

An Empirical Study on Property Management Mode of Security Housing Community based on Resident Willingness

——A Case from Guangzhou^①

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Keywords: Security housing community; Property management mode; Government-leading mode; Owner committee-leading mode; Service concept

Abstract: Based on questionnaire surveys and interviews in 6 typical security housing communities in Guangzhou, this paper analyzes residents' satisfaction evaluation on property management and their choice willingness of management mode in different security housing communities. On this basis, uses logistic regression model to study the influencing factors on residents' choice willingness of property management mode. Research shows that, the characteristics of households and individuals, residents' housing ownership, real effect of current property management mode have significant effect on choice willingness.

Introduction

Residential communities are the main carriers social integration. The harmonious development is the bases of the social harmonious development. In order to explore the property management modes suitable for security housing communities, on the basis of questionnaires and interviews taken in typical 6 security housing communities in Guangzhou, we have analyzed the current situation of security housing community property management, and based on the selection willingness of the residents on the property management modes, the relevant factors influencing the selection of modes are studied, to provide foundations for the decisions making in the determination of reasonable property management modes for security housing communities.

Review of relevant study documents

As the domestic property management system is of short history, the study range and depth in property management theory and the guidance to well dispose the relationships among different interest bodies, etc., are to be further heightened ^[1]. Currently the study of property management is mainly concentrated in the legal rules establishments of property management, the issues of

management fee delaying, standards and pricing mechanism of property management fees, service levels of property service enterprises and their self-management problems, etc.^[2]. In the management modes, ZHANG Nongke has the idea that the simple and overall guiding mode of management by property service enterprises is basically no longer effective; selectable important management methods are self management by owners or by employed management teams^[3]. Scholars are now paying more and more close attention to the characteristics and modes of security housing community property managements. Mr. Paris et al. have raised their points that due to non-profit making nature of security housing community property managements, the management team members are frequently changed, which may lower the satisfaction of the residents^[4]. After the crash of unit system in China, the analysis of individuals to the unit organizations are weakened, but the situation has not been fundamentally changed, and the circumstances that unit members are relying on their unit organizations are existing in large scale^[5]. As the straitened groups of people of unemployed, disabled, serious disease patients, divorced, etc., are of higher percentages in security housing communities than in other communities, the residents in security housing communities relying on units is mainly represented by the relying mainly on the government authorities and social organizations (such as residents' committees, etc.), therefore the property managements in the communities are combining with the community managements more closely. For this point, LIU Zuyun et al. have suggested the establishments of service oriented professional property management system in security housing communities, and the community management system combining governmental guidance and residents' participations^[6]. Domestic scholars also have raised their relative measures for the security housing communities property management issues; such as providing financial subsidies^[7], resolving the existence and development issues of the security housing property service enterprises by the taxation mechanism^[8]. Some scholars have even made relatively systematical suggestions based on the empirical studies. TAN Jianhui has listed a new mode of security housing community property managements which is under the guidance of the government, involved by the residents, served by the property management companies, and supervised by property management supervising committees^[9]. CHEN Lin et al. have raised their ideas that the government should lead and guide the security housing community property management, strengthen community property asset managements of commercial nature, to realize the sustainable development of the communities, etc.^[10].

Scholars and experts inside and outside China have made the foundations for the study of the security housing community property management modes, greatly promoting the further completion of security housing property managements in China. But the existing researches and studies are mostly discussing on the theoretical tier, while most empirical studies are based on a single community as the object, not so many research and study fruits starting from the selection willingness of the residents and comparing the different property management modes in security housing communities, are presented.

Analyses of selection willingness and influencing factors in the security housing community property management modes

Introduction of situations of the researched communities

Data come from the Guangzhou security housing community property management investigation done in 2011. From the data we have selected 6 security housing communities such as Jinsha community, Tangde community, Tongde community, Jude community, Guocun community and Dapeng community. Such communities have covered all types of security housing communities in different periods in Guangzhou, and the residents have been about 50% of the security housing covered headcount before 2011 in Guangzhou. The researches are made by the methods of questionnaires and deepened visits and interviews. The researches by questionnaires have been done mainly by indoor investigations, supported by visiting street walkers. To assure the

representativeness of the samples, to each security housing community, relevant quota is assigned according to the family quantity and the types of property ownership rights. By site researches of nearly one month, totally 612 copies of questionnaires have been collected and 588 copies of them are effective.

Analyses of factors of property management mode selection willingness

Data and model

On the basis of property management satisfaction degrees and mode selection willingness analyses, we have studied the conditions of life course conditions of the residents in their marriages, ages, incomes, and serious diseases, etc., and the influences of the housing ownership property rights, current property management modes etc., to the selection willingness of the residents. We take the residents' property management mode willingness as dependent variables, combining the modes into two types as "government guided type" and "owner committee or residents guided type", picking up missing values with column-deleting method, totally 115 samples are picked out, and the samples accepted into the model are 473 cases.

As the dependent variable "property management mode" is nominal level variable, government guided mode is set as 1, owner committee or residents guided mode as 0, use logarithm regression statistic model to analyze the influencing factors in the property management mode selection willingness. The formula of that model is:

$$\log f_i = a + \sum b_i X_i \quad (\text{Formula 1})$$

In which $f_i = \frac{p(y_i = 1)}{1 - p(y_i = 1)} = \frac{p(y_i = 1)}{p(y_i = 0)}$, namely the likelihood ratio between the probability of the dependent variable in a case, setting as 1 and that setting as 0, in statistics it is called odds^[32]. Analyzing it with software Stata the results are as shown in Form 1.

Form 1 Logarithm ratio regression analysis of security housing community property management mode selection willingness

Independent variable	model 1		model 2		model 3	
	Coefficient	Odds	Coefficient	Odds	Coefficient t	Odds
Age	0.137	1.147	0.103	1.108	0.153*	1.165
Gender (female = 1)	0.265	1.303	0.197	1.218	0.289	1.335
Marriage						
Not married	-0.844	0.430	-1.042*	0.353	-0.888	0.411
Divorced /widow widower	-0.927	0.396	-1.034*	0.356	-0.742	0.476
Married (reference item)						
Cross item of marriage and gender						
Unmarried female	1.395*	4.036	1.440*	4.219	1.401*	4.058
Widow (Married male = 1)	1.005	2.732	1.048	2.853	0.801	2.229
Family member quantity	-0.020	0.980	-0.0048	0.995	0.0081	1.008
Logarithm of family monthly income	-0.190*	0.827	-0.114	0.892	-0.0546	0.947
Family special situation (Yes = 1)	0.469*	1.599	0.303	1.354	0.470*	1.599
Nature of housing						
Property right security housing, not transferred			-0.346	0.707	-0.429*	0.651
Property right security housing, transferred			-1.274***	0.280	-1.104**	0.331
Low-rental housing (reference item)						
Property community						
Tongde community					0.0322	1.033
Tangde community					-0.723**	0.485
Jude community					0.0722	1.075
Guocun community					-1.024**	0.359
Dapeng community					-1.708***	0.181
Jinsha community (reference item)						
Coefficients	0.740		0.614		0.0196	
Cases	473		473		473	
Log likelihood	-315.14		-310.44		-300.98	
LR chi2	25.37***		34.78***		53.70***	
Pseudo R2	0.0387		0.0530		0.0819	

Double tail test statistics significant degree: *** p<0.01, ** p<0.05, * p<0.1

Note: Ages in the form are sectional figures, divided by 10 years, the incomes and housing areas are continuous variables

Resident individual / family characteristics and property management mode selection willingness

Results from the data show that the important changes of the objects in their life courses have important influences to the property management mode selection willingness. Model 1 shows that the ages are influencing obviously the property management mode selection willingness, the older the residents, the more they hope government guided property management be taken. In the age range, each time increasing by 10 years, the percentage expecting government guided mode increases by 14.7%. For residents of different genders there is gap in the selection willingness. The females have the probability 1.30 times higher than the males for the government guided mode. Those residents of unmarried, and divorced / widows/ widowers are selecting government guided mode as 43% and 39.6% percents of those married residents. When we add the cross over items of genders and marriage status into the models, we find that residents of unmarried, and divorced / widow females are selecting government guided mode as 4.036 times and 2.732 times higher than those of married males. It shows that the low-income residents of unmarried, and divorced / widows females are more expecting for helps from the government.

Family characteristics also are influencing the property management mode selection willingness. Family incomes are influencing the government guided mode selection willingness negatively. It means the higher resident family incomes, the more reluctant to select government guided property management mode. Families with special situations (disabled, serious and mental diseases, etc.) are more expecting for the government guided property management modes, with 1.599 time higher than those families without special situations, and it has passed the significance test. As vulnerable groups, families with special situations and low-incomes, are more in need of helps from the government, and they are more inclining to take the government guided property management mode.

Housing property rights and property management mode selection willingness

Property right theory shows that the more clear the resident housing property rights, the more attention will be paid to the rights and benefits of the housing, the more strong the right awareness will exist. In Form 1 the results show that the families of property right type security housing selecting government guided mode are only 70.7% of that of the low-rental residents. The families of property right type security housing and already have the property rights transferred selecting government guided mode are only 28% of the families of low-rental housing. Namely, families of low-rental housing selecting government guided mode are of the probability of 3.57 times of that of the property right type security housing families, and it is obvious on 1% level. It is to say, leasing type security housing families are more inclining to take government guided property management mode, while the property right type security housing families with economically affordable housing, living-in-peace housing, difficulty resolving housing, settling housing for dismantled, are more expecting for property management mode of owner committee guided. The cleaner the property rights are, the lower percentage will select government guided mode.

Conclusion

Security housing communities are of complicated property rights, with higher percentages of disabled, serious disease patients, widows and widowers, etc., as special situations in the families, the residents are of weaker self management ability. Therefore government guided property management code must be adopted, to meet the demands of property managements in the security housing communities which are soon completed in the coming future. The property managements

and community managements in security housing communities should encourage residents to actively participate, but the owner committees should establish under government guidance, don't do it in a hurry. Security housing community property services should be done with the concepts of care oriented and hearty services, to provide quality property service to the residents, so that they may better melt into the communities and the society. By effective property management and services, the security housing should enter into the virtuous circle in construction, management, living, and uses, finally forming healthy, stable, harmonious and happy communities, all these should be the principles and targets of the security housing property management work from the beginning to the end.

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