

## **Client Satisfaction on the Housing and Other Services Provided by the Different Subdivision Developers in Zambales, Philippines**

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### **Abstract**

This study aimed to examine the client satisfaction on the housing and other services provided by the different subdivision developers in the province of Zambales. The respondents were highly satisfied with residential space design, service provision, and housing quality. Higher level of satisfaction was found in management provided by the developers than in the space design and housing quality. Significant differences were found on the level of satisfaction towards residential space plan design, location, management and housing quality when grouped according to place of the subdivision. Significant differences on lot size, floor area and number of bedroom when grouped according to place of the subdivision were also found. Significant differences were also found on highest educational attainment, length of years in the service and net family income towards management and significant differences on sex, civil status, highest educational attainment, length of years in the service and net family income towards housing quality. There is a low or slight correlation between the level of satisfaction and the status of developer's services.

**Keywords:** Client satisfaction, subdivision developers, housing, descriptive design, Zambales, Philippines

## 1. Introduction

Housing in the sense of shelter provision is a basic human necessity. This is the place where everyday life begins and ends. Housing is a major part of urban land use. Recent census data revealed that while the country's stock of housing units increased significantly over the decade (14.9 million in 2000 from 11 million in 1990), homeownership rate of households in the Philippines decreased from 83 per cent in 1990 to 71 per cent in 2000 (Ramores&Tia, 2004). This may be explained by one of the indicators, the income. Owning a house can be considered costly. An average home often costs a typical family its savings and yearly income. Very few people can afford to purchase a house right away. In the early 19<sup>th</sup> and 20<sup>th</sup> century, rental occupancy is dominating tenure form in most cities. However in the mid-20<sup>th</sup> century, owner occupation has been increasing. In fact, to many households, their family home is their single most important asset item. Many are willing to spend almost half of their income just to purchase a single house.

Spatial organizations of dwellings may be quite different in different periods, regions, cultures, and societies. Societies establish an order on their living spaces and reflect their characters in these spaces. There is a relation between the space and human relations. The differences in social systems show morphological variety in dwelling layouts. The family comprises the socio-economic structure of society in itself. Even though it is a small element, it forms the core which makes up the future of the society. The family needs a certain space, namely the dwelling, to achieve this function (Sungur, 2001).

In the Philippines, there are various developers of quality homes and other real estate assets. Despite the fact that these developers are profit-driven, they are guided by the principle of planning and executing designs and structures that are comfortable and exceed customer satisfaction. They unanimously want to provide for their clients from all walks of life by providing them homes and properties built only with the latest technologies and innovation.

In Zambales there are few existing subdivisions named Subic Hills in Subic, Saint Nicholas in Castillejos, and Sierra Vista in San Marcelino. With the growing population, more subdivisions are being put up to provide housing to families. However, there is a scarcity of feedback from occupants whether or not they are satisfied with the housing likewise the services provided by the developers. Hence, the researchers aimed to fill the dearth through this study.

## 2. Methodology

The researchers used the descriptive research design to assess the relationship between the status of developer's housing unit services and level of satisfaction. Additionally, it is both a quantitative and qualitative study. The 306 respondents in this study were the homeowners of the different subdivisions in Zambales. They were collected from the three subdivisions in Zambales which include Subic Hills in Subic, Saint Nicholas in Castillejos, and Sierra Vista in San Marcelino Zambales. The location of the different subdivisions is presented in Figure 1.

The researchers made use of a survey questionnaire to gather data needed for the study supported by unstructured interviews. A formal letter was sent to the barangay captain or head of the subdivision. After securing an approval of the request, survey questionnaires were distributed and accomplished by the respondents. Data were tabulated and analyzed by means of statistical tools using the weighted Arithmetic Mean in order to interpret the respondent's assessment on the level of satisfaction. The data collected were analyzed using SPSS program.

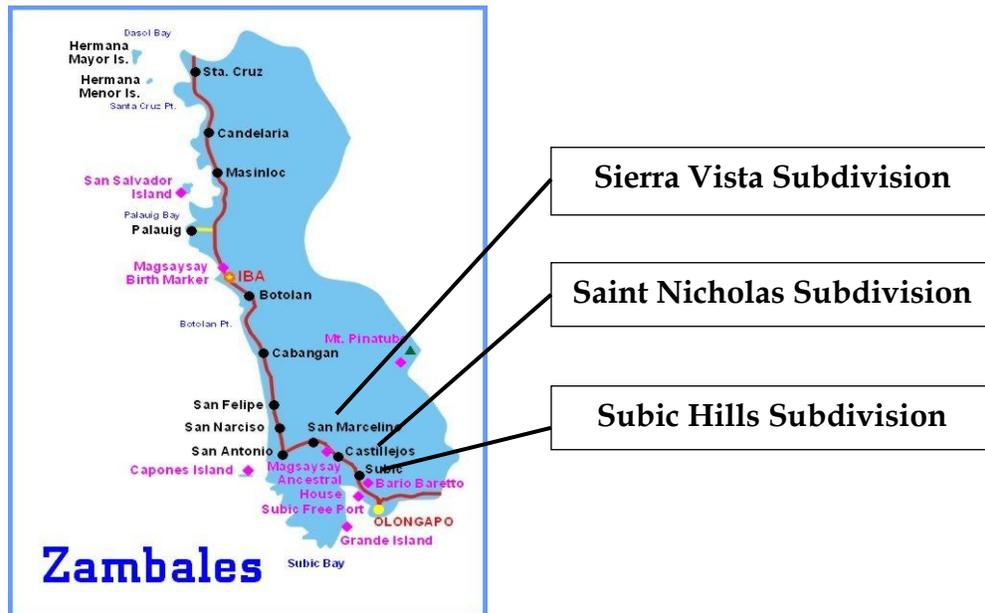


Figure 1. Location of the three subdivisions in the province of Zambales

### 3. Results and Discussion

#### 3.1. Profile of the Respondents

Table 1 shows the frequency and percentage distribution of the respondent according to age, sex, civil status, highest educational attainment, years in the service if employed, monthly income and number of family members. Majority of the respondents residing in the subdivisions belong to age group of 51 to 60 years old which comprised 30.70% of the total respondents. The oldest respondents had age 61 to 75 while the youngest respondents belong to age group of 26 to 35. The computed weighted mean age of the respondents was 45.43 years old. The respondents were mostly married which was 70.40% of the total respondents.

The highest educational attainment of the respondents was master's with doctoral units but most of them were undergraduate which comprise 51.80% of the respondents. The rest of the occupants were degree holder and with Masteral degree with units in doctoral degree. Some of the respondents had been staying in the subdivision for 25 years. However, majority of the respondents only stayed for a range of 1 to five years. The computed mean on years of stay in the housing unit was 8.25 years. Less than half of respondents had income ₱15,000.00 to ₱20,000. The respondents were mostly teachers of the elementary or secondary in the public schools.

**Table 1: Distribution of the Respondents According to their Profile**

	Frequency (f)	Percentage (%)
<b>AGE</b>		
61-75	26	9.30
51-60	86	30.70
46-50	18	6.40
36-45	83	29.70
26-35	25 67	23.90
<b>CIVIL STATUS</b>		
Single	17	6.10
Married	197	70.40
Widow/er	42	15.00
Separated	24	8.60
<b>HIGHEST EDUCATIONAL ATTAINMENT</b>		
MA with Doctoral Units	1	0.4
MA Degree Holder	3	1.10
BS/AB Degree with MA Units	31	11.10
BS/AB Degree	100	35.70
Undergraduate	145	51.80
<b>INCOME PER MONTH</b>		
less than 10,000 pesos	21	7.50
10,001-15,000 pesos	11	3.93
15,001-20,000 pesos	138	49.29
20,001-25,000 pesos	86	30.71
25,001-30,000 pesos	18	6.43
30,001 -35,000 pesos	6	2.14
<b>NUMBER OF FAMILY MEMBERS</b>		
10 or more	7	2.50
7-9	34	12.10
4-6	113	40.40
1-3	126	45.00
<b>Number Of Years Staying in the Subdivision</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
1 – 5 years	114	40.71
6 – 10 years	80	28.57
11 – 15 years	52	18.57
16 – 20 years	26	9.29
21 – 25 years	8	2.86

<b>Total</b>	<b>280</b>	<b>100.00</b>
<b>Mean of Years =8.25 years</b>		

### 3.2. Profile of the Housing Units in the subdivision

The profile of the housing unit is shown in Table 2. Most of the respondents were staying in the lot size of 201 sq.m. and above. The lot area was relatively bigger but the house floor area was smaller with a size of 50 s.m.

**Table 2: Lot size, floor area and number of bedroom of the housing unit**

Lot Size	Frequency (f)	Percentage (%)
Less than 50 square meter	1	0.40
51-100 square meters	95	33.90
101-200 square meters	82	29.30
201 and above	102	36.40
<b>Total</b>	<b>280</b>	<b>100.00</b>

House Floor Area	Frequency(f)	Percentage(%)
50 square meters	252	90.00
51-100 square meters	22	7.90
101- and above square meters	6	2.10
<b>Total</b>	<b>280</b>	<b>100.00</b>

Number of Bedrooms	Frequency(f)	Percentage(%)
1 - 2 rooms	234	83.60
3 - 4 rooms	45	16.10
5 - 6 rooms	1	.40
<b>Total</b>	<b>280</b>	<b>100.00</b>

Ninety percent of the occupants in the subdivision are living in a 50 sq. m area. The remaining occupants are occupying 51 sq. m to more than 101 sq m house floor area.

The 50 square meters is equivalent to 5m x 10m or less than 6m x 9m where enough space to build a house with 1-2 bedrooms which includes living and dining room, and a comfort room. On the number of bedrooms, more than 80 % are living in the housing with 1 to 2 bedrooms. In most subdivisions, the common number of bedrooms is two. Due to the practice of subdivisions to put up row houses or duplex houses the number of bedrooms is limited. If the owner buys lot, then he can afford to have more than 2 bedrooms. One respondent had 3 to 4 bedrooms in his housing unit. The most affordable housing unit in the subdivisions is the 2 bedroom units.

### 3.3. Level of Satisfaction

Table 3 shows the satisfaction rating of the respondent towards residential space plan design, service provision and housing quality. The respondents were highly satisfied on location and size of the different rooms such as master bedroom, kitchen, living/dining room as well as the location of these room with a rating ranging from 4.24 to 4.29. According to Mary and Surulivel (2014), location is an important factor in the increase of the satisfaction level of the customers. A similar study conducted by Ibe et al. (2016) on the evaluation of residential buildings in Nigeria indicates that the respondents were generally satisfied with the performance of the different components of the buildings with mean satisfaction score of 3.21. Satisfaction levels were generally higher with privacy and sizes of living and sleeping areas than the availability of water and electricity in the buildings.

**Table 3: Respondents' evaluation of the space plan design, management and housing quality**

<b>Residential Space Design</b>		<b>Weighted Mean</b>	<b>Description</b>
1	Size of the master bedroom	4.26	Highly Satisfied
2	Size of the other bedrooms	4.25	Highly Satisfied
3	Size of the kitchen	4.24	Highly Satisfied
4	Size of the living room / dining room	4.24	Highly Satisfied
5	Location of the master bedroom	4.29	Highly Satisfied
6	Location of the other bedrooms	4.28	Highly Satisfied
7	Location of the kitchen	4.29	Highly Satisfied
8	Location of living room / dining room	4.29	Highly Satisfied
9	Location of windows in the house	4.29	Highly Satisfied
10	Overall opinion of the location of rooms / features in the house.	4.30	Highly Satisfied
<b>Weighted Mean</b>		<b>4.29</b>	<b>Highly Satisfied</b>
<i>Service Provision</i>			
1	Safety and security from robbery and accident	4.21	Highly Satisfied
2	Safety from floods and erosion	4.26	Highly Satisfied

3	Away from noise and air pollution	4.08	Satisfied
4	Friendly and accommodating Staff and Personnel	4.23	Highly Satisfied
5	Price fairness	4.23	Highly Satisfied
<b>Weighted Mean</b>		<b>4.20</b>	<b>Highly Satisfied</b>
<i>Housing Quality</i>			
1	Quality of interior construction	4.46	Highly Satisfied
2	Quality of plumbing works	4.45	Highly Satisfied
3	Quality of electrical works and fixtures	4.46	Highly Satisfied
4	Overall satisfaction with the interior quality of the house	4.45	Highly Satisfied
<b>Weighted Mean</b>		<b>4.46</b>	<b>Highly Satisfied</b>

In terms of service provision of the subdivision developers, the occupants were highly satisfied on safety and security of their houses from robbery and accident, safety from floods and erosion, friendliness and accommodating staff and personnel and price fairness. However, they were more highly satisfied in terms of safety from floods and erosion. The occupants of subdivisions were satisfied only regarding noise and pollution. This implies that even the management cannot control noise caused by the neighbors of the other occupants and air pollution caused by the vehicles going in and out of the subdivisions. The findings contradicts the finding of (Mojit, 2012) where he found out that majority of the residents are only slightly satisfied, though satisfaction levels were generally higher for services provided and public facilities, compared to satisfaction with physical space within the housing unit and the social environment within the housing area.

The respondents were highly satisfied with the quality of interior construction, plumbing works, electrical works and fixtures with weighted mean of 4.46. The high satisfaction is based on the use of materials for construction had good quality. Electrical wiring was properly installed and the plumbing works is excellent. Improving quality and customer satisfaction has received extensive attention in recent years. Product and service quality, price, location, delivery time and apartment buyers' characteristics are the key factors that influence buyers' satisfaction (Mary and Surulivel 2014). A similar study was espoused by Kuikka (2011) that the overall service quality was rated at a very good level. Most of the respondents were satisfied or very satisfied with the apartment and its location. There were some problems mentioned, but generally the feedback was very positive.

Higher level of satisfaction was found in the quality of housing than in management and space design.

### 3.4. Test of Differences on the Level of Satisfaction of the Residents when Grouped According to Profile

#### Residential Space Design

Table 4 shows the Analysis of Variance to test the differences on the level of satisfaction as to residential space plan design when group according to the respondents profile variables.

Significant differences were observed on profile such as sex, civil status, number of family member living in the unit, and number of years living in the unit with computed significant values of 0.005, 0.025, 0.001 and 0.041 which are lower than (<) 0.05 Alpha Level of Significance, therefore the Null Hypothesis is rejected, hence there is significant difference. The

**Table 4: Analysis of Variance to test differences on the perceived level of satisfaction as to residential space design when grouped according to profile variables.**

Sources of Variations		SS	df	MS	F	Sig.	Decision
Age	<i>Between Groups</i>	5.029	7	0.718	1.142	0.337	Accept Ho
	<i>Within Groups</i>	171.088	272	0.629			Not Significant
	<i>Total</i>	176.117	279				
Sex	<i>Between Groups</i>	4.912	1	4.912	7.976	0.005	<b>Reject Ho</b>
	<i>Within Groups</i>	171.205	278	0.616			<b>Significant</b>
	<i>Total</i>	176.117	279				
Civil Status	<i>Between Groups</i>	5.843	3	1.948	3.157	0.025	<b>Reject Ho</b>
	<i>Within Groups</i>	170.274	276	0.617			<b>Significant</b>
	<i>Total</i>	176.117	279				
Highest Educational Attainment	<i>Between Groups</i>	4.434	4	1.108	1.776	0.134	Accept Ho
	<i>Within Groups</i>	171.683	275	0.624			Not Significant
	<i>Total</i>	176.117	279				
Length of Service	<i>Between Groups</i>	8.948	8	1.118	1.813	0.075	Accept Ho
	<i>Within Groups</i>	167.169	271	0.617			Not Significant
	<i>Total</i>	176.117	279				
Net Family Income	<i>Between Groups</i>	4.204	5	0.841	1.340	0.247	Accept Ho

	<i>Within Groups</i>	171.913	274	0.627			Not Significant
	<i>Total</i>	176.117	279				
<i>Number of Family Member</i>	<i>Between Groups</i>	10.875	3	3.625	6.055	0.001	<b>Reject Ho</b>
	<i>Within Groups</i>	165.242	276	0.599			<b>Significant</b>
	<i>Total</i>	176.117	279				
<i># of Years Living in the unit</i>	<i>Between Groups</i>	20.715	21	0.986	1.638	0.041	<b>Reject Ho</b>
	<i>Within Groups</i>	155.402	258	0.602			<b>Significant</b>
	<i>Total</i>	176.117	279				

female residents have higher level of satisfaction with the design of the housing unit than the male. On the other hand, the married occupants were highly satisfied than the single occupants occupying small bedrooms in the house. The master's bedrooms were generally bigger than the other bedrooms constructed. The masters' bedrooms are more convenient to stay. Those residents with small family had higher satisfaction rating in 1 -2 bedroom houses than those with bigger families. Those who stayed in the subdivisions for shorter period of time indicated lower level of satisfaction.

### Service Provision

Table 5 shows the Analysis of Variance to test the differences on the level of satisfaction of the residents as to service provision when residents were grouped according to the respondents' profile.

Marked with significant differences on profile variables of highest educational attainment, length of years in the service and net family income with computed significant values of 0.000 respectively which is lower than (<) 0.05 Alpha Level of Significance, therefore the Null Hypothesis is rejected, hence there is significant difference on highest educational attainment, length of years in the service and net family income profile variables.

Studies found that the crime rate and feelings of personal safety were dominant predictors of neighborhood satisfaction (Adams, 1992; Cook, 1988; Taylor, 1995). However, perceived safety was found to be less important compared to environmental variables, such as the amount of noise and sunlight or presence of acquaintances (Loo, 1986; Savasdisara, 1988). Several studies suggested that different social groups may attach more importance to certain neighborhood features (Cook, 1988, Flaming and Griffith, 1990; Galster and Hesser, 1981). For example, Cook (1988) found that although urban and suburban single mothers are both concerned about the neighborhood safety, suburban single mothers pay greater attention to lack of noise, access to local shops, and friendly neighbors while urban single mothers pay more attention to housing opportunities and discrimination in housing markets.

**Table 5: Analysis of Variance to test differences on the perceived level of satisfaction as to Service provision when grouped according to profile variables**

Sources of Variations		SS	df	MS	F	Sig.	Decision
Age	<i>Between Groups</i>	5.878	7	0.840	0.795	0.592	Accept Ho
	<i>Within Groups</i>	287.361	272	1.056			Not Significant
	<i>Total</i>	293.239	279				
Sex	<i>Between Groups</i>	.944	1	0.944	0.898	0.344	Accept Ho
	<i>Within Groups</i>	292.294	278	1.051			Not Significant
	<i>Total</i>	293.239	279				
Civil Status	<i>Between Groups</i>	.355	3	0.118	0.111	0.953	Accept Ho
	<i>Within Groups</i>	292.884	276	1.061			Not Significant
	<i>Total</i>	293.239	279				
Highest Educational Attainment	<i>Between Groups</i>	21.464	4	5.366	5.430	<b>0.000</b>	<b>Reject Ho</b>
	<i>Within Groups</i>	271.775	275	0.988			<b>Significant</b>
	<i>Total</i>	293.239	279				
Length of Service	<i>Between Groups</i>	48.267	8	6.033	6.674	<b>0.000</b>	<b>Reject Ho</b>
	<i>Within Groups</i>	244.971	271	0.904			<b>Significant</b>
	<i>Total</i>	293.239	279				
Net Family Income	<i>Between Groups</i>	38.386	5	7.677	8.254	<b>0.000</b>	<b>Reject Ho</b>
	<i>Within Groups</i>	254.853	274	0.930			<b>Significant</b>
	<i>Total</i>	293.239	279				
Number of Family Member	<i>Between Groups</i>	.275	3	0.092	0.086	0.967	Accept Ho
	<i>Within Groups</i>	292.963	276	1.061			Not Significant
	<i>Total</i>	293.239	279				
# of Years Living in the unit	<i>Between Groups</i>	22.870	21	1.089	1.039	0.416	Accept Ho
	<i>Within Groups</i>	270.369	258	1.048			Not Significant
	<i>Total</i>	293.239	279				

## Housing Quality

Table 6 shows the Analysis of Variance to test the differences on the level of satisfaction as to housing quality when group according to the respondents profile variables.

Marked with significant differences on profile variables of sex, civil status, highest educational attainment, length of years in the service and net family income with computed significant values of 0.030, 0.019, 0.000, 0.004, and 0.020 respectively which is lower than (<) 0.05 Alpha Level of Significance, therefore the Null Hypothesis is rejected, hence there is significant difference on sex, civil status, highest educational attainment, length of years in the service and net family income profile variables.

Researchers agree that the quality of housing in the United States is considered an optimum quality in the world compared to other nations (Hartman, 1983). The number of units that are overcrowded, lack of plumbing, or showing signs of structural dilapidation have been significantly reduced over the past decades, and less than 5 percent of the nation's housing stock is of poor quality (Gilderbloom&Appelbaum, 1988; Meeks, 1988). In 1981, HUD issued a definition of physically inadequate housing which included ten possible deficiencies in the area of plumbing, kitchen facilities, physical structure, common area fixtures, heating, and electrical systems. Morris and colleagues' study (1976) indicated that existence of housing deficits measured against cultural norms reduces the level of housing satisfaction.

**Table 6: Analysis of Variance to test differences on the perceived level of satisfaction as to housing quality when grouped according to profile variables**

Sources of Variations		SS	df	MS	F	Sig.	Decision
Age	<i>Between Groups</i>	1.314	7	0.188	0.306	0.951	Accept Ho
	<i>Within Groups</i>	166.921	272	0.614			Not Significant
	<i>Total</i>	168.236	279				
Sex	<i>Between Groups</i>	2.837	1	2.837	4.768	0.030	<b>Reject Ho</b>
	<i>Within Groups</i>	165.399	278	0.595			<b>Significant</b>
	<i>Total</i>	168.236	279				
Civil Status	<i>Between Groups</i>	5.926	3	1.975	3.359	0.019	<b>Reject Ho</b>
	<i>Within Groups</i>	162.310	276	0.588			<b>Significant</b>
	<i>Total</i>	168.236	279				
Highest Educational Attainment	<i>Between Groups</i>	11.888	4	2.972	5.228	0.000	<b>Reject Ho</b>
	<i>Within Groups</i>	156.347	275	0.569			<b>Significant</b>
	<i>Total</i>	168.236	279				

<i>Length of Service</i>	<i>Between Groups</i>	13.128	8	1.641	2.867	0.004	<b>Reject Ho</b>
	<i>Within Groups</i>	155.107	271	0.572			<b>Significant</b>
	<i>Total</i>	168.236	279				
<i>Net Family Income</i>	<i>Between Groups</i>	8.017	5	1.603	2.742	0.020	<b>Reject Ho</b>
	<i>Within Groups</i>	160.219	274	0.585			<b>Significant</b>
	<i>Total</i>	168.236	279				
<i>Number of Family Member</i>	<i>Between Groups</i>	1.628	3	.054 3	0.899	0.442	Accept Ho
	<i>Within Groups</i>	166.608	276	0.604			Not Significant
	<i>Total</i>	168.236	279				
<i># of Years Living in the unit</i>	<i>Between Groups</i>	12.572	21	0.599	0.992	0.473	Accept Ho
	<i>Within Groups</i>	155.663	258	0.603			Not Significant
	<i>Total</i>	168.236	279				

#### 4. Conclusions and Recommendations

Based on the summary of the investigations conducted, the following conclusions are drawn:

1. The respondent is a typical female, in her middle adulthood, married, college undergraduate, with adequate number of years in work service, average net family income, adequate number of years stayed in the subdivision and 1-3 family members living in the housing unit.
2. The respondents occupies more than 102 square meters of lot size, with 50 square meters for floor house area and 1-2 bedrooms.
3. The respondents are highly satisfied residential with the space design, service provision and housing quality.
4. There are significant differences on the level of satisfaction with regard to residential space design, service provision, and housing quality when grouped according to place of the subdivision. Significant differences were also found on the highest educational attainment, length of years in the service and net family income towards service provision and profile such as sex, civil status, highest educational attainment, length of years in the service, and net family income towards housing quality.

Based on the findings and conclusions, the researcher recommends that the home developers should sustain the priorities in house construction such as safety and security of the clients with good drainage against floods and erosion and quality of construction and plumbing works. It is also important that home developers must maintain friendly and accommodating personnel and staff to encourage more clients. It is suggested that a similar study

may be conducted to validate the findings of the study and to include other parameters such as noise and air pollution and location of the subdivision.

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