16. My residence means a lot to me	1	2	3	4	5	6	7
17. I feel a strong sense of belonging to my residence	1	2	3	4	5	6	7
18. My friends/family would be disappointed if I were to start living in another residence	1	2	3	4	5	6	7
19. If I were to leave this residence, I would lose contact with a number of friends	1	2	3	4	5	6	7
20. I often get involved in local community projects and activities	1	2	3	4	5	6	7
21. There is an intimate relationship between neighbors in this neighborhood	1	2	3	4	5	6	7
22. I enjoy the relationships with my neighbors	1	2	3	4	5	6	7

**Section D: Kindly inform us about your background. Your information will be kept confidential and not detail will be linked to you.**

Gender : Male / Female Age : \_\_\_\_\_

Household Size : \_\_\_\_\_

Highest Level of Education: \_\_\_\_\_

Monthly Income:

- |                          |                          |
|--------------------------|--------------------------|
| <input type="checkbox"/> | Do not have fixed income |
| <input type="checkbox"/> | No income                |
| <input type="checkbox"/> | Less than RM1,000        |
| <input type="checkbox"/> | RM1,001-RM2,000          |
| <input type="checkbox"/> | RM2,001-RM5,000          |
| <input type="checkbox"/> | RM5,001-RM10,000         |
| <input type="checkbox"/> | RM10,000 – RM20,000      |
| <input type="checkbox"/> | More than RM20,000       |

**Thank you for sharing your viewpoints and perceptions.**

