

**INCENTIVES AS A MECHANISM TO REVIVE HOUSING  
ABANDONMENT**

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**A project report submitted in partial fulfilment of the  
requirements for the award of the degree of  
Bachelor of Science (Hons) Construction Management**

**Faculty of Engineering and Green Technology  
Universiti Tunku Abdul Rahman**

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## DECLARATION

I hereby declare that this project report is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at UTAR or other institutions.

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## APPROVAL FOR SUBMISSION

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Specially dedicated to  
my beloved parents and my supervisor. Without their supporting,  
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## INCENTIVES AS A MECHANISM TO REVIVE HOUSING ABANDONMENT

### ABSTRACT

Shelter is necessity. However, while homeownership rate is low, there are high cases in abandoned housing projects. Therefore, this research is to examine the role of incentives in order to reduce the numbers of housing abandonment. To achieve the aim, 3 objectives were investigated: 1) to analyse the benefits of increasing homeownership, 2) To determine the incentives of home buyers in order to reduce the number of housing abandonment, and 3) to categorise the home buyers' incentives. While previous studies have investigated many causes and solutions of abandoned housing projects, but the problem still exists. The incentive provided to the demand side is a basic idea to motivate the home buyers to purchase a house. A survey questionnaire was developed and conducted in Malaysia. A total of 287 questionnaires were returned through hand delivery and "google form". The collected data were analysed with SPSS. 7 of 9 benefits are very important for respondents and 34 incentives for home buyers were determined and top 5 incentives were ranked: 1) location of the housing units to place of work, 2) reduce interest rate for home buyers from bank, 3) developers to provide complimentary goods likes furniture, 4) safety issue and 5) banks relaxing loan approvals by offering flexibility to lend up to 100%. These findings are useful and meaningful to assist the policy makers, developers and banks in developing more appropriate housing policies to motivate the buyers in order to reduce the abandonment. Also, recommendations were provided for future study.

**Keywords:** housing projects, homeownership

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**LIST OF ABBREVIATIONS**

$\alpha$	Alpha
$p$	Preliminary
EPU	Economic Planning Unit
KMO	Kaiser-Meyer-Olkin
KPKT	Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan
MHLG	Ministry Housing and Local Government
NAPIC	National Property Information Centre
SPSS	Statistical Package for the Social Sciences



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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 General**

Shelter is necessity. Home is a 'places' derived the peace and comfort for everyone. In Malaysia, there are shortage of houses, therefore, there must increase the houses. In Malaysia, there are high cases of abandonment housing projects. The abandoned housing projects have a close relationship with the shortage of houses. For example, if the number of abandoned housing projects increases, it can put more pressure in the houses shortage. This research involves mechanism of incentives in reducing abandoned housing projects, in an effort to increase the homeownership. This chapter consists of the background of the study, problem statement, research aim, research objectives, significance of the study and the research outline.

#### **1.2 Background of the Study**

The population of Malaysia is slightly increasing from year to year. From the table 1.1, the population of Malaysia in year 2011 to year 2016 was increased from 28.96 million to 32.07 million. There are a positive relationship between the population and the both quality and quantity of houses. If population increase, the houses require increasing to accommodate the people. So, owning a house is not a luxury is necessary for the people.

Moreover, the total numbers of household in Malaysia in 2010 were 6.35 million compared to 2000 were 4.8 million which represent a 32 per cent increase in

number of household for 10 year or 3.2 per cent average annual increase in number of household (Department of Statistics, 2014). This data can shows that the number of household is increasing between 10 years, therefore, it need supply more houses to cover the demand.

**Table 1.1 Statistics on total population of Malaysia from year 2012 to year 2016**

Year	Total Population (million)	Growth Rate (%)
2016	32.07	5.18
2015	30.49	1.30
2014	30.10	1.31
2013	29.71	1.26
2012	29.34	1.31
2011	28.96	1.29

Source: Economic planning Unit (EPU), Prime Minister's Department Malaysia

From table 1.2, it shows that the amounts of residential which were increased 439,377 units within 6 years or 73,230 units average annual increase in number of residential. Besides, the average number of people per unit is around 6 to 7. However, the international standard of average household size is 3 people per units and the average household size of Malaysia in year 2014 is 4.3 people per unit (ArcGIS, 2015) but this data is doubtful. Therefore, Malaysia is currently experiencing housing shortage. Around 300,000 of population is increase but the resident only increase in 100,000 in one year.

**Table 1.2 Statistics on Residential Existing Stock and the People per unit**

Year	Residential Existing Stock (unit)	Number of People per unit
2016	4,950,000	6.48
2015	4,928,883	6.18
2014	4,831,791	6.23
2013	4,718,534	6.29
2012	4,620,166	6.35
2011	4,510,623	6.42

Source: National Property Information Centre (NAPIC)

While the Malaysia is experiencing houses shortage, it can be found that the abandoned housing projects are existing. The more number of abandoned housing projects, the more pressure will put in the houses shortage. Abandonment can be defined as the failure of parties to comply with the contract, or it can means that when the contractors stop their work in the job and removes all the personnel as well as the equipment before the project is completed. While the abandoned housing projects can be defined as uncompleted projects or the projects has stopped (Khalid, 2010).

There are not all the housing projects can be completed on time due to different reasons, in the worst case it able to become abandoned. During year 2015, Peninsular Malaysia has total 63 private housing project listed as abandoned building which involved 16,419 housing units and 11,465 purchasers (See Table 1.3). The number of abandoned housing projects from table 1.3 did not included the private abandoned housing projects, it just cover the federal government projects. The table shows the number of abandoned housing projects from year 2011 to March of year 2016. Although the number is decreasing, but the value still very high.

**Table 1.3 Statistics on Abandoned Housing Projects of Peninsular Malaysia**

Year	No. of projects	No. of houses	No. of purchasers
2016 (March)	48	13,020	8,896
2015	63	16,419	11,465
2014	68	24,726	17,468
2013	87	32,710	23,572
2012	95	37,252	26,124
2011	116	42,363	28,579

Source: Ministry of Urban Wellbeing, Housing and Local Government Malaysia

The projects may become abandoned at any stages of the construction process which will bring impacts to the public as well as large amount of loss. The impacts and causes of the abandoned housing projects will be discussed in this study. The impacts will be categorised into main 4 impacts which are personal and company impacts, social and economic impacts, environmental impacts, as well as country

impacts. Besides, there are several causes discovered by such a numbers of researchers.

The solutions to avoid the abandoned housing projects have been proposed by the different researchers. Build then Sell concept is one of the solution proposed by the previous researchers good for home buyers (Ng, 2012) and protects the home buyers from the abandoned housing projects.

Local authorities and government play an important role in the solution of abandoned housing projects, they able to take their responsibility in monitoring the projects and reviving the abandoned projects. For the financial restructure, the deposit paid by the developers should be reviewed and an insurance scheme is proposed to protect the buyers.

Furthermore, the projects team should be restructured and more investors should be invited for refinancing is another solution of abandoned housing projects. In additional, some of the researchers applied the indoor aquaponics concept in abandoned housing projects become a potential solution to food deserts in order to solve the problem of abandonment (Tomlinson, 2015).

### **1.3 Problem Statement**

According to the previous research on the abandoned housing projects, the causes of the abandoned housing projects and the solutions were determined but the problem of the housing projects abandonment still existing. Table 1.3 suggest the number of abandoned housing projects is decreasing, but this is only for the federal government. While the information in private and state government is not available. However, there is a possibility the number of housing abandonment is high.

However, one of the methods proposed by the previous researchers is Build then Sell (BTS) concept (Yap, 2013). This concept is implemented by a small percentages of developers and the Sell then Build (STB) concept is coexist with the BTS concept due to BTS able to protect the home buyers only but the developers bear full responsibility of taking risk. The developers must have the strong financial

background to support the whole projects. If not, the housing project also will become abandon at any particular stage due to financial problem. Thus, this concept is not suitable for the smaller developers due to their financial status not strong enough to cover the whole stages of the projects.

10:90 concept was also proposed. This method which could also protect the buyers but the developers will bear higher financial risk. This method is not attractive to the developers. Consequently, more houses will be abandoned if at all started. So that, the only way is the government to provide the financial assistance to developers or ministry help to revive the projects (The Star Online, 2016).

Other than that, the expense of abandoned housing was huge amount which is approximate RM 4.33 billion. This expense only calculated by using 48 projects which involve 13,020 housing units in year 2016 (KPKT, 2016) multiple by the average housing price (RM332, 909.75) in year 2016 (NAPIC, 2016).

Yet, the problem of housing abandonment still exists. Therefore, a market mechanism could be suitable to reduce or eliminate abandonment. Market mechanism like incentives is suitable.

#### **1.4 Research Aim**

Therefore, this research aim is to examine the role of incentives in order to reduce the numbers of housing abandonment.

#### **1.5 Research Objectives**

To achieve the above aim, the following objectives are proposed:

1. To analyse the benefits of increasing homeownership.

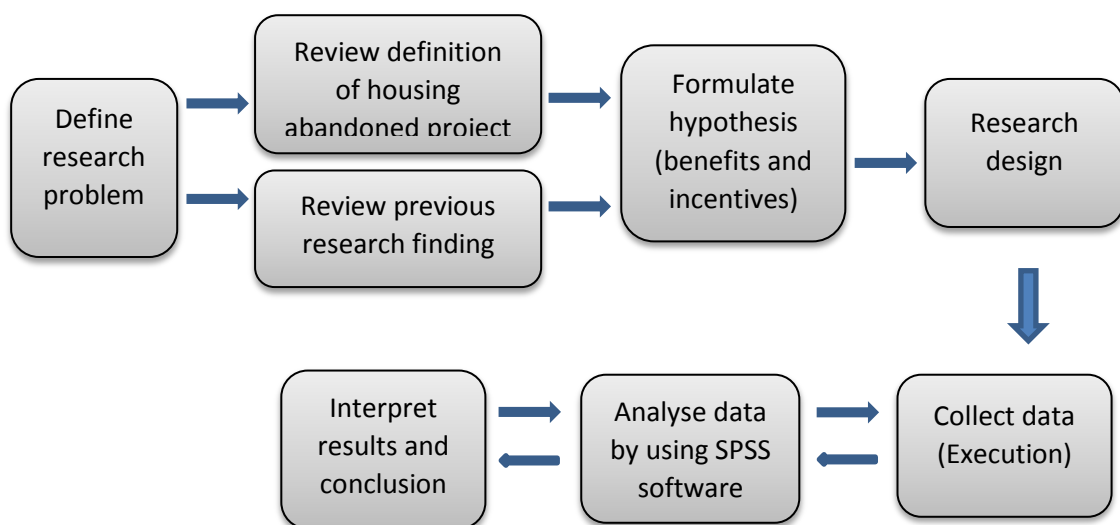
2. To determine the incentives of home buyers in order to reduce the number of housing abandonment.
3. To categorise the home buyers' incentives.

### 1.6 Significance of the Study

The significance of this study is to propose a guideline to the involved parties because in this study reviews the basic idea to reduce the abandoned housing projects and the incentives are provided to the demand side in order to motivate the home buyers purchase their own house or the homeowners to buy their second house . This is because when the home buyers and homeowners buy more houses, it will provide the financial help to the developers to continue or revive the housing abandoned then the number of the abandoned housing projects will be reduce.

### 1.7 Research Outline

The outline flow of the research as following:



**Figure 1.1 Research Process Chart**

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In this chapter, it presents about the types of building, volume of transaction and consumer income. Besides, it also reviews the impacts of abandoned housing projects and causes of abandoned housing projects from the current existing literature.

#### **2.2 Types of Buildings**

There are different types of buildings which can be categorized into shape, size, function, the number of floors, aim and others. Different author who has different view in building classification, some are defined too wide while some authors' views are clearly and narrowly stated. Referring to Olanrewaju and Abdul-Aziz, said that De-Chiara and Crosbie (2001) says, the buildings can be divided categories into:

- 1) Commercial Buildings,
- 2) Hospitality Buildings,
- 3) Educational Buildings,
- 4) Residential Buildings,
- 5) Healthcare Buildings,
- 6) Cultural and Entertainment Buildings,
- 7) Government and Public Buildings,
- 8) Religious Buildings,
- 9) Transportation Buildings, and



#### 10) Industrial Buildings.

In Malaysia, building can be classified into 4 categories which are Residential Buildings, Commercial Buildings, Industrial Buildings, and Leisure Buildings. Housing project is residential buildings which contain huge numbers of housing compare to the commercial, industrial and leisure (See Table 2.2). Besides, the residential buildings representing the highest percentage in existing stock which is 97.828% while the commercial buildings accounted for the lowest percentage which is 0.048% in year 2016 (See Table 2.2). This is because the population of Malaysia was slightly increased from year 2005 to 2016 which increased total number of 6,024,700 people within 11 year (See Table 2.1). Hence, more housing projects will be conducted in order to prevent the urgent action of limited house.

**Table 2.1 Statistic on the population and the number of construction labour of Malaysia**

Year	Population of Malaysia ('000)	Growth Rate (%)
2016	32,070.2	1.28
2015 <sup>P</sup>	30,485.2	1.29
2014 <sup>P</sup>	30,097.9	1.29
2013 <sup>P</sup>	29,714.7	1.29
2012 <sup>P</sup>	29,336.8	1.29
2011 <sup>P</sup>	28,964.3	1.31
2010	28,588.6	1.81
2009	28,081.5	1.86
2008	27,567.6	1.88
2007	27,058.4	1.92
2006	26,549.9	1.94
2005	26,045.5	1.97

Source: Economic Planning Unit (EPU), Prime Minister's Department Malaysia

Moreover, the residential buildings are discussed from year 2005 to year 2015. The residential can be divided into 12 types which are single storey terrace, 2-3 storey terrace, single storey semi-detach, 2-3 storey semi-detach, detach, town

house, cluster, low cost house, low cost flat, flat, service apartment and condominium. The actual volume of residential buildings is increased by 29.87% for last 10 years.

The purpose of the developers constructed the projects is become an entrepreneur to make profit. Many projects can be constructed but some of the projects failed to complete before deadline or in the worst case it can become abandoned due to different reason and it can lead to large amount of loss.

**Table 2.2 Statistics on Existing Stocks of Residential, Commercial, Industrial and Leisure**

	Residential		Commercial		Industrial		Leisure	
	units	%	units	%	units	%	units	%
2016	4,950,000	97.828	2,440	0.048	104,627	2.068	2,859	0.057
2015	4,928,883	97.833	2,434	0.048	103,868	2.062	2,857	0.057
2014	4,831,791	97.926	2,408	0.049	97,123	1.968	2,805	0.057
2013	4,718,534	97.919	2,361	0.049	95,212	1.976	2,689	0.056
2012	4,620,166	97.906	2,324	0.049	93,903	1.990	2,578	0.055
2011	4,510,623	97.859	2,282	0.050	93,896	2.037	2,515	0.055
2010	4,433,310	97.842	2,227	0.049	93,139	2.056	2,403	0.053
2009	4,322,921	97.806	2,200	0.050	92,416	2.091	2,361	0.053
2008	4,193,150	97.790	2,154	0.050	90,347	2.107	2,263	0.053
2007	4,043,040	97.739	2,175	0.053	89,160	2.155	2,205	0.053
2006	3,850,568	97.663	2,151	0.055	87,832	2.228	2,155	0.055
2005	3,647,887	97.599	2,124	0.057	85,497	2.287	2,131	0.057

Source: National Property Information Centre (NAPIC)

### 2.3 Volume of Transaction

From table 2.3, the volume of the residential transaction is declined from year 2012 to year 2015 while the transaction in year 2014 is increased from the volume of 246,225 to 247,251. It means that less of the people purchase on the houses in year

2015. If the volume of the transaction continues decline, there can be found still have many existing stock of residential building that not yet sold out and the worst outcome may become the abandoned houses.

**Table 2.3 Volume and Value of Residential Transaction and Annual Changes 2005-2015**

Year	Volume of Transaction	Changes in Volume Transaction from year to year (%)	Value (RM Million)	Changes in Value from year to year (%)
2005	181,762	-6.90	28,407.34	-3.03
2006	182,555	0.44	29,446.88	3.66
2007	199,482	9.27	36,490.61	23.92
2008	216,702	8.63	41,303.97	13.19
2009	211,653	-2.33	41,848.38	1.32
2010	226,874	7.19	50,654.16	21.04
2011	269,789	18.92	61,831.56	22.07
2012	272,669	1.07	67,762.20	9.59
2013	246,225	-9.70	72,060.41	6.34
2014	247,251	0.42	82,059.59	13.88
2015	235,967	-4.56	73,469.89	-10.47

Source: National Property Information Centre (NAPIC)

#### **2.4 Housing Abandoned Definition**

The definition of abandoned housing projects and abandoned housing is totally different (Hadi et al., 2015). The abandoned housing projects means that the projects are partially completed and stopped at any stages of construction process due to different reason, the projects can be stopped at 50% complete even 99% complete. While the abandoned housing defined as there are the completed houses but not occupied by the people. Abandoned housing projects will be concerned in this study.

An abandoned construction project is defined as an uncompleted project in a time frame of a contract or the projects are said to be abandoned when the actions and activities on development projects are stopped without any stated time of resumption. But, referring to the Ministry of Housing and Local Government (MHLG) Malaysia, the housing projects are considered “abandoned” if:

1. ‘There has been no substantial activity on site for six consecutive months, or
2. It is involved in a winding-up petition registered at the High Court under Section 218 of the Companies Act, or
3. It is under receivership, or
4. The developer has informed the Housing Controller in writing of his inability to complete the project, or
5. The project confirmed as abandoned by the Minister under Section 11 (1) (c) of Housing Development (Control and Licensing) Act 1966 (i.e. Act 118)’ (MHLG, 2011), in Yap E.H. (2013).



**Figure 2.1 Abandoned Housing Project at Eastlake, Kampar in Malaysia**



**Figure 2.2 Abandoned Housing Project at Malim Nawar, Perak in Malaysia**



**Figure 2.3 Abandoned Housing Project at Kampar, Perak in Malaysia**



**Figure 2.4 Abandoned Shop lots Project at Simpang Pulai, Perak in Malaysia**



**Figure 2.5 Abandoned Housing Project at Ipoh, Perak in Malaysia (All Photos come from own resources)**

## **2.5 Causes of Abandoned Housing Project**

The abandoned housing projects are being discussed in this thesis, this is probably because the larger volume and value of housing projects that are abandoned in Malaysia than others projects which are commercial, industrial and leisure projects. Besides, the abandoned housing projects also will produce impacts to the public. Thus, the factors that may lead to abandoned housing projects need to be discussed for further understanding. From current existing literature, there can be found different researchers have different view on the causes.

**Table 2.4 Summary of Causes of Abandoned Housing Projects**

Author	Factor	Variable
Khalid (2010)	1.Profit maximisation	Profit motivate; Social obligation; Financial gain
	2.Poor management	Mismanagement; Misuse; Fraud; Profit orientation
	3.Response to market signals	Demand; Supply; Mortgage; Loss aversion
	4.Enforcement and monitoring	Weak monitoring; Weak enforcement
	5.Strictness of rules and regulation	Time to complete; Rules and regulations; Legal requirement
(KPKT, 2012)	1. Poor Market Study	
	2.Ineffective Project and Cash Flow Joint	
	3.Venture disputes between land proprietor and developer	
	4.Lack of Incentives to complete projects which are already late (where liquidated ascertain damage claims exceed cost)	
	5.Financier abruptly withdraws their support Developments orders are Overruns due to hike in materials	

**Table 2.4 Summary of Causes of Abandoned Housing Projects (Cont'd)**

Author	Factor	Variable
Yap Eng Hoe (2013)	1.Financial Problem	Unhelpful financial institution; Liquidity problem; Lack of bridge financing; Drain out funds
	2.Management problem	Lack of experience and expertise; Lack of coordination; Inefficient use of resources; Poor marketing and sales
	3.Government Policy	Build and sell system; Loose monitoring; Lack of financial scrutiny; Ineffective punitive measure
	4.Others	Fraudulent practices by developers; Dishonest loan officer
Admin (2015)	1.Choice of Project site or location	
	2.Embarking on projects without need analysis	
	3.Lack of social analysis of a project	
	4.Project Imposition	
	5.Improper financial analysis	
	6.Under bidding of projects	
	7.Lack of technical analysis	



## **2.6 Impacts of Abandoned Housings Projects**

The impacts of abandoned housing projects means that when the development project is confirmed to be abandoned, the side effects and problems brought by the abandoned projects. Those impacts will result in large amount of loss and the negative impacts will affect to the public. The impacts will implicated in large number of people and it can be distributed in different aspects where it could be personal and company impacts, social and economic impacts, environment impacts, and country impacts (Hadi et al., 2015).

### **2.6.1 Personal and Company Impacts**

The personal means that relating to the single or particular person rather than to a group or an organisation. In here, the “personal” is focused on the home buyers who have influenced by the abandoned housing projects. While the “company” is concentrated on the company or organisation which will cause the housing projects become abandoned.

For home buyers, they will become a victim and caused them hardship when the housing projects are abandoned because the buyers who paid the down payment, they cannot take back their money but they will continue their instalment plan. Datuk Goh Seng Toh, vice-president of House Buyers’ Association (HBA), conversed with some victims of abandoned housing projects before and concluded that they have been suffering for few years, even decades, they must settle their housing loan if not they are declared bankrupt and they do not even have the house to live in (Ujang, 2014).

If the buyers who have gone bankrupt, they must comply with the rules and regulation, even though they no need worry on their loan but they received some restriction in their life. For example, they can’t invest in houses, private property or fund, they restrict in going abroad and others. Besides, bankrupt will affect the personal image as they will be blacklisted by the bank in applying on any loan.

For the company, it has the responsibility to complete the housing projects within the due date, if the housing projects become abandon means that the company breach of duty. The workers of the company maybe not diligent on their work or they are not follow the sequences so leading to the extension of the projects even failure. Thus, the company image will be affected and the people who intend to purchase a house will not be acquire from that company due to disappointing (Hadi et al., 2015) and lack of confidence to trust them again.

Furthermore, it will lead to a huge number of monetary losses when the projects are abandoned, the company will owe a debt. If the company can't receive others project, it means no income to cover the debt, and finally the company will be bankrupt. When the company went bankrupt, all the employees will be unemployed and the company suffer from bad reputation, also will be blacklisted by the government and financial institute in applying the new projects.

### **2.6.2 Social and economic Impacts**

Social security of public affected due to the land of abandoned housing projects will become the discarded places or sheltering for gambling, sexual activity, drug users, gangster activity and the accommodation of the vagrants (Hadi et al., 2014). All of those activities are not allowed and illegal. The residents who live around the abandoned buildings will become more flurry because their security will be seriously influenced due to the buildings promote or increase the chances of stealing, vandalism or robbery by the gangster or drug users (Daniel, 2013). Moreover, the abandoned housing projects can promote the criminal process started because the body of teenagers can be found in the abandoned buildings. Those situations will influence the reputation of that place that may directly affect the value and the price of that land.

On the others hand, for the economic impacts, the construction industry play an important role to the developing country due to can increased the economy (Hadi et al., 2015). The abandoned projects affect many related industries or parties that include the suppliers of the construction material, transportation industries,

contactors and consultant (Ng, 2009). If the project was abandon, many workers will be ended their employment, this is because the employees require to work in the macro-group as same as the construction company normally formed macro-group (Carrero et al., 2009). Thus, it will increase the unemployment rate of the workers.

### **2.6.3 Environmental Impacts**

The abandoned housing projects also will influence the environmental negatively (Yap, 2013). First, the abandoned housing has a pools of stagnant water that can made a perfect spot for the *Aedes* mosquitoes to breed (Bavani, 2009; Deva, 2014). This can boost up the breeding of the mosquitoes and it will threaten to the public health, especially who live around because the mosquitoes will transmit the diseases to the community. For instance, there are some cases of dengue fever happened due to transmit from the mosquitoes to the public (Kaur, 2014) which will lead to illness and death. When the mosquito bites a person with dengue virus in their blood it will become infected and it can be spread to another person though mosquitoes.

Besides, the land of abandoned housing projects had become overgrown with undergrowth (Bavani, 2009), it maybe hide some animals easily like snakes, grasshoppers and others to become their den. The abandoned housing projects also facilitate the habitat for the dangerous animals such as reptiles, mammals and insects (Hadi et al., 2015). The dangerous animals are threaten to the public that the snake poison will cause the people die and the dog will chase the person who passing by the abandoned housing or the explorer even lead to injured.

Some area of the abandoned housing projects serves as the illegal garbage dump (Bavani, 2009; Kaur, 2014). The rubbish will affect the air quality due to it will come out the odour and the insects such as flies will be attracted by the smell. Sometimes, the rubbish can attract the rats that may create a disease to the public which will lead the public health in a bad situation.

#### **2.6.4 Country Impacts**

The personal and company impacts, social-economic impacts and environmental impacts that both impacts mentioned above will affect the image of the country towards others country (Hadi et al., 2015). With those situations, it will directly influence the numbers of the tourist of that country due to the bad reputation. If decreasing in tourist, it will cause a loss of income. Besides, the others country will lack of confidence to invest in the country because of the bad reputation.

### **2.7 Solution of Abandoned Housing Projects**

According to the current existing literature done by the previous researchers, they have been proposed some of the solutions or suggestions to prevent even avoid the occurrence of the abandoned housing projects.

#### **2.7.1 Build then Sell Concept**

One of the solutions the previous researchers proposed to overcome the problem of the abandoned housing projects is change the Sell then Build (STB) concept to the Build then Sell (BTS) concept which would be good for home buyers and housing industry (Ng 2012). Build then Sell (BTS) concept means that there are not any payments made by the home buyers before or during the construction stage. The home buyers will pay the down payment after complete of the housing with the insurance of Certificate of Completion & Compliance (CCC) (UKESSAYS, 2015).

The Build then Sell (BTS) concept can be divided into two variants which are 100% BTS and BTS 10:90 (Hadi et al., 2015). 100% BTS means that the houses will be sold after complete while BTS 10:90 means the home buyers will made a 10% down payment to reserve the house unit and the remaining 90% will be solve after the house complete. The benefit of this concept is to protect the home buyers from the abandoned housing projects.

### **2.7.2 Role of Local Authorities and Government**

The local authorities should be given power to take their responsibility in monitoring the work progress. They able to identify the problem early and solve it immediately by taking appropriate action. The local authority can use their given power to check the cash flow of the developers in order to avoid fraudulent claims by the developers.

The government plays an important role in the solution of the abandoned housing projects. The government should propose a right policy to overcome the problem of the abandoned even though some of the house buyers have a transaction with the private company not with the public company under government. But the government has the responsibility in helping their people to solve the problem. Therefore, the MHLG established a new division called Division of Rehabilitation of Abandoned Projects under the Department of National Housing in year 2008 (Hadi et al., 2015). Besides, the government take measures to monitor or revive the abandoned projects by establishing a competent team (Yap, 2013).

### **2.7.3 Financial Restructure**

Reviewed the deposit paid by the developers is another solution to avoid abandoned housing projects. The developer pay the deposit is to get a license of developer for each housing project. For example, the deposit require to increase 5% from the current RM200,000 or the deposit increase up to 5% out of the construction cost (Hadi et al., 2015). This condition is to ensure the developers who have the strong financial background to enter the market for avoiding the problems of abandoned project.

Furthermore, an insurance scheme is proposed by the Real Estate and Housing Developers Association of Malaysia (Rehda) for developers to cover the risk of the projects that unable to complete (Redha, 2005). This insurance scheme able to protect the home buyers who will get back the initial payment if the project is abandoned due to different reason (Hadi et al., 2015).

#### **2.7.4 Restructuring and Refinancing**

The projects team should be restructured and the original developers able to sell off the projects to the more competent developers to continue the projects or the original developers can cooperate with others developers to revive the abandoned projects (Yap, 2013). For refinancing, the developers should find out and invite the more investors to invest in the projects. Besides, the developers able to apply the loan from others bank or from the special government fund for abandoned projects in order to get the adequate fund to revive the abandoned housing projects.

#### **2.7.5 Indoor Aquaponics**

Aquaponics integrate the aquaculture and hydroponics practice which are the combination of the process of breeding fish in all types of water environments including rivers, pond or lake and the process of growing plants in nutrient water without the use of soil. It means that the aquaponics is the system that uses the waste of the fish to provide the nutrient to the plants (Tomlinson, 2015). The advantage of using this kind of method is because it can save the expenses of fertilizer, it just require the fish food. The indoor aquaponics can implement in the abandoned buildings. According to the Tomlinson (2015), there is a successful way in applied the indoor aquaponics to increase access to food and promote the revival of an abandoned structure.

## **CHAPTER 3**

### **METHOD OF DATA ANALYSIS**

#### **3.1 Introduction**

This chapter explained the overview of the research methods carried out in this study. Different researchers will base on their research topic to find out and choose the suitable research method in order to achieve their objectives and aim. Besides, the research able to collect the data they need and analyse the result they want via the method. In this chapter, it presents the literature review, data collection methods, sampling design, research instrument, and data analysis.

#### **3.2 Literature Review**

There are many types of the research method can be used in different topic of research. First, the research method will be chosen and used in this research is literature review.

The integrative literature review is one of the research that the new idea or perspective will be produced when the existing literature about the topic reviewed by the researchers in an integrated way (Torraco, 2005). Literature review provides a convenient guide to the researchers on their research topic. The researchers are able to refer the idea on similar topic literatures that already exist and generated the new view on their own research. Besides, the points of the existing literature including the theory and methods are able to utilise in the researchers own research. This method can be conducted from the beginning of the research to the end as a research progress.

In this research, literature review will be used to review the existing literature on the solutions, causes and impacts of the abandoned housing projects to support the view of the research. Most of that information can be found from the articles, journals, and newspapers. Hence, the current existing literatures on the solution of abandoned housing projects have been discussed by different authors.

### **3.3 Data Collection**

Data collection typically depends on what types of data that has been selected or used in the research. Primary data and secondary data can be classified into types of data. In this study, primary data and secondary data will be used.

#### **3.3.1 Primary Data**

Primary data is the data that collected by the researchers and usually through the survey method to get it (Tran, 2013). It means that the data is gathered from the first-hand information to the researchers or the data gathered by the researchers themselves for particular purpose. The data not pass through the third parties or the data has not changed by the others people. The types of the primary data include questionnaire survey, interview, experiments, observation and others. Since the study is about the response and view of the respondents towards the solution of the abandoned housing projects, collect primary data is the best method to gain that information. Questionnaire survey will be applied in this research as primary data.



### **3.3.2 Secondary Data**

Secondary data is the information that already gathered by someone or the information available in other sources (Tran, 2013). The information can be obtained through published sources or unpublished sources. For the published sources, the data or information can be collected via the journal, newspapers, governmental records, internet and others. While the data or information which gathered from research workers, bureau of labour and others, called unpublished sources.

If the information that the researchers found is relevant to their research topic can be used as references. Since this study need the statistic information such as the population and number of existing stock on housing via the government official website to prove the demand theory, literature review will used as secondary data which is helpful to this research.

## **3.4 Sampling Design**

It may be impossible to gather the information from the every member in the whole world. Sampling design is created by the researchers to obtain the information easily from a sample population, it will be save time and cost because the scope of research become smaller. Besides, it includes the target respondents and sampling location.

### **3.4.1 Target Respondents**

The target respondents for this research will be the potential home buyers and homeowners who had experience in purchasing the house. This is because the aim and objectives in this study is to determine the incentives for home buyers in order to reduce the abandoned housing projects.

### **3.4.2 Sampling Location**

The study will be carried out at the area of Kuala Lumpur, Malaysia. Kuala Lumpur is one of the developed states and it contained a higher housing price compare to others state. Hence, the incentives are important for them to own their house.

### **3.4.3 Sampling Technique**

Convenience sampling is one of the sampling technique, also is a non-probability method that collects the data from population members who able to participant in the research. It is classified as the first available primary data that without using additional requirement. This technique is used when the population is too large and it is impossible to include or to calculate everyone.

## **3.5 Research Instrument**

Questionnaires are a research tool, used in this research for gathering the data and information that related to the topic from the respondents. The questionnaires consist of a list of questions and the options of the answers or it can include a space for comment and suggestion. In addition, the questionnaires are a good method and often applied by the researchers because it is convenient to receive the information from a large amount of target respondents who come from different states or countries. The respondents are able to fill in the information when they are free and they are encouraged to express their though or feeling honestly without worry about the response of the researchers due to the answers will affect the consequences of the research.

Questionnaires able to apply in the various situation of the survey such as postal, mailed, web-based, face-to-face and telephone (Kirklees Council, 2006). The postal, mailed and web-based questionnaire also called self-completion questionnaire while face-to-face and telephone questionnaire suitable for the interviewers. Self-

completion questionnaire will be more focused in this research which the respondents spend the time to complete the questionnaires by themselves without any interference.

### **3.5.1 The Purpose of Application on Questionnaire**

The questionnaire will be chosen for this research because this is the easiest ways and simple tool to collect the information from the target respondents. Besides, questionnaire is a low cost instrument compare to others methods, it may include the printing fee only. It can through email, post, or web site to deliver the questionnaire to others respondents.

### **3.5.2 Questionnaire Design**

There are different types of question can be designed in the questionnaire such as opened and closed question, single and multiple responses, ranking and rating. The respondents can follow the instruction that mention in the questionnaire to fill in the option. In this research, questionnaire consists of 4 pages and divides into 3 sections which are Section A, Section B and Section C. Section A will be the general profile of the respondents such as gender, age, occupation, nationality and others. Section B is about the five-point Likert scale questions on benefits. This section contains the potential 9 benefits identified through literature review in order to know why the people want to buy a house. For the last section, five-point Likert scale will be conducted in this section again but it focus on the incentives. This section contains the potential 34 incentives which identified through literature review. The number starting from 1 to 5 will be used to represent each level of the scale such as number 1 to 5 are represent extremely unimportant, strongly unimportant, important, strongly important and extremely important respectively. The respondents can base on their opinion or experiences to rank the options or tick in the appropriate columns to

indicate how much they agree that the benefits will increase the homeownerships and how much they agree that the motivators are incentives for homebuyers to own their own house. Sample of questionnaire is placed in Appendix A.

### **3.6 Data Analysis**

When the questionnaires are gathered back, the next step that will be conducted is analysing the data. The results will be concerned and discussed in this study. Microsoft excel version 2010 is used for illustrative statistic and the Statistical Package for the Social Science (SPSS) software version 20 will be carried out in this study to analyse the data collected from the questionnaire. The reason of using SPSS is this statistical package suitable for analyse the quantitative data (Khalid, 2010).

Besides, the descriptive analysis is one of the method will be used in this study for summarising, establishing, and expressing the data gathered from the questionnaire in the form of tables, charts, graphs and numerical. It can help the researchers to simply the data from large amount of questionnaire and show the data in a sensible way if using the table form. Usually the unstructured data will be used in this method. Besides, the data gathered from the questionnaire will be calculated by applying the measurement which includes mean average, exhibition of percentage and frequency of distribution. Therefore, the information can be view easily and more understanding for everyone.

Next, reliability analysis and validity test also will conduct to test the strength of the data. Factor analysis also will conduct for identifying group of variable, to group 34 potential incentives into the groups of correlated incentives.

### **3.7 Conclusion**

In this chapter, the research is conducted in term of literature review, data collection methods, sampling design, research instrument and data analysis. Besides, the primary data and secondary data were determined and used as data collection methods in this study. The sampling design was discussed about the target respondents and sampling location. The research instrument was determined to carry out the research. Furthermore, the measurement such as Likert scale is used in designing the questionnaire. The SPSS software applied in this research to analyse the data.

## **CHAPTER 4**

### **RESULTS AND DISCUSSIONS**

#### **4.1 Introduction**

This chapter shows the results of the survey data that received from 287 sets of survey questionnaire. The descriptive statistic and inferential statistic which included descriptive analysis, reliability analysis, validity test, one sample t-test, and factor analysis will be applied in this chapter. There have total six sections in this chapter. First, the chapter begin with summary of data collection and descriptive of respondents' profile. The figure is produced by using illustrative statistic and Microsoft Excel in order to present the demographic data in clear and simple way. Next, the analysis on benefits of increasing homeownership and analysis on incentives for home buyers will be carried out in this chapter to achieve the aim and the objectives of this study. Last, the conclusion will be presented on the last section.

#### **4.2 Summary of Data Collection**

The home buyers who included potential home buyers and home owners were targeted as respondents in this survey in order to received different opinion for data interpretation. A total number of 250 sets of survey questionnaires were distributed by hand delivery while 200 sets were delivered via "google form". However, the exact number of the online survey form cannot be determined because it involved snowballing whereby it asked the respondents to help for through their friends. The survey questionnaires were conducted in Kuala Lumpur area.

There were received only 287 sets of survey questionnaire from respondents at the end of this research and used for data analysis as well as generate the result for this research. The data collection conducted within 2 months from November 2016 to December 2016 and the total amount of survey questionnaire returned from hand delivery is 224 sets while collected via “google form” is 63 sets. The total response rate of survey questionnaire is 63.78 per cent.

**Table 4.1 Summary of Data Collection**

Items	Total sent	Total respond	Response rate
Questionnaires distributed by hand delivery	250	224	89.60%
Questionnaires delivered via “google form”	200	63	31.50%
Total questionnaires sent out	450	287	63.78%

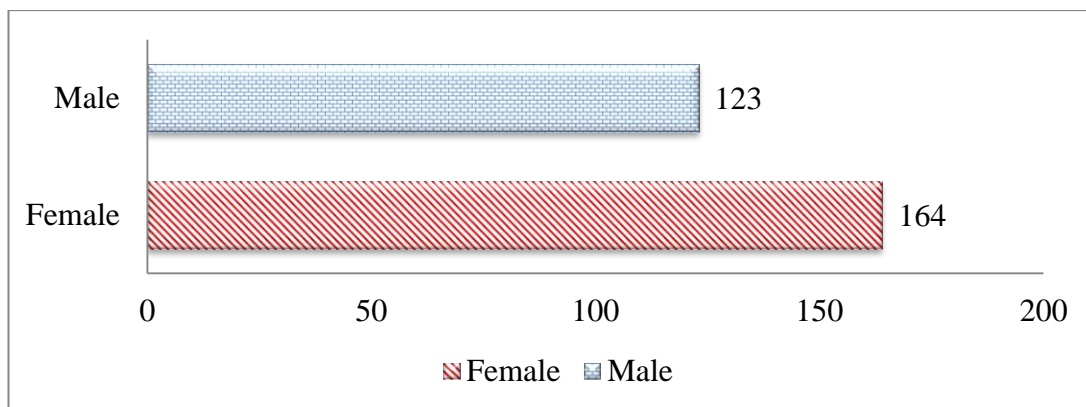
### 4.3 Respondents’ Profile

The demographic characteristic of the respondents are presented in this section. The data are presented in figure and table which the frequency as well as the percentage are detailed for each of the respondents’ demographic characteristic.

#### 4.3.1 Gender

Figure 4.1 indicates that 57.1 per cent of the respondents were female and 42.9 per cent were male. The total numbers of respondents were 287 people, the number of female and male were 164 people and 123 people respectively.

From figure 4.1, it can be found most of the respondents were female. This is because they will more focused on the incentives or promotion provided before they make decision on purchasing their own house.



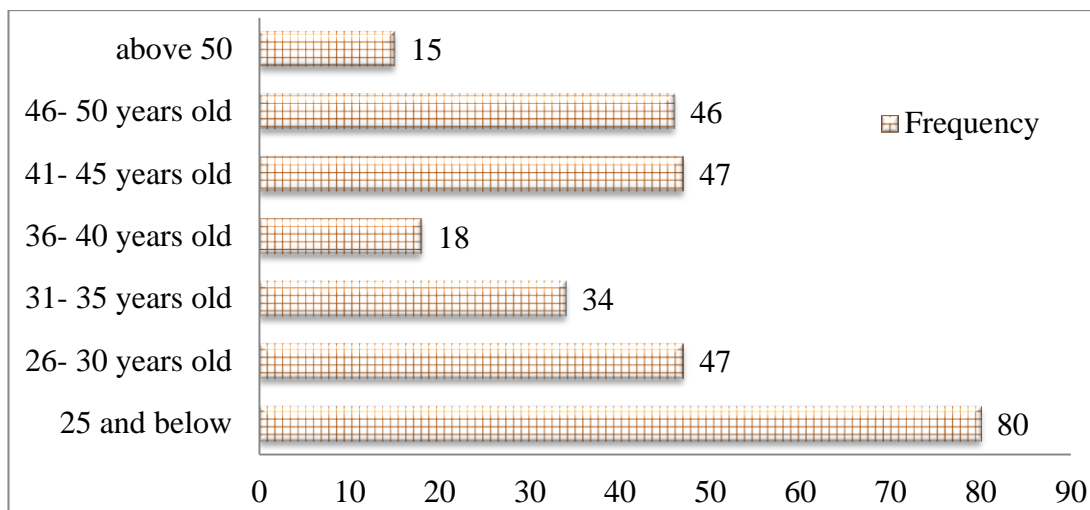
**Figure 4.1 Distribution of Respondents' Gender**

### 4.3.2 Age

Figure 4.2 represents the range of ages of the 287 respondents. The age group of 25 and below accounted the largest group which are 27.9 per cent. The age group of 26 to 30 and 41 to 45 years old were the second largest group because there had same amount of percentage which are 16.4 per cent while the third largest age group was 46 to 50 years old and this group accounted 16 per cent of the total. Then, there were 11.8 per cent of respondents under age group of 31 to 35 years old and less than 7 per cent of respondents were 36 to 40 or above 50 years old which are 6.3 per cent and 5.2 per cent.

The result indicates that most of the respondents in below 25 to 30 and 41 to 45 age groups. In Malaysia, first time buyers are between 24 to 35 years old. Hence, from figure 4.2, there are approximate 62 per cent of respondents are first time home buyers. The respondents may have more interest on purchasing their own house so they may have more concerned about the incentives provided or proposed by the developers and government as well as banks. While the age above 41 years old, the respondents probably want to buy their second house





**Figure 4.2 Distribution of Respondents' Age**

**Table 4.2 Mean and Standard Deviation of Respondents' Age**

Mean	3.3589
Standard Deviation	2.0398

Table 4.2 shows the mean and standard deviation of the respondents' age. From the table, it represented the data of mean was around 3.4 which means this data interpreted the average value on the age of the respondents is between 31 years old until 35 years old.

Furthermore, the following table presented the cross-tabulation between the age and gender of the respondents. From the analysis, it explained the age group of 25 years old and below accounted the largest group which consisted of 43 females and 37 males respectively. 25 females and 22 males were come from the age group of 26 to 30 years old while 35 females and 12 males were between 41 to 45 years old. These two groups had the same amount of respondents but different amount on different gender. Besides, there were only 8 females and 7 males had an age group of above 50 years old.

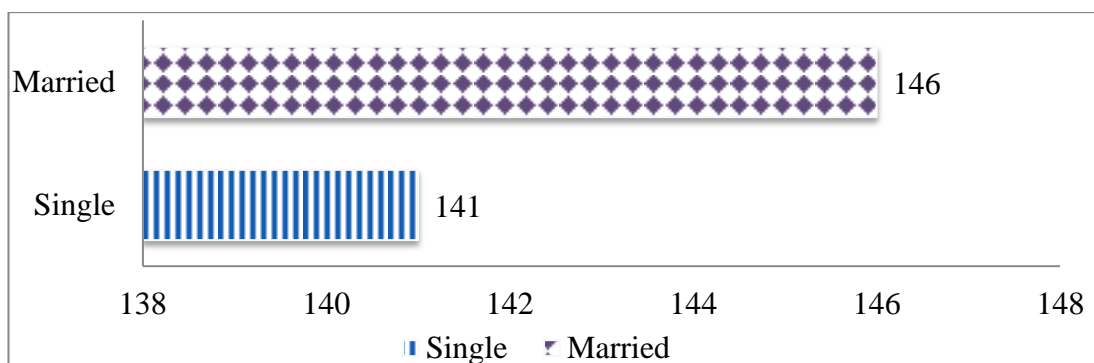
**Table 4.3 Distribution of Cross-tabulation between Age and Gender of Respondents**

		Gender		Total
		Female	Male	
Age	25 and below	43	37	80
	26- 30 years old	25	22	47
	31- 35 years old	22	12	34
	36- 40 years old	12	6	18
	41- 45 years old	35	12	47
	46- 50 years old	19	27	46
	above 50	8	7	15
Total		164	123	287

### 4.3.3 Marital Status

The data of marital status of respondents is displayed in figure 4.3. Marital status can be distributed to married and single.

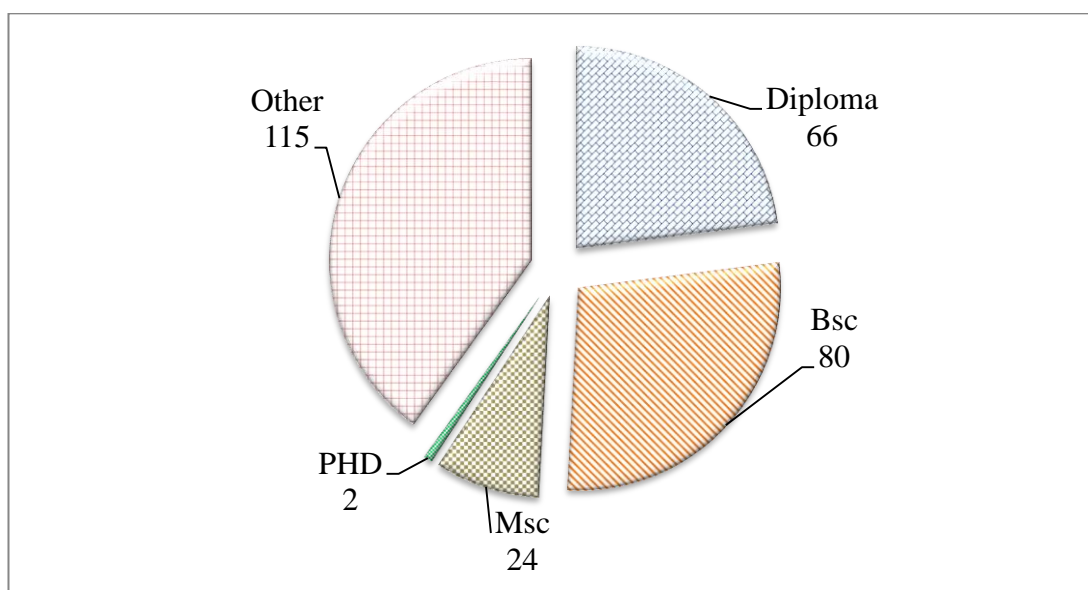
Based on the result, most of the respondents were married (50.9 per cent). This indicates that the respondents are more understand on the housing market need because they are desire to have their own house for their family. If there are any promotion or planning implementation will attracts home buyers and increase purchasing power of them.



**Figure 4.3 Distribution of Respondents' Marital Status**

#### 4.3.4 Educational Qualification

Figure 4.4 shows the educational qualification of respondents in the form of pie chart. Other academic levels constituted the highest percentages of 40 per cent which include graduated from primary school and secondary school or without education. Nearly 28 per cent of respondents had a Bachelor degree while Diploma shows the percentage of 23 per cent. Besides, the percentages of Master and PHD were 8.4 per cent and 0.7 per cent respectively.



**Figure 4.4 Distribution of Respondents' Educational Qualification**

The result explains that most of the respondents are working without high education. Those of Diploma and above qualification hold technical or administrative or management position in their organisation. Table 4.4 describe that the frequency and the percentage of the respondents come from others educational qualification. The proportion of the others which included no education, primary school, PMR level, SPM level, and UEC level were 0.9 per cent, 4.3 per cent, 5.2 per cent, 60.0 per cent, and 22.6 per cent respectively. While there are 8 respondents were no provided any response and which accounted 7.0 per cent of the total. Most of the respondents with other qualification are SPM holders (see Table 4.4) thus they able to make a reasonable consideration and wise decision before purchase the house.

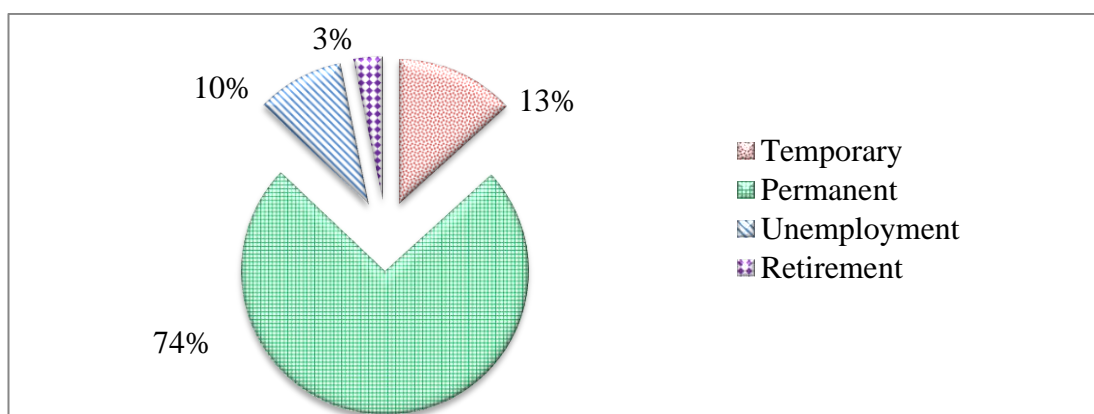
**Table 4.4 Others Educational Qualification of Respondents**

	Frequency	Percentage
No education	1	0.9
Primary school level	5	4.3
PMR level	6	5.2
SPM level	69	60.0
UEC level	26	22.6
No response	8	7.0
Total	115	100

#### 4.3.5 Nature of Job

Nature of job in this survey included temporary, permanent, unemployment and retirement. Figure 4.5 shows the nature of job of respondents. Refer to the figure, the highest frequency of respondents had permanent job which accounted 212 people of the total and followed by temporary job which included 38 respondents. In additional, 28 respondents were under unemployment and only 9 respondents were retirement.

Most respondents had permanent job, this is because most of them are graduated from high education as the total proportion of high education which included Diploma, Bachelor Degree, Master and PHD were 60 per cent compared to others which were 40 per cent. The respondents had permanent job means can afford the expense or loan on purchase their own houses due to they have fixed income.

**Figure 4.5 Distribution of Nature of Job of Respondents (%)**

**Table 4.5 Distribution of Cross-tabulation between Educational Qualification and Nature of job**

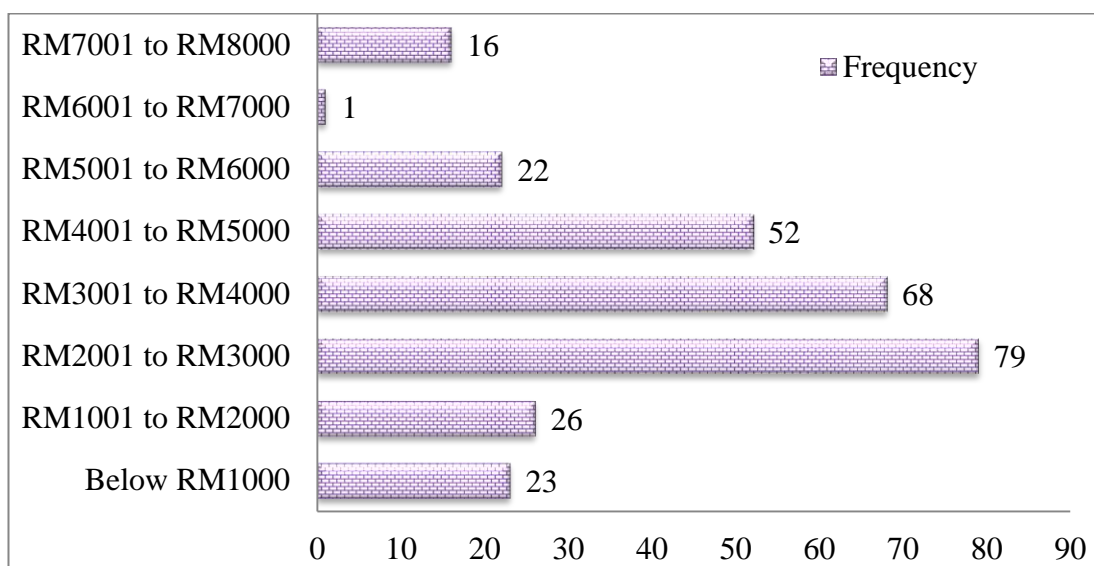
		Nature of job				Total
		Temporary	Permanent	Unemployment	Retirement	
<b>Educational Qualification</b>	Diploma	19	44	3	0	66
	Bsc	9	63	8	0	80
	Msc	4	20	0	0	24
	PHD	0	2	0	0	2
	No education	0	0	0	1	1
	Primary school level	0	1	2	2	5
	PMR level	0	2	3	1	6
	SPM level	3	54	10	2	69
	UEC level	1	25	0	0	26
	No response	2	1	2	3	8
	Total	38	212	28	9	287

Table 4.5 shows that crosstabs between educational qualification and nature of job of respondents. Refer to the table above, it is not surprising that Diploma, Bachelor Degree, Master, SPM and UEC had permanent job. For the temporary job, there were 19 respondents graduated from Diploma level, 9 respondents from Bachelor degree level, 4 respondents from Master level, 3 and 1 respondents from SPM level and UEC level respectively as well as 2 respondents were no gave any response on it. The respondents probably are changing location so they take temporary job. In addition, table shows that total 28 and 9 respondents who graduated from different level of education were unemployment and retirement.

#### 4.3.6 Monthly Income

Monthly incomes of respondents are displayed and presented in the form of bar chart shown in figure 4.6. Approximately 28.0 per cent of the respondents' monthly incomes were at RM 2001 to RM 3000 and followed by 23.7 per cent of respondents had monthly income between RM 3001 to RM 4000. Besides, monthly income between RM 4001 to RM 5000 accounted 18.1 per cent of the total while 9.1 per cent of respondents had monthly income between RM 1001 to RM 2000. The percentages of respondents' monthly income below RM 1000 and RM 5001 to RM6000 were similar which are 8.0 per cent and 7.7 per cent respectively. In addition, 5.6 per cent of respondents earned their monthly income between RM 7001 to RM 8000 and only 0.3 per cent of respondent earned at the income group of RM 6001 to RM 7000.

From the results, the most of the respondents earned between RM 2001 to RM3000 monthly. This probably because the respondents are fresh graduated from diploma or bachelor degree as most of the respondents' age was below 25 years old. Besides, the other reason may be the respondents come from low education which included SPM level, PMR level and others. However, 31.7 per cent of respondents earned more than RM 4000. In fact, only 5.6 per cent of respondents earned more than RM 7000. Hence, the incentives provided or the plans proposed by the developers, government as well as banks are important for the respondents to purchase their dream houses.



**Figure 4.6 Distribution of Respondents' Monthly Income**

**Table 4.6 Mean and Standard Deviation of Respondents' Monthly Income**

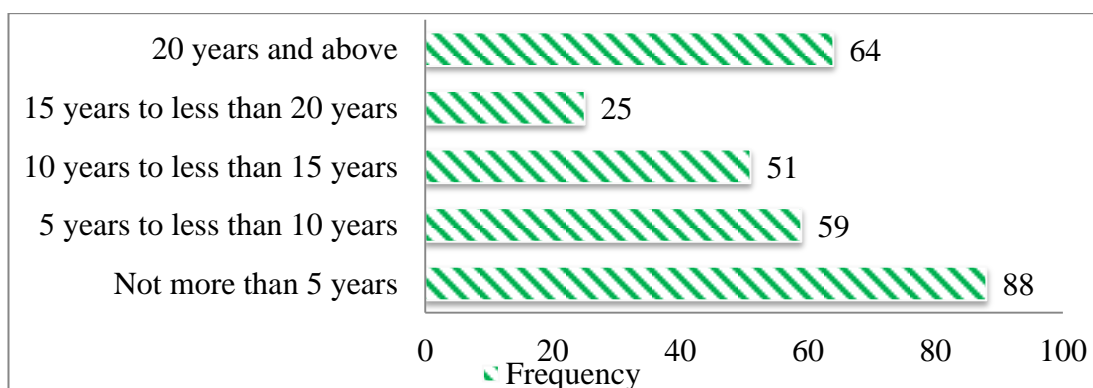
Mean	3.8711
Standard Deviation	1.66224

Mean and standard deviation of the respondents' monthly income are shown in table 4.6. From the table, the data of mean was nearly 3.90 which means this data interpreted the average value on the monthly income of the respondents is between RM 3001 to RM 4000.

#### 4.3.7 Working Experience

Figure 4.7 shows the group of respondents' working experience. 88 respondents had been working for less than 5 years which constituted the largest group at the percentage of 30.7 per cent. 22.3 per cent of respondents obtained 20 years working experience and above while 20.6 per cent of respondents had more than 5 years but less than 10 years of work experience. Moreover, working experience on 10 years to less than 15 years and 15 years to less than 20 years had the percentage of 17.8 per cent and 8.7 per cent separately.

The results shows that most of the respondents was not more than 5 years on their working experience due to the age of them was below 25 years old and probably some of them was fresh graduated students.

**Figure 4.7 Distribution of Respondents' Working Experience**

**Table 4.7 Mean and Standard Deviation of Respondents' Working Experience**

Mean	2.7143
Standard Deviation	1.52894

Table 4.7 indicates the mean and standard deviation of the respondents' working experience. From the table, it expressed the data of mean was around 2.71 which means this data presented the average value on the monthly income of the respondents are between 10 years to less than 15 years. 68 per cent of the respondents have between 0 or even 1 month to 20 years working experiences.

**Table 4.8 Distribution of Cross-tabulation between Respondents' Age and Working Experience**

		Working Experience					Total
		not more than 5 years	5 years to less than 10 years	10 years to less than 15 years	15 years to less than 20 years	20 years and above	
Age	25 and below	68	12	0	0	0	80
	26- 30 years old	16	31	0	0	0	47
	31- 35 years old	4	13	15	2	0	34
	36- 40 years old	1	0	6	7	4	18
	41- 45 years old	0	3	20	6	18	47
	46- 50 years old	0	0	9	7	30	46
	above 50	0	0	1	2	12	15
Total		89	59	51	24	64	287

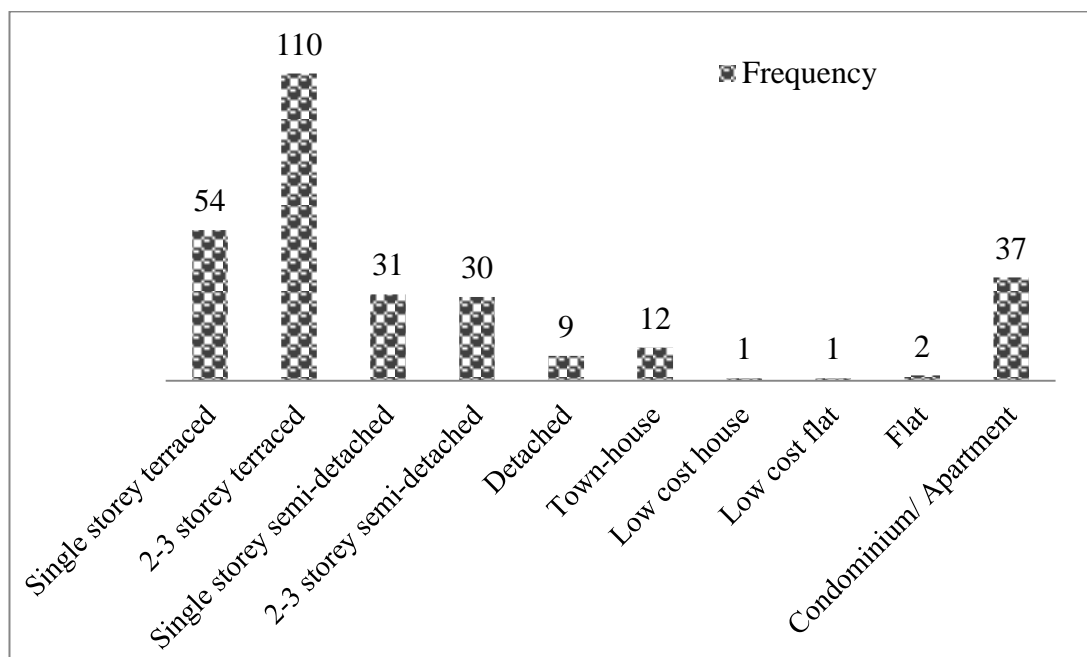
Cross-tabulation was performed on the age and working experience of the respondents. Based on the table 4.8, the information was expected because 25 years old are majority with less than 5 years working experience. Total amount of 64 respondents constituted the highest working experience of 20 years old and above



but the respondents came from different age groups: 46 to 50 years old (30 respondents), 41 to 45 years old (18 respondents), above 50 years old (12 respondents) and 36 to 40 years old (4 respondents).

#### 4.3.8 Type of House the Respondents Currently Living

Figure 4.8 displays that the amount on type of house the respondents currently living. It can be found that the majority of respondents lived in 2-3 storey terraced house which was 38.3 per cent or 110 people and followed by single storey terraced house which the percentage constituted 18.8 per cent of the total. The third highest percentage on type of house the respondents currently living was condominium/ apartment which presented nearly 13 per cent. Furthermore, the percentages of respondents who resided in single storey and 2-3 storey semi-detached houses were similar which were 10.8 per cent and 10.5 per cent respectively. Less than 5 per cent of the respondents lived in town house, flat, low cost house and low cost flat which show the percentage of 4.2 per cent, 0.7 per cent, 0.3 per cent as well as 0.3 per cent separately.

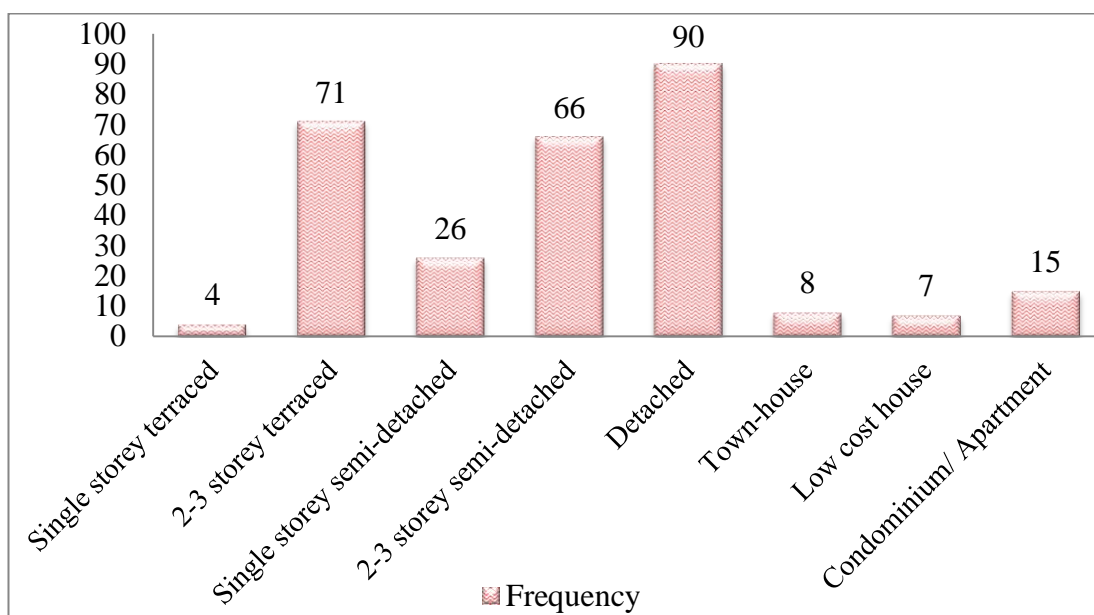


**Figure 4.8 Distribution of Type of House the Respondents Currently Living**

### 4.3.9 Type of House Respondents Prefer to Buy

Bar chart was presented percentages and frequency on the type of the house respondents prefer to buy. According to the figure 4.9, 31.4 per cent of the respondents preferred to buy detached house while 24.7 per cent of the respondents were preferred on purchasing 2-3 storey terraced house. 2-3 storey semi-detached houses made up the third highest percentage of 23 per cent and only 9.1 per cent of respondents would like to buy single storey semi-detached house. Other than that, 15 respondents (5.2 per cent) and 8 respondents (2.8 per cent) were preferred on condominium/ apartment and town-house. Only few respondents were interested on the low cost house and single storey terraced which constituted the percentage of 2.4 per cent and 1.4 per cent respectively.

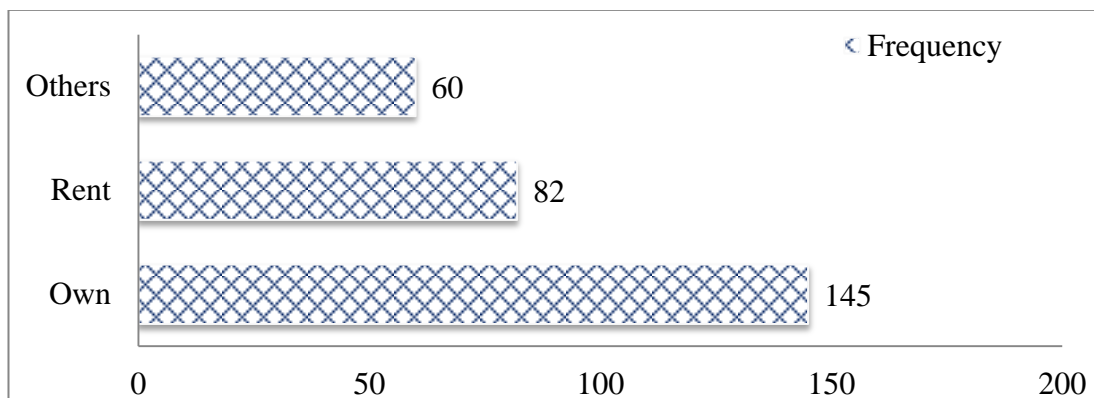
Based on the Eugene (2017), the preferred property of choice was apartment/condominium, followed by terrace/cluster/townhouse. Semi-detached home, serviced apartments, bungalows/villas and commercial/shop lots ranked third, fourth, fifth and sixth, respectively, in the survey. While, according to the figure, there was low quantity of respondents preferred to buy condominium or apartment probably because the security, convenience or comfortable reason, the neighbours are easily to access or pass through in front of the house. Also, the respondents need to wait for the lift before working, it probably waste their time. Therefore, the respondents actually prefer the detached house due to convenience purpose.



**Figure 4.9 Distribution of Type of House the Respondents Prefer to Buy**

#### 4.3.10 Status of House ownership

Figure 4.10 indicates the status of house ownership of respondent: 50.5 per cent of the respondents had their own house, and 28.6 per cent of respondents rent the house. While the status of house of 60 respondents or 20.9 per cent of respondents were other which the house is the family house.



**Figure 4.10 Distribution of Respondents' Status of House Ownership**

Cross-tabulation between type of house respondents currently living and status of house ownership were expressed in Table 4.9. It shows that 110 of the 287 respondents who lived in 2-3 storey terraced house: 50 respondents were owned, 34 respondents were rented and 26 respondents were others which is family house. For renting the house, most of the respondents more preferred rent on the house of 2-3 storey terraced (34 respondents) and followed by condominium/ apartment (28 respondents). Moreover, 33 respondents who owned the single storey terraced house, 10 respondents rented and 11 respondents stayed with their family in single storey terraced house. Other than that, there were only 1 respondent who owned the low cost house and low cost flat respectively.

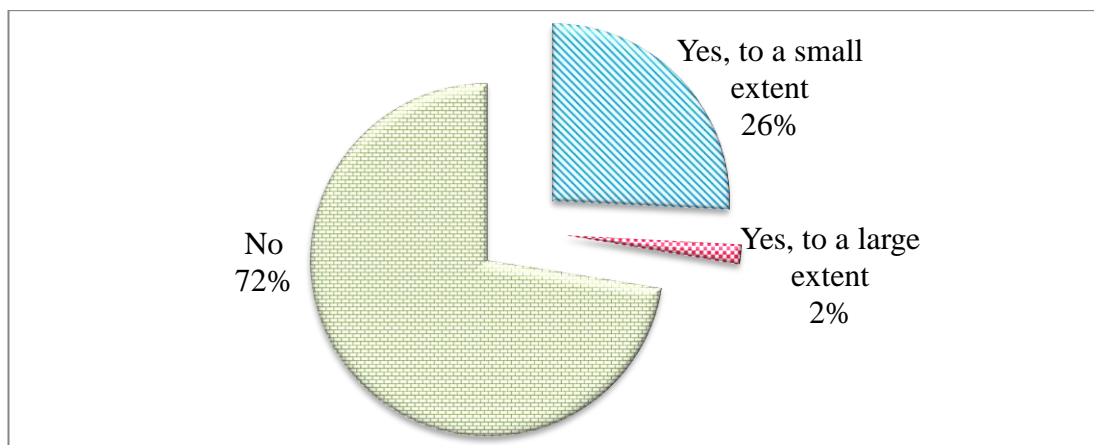
**Table 4.9 Distribution of Cross-tabulation between Type of House Respondents Currently Living and Status of House Ownership of Respondents**

		Status of house ownership			Total
		Own	Rent	Others	
Type of house respondents currently living	Single storey terraced	33	10	11	54
	2-3 storey terraced	50	34	26	110
	Single storey semi-detached	18	10	3	31
	2-3 storey semi-detached	27	0	3	30
	Detached	3	0	6	9
	Town-house	11	0	1	12
	Low cost house	1	0	0	1
	Low cost flat	1	0	0	1
	Flat	0	0	2	2
	Condominium/ Apartment	1	28	8	37
Total		145	82	60	287

#### 4.3.11 Experience in Abandoned Housing

The pie chart indicates the respondents' experience on abandoned housing (Figure 4.11). There had 208 respondents were no experience in abandoned housing which accounted 72.5 per cent of the total. 79 respondents had experience in abandoned housing at any particular stage that 74 respondents were to a small extent in abandoned housing while only 5 respondents of the total had to a large extent in abandoned housing.

Other researcher also asks this kind of question in his survey questionnaire and most of the respondents had no experience on the abandoned projects (Yap, 2013). But the answer will not be referred in this study due to the research title and background was different. The researcher was focused on the causes of the abandoned projects while for this study is focused on the incentives for home buyers in order to reduce abandoned projects. This finding is very interesting because in Malaysia around 22 per cent of housing development where actually abandoning yearly.

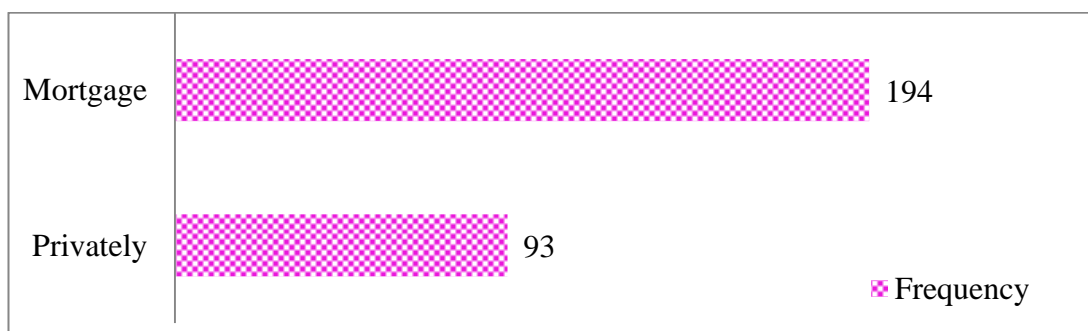


**Figure 4.11 Distribution of Respondent' Experience in Abandoned Housing (%)**

#### 4.3.12 How Home Buyers or Homeowner Funded Their Housing Project

The way on project funded of respondents is summarised in the figure 4.12. The project funded can be distributed into two ways which are privately and mortgage. According to the figure, the percentages of the projects which were funded privately and mortgage are 32.4 per cent and 67.6 per cent respectively.

According to Yap (2013), most of the abandoned projects were funded privately. The researcher is contradict with this research because refer to figure below, it shows the project was funded mortgage. This is because different respondents have different view on the project funded and the targeted respondents of researcher were working within the construction industry while the respondents for this study were the potential home buyers and homeowners.



**Figure 4.12 Distribution of Way on Project Funded of Respondent**

#### 4.4 Analysis on Benefits of Increasing Homeownership

This section seeks to analyse the benefits of homeownership. There are total 9 benefits of increasing homeownership in this research. However, before the main analysis, the reliability analysis and validity test of the benefits were carried out to determine the strength of the data. Then, the one sample t-test and KMO were also conducted.

##### 4.4.1 Reliability Analysis of Benefits

The Cronbach coefficient ( $\alpha$ ) is an indicator of the internal consistency of the interrelated trends of one variable to another (Zeng, 2013). The ranges of Cronbach's Alpha are from 0 to 1, the values more close to 1 which indicate that the variables have high consistency (Wells and Wollack, 2003). According to the table 4.10, the result shows the Cronbach's Alpha value in this survey was 0.799. Cronbach's Alpha values which greater than 0.7 are considered sufficient (Nunnally and Bernstein, 1994). Hence, it proved that all the benefits are consistency or repeatability of measure is in good range for this research.

**Table 4.10 Reliability of Benefits of Increasing Homeownership**

Cronbach's Alpha	N of items
0.799	9

Table 4.11 shows that Cronbach's alpha value for each of the benefits. From the results, the range from 0.766 to 0.800 which the benefit of reduce housing shortage had the highest cronbach's alpha value which was 0.800 and followed by the benefit of better neighbourhoods which obtained the value of 0.795. While secure investment accounted the lowest cronbach's alpha value of 0.766. Besides, improves health and safety and higher levels of personal self-esteem had the value of 0.779 and 0.775 separately. According to the table, there had two groups of benefits hold the cronbach's alpha at the same value of 0.774 and 0.773 respectively. One

group (0.774) was contained the benefits of higher levels of happiness and lower crime while another group (0.773) was consisted the benefits of having a space that is your home and make your own home. Each of the benefit in this research was contained the good cronbach's alpha value which the values were higher than 0.7. Therefore, the value for all benefits was very satisfactory, it proved all the benefits had high consistency and reliable.

**Table 4.11 Item-Total Statistic of Benefits**

	<b>Scale Mean if Item Deleted</b>	<b>Scale Variance if Item Deleted</b>	<b>Corrected Item-Total Correlation</b>	<b>Cronbach's Alpha if Item Deleted</b>
Reduce housing shortage	30.6620	16.287	0.334	0.800
To have a space that is your home	29.7840	15.289	0.537	0.773
To make your own home	29.6551	15.506	0.535	0.773
Secure investment	29.8467	15.368	0.601	0.766
Improves health and safety	29.8885	15.806	0.485	0.779
Higher levels of happiness	29.9199	15.137	0.525	0.774
Higher levels of personal self-esteem	29.8293	15.352	0.515	0.775
Better neighbourhoods	30.4704	15.467	0.391	0.795
Lower crime	29.7700	15.646	0.532	0.774

#### **4.4.2 Validity Test of Benefits**

The outcomes of validity test by using Communalities are shown in Table 4.12. Based on the table below, the resulting value is 0.421 to 0.834 which explained that reduce housing shortage was presented the lowest value and high levels of happiness accounted the highest value. The general Cronbach's Alpha value is 0.5, but 0.4 is

also accepted in fact for the variable of reduce housing shortage the reliability value is excellent. Therefore, it no needs to delete or remove the variable.

**Table 4.12 Communalities of Benefits**

	<b>Initial</b>	<b>Extraction</b>
Reduce housing shortage	1.000	0.421
To have a space that is your home	1.000	0.813
To make your own home	1.000	0.872
Secure investment	1.000	0.731
Improves health and safety	1.000	0.651
Higher levels of happiness	1.000	0.834
Higher levels of personal self-esteem	1.000	0.816
Better neighbourhoods	1.000	0.665
Lower crime	1.000	0.592

#### 4.4.3 Kaiser-Meyer-Olkin (KMO) of Benefits

To further test the strength of the variable, Kaiser-Meyer-Olkin (KMO) was computed. According to Zeng (2013), the value of Kaiser-Meyer-Olkin higher than 0.6 is considered as a good factor analysis and the significant value of Bartlett's test of sphericity less than 0.05 is considered the factor analysis is appropriate. The value of KMO and Bartlett's test displayed in the following table was 0.628 and 0.000 respectively which greater than 0.6 and less than 0.05.

**Table 4.13 Kaiser-Meyer-Olkin and Bartlett's Test of Benefits**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.628
Bartlett's Test of Sphericity	Approx. Chi-Square	1254.033
	df	36
	Sig.	0.000



#### 4.4.4 One Sample T-Test of Benefits

Also, one sample t-test was conducted. Table 4.14 represents the results of the benefits that analysed from one sample t-test. One sample t-test statistic was carried out to examine the measurement of population with respect to each of the benefit. The null hypothesis was presented that the benefit was unimportant for home buyers ( $H_0: U=U_0$ ) while the alternative hypothesis was that the benefit was important for home buyers ( $H_1: U>U_0$ ). The test value used in this test is 3.5 which mean the population mean  $U_0$  is 3.5 and the determinant=0.012. From the results, the p-value of each item indicates the value of 0.000 which means all the items are significant ( $H_1: U>U_0$ ). So that, the alternative hypothesis will accepted and rejected the null hypothesis. Thus, the items are able to stand as benefit to encourage the home buyers to purchase their own house. There can be found that some researchers had been done the research about the benefits of homeownership, so some of the literature review will be prove in this study.

Having the space that is your home and making your own home is the benefits of increasing homeownership as homeownership offers great freedom to create the living environment that you have always wanted. The homeowners can use the space to beauty their home in order to make a sign or mark that is their home. Besides, homeowners can paint rooms whatever colour or design they like, make changes to floors and carpeting, own pets and do all the things that make their own home. All those actions are without having to get approval from a landlord as he or she is a homeowner not a renter.

Homeownership is a secure investment as the prices of houses will rise in the short term cyclical. If the homeowners stay at their home for a long time, it will increase house's value and give homeowners a great return on their investment.

The conditions of the homeowners' house are generally better than the house of renters and the better condition of houses may improve on the health of owners while bad condition will bring negative health impact to the renters. Most of the renters may live in poor quality of the house due to financial problem and a series of health problem will be occur which including respiratory diseases such as asthma; easier contact with toxic substances such as lead; and injuries such as burns and falls (Rohe and Han, 2012).

Rossi and Weber (1996) established that homeowners reflect higher self-esteem and happiness compared to the renters. The homeownership influences the psychological health of the owners which bring positive impacts on the emotion to the homeowners.

According to Haurin (2003), the homeownership is important and there are many benefits of homeownership: there is security; there is self-reliance; create the stability of neighbourhoods; there is proud of homeownership; generate the economic growth and it bring benefits for children that will reduce the teenage pregnant rate of the owners' daughters. The children will remained at the house will lower down the crime compared to renters' children. Due to financial problem, the renters may often moving and lead to bad habit or attitude of the children who didn't like to stay at home.

Homeowners tend to minimize bad behaviour of their children and their neighbours this is because it has a negative impact on the value of homes in their neighbourhood (National Association of Realtors, 2012). Therefore, the better neighbourhoods are vital for the home buyers before purchase their house.

**Table 4.14 One Sample T-Test of Benefits**

	Test Value = 3.5					
	t	df	Sig. (2- tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
<b>Reduce housing shortage</b>	-8.929	286	0.000	-0.434	-0.529	-0.338
<b>To have a space that is your home</b>	9.618	286	0.000	0.444	0.353	0.535
<b>To make your own home</b>	13.086	286	0.000	0.573	0.487	0.659
<b>Secure investment</b>	9.174	286	0.000	0.382	0.300	0.463
<b>Improves health and safety</b>	7.827	286	0.000	0.340	0.254	0.425
<b>Higher levels of happiness</b>	6.335	286	0.000	0.308	0.213	0.404
<b>Higher levels of personal self-esteem</b>	8.518	286	0.000	0.399	0.307	0.491
<b>Better neighbourhoods</b>	-4.415	286	0.000	-0.242	-0.350	-0.134
<b>Lower crime</b>	10.809	286	0.000	0.458	0.375	0.542

#### 4.4.5 Descriptive Statistic of Benefits

Table 4.15 shows the frequency of the respondents on different perception on the benefits. 31.55 per cent of the respondents who gave the response as important, 41.81 per cent of the respondents measure all the benefits as strongly important and 19.86 per cent of the respondents agreed on extremely important. This means that 93.22 per cent of the respondents agree on the benefits stated in the survey. Each of the detailed showed in Appendix B.

**Table 4.15 Descriptive Statistic of Benefits**

<b>Incentives</b>	<b>Extremely unimportant</b>	<b>Strongly Unimportant</b>	<b>Important</b>	<b>Strongly Important</b>	<b>Extremely Important</b>
<b>To make your own home</b>	0	0	69	128	90
<b>Lower crime</b>	0	8	56	163	60
<b>To have a space that is your home</b>	0	2	90	117	78
<b>Higher levels of personal self-esteem</b>	0	7	85	125	70
<b>Secure investment</b>	0	1	87	144	55
<b>Improves health and safety</b>	0	2	98	131	56
<b>Higher levels of happiness</b>	0	10	100	112	65
<b>Better neighbourhoods</b>	0	75	84	107	21
<b>Reduce housing shortage</b>	0	70	146	53	18
<b>Total Sum</b>	0	175	815	1080	513
<b>Percentage</b>	0	6.78	31.55	41.81	19.86

#### **4.4.6 Ranking of Benefits**

The benefits of increasing homeownership ranked by 287 respondents are described in table 4.16. The mean of each benefit was shown and the benefits were ranked based on their mean value that the higher the mean value, the higher the rank. According to the analysis, the mean ranging from 3.066 to 4.073 which the benefits of making your own home accounted the highest mean value (4.073) while reducing housing shortage constituted the lowest mean value (3.066). Besides, the total average of mean and standard deviation of the benefits was 3.748 and 0.784 respectively.

To make your own home constituted the highest mean value and there can be found some similar researches on benefits of homeownership were done before. But there are no researches determine this variable is one of the benefits so it cannot

compare with. Yet, it is not surprising, because owning a home is the major dream for everyone for their future and it provide a greater freedom for the homeowners to create their dream house.

**Table 4.16 Benefits of Increasing Homeownership Ranked by 287 Respondents**

<b>Benefits</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Ranks</b>
To make your own home	4.073	0.742	1
Lower crime	3.958	0.718	2
To have a space that is your home	3.944	0.782	3
Higher levels of personal self-esteem	3.899	0.793	4
Secure investment	3.882	0.705	5
Improves health and safety	3.840	0.735	6
Higher levels of happiness	3.808	0.825	7
Better neighbourhoods	3.258	0.929	8
Reduce housing shortage	3.066	0.823	9

#### **4.5 Analysis on Incentives for Home Buyers to Own Their House**

This section seeks to analyse the incentives for home buyers to own their house. There are total 34 incentives in this research. However, before the main analysis, the reliability analysis and validity test of the incentives were carried out to determine the strength of the data. After that, one sample t-test, KMO and factor analysis were conducted in this research in order to analyse and interpret the data.

##### **4.5.1 Reliability Analysis of Incentives**

From table 4.17, the result shows the average Cronbach's Alpha value in this survey was 0.800, so it proved that the incentives have high internal consistency and have high reliability for this study.

**Table 4.17 Reliability of Incentives for Home Buyers to Own Their House**

Cronbach's Alpha	N of items
0.800	34

Table 4.18 shows that Cronbach's alpha value for each of the incentive. From the results, the range of value was from 0.784 to 0.808. Expand and retain the stamp duty exceptions accounted the lowest cronbach's alpha value of 0.784 while there had two variables constituted the highest value of 0.808 which are access to religious place and access to recreation facilities. Each of the incentive in this study was contained the good cronbach's alpha value therefore it was very satisfactory, and proved all the incentive had high consistency and reliable.

**Table 4.18 Item-Total Statistic of Incentives**

		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	Developers discount on the price of the houses	120.906	84.491	0.241	0.797
2	Discount of 10% for home buyers who booking the house unit	121.035	82.950	0.417	0.791
3	Reduce interest rate for home buyers from bank	120.707	85.466	0.180	0.799
4	Reduce taxes	121.174	86.690	0.103	0.801
5	Free of title insurance or title search fee	121.275	84.732	0.229	0.797
6	Implement build then sell concept	121.547	83.633	0.290	0.795
7	Free maintenance cost for 5 years	121.042	85.271	0.215	0.798
8	Developers to provide loan to home buyers instead bank	121.352	83.159	0.280	0.796
9	Developer to provide complimentary goods like furniture	120.711	82.500	0.378	0.792

**Table 4.18 Item-Total Statistic of Incentives (Cont'd)**

		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
10	Access to public transport network	121.021	80.874	0.434	0.789
11	Access to religious place such as mosque, temple, church	122.143	87.256	0.016	0.808
12	Access to child day care centre	121.836	82.270	0.319	0.794
13	Access to recreation facilities	121.739	88.131	-0.030	0.808
14	Better accessibility to the market	121.153	82.193	0.398	0.791
15	Location of housing units to place of work	120.662	84.420	0.271	0.796
16	Good environment such as air quality, water quality	120.902	83.179	0.337	0.793
17	Safety issue	120.749	84.496	0.264	0.796
18	Good road network	121.125	86.187	0.142	0.800
19	Population of the area reduce, quiet area	121.352	83.767	0.166	0.803
20	Increase quota for low and medium cost housing	121.533	81.425	0.379	0.791
21	Improve quality of the building	121.362	82.973	0.413	0.791
22	Green material	121.171	83.156	0.355	0.793
23	Government help home buyers cover the incidental costs such as legal fees	121.366	81.953	0.536	0.787
24	Government provide financial help for home buyers who build themselves	121.307	80.983	0.467	0.788
25	Government increase fund in account of EPF from current 30% to 40%	121.467	83.474	0.320	0.794

**Table 4.18 Item-Total Statistic of Incentives (Cont'd)**

		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
26	Banks relaxing loan approvals by offering flexibility to lend up to 100% financing	120.777	86.188	0.141	0.800
27	Increase Overnight Policy Rate (OPR)	121.655	83.164	0.339	0.793
28	Reduces charge of stamp duty memorandum of transfer	121.599	86.493	0.122	0.801
29	Home buyers to withdraw from EPF saving	121.491	85.132	0.220	0.797
30	Home buyers to use My Deposit scheme	121.554	82.835	0.457	0.790
31	Stamp duty for second and subsequent property to increase progressively	121.669	84.208	0.318	0.794
32	Banks to staggered repayment plan especially for first time buyers	121.697	81.485	0.427	0.789
33	Expand and retain the stamp duty exceptions	121.735	79.748	0.538	0.784
34	Increase loan ratio	121.150	82.827	0.365	0.792



#### 4.5.2 Validity Test of Incentives

The outcomes of validity test by using Communalities are shown in Table 4.19 with the value ranging from 0.526 (improve quality of the building) to 0.800 (reduce taxes).

**Table 4.19 Communalities of Incentives**

No		Initial	Extraction
1	Developers discount on the price of the houses	1.000	0.679
2	Discount of 10% for home buyers who booking the house unit	1.000	0.719
3	Reduce interest rate for home buyers from bank	1.000	0.694
4	Reduce taxes	1.000	0.800
5	Free of title insurance or title search fee	1.000	0.668
6	Implement build then sell concept	1.000	0.769
7	Free maintenance cost for 5 years	1.000	0.698
8	Developers to provide loan to home buyers instead bank	1.000	0.729
9	Developer to provide complimentary goods like furniture	1.000	0.672
10	Access to public transport network	1.000	0.621
11	Access to religious place such as mosque, temple, church	1.000	0.614
12	Access to child day care centre	1.000	0.728
13	Access to recreation facilities	1.000	0.737
14	Better accessibility to the market	1.000	0.745
15	Location of housing units to place of work	1.000	0.553
16	Good environment such as air quality, water quality	1.000	0.760
17	Safety issue	1.000	0.781
18	Good road network	1.000	0.666
19	Population of the area reduce, quiet area	1.000	0.686
20	Increase quota for low and medium cost housing	1.000	0.610
21	Improve quality of the building	1.000	0.526
22	Green material	1.000	0.624
23	Government help home buyers cover the incidental costs such as legal fees	1.000	0.735
24	Government provide financial help for home buyers who build themselves	1.000	0.765

**Table 4.19 Communalities of Incentives (Cont'd)**

No		Initial	Extraction
25	Government increase fund in account of EPF from current 30% to 40%	1.000	0.586
26	Banks relaxing loan approvals by offering flexibility to lend up to 100% financing	1.000	0.566
27	Increase Overnight Policy Rate (OPR)	1.000	0.663
28	Reduces charge of stamp duty memorandum of transfer	1.000	0.680
29	Home buyers to withdraw from EPF saving	1.000	0.753
30	Home buyers to use My Deposit scheme	1.000	0.707
31	Stamp duty for second and subsequent property to increase progressively	1.000	0.631
32	Banks to staggered repayment plan especially for first time buyers	1.000	0.764
33	Expand and retain the stamp duty exceptions	1.000	0.711
34	Increase loan ratio	1.000	0.697

### 4.5.3 Kaiser-Meyer-Olkin (KMO) of Incentives

According to Zeng (2013), the value of Kaiser-Meyer-Olkin higher than 0.6 is considered as a good factor analysis and the significant value of Bartlett's test of sphericity less than 0.05 is considered the factor analysis is appropriate. The value of KMO and Bartlett's test displayed in the following table was 0.628 and 0.000 respectively which greater than 0.6 and less than 0.05.

**Table 4.20 Kaiser-Meyer-Olkin and Bartlett's Test of Incentives**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.597
Bartlett's Test of Sphericity	Approx. Chi-Square	3573.616
	df	561
	Sig.	0.000

#### 4.5.4 One Sample T-Test of Incentives

The results of the motivators that analysed by one sample t-test are indicated in Table 4.21. For each motivator, the null hypothesis was presented that the motivator was unimportant incentive ( $H_0: U=U_0$ ) while the alternative hypothesis was that the motivator was important incentive ( $H_1: U>U_0$ ). The test value used in this test is 3.5 which mean the population mean  $U_0$  is 3.5 and the determinant=2.149E-006. From the results, 30 of the 34 motivators indicates the p-value of 0.000 which means those motivators are significant ( $H_1: U>U_0$ ). So that, the alternative hypothesis will accepted and rejected the null hypothesis. Thus, those motivators are able to stand as incentives to encourage the home buyers to purchase their own house.

On the others hand, there had 3 incentives' p-value exceed the value of 0.05 which are increase quota for low and medium cost housing; government increase fund in account of EPF from current 30% to 40%; and home buyers to withdraw from EPF saving. The p-value of those incentives was 0.225, 0.968, and 0.575 respectively. These indicate that the null hypothesis were accepted and rejected the alternative hypothesis.

Reduction in interest rate and taxes is important for home buyers as it cause an extra fee for the buyers and can found that the current interest rate and taxes are up to approximate 4.8 per cent and 6 per cent respectively which is very high for them. Therefore, a reduction in the interest rate of the loan by bank and reduction in taxes by government would stimulate the home buyers plan to purchase on their house, also provide the financial help to the developers in order to reduce the number of housing abandonment.

Implement Build then Sell (BTS) concept which would be good for home buyers and housing industry (Ng 2012). Build then Sell (BTS) concept means than there are not any payment made by the home buyers before or during the construction stage. The buyers only pay their down payment after completion of the projects. Hence, the home buyers no need worry about their financial issue after housing abandoned and at the same time the developers can discount 10 per cent for the home buyers who booking the house unit in order to attract the buyers to purchase the houses.

Buying furniture and some finishes post-closing can be a huge hidden or soft cost to real estate. Owners who have renovated their home often chose furniture that matches the home's new look. Some homes show so well, buyers might want to purchase the house and all the furniture in it.

Government should consider affordable housing for home buyers to increase the quota of low cost and medium cost housing. This is because the first consideration for the home buyers before purchases is the budget.

Location of housing unit to place of work is one of the important incentives that will stimulate the home buyers this is because most of the respondents were come from KL area and the traffic jam is one of the major problems they faced. Accessibility to the public transport network and others facilities like market, child day care centre, recreation, hospital and religious place are linked with the location of the housing units.

Besides that, the government allow home buyers to withdraw from the EPF to finance the 10% down payment for the PR1MA scheme (Olanrewaju et al., 2016). This is one of the incentives for the home buyers to own their house. However, the major problem is that if the home buyers use their EPF to finance the down payment it would lead to home buyers retiring into poverty. Therefore, the government should increase the EPF from current 30% to 40% and increase the quota for low and medium cost housing.

Banks relaxing loan approvals by offering flexibility to lend up to 100% financing is one of the incentives that will stimulate the home buyers plan to buy the houses. This is because the loan rejection by the bank is high and currently the bank only provides approximate 70% of the loan for the property. Other than that, the developers also can help to provide the loan or financial help to the home buyers instead of banks especially Redha.

**Table 4.21 One Sample T-Test of Incentives**

	Test Value = 3.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
<b>Developers discount on the price of the houses</b>	12.711	286	0.000	0.563	0.476	0.650
<b>Discount of 10% for home buyers who booking the house unit</b>	11.173	286	0.000	0.434	0.357	0.510
<b>Reduce interest rate for home buyers from bank</b>	17.966	286	0.000	0.761	0.678	0.845
<b>Reduce taxes</b>	7.610	286	0.000	0.294	0.218	0.371
<b>Free of title insurance or title search fee</b>	4.450	286	0.000	0.193	0.108	0.279
<b>Implement build then sell concept</b>	-1.703	286	0.090	-0.078	-0.169	0.012
<b>Free maintenance cost for 5 years</b>	10.831	286	0.000	0.427	0.349	0.504
<b>Developers to provide loan to home buyers instead bank</b>	2.266	286	0.024	0.117	0.015	0.218
<b>Developer to provide complimentary goods like furniture</b>	16.706	286	0.000	0.758	0.669	0.847
<b>Access to public transport network</b>	8.764	286	0.000	0.448	0.347	0.548
<b>Access to religious place such as mosque, temple, church</b>	-12.487	286	0.000	-0.674	-0.780	-0.568
<b>Access to child day care centre</b>	-6.841	286	0.000	-0.368	-0.473	-0.262
<b>Access to recreation facilities</b>	-5.380	286	0.000	-0.270	-0.369	-0.171

**Table 4.21 One Sample T-Test of Incentives (Cont'd)**

	Test Value = 3.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
<b>Better accessibility to the market</b>	6.904	286	0.000	0.315	0.225	0.405
<b>Location of housing units to place of work</b>	19.600	286	0.000	0.807	0.726	0.888
<b>Good environment such as air quality, water quality</b>	12.755	286	0.000	0.566	0.479	0.654
<b>Safety issue</b>	17.474	286	0.000	0.720	0.638	0.801
<b>Good road network</b>	8.762	286	0.000	0.343	0.266	0.420
<b>Population of the area reduce, quiet area</b>	1.783	286	0.076	0.117	-0.012	0.246
<b>Increase quota for low and medium cost housing</b>	-1.216	286	0.225	-0.064	-0.169	0.040
<b>Improve quality of the building</b>	2.729	286	0.007	0.106	0.030	0.183
<b>Green material</b>	6.962	286	0.000	0.298	0.214	0.382
<b>Government help home buyers cover the incidental costs such as legal fees</b>	2.799	286	0.005	0.103	0.030	0.175
<b>Government provide financial help for home buyers who build themselves</b>	3.420	286	0.001	0.162	0.069	0.255
<b>Government increase fund in account of EPF from current 30% to 40%</b>	0.040	286	0.968	0.002	-0.085	0.088

**Table 4.21 One Sample T-Test of Incentives (Cont'd)**

	Test Value = 3.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
<b>Banks relaxing loan approvals by offering flexibility to lend up to 100% financing</b>	17.621	286	0.000	0.692	0.614	0.769
<b>Increase Overnight Policy Rate (OPR)</b>	-4.199	286	0.000	-0.186	-0.274	-0.099
<b>Reduces charge of stamp duty memorandum of transfer</b>	-3.434	286	0.001	-0.131	-0.206	-0.056
<b>Home buyers to withdraw from EPF saving</b>	-0.561	286	0.575	-0.023	-0.102	0.057
<b>Home buyers to use My Deposit scheme</b>	-2.336	286	0.020	-0.085	-0.157	-0.013
<b>Stamp duty for second and subsequent property to increase progressively</b>	-5.279	286	0.000	-0.200	-0.275	-0.126
<b>Banks to staggered repayment plan especially for first time buyers</b>	-4.784	286	0.000	-0.228	-0.322	-0.134
<b>Expand and retain the stamp duty exceptions</b>	-5.464	286	0.000	-0.267	-0.363	-0.171
<b>Increase loan ratio</b>	7.208	286	0.000	0.319	0.232	0.406

#### 4.5.5 Descriptive Statistics of Incentives

The frequency of the respondents on different perception on the incentives is presented (Table 4.22). 34.18 per cent of respondents gave the answer of important, 41.31 per cent of the respondents agreed on strongly important while 16.93 per cent of respondents measure all the incentives as extremely important. Thus, total 92.42 per cent of the respondents who support on the incentives stated in the survey. Each of the detailed showed in Appendix C.

**Table 4.22 Descriptive Statistics of Incentives**

<b>Incentives</b>	<b>Extremely unimportant</b>	<b>Strongly Unimportant</b>	<b>Important</b>	<b>Strongly Important</b>	<b>Extremely Important</b>
<b>Location of the housing units to place of work</b>	0	4	27	133	123
<b>Reduce interest rate for home buyers from bank</b>	0	0	46	120	121
<b>Developers to provide complimentary goods likes furniture</b>	2	4	33	127	121
<b>Safety issue</b>	0	0	45	134	108
<b>Banks relaxing loan approvals by offering flexibility to lend up to 100% financing</b>	0	0	41	150	96
<b>Good environment such as air quality, water quality</b>	0	0	72	124	91
<b>Developers discount on the price of the houses</b>	0	4	60	137	86
<b>Access to public transport network</b>	0	18	61	126	82
<b>Discount of 10% for home buyers who booking the house unit</b>	0	3	63	171	50
<b>Free maintenance cost for 5 years</b>	0	4	63	170	50
<b>Good road network</b>	0	3	80	163	41
<b>Increase loan ratio</b>	0	8	87	141	51
<b>Better accessibility to the market</b>	0	8	93	130	56
<b>Green material</b>	0	4	98	137	48
<b>Reduce taxes</b>	0	0	97	152	38
<b>Free of title insurance or title search fee</b>	0	5	120	120	42



Table 4.22 Descriptive Statistics of Incentives (Cont'd)

Incentives	Extremely unimportant	Strongly Unimportant	Important	Strongly Important	Extremely Important
Government provides financial help for home buyers who build themselves	0	11	124	103	49
Developers to provide loan to the homebuyers instead banks	0	26	107	105	49
Population of the area reduce, quiet area	0	67	51	94	75
Improve quality of the building	0	0	141	118	28
Government helps home buyers cover the incidental costs such as legal fees	0	0	135	131	21
Government increases fund in account of EPF from current 30% to 40%	0	18	132	112	25
Homebuyers to withdraw from EPF saving	0	10	151	105	21
Increase quota for low and medium cost housing	0	41	119	88	39
Implement Build-then sell concept	0	33	119	116	19
Homebuyer to use My Deposit scheme	0	9	161	106	11
Reduces charge of stamp duty memorandum of transfer	0	20	147	114	6
Increase overnight policy rate (OPR)	0	32	151	86	18
Stamp duty for second and subsequent property to increase progressively	0	26	152	106	3
Banks staggered repayment plan especially for first time buyers	0	48	130	92	17
Expand and retain the stamp duty exceptions	0	56	124	91	16
Access to recreation facilities	0	60	119	90	18
Access to child day care centre	0	82	105	80	20
Access to religious places: Mosque, Temple, Church	1	133	81	59	13
<b>Total Sum</b>	3	737	3335	4031	1652
<b>Percentage</b>	0.03	7.55	34.18	41.31	16.93

#### 4.5.6 Ranking of Incentives

The incentives for home buyers to own their own house ranked by 287 respondents are described in table 4.23. According to the table, the mean ranging from 2.862 to 4.307 which the incentives of location of the housing units to place of work had the highest mean value (4.307) while access to religious places: mosque, temple and church accounted the lowest mean value of 2.862. Moreover, the total average of mean and standard deviation of incentives were 3.676 and 0.755 respectively.

Location constituted the highest mean value but there is no similar research on the incentives to compare. Only can found there had researcher on the factors affecting the housing prices, the location of the housing units to place of work was found to be very important (Tan, 2016) but this finding is contrary to the expectation. Reducing the price or bank relaxing the loan approval should be expected to become the most highly rated.

**Table 4.23 Incentives for Home Buyers Ranked by 287 Respondents**

<b>Incentives</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Ranks</b>
Location of the housing units to place of work	4.307	0.697	1
Reduce interest rate for home buyers from bank	4.261	0.718	2
Developers to provide complimentary goods likes furniture	4.258	0.769	3
Safety issue	4.220	0.698	4
Banks relaxing loan approvals by offering flexibility to lend up to 100% financing	4.192	0.665	5
Good environment such as air quality, water quality	4.066	0.752	6
Developers discount on the price of the houses	4.063	0.750	7
Access to public transport network	3.948	0.865	8
Discount of 10% for home buyers who booking the house unit	3.934	0.658	9
Free maintenance cost for 5 years	3.927	0.668	10
Good road network	3.843	0.664	11
Increase loan ratio	3.819	0.749	12
Better accessibility to the market	3.815	0.774	13
Green material	3.798	0.725	14
Reduce taxes	3.794	0.655	15

**Table 4.23 Incentives for Home Buyers Ranked by 287 Respondents (Cont'd)**

<b>Incentives</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Ranks</b>
Free of title insurance or title search fee	3.693	0.736	16
Government provides financial help for home buyers who build themselves	3.662	0.803	17
Developers to provide loan to the homebuyers instead banks	3.617	1.109	18
Population of the area reduce, quiet area	3.617	0.873	19
Improve quality of the building	3.606	0.660	20
Government helps home buyers cover the incidental costs such as legal fees	3.603	0.622	21
Government increases fund in account of EPF from current 30% to 40%	3.502	0.743	22
Homebuyers to withdraw from employee provident fund (EPF)saving	3.477	0.683	23
Increase quota for low and medium cost housing	3.436	0.898	24
Implement Build-then sell concept	3.422	0.780	25
Homebuyer to use My Deposit scheme	3.415	0.619	26
Reduces charge of stamp duty memorandum of transfer	3.369	0.645	27
Increase overnight policy rate (OPR)	3.314	0.752	28
Stamp duty for second and subsequent property to increase progressively	3.300	0.643	29
Banks staggered repayment plan especially for first time buyers	3.272	0.808	30
Expand and retain the stamp duty exceptions	3.233	0.826	31
Access to recreation facilities	3.230	0.850	32
Access to child day care centre	3.132	0.910	33
Access to religious places: Mosque, Temple, Church	2.826	0.915	34

### 4.5.7 Factor Analysis of Incentives

Factor analysis is used to determine the potential factors of a given list of measurable variables (Yap, 2013). In this research, the measurable variables are the list of potential incentives for home buyers to own their own house used in the questionnaire survey.

#### 4.5.7.1 Total Variance Explained

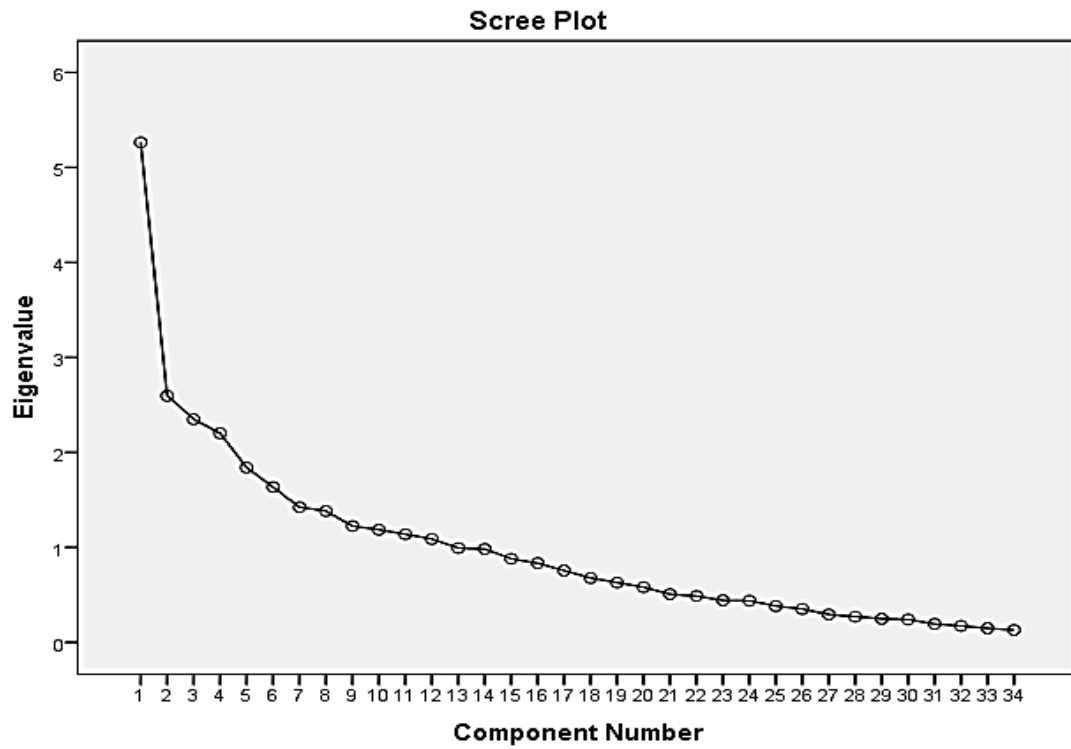
According to the table 4.24, it shows there were 12 components extracted from the analysis and the eigenvalue of these 12 components was greater than 1 which was accepted in the analysis. The total percentage of variance explained by Component 1 to Component 12 was 15.480 per cent, 7.636 per cent, 6.909 per cent, 6.478 per cent, 5.416 per cent, 4.811 per cent, 4.188 per cent, 4.071 per cent, 3.604 per cent, 3.491 per cent, 3.350 per cent, and 3.203 per cent respectively. Besides, the cumulative of variance of these 12 components was explained 68.638 per cent which considered acceptable and good.

**Table 4.24 Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.263	15.480	15.480	5.263	15.480	15.480	2.553	7.509	7.509
2	2.596	7.636	23.116	2.596	7.636	23.116	2.429	7.145	14.654
3	2.349	6.909	30.025	2.349	6.909	30.025	2.221	6.532	21.186
4	2.203	6.478	36.503	2.203	6.478	36.503	2.220	6.531	27.717
5	1.841	5.416	41.919	1.841	5.416	41.919	2.136	6.281	33.998
6	1.636	4.811	46.730	1.636	4.811	46.730	2.074	6.101	40.098
7	1.424	4.188	50.919	1.424	4.188	50.919	1.873	5.508	45.607
8	1.384	4.071	54.989	1.384	4.071	54.989	1.701	5.004	50.611
9	1.225	3.604	58.594	1.225	3.604	58.594	1.691	4.972	55.583

**Table 4.24 Total Variance Explained (Cont'd)**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
10	1.187	3.491	62.085	1.187	3.491	62.085	1.596	4.694	60.277
11	1.139	3.350	65.435	1.139	3.350	65.435	1.492	4.388	64.665
12	1.089	3.203	68.638	1.089	3.203	68.638	1.351	3.973	68.638
13	0.994	2.923	71.561						
14	0.984	2.893	74.454						
15	0.881	2.591	77.044						
16	0.835	2.455	79.499						
17	0.757	2.226	81.725						
18	0.679	1.997	83.722						
19	0.630	1.854	85.576						
20	0.582	1.713	87.288						
21	0.508	1.493	88.782						
22	0.489	1.437	90.219						
23	0.443	1.303	91.522						
24	0.439	1.291	92.813						
25	0.384	1.128	93.941						
26	0.353	1.038	94.979						
27	0.295	0.867	95.845						
28	0.271	0.798	96.643						
29	0.250	0.734	97.378						
30	0.242	0.712	98.090						
31	0.195	0.574	98.664						
32	0.174	0.513	99.176						
33	0.150	0.440	99.616						
34	0.130	0.384	100.000						



**Figure 4.13 Scree Plot**

#### **4.5.7.2 Rotated Component Matrix**

The Varimax's approach was used as rotation approach and factor loading value was set at 0.4 for analysis which means when the value higher than 0.4, the variable was loaded into specific component as shown in table 4.25.



**Table 4.25 Rotated Component Matrix (Cont'd)**

	Component											
	1	2	3	4	5	6	7	8	9	10	11	12
Good environment such as air quality, water quality			0.824									
Location of the housing units to place of work			0.444									
Implement Build-then Sell concept				0.802								
Free of title insurance or title search fee				0.714								
Access to public transport network				0.452								
Population of the area reduce, quiet area					0.768							
Government increases fund in account of EPF from current 30% to 40%					0.602							
Access to recreation facilities				0.506								
Increase Overnight Policy Rate					0.425							
Reduce interest rate for buyers from bank						0.766						
Reduce Taxes						0.733						





### 4.5.7.3 Component of Incentives

The 34 incentives in this research were categorised into 12 components according to the result acquired from the factor analysis of rotated component matrix. There are 2 components will be deleted due to the variables are independent variable. Component 1 was named as general incentive, component 2 as financial incentive, component 3 as satisfaction incentive, component 4 as government policy incentive, component 5 as other incentive, component 6 as reduce incentive, component 7 as discount incentive, component 8 as home buyers incentive, component 9 as market & bank incentive, component 10 as increase incentive.

**Table 4.26 Component of Incentives**

Component	Name	Incentives
1	General Incentive	<ul style="list-style-type: none"> <li>-Banks staggered repayment plan especially for first time buyers</li> <li>-Stamp duty for second and subsequent property to increase progressively</li> <li>-Expand and retain the stamp duty exceptions</li> <li>-Increase quota for low and medium cost housing</li> </ul>
2	Financial Incentive	<ul style="list-style-type: none"> <li>-Free maintenance cost for 5 years</li> <li>-Government provides financial help for home buyers who build themselves</li> <li>-Developer to provide loan instead of bank</li> <li>-Government helps cover the incidental costs such as legal fees</li> <li>-Developer provide complimentary goods like furniture</li> <li>-Green material</li> </ul>
3	Satisfaction Incentive	<ul style="list-style-type: none"> <li>-Safety issue</li> <li>-Good environment such as air quality, water quality</li> <li>-Location of the housing units to place of work</li> </ul>

**Table 4.26 Component of Incentives (Cont'd)**

Component	Name	Incentives
4	Government Policy Incentive	-Implement Build-then Sell concept -Free of title insurance or title search fee -Access to public transport network -Access to recreation facilities
5	Other Incentive	-Population of the area reduce, quiet area -Government increases fund in account of EPF from current 30% to 40% -Increase Overnight Policy Rate
6	Reduce Incentive	-Reduce interest rate for buyers from bank -Reduce Taxes
7	Discount Incentive	-Developers discount on the price of the houses -Discount 10% for home buyers who booking the house unit
8	Home buyers Incentive	-Homebuyers withdraw from EPF saving -Homebuyers use My Deposit scheme
9	Market & Bank Incentive	-Better accessibility to the market -Banks relaxing loan approvals by offering flexibility to lend up to 100% financing
10	Increase Incentive	-Increase loan ratio -Improve quality of building -Access to child day care centre

#### **4.6 Conclusion**

The survey questionnaire was conducted and received from 287 respondents for this research. The data was used for data analysis and the outcomes of data analysis were showed in this chapter. First, the data collection details which included response rate were summarised and the descriptive analysis was applied for demographic data of respondents. Besides, the values of Cronbach's Alpha, KMO and Bartlett's test for each benefits and incentives were indicate in good range as well as proved each of the variables was reliable and valid in this research. One sample T-test was conducted and concluded that the benefits and incentives were significant affect the purchasing power of home buyers as well as affect the economic condition which will lead to housing abandoned. Mean and standard deviation were presented in this research for ranking the variable and descriptive analysis of each variable was showed. Last, the factor analysis was carried out in this research. The benefits and incentives were grouped into different components and named after the results generated from rotated component matrix. The results or outcomes of those tests could help the government and developers to identify the incentives and offer appropriate plans or encourage for the home buyers to own their own house in order to reduce the number of housing abandonment.

## **CHAPTER 5**

### **CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

In the previous chapters, the issues of abandoned housing projects were discussed and the data collected from survey questionnaire was analysed. The research objectives were achieved through survey questionnaire and literature review. In this chapter, it includes total 3 sections which involve conclusion based on the objective of study, limitation of the study and last section will present the recommendations for future study.

#### **5.2 Conclusion**

The aim in this research is to examine the role of incentives in order to reduce the numbers of housing abandonment. In order to achieve the aim, three objectives have been outlined: 1) to analyse the benefits of increasing homeownership, 2) to determine the incentives of home buyers in order to reduce the number of housing abandonment and 3) to categorise the home buyers' incentives.

### **5.2.1 To analyse the benefits of increasing homeownership.**

The benefits were stated in the survey questionnaire in order to know why the people need to purchase a house and total 9 benefits were identified for the respondents to give their opinion based on 5-likert scale. Each of the benefit was significant and obtained the best results after analysis process as shown in chapter 4. Some of the benefit was prove from the literature review and explanation on the important of the benefits. In addition, each of the benefits was ranked based on the mean value. The top 5 benefits of increasing homeownership are:

- 1) To make your own home,
- 2) Lower crime,
- 3) To have a space that is your home,
- 4) Higher levels of personal self-esteem and
- 5) Secure investment.

From the above benefit, it can conclude that people want to own house because of the personal satisfaction, personal image and safety issue.

### **5.2.2 To determine the incentives of home buyers in order to reduce the number of housing abandonment**

As a result, 34 incentives for home buyers in order to own their house were evaluated. The survey questionnaire was conducted to collect different opinion from different respondents. A total 287 set survey questionnaires were collected from the respondents and they answer each of the 5-likert scale question based on their opinion or perception. The reliability analysis and validity test were conducted to test the strength of each of the incentives. Each of the incentives was gained the good results and significant after carried out the KMO and one sample t-test.

Besides, each of the incentives was ranked based on the mean value, the highest mean value will obtained the higher ranking. The ranking of incentives was

presented in chapter 4. The following is the top 10 incentives of home buyers to own their house:

- 1) Location of the housing units to place of work,
- 2) Reduce interest rate for home buyers from bank,
- 3) Developers to provide complimentary goods like furniture,
- 4) Safety issue,
- 5) Banks relaxing loan approvals by offering flexibility to lend up to 100% financing,
- 6) Good environment such as air quality and water quality,
- 7) Developers discount on the price of the houses,
- 8) Access to public transport network,
- 9) Discount of 10% for home buyers who booking the house units and
- 10) Free maintenance cost for 5 years.

From the above incentives, it can conclude that financial incentive and non-financial incentives both are important to the home buyers. Therefore, policy makers should make attention in order to provide incentives for home buyers to own their own house.

### **5.2.3 To categorise the home buyers' incentives.**

After conducted factor analysis, 34 incentives for home buyers were categorized into 12 components which can be explained 68.64% of variance. First component explained 15.48 per cent of variance while the last component explained only 3.2 per cent of variance and 2 components were deleted after using Varimax's approach because they are independent variable. From the results, KMO of those variables is 0.6 and Bartlett's test is 0.00. Those components were significant and named as:

- 1) General incentive,

- 2) Financial incentive,
- 3) Satisfaction incentive,
- 4) Government policy incentive,
- 5) Other incentive,
- 6) Reduce incentive,
- 7) Discount incentive,
- 8) Home buyers incentive,
- 9) Market & bank incentive and
- 10) Increase incentive.

### **5.3 Limitations of the Study**

First, not all the respondents are first-time home buyers. This reason becomes the limitation of this study as the homeowners already own their house so the incentives are less important to them compared to first time buyers unless the homeowners are interested to purchase their second house. The first time home buyers become the best respondents in this research.

There are no basic findings of the incentives for home buyers to compare with. Therefore, this will become the limitation in this research.



#### **5.4 Recommendations for Future Study**

- There were no others researchers to done the incentives for reduce the abandoned projects, just can found most researchers concerned on the causes, so that the next researcher can refer and continue in future study.
- This research only focused on 9 benefits and 34 incentives for the respondents, it can include more benefits and incentives to examine and analyse.
- The researcher can focus on the various states for data collection to gain different perception from different respondents.
- Besides, the researcher can carry out the survey in slums area. The residents in this area may face the problem of purchasing own house. Thus, increase the amount of abandonment due to financial problem.

## REFERENCES

- ArcGIS. (2015). Malaysia Average Household Size. [Online] Available from: <http://www.arcgis.com/home/item.html?id=69f2d666483f4bf79e3e7b9c42a12d39> [Accessed 3rd July 2016].
- Bavani, M. (2009). Abandoned Jelatek fire station now an eyesore. *The Star Online*. Available at: <http://www.thestar.com.my/news/community/2009/06/02/abandoned-jelatek-fire-station-now-an-eyesore/> [Accessed July 20, 2016].
- Carrero, R., Malvarez, G., Navas, F. and Tejada, M. (2009). Negative impacts of abandoned urbanisation projects in the Spanish coast and its regulation in the Law. *Journal of Coastal Research*, 2(56), pp.1120–1124.
- Daniel, S. (2013). Abandoned flats in Jalan Kuching now a haunt for drug addicts. *The Star Online*. Available at: <http://www.thestar.com.my/news/community/2013/11/15/residents-nightmare-abandoned-flats-in-jalan-kuching-now-a-haunt-for-drug-addicts/> [Accessed July 20, 2016].
- De-Chiara, J., & Crosbie, J. M. (2001). *Time-saver standards for buildings types* (4th ed.). Singapore: McGraw-Hill International Edition.
- Department of Statistic. (2014). Report on Characteristics of Household 2010. *Department of Statistics, Malaysia Official Portal*. Available at: [https://www.dosm.gov.my/v1/index.php?r=column/cthemedByCat&cat=117&bul\\_id=cUxSKzBHRktuRGJqajFQK2RiRHpKUT09&menu\\_id=L0pheU43NWJwRWVSZklWdzQ4TlhUUT09](https://www.dosm.gov.my/v1/index.php?r=column/cthemedByCat&cat=117&bul_id=cUxSKzBHRktuRGJqajFQK2RiRHpKUT09&menu_id=L0pheU43NWJwRWVSZklWdzQ4TlhUUT09) [Accessed July 16, 2016].
- Department of Statistic. (2014). Report of Household Income and Basic Amenities Survey 2014. *Department of Statistics, Malaysia Official Portal*. Available at: [https://www.dosm.gov.my/v1/index.php?r=column%2FcthemedByCat&cat=120&bul\\_id=aHhtTHVWNVYzTFBua2dSUIBRL1Rjdz09&menu\\_id=amVoWU54UTl0a21NWmdhMjFMMWcyZz09](https://www.dosm.gov.my/v1/index.php?r=column%2FcthemedByCat&cat=120&bul_id=aHhtTHVWNVYzTFBua2dSUIBRL1Rjdz09&menu_id=amVoWU54UTl0a21NWmdhMjFMMWcyZz09) [Accessed July 20, 2016].
- Economic Planning Unit. (2013). Population & Labour Force. *Official Website of Economic Planning Unit, Prime Minister's Department*. Available at: <http://www.epu.gov.my/en/economic-statistics/population-and-labourforce> [Accessed July 24, 2016].
- Eugene, M. (2017). Majority of Malaysians want to own a home in next 6 months.

- The Star Online*. Available at: <http://www.thestar.com.my/business/business-news/2017/04/25/poll-majority-of-malaysians-want-to-own-home-in-next-6-months/> [Accessed May 8, 2017]
- Hadi, A.N. binti A., Salleh, N.H.B.M. and Tan, G.M. (2014). Abandoned Housing Project: Issues and Challenge. *Word Journal Of The International Linguistic Association*, pp.1–22.
- Hair, Joseph F., & Anderson, Rolph E. (2010). *Multivariate data analysis* (7th ed.). New Jersey: Prentice Hall, Cornell University.
- Haurin, D.R. (2003). The Private and Social Benefits of Homeownership. *Habitat for Humanity University Lecture Series*, pp. 1-30.
- Kaur, M. (2014). *The Star Online*. Available at: <http://www.thestar.com.my/news/community/2014/01/04/in-need-of-more-action-mosquitoes-breeding-sites-must-be-cleared-to-fight-dengue-menace/> [Accessed July 5, 2016]
- Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan (KPKT). (2012). Buletin KPKT Volume 2/12. Available at: [http://www.kpkt.gov.my/resources/index/user\\_1/GALERI/PDF\\_PENERBITAN/BULETIN/Issue2\\_2012.pdf](http://www.kpkt.gov.my/resources/index/user_1/GALERI/PDF_PENERBITAN/BULETIN/Issue2_2012.pdf) [Accessed July 23, 2016].
- Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan (KPKT). (2016). Laporan Perangkaan Suku Tahun Pertama 2016.
- Khalid, M.S. (2010). Abandoned Housing Development: The Malaysian Experience. , (February), pp.1-329.
- Khazanah Research Institute (KRI). (2014). The State of Households., p.78. Available at: [http://krinstitute.org/publications\\_list.aspx](http://krinstitute.org/publications_list.aspx). [Accessed July 30, 2016].
- Kirklees Council. (2006). Research & Consultation Guidelines. *Kirklees government uk*, p.6.
- Loh, I. (2016). Property expo is back with 51 booths. *The Star Online*. Available at: <http://www.thestar.com.my/metro/community/2016/07/27/property-expo-is-back-this-years-mapex-to-feature-51-booths/>[Accessed July 22, 2016]
- MHLG. (2014). KPKT Statistics 2014. *Ministry of Urban Wellbeing, Housing and Local Government*. Available at: [http://www.kpkt.gov.my/resources/index/user\\_1/GALERI/PDF\\_PENERBITAN/PERANGKAAAN%20TERPILIH/Buku\\_Perangkaan\\_KPKT\\_2014.pdf](http://www.kpkt.gov.my/resources/index/user_1/GALERI/PDF_PENERBITAN/PERANGKAAAN%20TERPILIH/Buku_Perangkaan_KPKT_2014.pdf) [Accessed August 3, 2016].
- MHLG. (2011). Definasi Projek dan Pegawai untuk dihubungi. Portal Rasmi Kementerian Perumahan & Kerajaan Tempatan: Available at: <http://www.kpkt.gov.my/kpkt/index.php/pages/view/181> [Accessed July 17, 2016].

- MHLG. (2015). KPKT Statistics 2015. *Ministry of Urban Wellbeing, Housing and Local Government*. Available at:  
[http://www.kpkt.gov.my/resources/index/user\\_1/GALERI/PDF\\_PENERBITAN/PERANGKAAAN%20TERPILIH/Buku\\_Perangkaan\\_KPKT\\_2015\\_updated.pdf](http://www.kpkt.gov.my/resources/index/user_1/GALERI/PDF_PENERBITAN/PERANGKAAAN%20TERPILIH/Buku_Perangkaan_KPKT_2015_updated.pdf)  
 [Accessed August 3, 2016].
- NAPIC. (2015). Property Stock Report. *Residential Property Stock Table Q4 2015*, (7), pp.1–65.
- NAPIC. (2016). Property Stock Report. *Residential Property Stock Table Q1 2016*, (7), pp.1–42.
- NAPIC. (2016). The Malaysian House Price Index. Available at:  
[http://napic.jp-ph.gov.my/portal/web/guest/main-page?p\\_p\\_id=ViewHighlights\\_WAR\\_ViewHighlightsportlet&p\\_p\\_lifecycle=0&p\\_p\\_state=normal&p\\_p\\_mode=view&p\\_p\\_col\\_id=column-1&p\\_p\\_col\\_count=2&\\_ViewHighlights\\_WAR\\_ViewHighlightsportlet\\_action=renderViewHighlightScreen&highlightId=4680&pageno=1&showButton=true](http://napic.jp-ph.gov.my/portal/web/guest/main-page?p_p_id=ViewHighlights_WAR_ViewHighlightsportlet&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column-1&p_p_col_count=2&_ViewHighlights_WAR_ViewHighlightsportlet_action=renderViewHighlightScreen&highlightId=4680&pageno=1&showButton=true)  
 [Accessed April 3, 2017].
- National Association of Realtors. (2012). Social Benefits of Homeownership and Stable Housing., (April).
- Ng, A. (2009). Grappling with abandoned projects. *The Star Online*. Available at:  
<http://www.thestar.com.my/business/business-news/2009/07/18/grappling-with-abandoned-projects/> [Accessed July 22, 2016].
- Ng, S. T. (2012). Go for build then sell. *The Star Online*. Available at:  
<http://www.thestar.com.my/opinion/letters/2012/12/03/go-for-build-then-sell/>  
 [Accessed July 22, 2016].
- Nunnally, J.C., Bernstein, I.H. (1994). Psychometric theory, 3<sup>rd</sup> Edition. *New York: McGraw-Hill*.
- Olanrewaju, A.L. & Abdul-Aziz, A.R. (2015). *Building Maintenance Processes and Practices*. Malaysia: Springer.
- Olanrewaju, A.L., Lee, L.T. and Tan, S.Y. (2016) Rethinking Affordable Housing Delivery: An Analytical Insight
- REHDA. (2005). *Insurance Cover For Abandoned Projects*. Available at:  
<http://www.hba.org.my/news/2005/905/insurance.htm> [Accessed July 14, 2016].
- Rohe, W.M. & Han, H.S. (2012). 'Housing and health: time for renewed collaboration.' *North Carolina Medical Journal*, vol 73, no. 5, pp. 374-380.

- Rossi, P. and E. Weber. (1996). "The Social Benefits of Homeownership: Empirical Evidence from National Surveys," *Housing Policy Debate*, 7, pp. 1-15.
- Tan, C.W. (2016). Factors Affecting Housing Price In Malaysia. The Star Online. (2016). 182 abandoned housing projects revived. *The Star Online*. Available at: <http://www.thestar.com.my/news/nation/2016/05/26/182-abandoned-housing-projects-revived/> [Accessed March 2, 2017].
- Tomlinson, L. (2015). Indoor Aquaponics in Abandoned Buildings : A Potential Solution to Food Deserts.
- Torraco, R.J. (2005). Writing Integrative Literature Reviews: Guidelines and Examples. *Human Resource Development Review*, 4(3), pp.356–367.
- Tran T. U. (2013). Data in a research. , p.65.
- Ujang, A. (2014). House buyers' nightmare worsens. *TheSundaily*. Available at: <http://www.thesundaily.my/node/279106> [Accessed August 2, 2016].
- UKESSAYS. (2015). Prevention of abandoned housing projects. [Online]. Available from: <https://www.ukessays.com/essays/construction/prevention-of-abandoned-housing-projects.php> [Accessed August 1, 2016]
- Wells, C.S. and Wollack, J.A. (2003). An Instructor's Guide to Undertanding Test Reliability.
- Yap, E.H. (2013). Causes of Abandoned Construction Projects in Malaysia. , (May), pp.1–172.
- Zeng, R. (2013). Attributes influencing home buyers' purchase decisions : a quantitative study of the Wuhan residential housing market .

## APPENDICES

### APPENDIX A: Survey Questionnaire

#### **SURVEY ON INCENTIVES FOR HOME BUYERS TO OWN THEIR OWN HOUSE IN ORDER TO REDUCE THE NUMBER OF ABANDONED HOUSING PROJECT**

Dear Sir/ Madam,

I am undergraduate student pursuing the Bachelor of Science (Hons) Construction Management in University Tunku Abdul Rahman (UTAR) and currently taking out a final year project entitled “Incentives as a Mechanism to Revive Housing Abandonment”. Please spare some few minutes of your valuable time to complete this survey. This survey seeks to investigate the incentives of home buyers to purchase more houses in the demand sides of the construction projects in Malaysia in order to reduce the number of housing abandonment. Your feedback is extremely important towards reducing or avoiding housing project abandonment. All information obtained is strictly confidential and will be used only for statistical analysis. Thank you for your participation.

#### ***Section A: Respondent's Information***

Please provide information about yourself by completing the following question. You can tick more than one box where appropriate.

1) Gender:

Female       Male

## 2) Age:

- 25 and Below       26 - 30 years old       31 - 35 years old       36 - 40 years old  
 41 - 45 years old       46 - 50 years old       Above 50

## 3) Marital status:

- Single       Married

## 4) Educational qualification:

- Diploma    BSc    MSc    MBA    PHD  
 Other, please specify \_\_\_\_\_

## 5) Nature of job:

- Temporary    Permanent    Unemployment    Retirement

## 6) Monthly income:

- Below RM 1,000                       RM 1,001 to RM 2,000                       RM 2,001 to RM 3,000  
 RM 3,001 to RM 4,000                       RM 4,001 to RM 5,000                       RM 5,001 to RM 6,000  
 RM 6,001 to RM 7,000                       RM 7,001 to RM 8,000                       RM 8,001 to RM 9,000  
 RM 9,000 to RM10,000                       Above RM10,000

## 7) Working experience:

- Not more than 5 years    5 years to less than 10 years  
 10 years to less than 15 years    15 years to less than 20 years    20 years and above

## 8) Type of house you are currently living:

- Single Storey Terraced    2-3 Storey Terraced    Single Storey Semi-Detached  
 2-3 Storey Semi-Detached    Detached    Town-House    Cluster  
 Low Cost House    Low Cost Flat    Flat    Condominium/ Apartment  
 Others, please specify: \_\_\_\_\_

## 9) Type of house prefers to buy:

- Single Storey Terraced    2-3 Storey Terraced    Single Storey Semi-Detached  
 2-3 Storey Semi-Detached    Detached    Town-House    Cluster  
 Low Cost House    Low Cost Flat    Flat    Condominium/ Apartment

Others, please specify: \_\_\_\_\_

10) Status of house:

Own     Rent     Other. Please specify \_\_\_\_\_

11) If you own your house, was the house abandoned at a particular stage before completion?

Yes, to small extent     Yes, to large extent     No

12) How was the project funded?

Privately     Mortgage     Publicly     Other. Please specify \_\_\_\_\_

***Section B: Survey Question on Benefits***

Please place a tick on the appropriate column to represent how much you agree that the following benefits will increase homeownership. Where 5= Extremely important; 4= Strongly important; 3= Important; 2= Strongly unimportant and 1= Extremely unimportant.

	Benefits of increasing homeownerships	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
1	Reduce housing shortage					
2	To have a space that is yours home					
3	To make your own home					
4	Secure investments					
5	Improved health and safety					
6	Higher levels of happiness					
7	Higher levels of personal self-esteem					
8	Better neighbourhoods,					
9	Lower crime					

***Section C: Survey Question on Incentives***

Please place a tick on the appropriate column to represent how much you agree that the following motivators are incentives of home buyers to own their own house in Malaysia in order to reduce the number of housing abandonment. Where 5=



Extremely important; 4= Strongly important; 3= Important; 2= Strongly unimportant and 1= Extremely unimportant.

	Incentives	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
1	Developers discount on the price of the houses					
2	Discount 10% for home buyers who booking the house unit					
3	Reduce interest rate for home buyers from bank					
4	Reduce Taxes					
5	Free of title insurance or title search fee					
6	Implement Build Then Sell Concept					
7	Free maintenance cost for 5 years					
8	Developers to provide loan to the homebuyers instead banks					
9	Developer to provide Complimentary goods likes furniture					
10	Access to public transport network					
11	Access to religious place such as mosque, temple, church.					
12	Access to child day care centre					
13	Access to recreation facilities					
14	Better accessibility to the market					
15	Location of the housing units to place of work					
16	Good environment such as air quality, water quality					
17	Safety issue					
18	Good road network					
19	Population of the area reduce, quiet area					
20	Increase quota for low and medium cost housing					
21	Improve quality of the building					
22	Green material					
23	Government help home buyers cover the incidental costs such as legal fees					

24	Government provide financial help for the home buyers who build themselves					
25	Government increase fund in account of EPF from current 30% to 40%					
26	Banks relaxing loan approvals by offering flexibility to lend up to 100% financing					
27	Increase Overnight Policy Rate (OPR)					
28	Reduces charge of stamp duty memorandum of transfer					
29	Homebuyers to withdraw from the EPF saving					
30	Homebuyer to use My Deposit scheme					
31	Stamp duty for second and subsequent property to increase progressively					
32	Banks to staggered repayment plan especially for first time buyers					
33	Expand and retain the stamp duty exceptions					
34	Increase loan ratio					
<p>What other factors are used as incentive for the home buyers in order to own their own house in order to avoid abandoned housing projects?</p>						

## APPENDICES

### APPENDIX B: Frequency of Individual Benefit

#### Reduce housing shortage

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	70	24.4	24.4
Important	146	50.9	75.3
Strongly important	53	18.5	93.7
Extremely important	18	6.3	100.0
Total	287	100.0	

#### To have a space that is your home

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	2	0.7	0.7
Important	90	31.4	32.1
Strongly important	117	40.8	72.8
Extremely important	78	27.2	100.0
Total	287	100.0	

#### To make your own home

	Frequency	Percent	Cumulative Percent
Valid Important	69	24.0	24.0
Strongly important	128	44.6	68.6
Extremely important	90	31.4	100.0
Total	287	100.0	

**Secure investments**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	1	0.3	0.3
Important	87	30.3	30.7
Strongly important	144	50.2	80.8
Extremely important	55	19.2	100.0
Total	287	100.0	

**Improves health and safety**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	2	0.7	0.7
Important	98	34.1	34.8
Strongly important	131	45.6	80.5
Extremely important	56	19.5	100.0
Total	287	100.0	

**Higher levels of happiness**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	10	3.5	3.5
Important	100	34.8	38.3
Strongly important	112	39.0	77.4
Extremely important	65	22.6	100.0
Total	287	100.0	

**Higher levels of personal self-esteem**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	7	2.4	2.4
Important	85	29.6	32.1
Strongly important	125	43.6	75.6
Extremely important	70	24.4	100.0
Total	287	100.0	

**Better neighbourhoods**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	75	26.1	26.1
Important	84	29.3	55.4
Strongly important	107	37.3	92.7
Extremely important	21	7.3	100.0
Total	287	100.0	

**Lower crime**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	8	2.8	2.8
Important	56	19.5	22.3
Strongly important	163	56.8	79.1
Extremely important	60	20.9	100.0
Total	287	100.0	

## APPENDICES

### APPENDIX C: Frequency of Individual Incentive

#### Developers discount on the price of the houses

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	4	1.4	1.4
Important	60	20.9	22.3
Strongly important	137	47.7	70.0
Extremely important	86	30.0	100.0
Total	287	100.0	

#### Discount of 10% for home buyers who booking the house unit

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	3	1.0	1.0
Important	63	22.0	23.0
Strongly important	171	59.6	82.6
Extremely important	50	17.4	100.0
Total	287	100.0	

#### Reduce interest rate for home buyers from bank

	Frequency	Percent	Cumulative Percent
Valid Important	46	16.0	16.0
Strongly important	120	41.8	57.8
Extremely important	121	42.2	100.0
Total	287	100.0	

**Reduce taxes**

	Frequency	Percent	Cumulative Percent
Valid Important	97	33.8	33.8
Strongly important	152	53.0	86.8
Extremely important	38	13.2	100.0
Total	287	100.0	

**Free of title insurance or title search fee**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	5	1.7	1.7
Important	120	41.8	43.6
Strongly important	120	41.8	85.4
Extremely important	42	14.6	100.0
Total	287	100.0	

**Implement build then sell concept**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	33	11.5	11.5
Important	119	41.5	53.0
Strongly important	116	40.4	93.4
Extremely important	19	6.6	100.0
Total	287	100.0	

**Free maintenance cost for 5 years**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	4	1.4	1.4
Important	63	22.0	23.3
Strongly important	170	59.2	82.6
Extremely important	50	17.4	100.0
Total	287	100.0	

**Developers to provide loan to home buyers instead bank**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	26	9.1	9.1
Important	107	37.3	46.3
Strongly important	105	36.6	82.9
Extremely important	49	17.1	100.0
Total	287	100.0	

**Developer to provide complimentary goods like furniture**

	Frequency	Percent	Cumulative Percent
Valid Extremely unimportant	2	0.7	0.7
Strongly unimportant	4	1.4	2.1
Important	33	11.5	13.6
Strongly important	127	44.3	57.8
Extremely important	121	42.2	100.0
Total	287	100.0	

**Access to public transport network**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	18	6.3	6.3
Important	61	21.3	27.5
Strongly important	126	43.9	71.4
Extremely important	82	28.6	100.0
Total	287	100.0	

**Access to religious place such as mosque, temple, church**

	Frequency	Percent	Cumulative Percent
Valid Extremely unimportant	1	0.3	0.3
Strongly unimportant	133	46.3	46.7
Important	81	28.2	74.9
Strongly important	59	20.6	95.5
Extremely important	13	4.5	100.0
Total	287	100.0	



**Access to child day care centre**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	82	28.6	28.6
Important	105	36.6	65.2
Strongly important	80	27.9	93.0
Extremely important	20	7.0	100.0
Total	287	100.0	

**Access to recreation facilities**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	60	20.9	20.9
Important	119	41.5	62.4
Strongly important	90	31.4	93.7
Extremely important	18	6.3	100.0
Total	287	100.0	

**Better accessibility to the market**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	8	2.8	2.8
Important	93	32.4	35.2
Strongly important	130	45.3	80.5
Extremely important	56	19.5	100.0
Total	287	100.0	

**Location of housing units to place of work**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	4	1.4	1.4
Important	27	9.4	10.8
Strongly important	133	46.3	57.1
Extremely important	123	42.9	100.0
Total	287	100.0	

**Good environment such as air quality, water quality**

	Frequency	Percent	Cumulative Percent
Valid Important	72	25.1	25.1
Strongly important	124	43.2	68.3
Extremely important	91	31.7	100.0
Total	287	100.0	

**Safety issue**

	Frequency	Percent	Cumulative Percent
Valid Important	45	15.7	15.7
Strongly important	134	46.7	62.4
Extremely important	108	37.6	100.0
Total	287	100.0	

**Good road network**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	3	1.0	1.0
Important	80	27.9	28.9
Strongly important	163	56.8	85.7
Extremely important	41	14.3	100.0
Total	287	100.0	

**Population of the area reduce, quiet area**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	67	23.3	23.3
Important	51	17.8	41.1
Strongly important	94	32.8	73.9
Extremely important	75	26.1	100.0
Total	287	100.0	

**Increase quota for low and medium cost housing**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	41	14.3	14.3
Important	119	41.5	55.7
Strongly important	88	30.7	86.4
Extremely important	39	13.6	100.0
Total	287	100.0	

**Improve quality of the building**

	Frequency	Percent	Cumulative Percent
Valid Important	141	49.1	49.1
Strongly important	118	41.1	90.2
Extremely important	28	9.8	100.0
Total	287	100.0	

**Green material**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	4	1.4	1.4
Important	98	34.1	35.5
Strongly important	137	47.7	83.3
Extremely important	48	16.7	100.0
Total	287	100.0	

**Government help home buyers cover the incidental costs such as legal fees**

	Frequency	Percent	Cumulative Percent
Valid Important	135	47.0	47.0
Strongly important	131	45.6	92.7
Extremely important	21	7.3	100.0
Total	287	100.0	

**Government provide financial help for home buyers who build themselves**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	11	3.8	3.8
Important	124	43.2	47.0
Strongly important	103	35.9	82.9
Extremely important	49	17.1	100.0
Total	287	100.0	

**Government increase fund in account of EPF from current 30% to 40%**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	18	6.3	6.3
Important	132	46.0	52.3
Strongly important	112	39.0	91.3
Extremely important	25	8.7	100.0
Total	287	100.0	

**Banks relaxing loan approvals by offering flexibility to lend up to 100% financing**

	Frequency	Percent	Cumulative Percent
Valid Important	41	14.3	14.3
Strongly important	150	52.3	66.6
Extremely important	96	33.4	100.0
Total	287	100.0	

**Increase Overnight Policy Rate (OPR)**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	32	11.1	11.1
Important	151	52.6	63.8
Strongly important	86	30.0	93.7
Extremely important	18	6.3	100.0
Total	287	100.0	

**Reduces charge of stamp duty memorandum of transfer**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	20	7.0	7.0
Important	147	51.2	58.2
Strongly important	114	39.7	97.9
Extremely important	6	2.1	100.0
Total	287	100.0	

**Home buyers to withdraw from EPF saving**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	10	3.5	3.5
Important	151	52.6	56.1
Strongly important	105	36.6	92.7
Extremely important	21	7.3	100.0
Total	287	100.0	

**Home buyers to use My Deposit scheme**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	9	3.1	3.1
Important	161	56.1	59.2
Strongly important	106	36.9	96.2
Extremely important	11	3.8	100.0
Total	287	100.0	

**Stamp duty for second and subsequent property to increase progressively**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	26	9.1	9.1
Important	152	53.0	62.0
Strongly important	106	36.9	99.0
Extremely important	3	1.0	100.0
Total	287	100.0	

**Banks to staggered repayment plan especially for first time buyers**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	48	16.7	16.7
Important	130	45.3	62.0
Strongly important	92	32.1	94.1
Extremely important	17	5.9	100.0
Total	287	100.0	

**Expand and retain the stamp duty exceptions**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	56	19.5	19.5
Important	124	43.2	62.7
Strongly important	91	31.7	94.4
Extremely important	16	5.6	100.0
Total	287	100.0	

**Increase loan ratio**

	Frequency	Percent	Cumulative Percent
Valid Strongly unimportant	8	2.8	2.8
Important	87	30.3	33.1
Strongly important	141	49.1	82.2
Extremely important	51	17.8	100.0
Total	287	100.0	