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WILLINGNESS TO ACCEPT REVERSE MORTGAGE

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Abstract

At age 60, the working adult is turned into retired and stops generating active income. With the reduction in earnings, the aging population is facing the financial challenge to maintain their pre-retirement lifestyle. Hence, the elderly needed to find an alternative source to sustain their pre-retirement lifestyle and pay off their daily expenses. With the current retirement income, it is challenging for the elderly to sustain in their retirement, therefore, a new financial innovation shall be offered to solve the financial constraint of the elderly which elderly can convert the property into cash for self-sustaining without relying on other parties. As Malaysia has yet to launch new financial innovation products such as reverse mortgages, thus, it is crucial to understand the willingness to take up the reverse mortgage, so that the financial institutions have more confidence in the take-up rate of the reverse mortgage. The questionnaire is employed to examine the willingness to take up reverse mortgages and it found that most of the elderly are not ready to take up the reverse mortgage due to a lack of exposure and understanding of the product.

Keywords: Income Stability, Property, Reverse Mortgage, Willingness

1. Introduction

The aging population is rising with increased life expectancy and reduced fertility rates (Ismail et al., 2015). Based on Table 1, According to the Department of Statistics Malaysia's Abridged Life Table Malaysia 2018–2020, from 2014 to 2020, Malaysians' average life expectancy at age 60 increased yearly. Given the increased longevity, the elderly will require more money to cover their daily expenses for the next 20 years or so, given the annual increase in inflation and the fact that medical costs are a major expense for keeping them well. Increased longevity shows that elderly need to save more money for their retirement years. In addition, longer life expectancy affects the income stability of the aging population during the post-retirement years.

Table 1. Life expectancy at the age of 60 years old

Year	Expected life expectancy for male	Expected life expectancy for female
2014	78.2	80.6
2015	78.2	80.6
2016	78.1	80.7
2017	78.1	80.7
2018	78.2	80.9
2019	78.3	81.1
2020	78.4	81.2

(Source: Department of Statistics Malaysia)

With the increase in the number of elderly in an aging nation like Malaysia, the need for an innovative financial product to solve retirement funding is crucial (Ashok & Vij, 2020); therefore, an innovative financial product is needed to curb the poverty of the elderly. Thus, replacement income for retirement might be obtained from property (Moulton et al., 2017). A reverse mortgage is a financial product that can be learned from developed countries (Chen et al., 2008), with the concept of increasing liquidity or freeing up equity appealing to some homeowners (Whait et al., 2019). Thus, the innovative financial product which provides financial assistance in retirement by the private sector is thus worth investigating (Yang, 2011).

A reverse mortgage is one of the financial products introduced by financial institutions to generate income for the elderly (Kovaipudur & Nadu, 2020). It benefits the elderly and global acceptability in many developed countries (Nagar & Mahesh, 2017). A reverse mortgage provides shelter for the elderly, allowing the homeowner to borrow against property wealth without leaving the property (Nakajima & Telyukova, 2017). Therefore, the reverse mortgage becomes a beneficial financial instrument for the retired homeowner to have some income stability in their retirement years (Han et al., 2017).

If the elderly have good health in old age, this is regarded as fortune aging (Alias, 2019). Nevertheless, despite having a lengthy life expectancy, Malaysian elders are said to have a low quality of life (QOL) in past studies (Alias, 2019; Kanasi et al., 2016; T'ng et al., 2020). Meanwhile, the aging population substantially affects the economic conditions of a country (Zweifel et al., 1999). In addition, recent studies found that health issues have a significant relationship with the elderlies (Kanasi et al.,

2016). If the savings from the social security system is insufficient for the elderly to maintain the pre-retirement lifestyle, the elderly might face financial challenges during retirement (Purcell, 2012).

Households have been relying on debt to finance their consumption, and thereby, adverse shocks that arise in the economy can cause serious outcomes to the country's economic performance (Yusop et al., 2020). The impact of household debt is not widespread. However, it must be closely monitored to pledge that the risk is contained and that the well-being of households is not adversely affected (Yunchao et al., 2020). It is even more prevalent for the elderly if their income is insufficient to pay for their monthly expenses.

Hence, the elderly need a replacement income to maintain the same standard of living, which might start with the social security system (William, 2021). According to Joy Lee (2021, May 15), the elderly need to seek alternative income or replacement income to support their daily expenses. According to Mohammed et al. (2018), a reverse mortgage can be an alternative income and provide financial assistance during retirement. A reverse mortgage provides financial support to the elderlies in developed countries (Wazal, 2017).

However, converting the property to cash is a challenge on mindset shift for Asians who traditionally used to leave their estate to the beneficiary (Tan & Singaravelloo, 2020). By contrast, Datuk Chung Chee Leong, president and CEO of Cagamas Bhd, highlighted that the elderly would change their mind from leaving the estate to the beneficiary to take up a reverse mortgage after realizing the benefit from a reverse mortgage (Lee, 2021). Parrish (2021) expressed the challenge for the homeowner to take up a reverse mortgage as they are yet to be in retirement. Hence it is difficult for them to visualize the benefit of the reverse mortgage.

As reverse mortgages are yet to be implemented in Malaysia, there will be uncertain factors or risks that the financial institutions will face if the take up rate is not favorable. Therefore, the objective of this paper is to study the willingness to take up reverse mortgage in Malaysia. By understanding the readiness of the elderly who have residential property ownership, the financial institutions may get ready themselves to offer reverse mortgage to solve the income instability for the elderly.

2. Literature Review

According to The European Commission 2015 Aging report, individuals aged 65 years and above are considered an aging population (Chand & Markova, 2019). This aging population is a challenge for macroeconomic growth and income stability (Conesa & Kehoe, 2018). Individuals with good health might delay retirement, reflecting that the aging population is related to a decline in consumption and possibly an extended involvement in the job (Sheiner, 2014). The aging population is negatively related to capital per capita in both the short and long run (Bairoliya et al., 2017). There will be income loss when individuals retire, affecting their income stability (Selvaratnam & Tin, 2007). Moreover, elderly care is a family and social issue with the fast-growing aging population (Li & Tracy, 1999).

With the increase in life expectancy and inflation on medical and living expenses, the aging population is facing financial challenges with the currently available retirement source. Thus, it is crucial to provide income stability for the aging population in retirement. According to Bernhardt and Donnelly (2021), income stability is computing the initial amount of earnings which can be withdrawn for the first

30 years, and subsequent withdrawal will be adjusted for inflation. This strategy has at least a 90% chance of being sustained. Hence, converting equity to cash may help the aging population financially support the elderlies' retirement (Simón-Moreno, 2019) and provide stable income (Han & Jiang, 2019). As the aging population is alarming, it is essential to work out a blueprint to provide income stability for the elderly.

The life cycle hypothesis is a framework that considers fiscal policy, for example, the consequence of national savings of taxes, expenditures and government debt (Modigliani, 1961). The life cycle hypothesis refers to the individual and national savings when people contribute to funded or unfunded pension plans (Modigliani & Sterling, 1983). The life cycle hypothesis stipulates a direct linkage between monetary policy, interest rate and consumption, as the interest rate changes affect the asset's market value and consequently consumption (Jappelli, 2005). As the elderly extend their longevity, the reverse mortgage will raise the consumption even before retirement, yet the utility is enriched (Lei & Yang, 2019). The life cycle hypothesis concept inspires using the reverse mortgage (Gotman, 2020). The elderlies use their previous savings in the equity and convert them into cash as dissaving and consumption.

With the development of medical facilities, people tend to have a longer life expectancy. At the same time, chronic illnesses have become more common and generally lead to a source of disability and functional dependency for the elderlies (Tobi et al., 2017). However, as social security is not complete to cover most of the expenses in retirement years, the elderly face financial difficulties in this later stage in life (Kock & Folk, 2011). The aging population is raising concerns about the social security system (Quy Long, 2019) as it is crucial for the well-being of the elderly as the aging population faces financial challenges (Goli et al., 2019). Thus, development in the current social security system is believed to enhance the elderlies' standard of living and reduce poverty (Chuang, 2021).

Malaysians are not ready for retirement (Tai & Sapuan, 2018) because they lack retirement planning (Zulfaka & Kassim, 2021). Their lack of awareness to save for their retirement (Harun, 2020) causes their failure to sustain themselves throughout their retirement (Kumaraguru & Geetha, 2021). Therefore, the elderly in Malaysia face financial challenges in their retirement (Tan & Singaravelloo, 2020). By exploring the potential of new financial innovation products in Malaysia, it realized that reverse mortgages are different from other forward mortgages, which require no repayment from the elderly during the tenure (Whait et al., 2019). Meanwhile, it is able to provide stable income to the elderly (Simón-Moreno, 2019), and it can be a financial tool for the elderly with its features which provide income to maintain the retirement lifestyle and reduce poverty (Martinez-Lacoba et al., 2021).

Notwithstanding reverse mortgages might solve the poverty issue among the elderly, Malaysians would typically buy a house to stay in and maintain their own house until their death. After many years of repayment, most houses are free from debt. However, without proper retirement planning, one cannot discount other commitments. They may even increase rapidly as the cost of living increases yearly, and the elderly need to spend more on their welfare and medical costs. Therefore, the elderly might face unmanageable debt in their retirement years (Apgar & Di Zhu, 2005). Apgar and Di Zhu (2005) also reiterated that a new financial instrument is needed to solve this 'asset rich, cash poor' issue for the elderly.

As the property is an illiquid asset, property disposal immediately provides cash. Thus, the reverse mortgage becomes the only financial instrument where the elderly can receive cash and enjoy the beneficial interest by staying in the property (Husáková, 2018). It has been proven that reverse mortgages can provide financial assistance and income stability for elderly in their retirement years. In western countries, it allows homeowners to take advantage of the wealth accumulated (property wealth) over the years by converting their property into cash (Simón-Moreno, 2019). A reverse mortgage provides income support for the elderly to make essential spending without moving out of their primary residential property (Dillingh et al., 2017).

Kutty (1998) asserts that two factors are correlated with the take up of reverse mortgages. The first factor is the interest rate which plays a vital role as the borrower is somewhat sensitive to the offered rate and affects the take-up rate. Subsequently, the borrower's age does affect the ability to release from poverty via a reverse mortgage, as longevity is one of the conditions for reverse mortgage approval. In addition, the elderlies are known to own more housing wealth than other types of wealth (Lusardi & Mitchell, 2007). Hence, by unlocking housing equity, the elderly can convert their assets into cash to manage their daily and healthcare expenses for their retirement well-being. At the same time, it serves as an income replacement for the elderly. A reverse mortgage provides financial security to the elderly, whereby the elderly receive income and offers a guarantee of living on their property (Husáková, 2018).

According to Mayer and Simons (1994), there are several obstacles which might cause the elderly not to be willing to accept reverse mortgages, such as the elderly are not familiar with the product features, the financial institutions are not flexible in the loan provided, and lack of regulation over the consumer protection and costly processing fees. Having said that, another factor that will push consumers to obtain a reverse mortgage is the borrower has outstanding traditional mortgage loans (Moulton et al., 2017).

The theory of planned behavior (TPB) refers to the intention of the individual to carry out the action (Ajzen, 1991), and it is based on a cognitive approach to interpreting the individual's beliefs and attitudes (Mohammed & Sulaiman, 2018). TPB managed to predict and explain behaviour in the majority of behavioral domains (Ajzen, 2020). As a result, the factor that makes the elderly willing to convert the property is very important. By predicting the attitude toward the behavior, TPB recommends that behavior is predicted by behavioral intention (Ajzen, 2020). The decision for the elderly to opt for conversion of property should be studied, as to whether the elderly have sufficient funds for retirement or their children can take care of them in their elderly life might be one of the factors too.

3. Methodology

This paper employs a quantitative method which questionnaire is the research tool to examine the willingness to accept reverse mortgages based on previous studies. Income stability applied to examine the respondents' financial readiness and willingness to accept reverse mortgages. In the past residential property transactions record, it showed that the property market in Selangor is active and it has the highest volume of residential property transactions and the property price is stable with a dramatic rise from 1970 to 2000. Thus, this questionnaire focused on the Selangor population. Convenience sampling is applied for this questionnaire. Despite the possibility that convenience sampling's main feature is a

large diversity, with this characteristic, it can reach more target groups compared to another sampling that only targets a specific group of participants (Rice et al., 2017), including the rare target group (Speak et al., 2018). Besides, convenience sampling is inexpensive, available, and without a sampling frame (Baltes & Ralph, 2022).

Previous studies focused on several aspects that vary to examine the respondents' willingness to take up a reverse mortgage. The questionnaire design will use the variables commonly applied in previous studies that focus on the socio-demographic, financial situation, health-related living arrangement, and the willingness to accept the reverse mortgage. This questionnaire is modified and aspired by the previous study; Panchal and Bhuva (2020) have divided it into four (4) main sections, which are demographic (8 items), family arrangement (4 items), health status (3 items) and the potential of a reverse mortgage (5 items). To understand the financial needs for the retirement and the willingness to take up reverse mortgage, this questionnaire adopted the Likert scale because it is widely used in social science research and is regularly constructed with four to seven points (Wu & Leung, 2017). It is significant to prepare the questionnaire by considering when to present or omit a midpoint in the Likert scale (Chyung et al., 2017). Therefore, this questionnaire adopts a 5-point scale for the case scenario and a 6-point scale on the health status and the potential of a reverse mortgage to provide an insightful response according to the questionnaire.

According to the NAPIC terrace house price by state report 2020, for Selangor state, in the year 2020, the house price is RM527,045, and it has the highest number of owners across the districts. Therefore, to provide a better understanding of the implementation of the reverse mortgage, a clarification question (Case Scenario: If you have a residential property (Terraced House) with a market value of RM600,000.00, will you consider converting into cash, receive monthly/one lump sum annuity payment from financial institutions (with a condition: no outstanding loan & owner will continue to occupy in the unit until death) has been a question in the questionnaire as clarification is the fundamental ability for knowledge-based question answering (Xu et al., 2019), it can be a favorable way to diminish the conundrum (Zhang & Zhu, 2021).

To validate this study's developed questionnaire, it seeks industry experts' (several bankers and academicians) opinions. As the reverse mortgage is not available in Malaysia, thus industry experts advised adding a simple write-up to explain the nature and usage of the reverse mortgage. A pilot study was conducted and the respondents' feedback was a simplified write-up to ease reading. The reverse mortgage was discussed in Malaysia; however, reverse mortgage exposure to the public is still low, and the respondents have no idea how reverse mortgage works. With the write-up, respondents realize the usage of the reverse mortgage, understand the questionnaire's objective, and realize the need for a reverse mortgage for their retirement.

Data collection for this study was collected through an online questionnaire, yet it has its limitations. It was challenging to be in touch with those homeowners who are technology savvy or have poor internet connections in their location. This study adopts the Chi-square test to examine the significance and determine the tolerance of the acceptance of reverse mortgages related to selected variables. Chi-square is applied for the questionnaire as Chi-square is connected to the estimation

technique (Shi et al., 2018). Chi-square evaluates the fit between the observed data and the hypothesized model, and Chi-square statistics attain maximum probability (Alavi et al., 2020).

A pilot study was conducted and the questionnaire was distributed to 30 respondents personally by sending the URL via WhatsApp. Although an introduction to a reverse mortgage was sent in the message, some respondents were not familiar with the concept and clueless about the questionnaire's objective. Overall, the respondents' feedback was a simplified write-up to ease reading. The reverse mortgage was discussed in Malaysia; however, reverse mortgage exposure to the public is still low, and the respondents have no idea how reverse mortgage works. With the write-up, respondents realise the usage of the reverse mortgage, understand the questionnaire's objective, and realise the need for a reverse mortgage for their retirement.

4.   Result and Discussion

Based on the Table 2, demographic analysis, most of the questionnaire respondents were females. Out of 405 questionnaire respondents, 215 or 53.10% were females. As the respondents are homeowners and are the prospect for the reverse mortgage which will be launched in the future, 383 or 94.57% of respondents are below 60 years old, reflecting the potential market for the product. Around 85.19% of respondents received their tertiary study (345 respondents), 10.61% completed their education at STMP/A-Level (43 respondents), with the remaining respondents below STPM/A-Level (17 respondents). Most of the respondents are income earners (308 respondents), followed by entrepreneurs/businessmen (66 respondents) and unemployment/retirement (31 respondents).

Table 2.   Demographic analysis

Variables	Category	Frequency	Percentage (%)
Gender	Male	190	46.91
	Female	215	53.09
Age Group	60 and above	22	5.43
	50-59	85	20.99
	40-49	124	30.62
	22-39	174	42.96
Education Level	SPM/O-Level	17	4.2
	STPM/A-Level	43	10.62
	Degree	172	42.47
	Master	130	32.10
	Professional Certificate	43	10.61
Primary Residential Property Located	Gombak	23	5.68
	Hulu Selangor	6	1.48
	Kajang	34	8.40
	Klang	125	30.86
	Kuala Langat	10	2.47
	Kuala Selangor	4	0.99
	Petaling Jaya	72	17.78
	Rawang	12	2.96

	Subang Jaya	32	7.90
	Sepang	4	0.99
	Shah Alam	83	20.49
Primary Residential Property	Flat/Apartment	30	7.41
	Condominium	61	15.06
	Townhouse	2	0.49
	Service Apartment	2	0.49
	Landed property (Single storey/Double storey)	266	65.69
	Semi-D/Bungalow	44	10.86
Marital Status	Single	103	25.43
	Married	288	71.11
	Divorced	11	2.72
	Widow/Widower	3	0.74
Occupation	Unemployed	31	7.65
	Employed	308	76.05
	Self-employed/Businessman	66	16.30
Sufficient retirement fund	Yes	104	25.68
	No	116	28.64
	Maybe	185	45.68

The respondents are mostly educated working adults who will receive retirement 15 years later. The response found that most respondents are married and stay on landed property. However, 46% of the respondents have no confidence that the retirement fund is sufficient for their retirement. Respondents mostly prefer to stay independently or with their spouse, yet for the disposal of the primary residential property, they prefer to keep it for their family to stay.

Respondents have several types of retirement funding. However, most of the funding source is EPF. Although the respondents have several types of retirement funding, the affordability to pay for the daily expenses in retirement does not sound optimistic. 161 respondents (40%) found it is relatively manageable, 165 respondents (41%) found that it is challenging to pay, 121 respondents (30%) with difficulty, and 32 respondents (8%) with significant difficulty and the remaining respondents found it not manageable to pay their regular expenses in retirement.

To understand the willingness to take up a reverse mortgage or dispose of the property to obtain cash to overcome the financial constraints, it found that 186 respondents (46%) intended to stay in their primary residential property, and 53 respondents (13%) did not intend to stay in their primary residential property. The remaining respondents are uncertain about their future decision on their stay at a primary residential property.

Table 3. Type of primary residential property and gender crosstabulation

Type of primary residential property	Male	Female	Total
Landed property	152	158	310
Non-landed property	38	57	95
Total	190	215	405

Table 3 shown a chi-square test of independence was performed to examine the relation between the type of primary residential property and gender. Chi-square test of independence showed that there was no significant association between type of primary residential property and gender, χ^2 (1, N= 405) = 2.382, p= .123.

Table 4. Type of primary residential property and marital status crosstabulation

Type of primary residential property	Married	Single	Total
Landed property	229	81	310
Non-landed property	59	36	95
Total	288	117	405

Table 4 shown a chi-square test of independence was performed to examine the relationship between primary residential property and marital status. Chi-square test of independence showed that there was a significant association between the type of primary residential property and marital status, χ^2 (1, N= 405) = 4.9, p= .027. Table 4 shows that married couples were more likely than those single to stay on landed property.

Table 5. Type of primary residential property and education level cross tabulation

Type of primary residential property	Non-tertiary level	Tertiary level	Total
Landed property	45	265	310
Non-landed property	15	80	95
Total	60	345	405

Table 5 shown a chi-square test of independence was performed to examine the relation between the type of primary residential property and the education level. Chi-square test of independence showed that there was no significant association between type of primary residential property and education level, χ^2 (1, N= 405) = 0.93, p= .760.

Table 6. Affordability to pay daily expenses in retirement and gender cross tabulation

Affordability to pay daily expenses in retirement	Male	Female	Total
Able to pay	94	146	240
Unable to pay	96	69	165
Total	190	215	405

Table 6 shown a chi-square test of independence was performed to examine the relationship between the affordability of paying daily expenses in retirement and gender. Chi-square test of independence showed a significant association between the affordability to pay daily expenses in retirement and gender, χ^2 (1, N= 405) = 14.196, p= .000. Table 6 shows that females have more affordable than males to pay for their daily expenses in retirement.

Table 7. Affordability to pay daily expenses in retirement and marital status crosstabulation

Affordability to pay daily expenses in retirement	Married	Single	Total
Able to pay	191	49	240
Unable to pay	97	68	165
Total	288	117	405

Table 7 shown a chi-square test of independence was performed to examine the relationship between the affordability to pay daily expenses in retirement and marital status. Chi-square test of independence showed that there was a significant association between the affordability to pay daily expenses in retirement and marital status, $\chi 2$ (1, N= 405) = 20.583, p= .000. Table 7 shows that married respondents have more affordable than singles to pay for their daily expenses in retirement.

Table 8. Affordability to pay daily expenses in retirement and education level cross tabulation

Affordability to pay daily expenses in retirement	Non-tertiary level	Tertiary level	Total
Able to pay	36	204	240
Unable to pay	24	141	165
Total	60	345	405

Table 8 shown a chi-square test of independence was performed to examine the relationship between the affordability to pay daily expenses in retirement and the education level. Chi-square test of independence showed that there was no significant association between affordability to pay daily expenses in retirement and education level, $\chi 2$ (1, N= 405) = 0.16, p= .899.

Table 9. Intention to stay at primary residential property until pass away and gender cross tabulation

Intention to stay at primary residential property until pass away	Male	Female	Total
Yes	168	184	352
No	22	31	53
Total	190	215	405

Table 9 shown a chi-square test of independence was performed to examine the relationship between the intention to stay at the primary residential property until passing away and gender. The "yes" includes the definite yes and the "maybe." Chi-square test of independence showed no significant association between the intention to stay at the primary residential property until passing away and gender, $\chi 2$ (1, N= 405) = 715, p= .398.

Table 10. Intention to stay at primary residential property until pass away and marital status crosstabulation

Intention to stay at primary residential property until pass away	Married	Single	Total
Yes	257	95	352
No	31	22	53
Total	288	117	405

Table 10 shown a chi-square test of independence was performed to examine the relationship between the intention to stay at the primary residential property until passing away and marital status. The "yes" includes the definite yes and the "maybe." Chi-square test of independence showed a significant association between the intention to stay at the primary residential property until passing away and marital status, $\chi2$ (1, N= 405) = 4.728 p= .030. Table 10 shows that married couples were more intent than singles to stay at the primary residential property until they passed away.

Table 11. Intention to stay at primary residential property until pass away and education level cross tabulation

Intention to stay at primary residential property until pass away	Non-tertiary level	Tertiary level	Total
Yes	57	295	352
No	3	50	53
Total	60	345	405

Table 11 shown a chi-square test of independence was performed to examine the relationship between the intention to stay at the primary residential property until passing away and education level. The "yes" includes the definite yes and the "maybe." Chi-square test of independence showed a significant association between the intention to stay at the primary residential property until passing away and education level, $\chi2$ (1, N= 405) = 4.049, p= .044. Table 11 shows that individuals who accepted tertiary education are more likely than those who do not receive tertiary education to stay at the primary residential property until they pass away.

Table 12. Consideration to exchange property with cash for living expenses and gender cross tabulation

Consideration to exchange property with cash for living expenses	Female	Male	Total
Yes	90	101	191
No	125	89	214
Total	215	190	405

Table 12 shown a chi-square test of independence was performed to examine the relation between consideration to exchange property with cash for living expenses and gender. Chi-square test of independence showed a significant association between consideration to exchange property with cash for living expenses and gender, $\chi2$ (1, N= 405) =9.305, p= .010. Table 12 shows that males are more likely than females to exchange their property with cash for their living expenses.

Table 13. Consideration to exchange property with cash for living expenses and marital status crosstabulation

Consideration to exchange property with cash for living expenses	Married	Single	Total
Yes	128	63	191
No	169	54	214
Total	288	117	405

Table 13 shown a chi-square test of independence was performed to examine the relationship between considering exchanging property with cash for living expenses and marital status. Chi-square test of independence showed that there was no significant association between consideration to exchange property with cash for living expenses and marital status, $\chi2$ (1, N= 405) =2.986, p= .225.

Table 14. Consideration to exchange property with cash for living expenses and education level cross tabulation

Consideration to exchange property with cash for living expenses	Non-tertiary level	Tertiary level	Total
Yes	25	166	191
No	35	179	214
Total	60	345	405

Table 14 shown a chi-square test of independence was performed to examine the relation between consideration to exchange property with cash for living expenses and education level. Chi-square test of independence showed that there was no significant association between consideration to exchange property with cash for living expenses and education level, $\chi2$ (1, N= 405) = .875, p= .646.

The tendency to accept reverse mortgages is low when the question has been asked in general. Despite that, the willingness to accept reverse mortgages increases when a scenario has been asked. In other words, with proper awareness and education provided, the homeowners will be aware of the financial assistance deriving from the reverse mortgage. When the gap between income and retirement expenses is growing (Husáková, 2018), the elderlies can consider taking up a reverse mortgage to exchange for cash to sustain their existing lifestyle. Although the property is the object of consideration to convert into cash, the chi-square test found that it is insignificant with gender and education level. However, it is significant with marital status, and married couples prefer to stay on landed property.

This result supports previous research on gender as a significant demographic for accepting reverse mortgages (Gupta & Kumar, 2019). However, Gupta and Kumar (2019) showed that females are more willing to consider a reverse mortgage, a finding that does not support this present study. This could be due to the fact that in Malaysia, the male is the breadwinner, and the property ownership mostly is joint ownership instead of under the female. In India, homeownership is a positive association for females and relates to their right to inherit property (Bahrami-Rad, 2021). Regarding affordability to pay for routine expenses in retirement, it is significant with gender and marital status variables but not significant with education level. It found that female and married couples have more affordability to pay for their regular expenses in retirement. The intention to stay at the primary residential property until passing away is not significant for gender but marital status and education level. Married persons and individuals who received tertiary education are more willing to stay at their primary residential property until they pass away. Finally, gender is significant in the willingness to convert the property to cash, but marital status and education level are insignificant. The test result showed that males are more willing to convert their property to cash than females.

5. Conclusion

The reverse mortgage is not well known in Malaysia, so the willingness to convert the property to cash is not widespread. The homeowner might not be ready to accept yet with the available data showing that with current retirement savings and longevity, alternative income for retirement income shall be further studied so that the elderlies will not face poverty in their retirement.

The questionnaire result shows that most respondents are reluctant to convert the primary property to cash and negatively respond to taking up the reverse mortgage. Meanwhile, the questionnaire result shows that the elderly are willing to stay at the primary residential property. Ryan (2017) found that the elderly manage their finances by taking up reverse mortgages and staying on their property (Ryan, 2017). A reverse mortgage will be feasible to enhance the elderlies' financial position in self-saving to cover part of the regular expenses such as medical costs (Warchlewska & Iwański, 2020). It is worth studying and conducting subsequent research on the feasibility of reverse mortgages in Malaysia. Thus, it is practical to implement reverse mortgages as a new financial instrument for the elderly to provide an alternative income for their retirement.

In the 12th Malaysia plan, the government focuses on affordable housing and homeownership (Twelfth Malaysia Plan 2021–2025, page 175). With homeownership, the elderly can receive an annuity from the reverse mortgage (Choi et al., 2020). Different terms and payment modes are implemented in different countries based on their policy and culture. Features of reverse mortgages are that recurring payment structures can be feasible for the elderly seeking to reinforce their retirement security (Feather, 2018).

As awareness is significant in the willingness to accept reverse mortgages, further research may explore the extent of awareness programs needed to assist the homeowners in understanding the reverse mortgage and the relationship between the take-up rate and the understanding of the features of a reverse mortgage. With a better understanding of the mechanism of a reverse mortgage, it can provide confidence to the elderlies that this product can solve their financial difficulty in retirement.

As the awareness of retirement planning is poor thus, it is challenging to create awareness of the need for income stability to achieve retirement. With the poor awareness of retirement planning, working adults do not want to prepare their retirement finances. Thus, they fail to save for retirement but face financial challenges in their retirement. To get the elderly able to self-sustain in their retirement, the government shall promote awareness and provide some financial literacy program to get the people aware and ready for their retirement.

For future research, researchers may study on the acceptance level after an education program has been conducted or an awareness program launched. At the same time, researchers might also study the acceptance level with the reverse mortgage provided as a different loan margin and the package of the reverse mortgage.

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