

# RELATIONSHIP BETWEEN POVERTY LEVELS AND AGE CATEGORIES AMONG MALE AND FEMALE CONSUMERS IN MALAYSIA

Zumilah Zainalaludin<sup>1,2</sup>  
Norehan Saidi<sup>1</sup>  
Foong Hui Foh<sup>2</sup>  
Siti Farra Zillah Abdullah<sup>2</sup>

## Abstract

This paper mainly aims to show the poverty incidents among elderly Malaysians by sex disaggregation. In detail, this paper aims (RO-1) to profile the economic background of the respondents by age categories and sex disaggregation; (RO-2) to differentiate the mean of household income by poverty level, age categories, and sex of the respondents; and (RO-3) to measure the relationship between the level of poverty and age categories by sex disaggregation. A total of  $n=4428$  respondents participated in this study, drawn from 100 districts with 20,000 population of the elderly. Descriptive analyses, t-tests, and chi-square tests were conducted to achieve the objectives. Under RO-2, four null hypotheses were tested (there was no difference of mean household income among – poor and younger ( $Ho_1$ ), non-poor and younger ( $Ho_2$ ), poor and older ( $Ho_3$ ), and non-poor and older ( $Ho_4$ ); respondents by sex disaggregation respectively). Only  $Ho_3$  shows a significant ( $p<0.05$ ) difference in mean household income among poor and older male and female respondents. Therefore, only  $Ho_3$  was rejected whilst  $Ho_1$ ,  $Ho_2$ ,  $Ho_4$  was failed to be rejected. Under RO-3, three null hypotheses were tested (there was no relationship between poverty levels and age categories among male respondents ( $Ho_5$ ) and among female respondents ( $Ho_7$ ), respectively). The  $Ho_5$  and  $Ho_6$  revealed significant ( $p<0.05$ ) relationships between level of poverty and age categories among male and female respondents through Chi-square. Thus,  $Ho_5$  and  $Ho_6$  were rejected. This study concludes that older men and women are poorer than younger ones. Therefore, poverty is not only a gender issue but also-an age-related issue.

**Keywords:** Poverty; Gender; Consumer; Older; Household income

## Introduction

The feminization of ageing is generally associated with the fact that there are more women than men in the elderly population (Cepellos, 2021). As the elderly are known to be the group most affected by poverty (Masud & Zainalaludin, 2018; Barrientos,

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<sup>1</sup>Department of Resource Management and Consumer Studies, Faculty of Human Ecology, Universiti Putra Malaysia

<sup>2</sup>Social Gerontology Laboratory, Malaysian Research Institute on Ageing, Universiti Putra Malaysia

Gorman, & Heslop, 2003), and feminization of poverty is well-known (Hooyman, Browne, Ray, & Richardson, 2002), the elderly women may immensely suffer from poverty (Masud & Zainalaludin, 2018, Barrintos *et al.*, 2003). This may be due to gender and age discrimination and other occupational challenges that cause many difficulties for women in society (Morrow, 1999). This concept is significant in rural areas because many older women live in rural areas (Hidayah & Latiana, 2020; Roddin, Sidi, Yusof, Mohamed, & Razzaq, 2011; Ahmad & Bisilliat, 1984). In addition, older women have lower incomes than younger people (Masud & Zainalaludin, 2018). They also tend to be older and single mothers who are always considered the poorest among the poor (Barrintos *et al.*, 2003), especially in rural areas (Barrintos *et al.*, 2003). Older women in rural areas cannot be ignored both in society and the labor market (Morrow, 1999; Little & Austin, 1996). Due to limited educational opportunities, barriers to equal employment, and poor pay, women as a group spend their lives poorer than men, regardless of age (Hooyman *et al.*, 2002).

Moreover, older women living in poverty still contribute to many unpaid activities such as caring for children and family (Ismail, Masud, & Zainalaludin, 2015; Chant, 2012). As a result, men will earn much higher amounts from different income sources than women (Masud & Zainalaludin, 2018). Spratlin and Holden (2000) arrived at the same conclusion, which stated that women were economically worse off than other groups. Traditionally, the elderly Malaysians rely on their children for support due to limited social security in old age (Teh, Tey, & Ng, 2014; Masud & Haron, 2014) as their children are also poor (Barrientos, Gorman, & Heslop, 2003; Deaton & Paxson, 1997). Additionally, the lack of employment opportunities among the elderly in Malaysia limits their ability to earn an income in the normal economic sector to support themselves, and they must rely on other sources of income instead (Masud & Haron, 2014; Haron & Gikonyo, 2008). As a result, they work mainly in the informal economic sector at low pay (Basole, 2014). In the United States, about 11.10 per cent of people aged 80 and older live in poverty, as compared with poverty rates of 9.20 per cent for people aged 75-79, 7.40 per cent for those aged 70-74, and 8.40 per cent for those aged 65-69 (Li & Dalaker, 2021).

Therefore, this study aims to answer the following three research questions:

- i) What were the differences in the mean household income by poverty levels, age categories and sex of the respondents?
- ii) What was the relationship between the levels of poverty and age categories by sex disaggregation?

## **Research Objectives**

This paper aims to achieve the following research objectives: -

- i) To profile the economic background of the respondent by age categories and sex disaggregation.

- ii) To differentiate the mean of household income by poverty level, age categories and sex of the respondents.
- iii) To measure the relationship between poverty and age categories by sex disaggregation.

## Literature Review

Malaysia will be an aged nation by 2035, and income inequality among the elderly will become a serious problem (Shahar, Vanoh, Ludin, Singh, & Hamid, 2019). Due to demographics, the elderly are usually associated with women (Ray, 1996). Older people are often classified as having low socioeconomic status as most of them are retired and have limited income due to their low academic background (Masud, Hamid, & Haron, 2015). Currently, women make up 54.40 per cent of all elderly in Malaysia (Department of Statistic, 2021). Therefore, their opportunities to work in any economic sector are severely limited (Shahar *et al.*, 2019). Among the elderly, poverty was higher in rural areas than urban areas, especially among elderly females due to lower education and no proper employment (Khan, Khan, Leng, Chen, & Vergara, 2017; Bakar, Idris, & Selayaratna, 2009). According to Tey, Siraj, Kamaruzzaman, Chin, Tan, Sinnappan, and Muller (2016), older women are more likely than older men to rely on financial support from their spouses and children. The lack of social security in most developing countries, including Malaysia, increases the vulnerability of older people to poverty, especially among older women (Khan *et al.*, 2017; Masud *et al.*, 2015; Caraher, 2003).

Nearly a quarter of older women who are poor or near-poor because they earn less are less likely to have a family to help them with medical care, live alone and are disabled older people (Masud *et al.*, 2015; Rowland & Lyons, 1996; Alecxih & Kennel, 1994). Thus, in order to sustain their livelihood in old age, they depend on the financial resources that are available to them, especially those who do not have pensions or even their savings (Zainuddin, Hamidi, & Abd Wahab 2020; Masud, Sulaiman, Hamid, & Ibrahim, 2012).

Poverty among the elderly is a global problem, as noted in the 2002 Madrid International Plan of Action on Ageing (UN, 2002). In Malaysia, 22.70 per cent of households headed by the elderly (65 years and above) are the most affected by poverty and recorded a poverty incidence of 12.00 per cent in the year 2019 as compared to 10.90 per cent in the year 2016 (DOSM, 2020; Haron, Sharpe, Masud, & Abdel-Ghany 2010). The 2019 Household Expenditure Survey revealed that the average monthly household expenditure for an elderly headed household was RM5,282. The average monthly expenditure for a 45 to 64 years old head of the household was RM8,696 (Department of Statistic Malaysia [DOSM], 2020). Limited access to financial resources increases the risk of falling into poverty in older age,

and this becomes one of the reasons for the unsuccessful of positive ageing (Masud et al., 2012).

In Zainuddin *et al.* (2020), it is stated that the spouse is the essential income resource in an ageing family. Even though the husbands are also ageing, they are often considered the breadwinner of the family and the main person who supports the family financially. Most homemakers depend on their husbands for money (Wahab, Ghani & Yusof, 2018). Thus, when the spouse is absent, they may fall into poverty or find other financial support to care for a sick husband, especially in low-income households (Zainuddin *et al.*, 2020). In a non-age-friendly environment, age restrictions, eligibility for financial support, working hours, and work nature cause older people to slip into poverty (WHO, 2007; Hemerijck, 2002).

The financial status of women is even more striking when one examines the poverty levels of single mothers and aged women, many of whom face a lifetime of poor wages and discriminatory educational opportunities and labor practices (Choi, 1996; Glenn, 1999; National Center for Health Statistics, 2000; Smeeding, Estes, & Glossy, 2000). Women's gender inequalities are exacerbated by race, class, advanced age, and ageism in politics and public sentiment. Divorce laws, age discrimination, limited research on their health concerns, and demeaned physical appearance individually and collectively challenge older women's attempts to age with dignity.

Age, gender, and marital status were revealed as factors that lead to poverty. Nor, Mohamad, and Vellymalay (2019) and Omar (2003) state that single women, divorcees, or widows have lower life satisfaction than married women due to financial shortfall for child support. According to Glenn (1999), feminism and economic dependence on men do not similarly apply to women for subordination or poverty. This may be due to women being less likely to have full benefits through social security or pension programs, less access to health care, and higher poverty rates than their male counterparts (Hooyman et al., 2002).

Older people are more vulnerable to poverty than younger ones, especially those who lose income through retirement (Masud & Zainalaludin, 2018; Rasool & Salleh, 2012). This further confirmed that young women are affected by poverty due to their single marital status (Utaminingsih *et al.*, 2021; Anggarwal, 2012) because they they do not have a husband to depend on. The causes of poverty among younger and older women are almost similar, except the latter older women are much more likely to live independently (McLanahan & Kelly, 2006; Treas, 1995). Nevertheless, generally, women tend to be associated with poverty (Oyekanmi & Moliki, 2021; Masud & Zainalaludin, 2018) and are poorer than men (Holmes & Jones, 2011). This may be because women live longer than men and are generally without social security at their later ages (United Nations, 2019; Morris, 2007). Some of the reasons, especially among rural women are, they tend to earn lesser than men (Ismail & Jajri, 2012),

have little or no income during their productive age (Ismail *et al.*, 2015; Masud *et al.*, 2008), which may explain why they have no social security planning (Morris, 2007) besides low academic background (Zainalaludin, 2012). Therefore, poverty among rural older women is more prevalent in retirement age (Mohd, Senadjki, & Mansor, 2017; McLanahan, 2006).

## Methodology

This paper used a study on older (60 years old and above) consumers and adults (40-59 years old) in Malaysia. In 2016, the age 40 years old and above was  $N=9.6$  mil (DOSM, 2016). The sampling frame was drawn from the 2010 Population and Housing Census to identify districts with more than 20,000 older persons aged 60 years and above. A total of 92 districts (61.33% from the total of 150 districts in Malaysia) in Peninsular Malaysia, Sabah and Sarawak met this criterion and were therefore selected for the survey. The targeted samples were the head of households of adult family members aged 40 years old and above in 2016. The  $n=50$  respondents were identified in each sampled district through the community leaders, making  $n=4,600$  respondents. The selection was based on the equal distribution among two age groups with 25 respondents each for 40-59 years and 60 years and above. The oversampling was conducted in order to overcome the limitation of sampling technique in data gathering and to ensure the normal distribution of the variables to be used for further analyses under big data theory (Batista, Prati, & Monard, 2004; Chawla, Bowyer, Hall, & Kegelmeyer, 2002). Data were collected through face-to-face interviews using a standardized questionnaire. Field enumerators were trained in administering the questionnaires to ensure that correct interview techniques and other relevant procedures were properly carried out. A total of  $n=4428$  respondents (96.3% from sample size) were successfully interviewed.

Six null hypotheses were tested in this paper as follows: -

$H_{01}$ : There was no difference in mean household income of poor and younger respondents by sex disaggregation.

$H_{02}$ : There was no difference in mean household income of non-poor and younger respondents by sex disaggregation.

$H_{03}$ : There was no difference in mean household income of poor and older respondents by sex disaggregation.

$H_{04}$ : There was no difference in mean household income of non-poor and older respondents by sex disaggregation.

H<sub>05</sub>: There was no relationship between poverty levels and age categories among male respondents

H<sub>06</sub>: There was no relationship between poverty levels and age categories among female respondents

This paper used part of data from a study on Malaysian older consumers - Part A (background of respondents) and Part B (socioeconomics data). The variables are mainly the sex of the respondent, age and household income. The Malaysian Poverty Line Income (PLI 2016) (RM980.00/USD225.40) was used to divide the household income into two levels - poor and non-poor categories. Households with a total income of RM980.00 (USD225.40) and below were classified as poor households, while households with a total income of > RM980.00 (USD225.40) were classified as non-poor households. The age of the respondents in the year 2016 was 60 years old and was used as cut off point between older (60 years old and above) and younger (less than 60 years old) (following Moschis & Ong, 2011; Brodaty, Harris, Peter, Wilhelm, Hickie, Boyce, & Eyers, 1993). Descriptive statistics were used to represent the RO-1, whilst a t-test tested variables in RO-2, and a chi-square test was used to measure the relationship between the variables in RO-3.

## Findings and Discussion

### Socioeconomic background of the respondent by age categories and sex disaggregation

The socioeconomic variables are presented by age categories – younger (less 60 years old) and older (60 years old and above), and sex – male and female respondents. Table 1 shows the respondents' socio-economic background broken down by age and sex. Around three-quarters (75.6%) of the respondents are married, with the older male respondents (32%) being the highest percentage. It shows that older men are more likely to be married than younger men and women in most countries (Wan Ahmad & Ismail, 2014; Kinsella & Velkoff, 2001). On the other hand, almost half (46%) of the single respondents are older women, more likely to live independently after being widowed, separated from their spouse, or divorced. According to Carr and Bodnar-Deren (2009), men's life expectancy is lower, so women are more likely than men to lose a spouse to death and remarry. In addition, increasing widowhood among older women is becoming a lifestyle, financial, and well-being issue (Schmitz, 2021; Carr & Utz, 2020; Silverstein, Cong, & Li, 2006; Lillard & Waite, 1995).

When broken down by strata, it is evident that most of the respondents are from rural areas (62%), with an almost similar percentage between older male (30%) and older female (29%) respondents. In contrast, younger males and females (27% and 26%

respectively) from 38 per cent of respondents reside in urban areas (Table 1). According to Aini, Murni & Abd Aziz (2016), the high proportion of older people living in rural areas was caused by the rapid urbanization and out-migration of the younger generation from rural areas. Consequently, it made a significant impact on the population of Malaysia. Many researchers have also established a relationship between the older person and the environment and geographical factors (Aini *et al.*, 2016; Golant, 2012; Cutchin, 2009; Keating, 2008).

In terms of ethnicity, a vast majority (79.27%) are Malays, and only 20.73 per cent belong to other ethnicities. Among Malays, the distributions of the respondents by age categories and sex are almost similar (Table 1), in which a high percentage is older Malay males (28%), almost similar percentage to older Malay females (27%). Notwithstanding, out of the 4.97 per cent Chinese, 5.82 per cent Indian, 7.79 per cent Bumiputera, and 2.15 per cent from other ethnics as respondents in this paper, a high percentage among each of the ethnic respectively consist of 26, 28, 31 and 33 per cent younger male, older female, an older male and older female respondents (Table 1).

**Table 1: Distribution of Respondent by Age Categories and Sex Disaggregation (n=4428)**

Socioeconomic Indicator		Male		Female	
		Older n (%)	Younger n (%)	Older n (%)	Younger n (%)
Marital status (n=4385)	Married (75.60%)	1069 (32)	853 (26)	604 (18)	789 (24)
	Single (24.40%)	172 (13)	98 (8)	598 (46)	421 (33)
Strata (n=3177)	Rural (62.00%)	586 (30)	394 (20)	569 (29)	421 (21)
	Urban (38.00%)	292 (24)	324 (27)	275 (23)	316 (26)
Ethnic (n=4428)	Malay (79.26%)	997 (28)	758 (22)	964 (27)	791 (23)
	Chinese (4.97%)	59 (17)	57 (26)	53 (24)	51 (23)
	Indian (5.83%)	67 (26)	56 (22)	71 (28)	64 (25)
	Bumiputera (7.79%)	107 (31)	64 (19)	95 (28)	79 (23)
	Others (2.15%)	23 (24)	24 (25)	31 (33)	17 (18)
Academic Background (n=4412)	Primary (35.31%)	593 (38)	155 (10)	594 (38)	216 (14)
	Secondary (41.27%)	426 (23)	576 (32)	258 (14)	561 (31)
	Tertiary (10.61%)	77 (16)	189 (40)	37 (8)	165 (35)
	Others (12.81%)	152 (27)	35 (6)	322 (57)	56 (10)

**Table 1 (continues)**

Socioeconomic Indicator		Male		Female	
		Older <i>n</i> (%)	Younger <i>n</i> (%)	Older <i>n</i> (%)	Younger <i>n</i> (%)
Working Status ( <i>n</i> =4408)	Never Work (22.30%)	113 (11)	53 (5)	547 (56)	270 (27)
	Working (44.56%)	448 (23)	753 (38)	231 (12)	532 (27)
	Retired (33.14%)	686 (47)	146 (10)	432 (30)	197 (13)
House Ownership ( <i>n</i> =4413)	No (33.36%)	208 (14)	266 (18)	502 (34)	496 (34)
	Yes (66.64%)	1040 (35)	690 (23)	710 (24)	501 (17)
Sources of Income ( <i>n</i> =4326)	Paid Employment (43.25%)	449 (24)	692 (37)	211 (11)	519 (28)
	Self-employment (13.55%)	154 (26)	130 (22)	169 (29)	133 (23)
	Property and Investment (1.73%)	23 (31)	11 (15)	23 (31)	18 (24)
	Current Transfer (41.47%)	607 (34)	115 (6)	785 (44)	287 (16)
Age	Mean	67.29	51.7	67.73	51.18
	SD	6.63	5.26	7.06	5.18
Personal Income	Mean	2,800.32	4,059.89	1,767.51	2,806.99
	SD	6,668.20	6,201.74	2,533.91	7,279.77
Household Income	Mean	2,383.49	3,529.58	2,091.25	3,249.91
	SD	2,582.74	3,189.69	2,221.57	3,155.81
Marital status ( <i>n</i> =4385)	Married (75.60%)	1069 (32)	853 (26)	604 (18)	789 (24)
	Single (24.40%)	172 (13)	98 (8)	598 (46)	421 (33)

The academic background shows a high percentage (41.27%) of older respondents have a secondary school background. Among them, a high percentage is among young male (32%) respondents (Table 1). Nevertheless, about three-quarters of the respondents only had primary and secondary school backgrounds. The factors contributing to the low academic background of a locality are poor educational services (Shah, Hassan, Malik, & Sreeramareddy, 2010; Arba, Singh, & Teoh, 2010), lack of various resources (World Bank, 2010) and remote geographical location (Nagaraj, Lee, Goh, & Tey, 2017; Maddox, 2007). All these factors are associated with rural areas. This shows that the respondents are more likely to be from rural areas. These findings are corroborated by Zainalaludin (2012), who found that rural people are usually associated with low academic backgrounds, leading to poverty (Cahaya, 2015; Calson & Buttram, 2004).

Table 1 shows that a large majority (56%) of older female respondents have never worked, whilst only 27 per cent of younger female respondents are in the same category. On the other hand, a high percentage (38%) of younger male respondents are working, and a high percentage (47%) of older male respondents are retired and are no longer working. It is important to note that most elderly women in Malaysia do not work. This is because they are economically vulnerable and often marginalized in society (Omar, 2003). As a result, they rely more on their spouse or family members. This was also confirmed by Gorman (2017) and De Jong Gievelde, De Valk, & Blommesteijn (2000) that the elderly rely more on their children due to their socio-economic vulnerability.

Generally, elderly respondents with homeownership are heads of their households. However, the percentage of elderly female respondents with homeownership was only 24.00 per cent as opposed to elderly male respondents with homeownership of 35.00 per cent (Table 1). This could be because older women are, on average poorer than older men, especially in rural areas (McWilliam *et al.*, 2021; Zain *et al.*, 2018; DOSM, 2017; HLPE, 2014, Zainalaludin, 2010). They are mainly rural housewives who have no income to buy a house. In most cases, they inherit the house they own.

A high percentage (31.00%) of older male and older female respondents earn income from their properties and investments (Table 1). However, this table also shows that almost half (445) of older females earn income from their children (current transfer) compared to 34 per cent of older male respondents. This is also in line with previous studies by Masud and Zainalaludin (2018) and Masud, Haron, and Gikonyo (2008), which highlighted that the main sources of income for the elderly are their children or other family members since most of them are not employed even when they were younger.

The mean age of older men was 67.29 years (SD = 6.63 years), and that of younger men was 51.70 years (SD = 5.26 years) (Table 1). For older women, the mean age was 67.73 years (SD = 7.06) and, the mean age was 51.18 years (SD = 5.18 years) for younger women (Table 1). The higher mean of age figures for both older men and women reflect that older people have grown much faster than the total population. According to Tey *et al.* (2016) and Rowe (2015), as the older people population increases, the burden on the health care system increases as they are more likely to suffer from chronic diseases than younger people. Therefore, health care infrastructure in effective care networks, community-based care and home-based care services are needed (Ambiga, Ramli, Suthahar, Tauhid, Clearihan, & Browning, 2011) lacking in Malaysia. Nevertheless, Malaysia is a "newcomer" regarding the ageing population (Tey *et al.*, 2016).

The mean personal income of the male respondents (older, RM2800.32; younger, RM405.89) was significantly higher than that of the female respondents (older, RM1767.51; younger RM2806.99) (Table 1). The household income of male respondents (older, RM2383.49; younger, RM3529.58) was also notably higher than that of female respondents (older, RM2091.25; younger, RM3249.91) (Table 1). Although the male respondents are no longer employed, they can still draw a pension later than the female respondents because they were employed in their productive age. Many studies also support these findings that older rural women are poorer than older rural men (McWilliam *et al.*, 2021; Zain *et al.*, 2018; DOSM, 2017; HLPE, 2014, Zainalaludin, 2010). According to McWilliam *et al.* (2021), there are many reasons why women fall into poverty than men. For example, when women are widowed or divorced, they would lose direct access to household income (McWillson *et al.*, 2021; Rajaratnam *et al.*, 2016; Zain *et al.*, 2018). Therefore, older women are more likely to live alone than older men at old age due to their financial status (DOSM, 2019; Hamid, 2015; Yahaya *et al.*, 2010).

### **The difference in mean of household income by poverty levels, age categories and sex of the respondents**

This subtopic discusses the RO-2 (to differentiate the respondents' mean household income, poverty level, age categories, and sex). Four null hypotheses were tested to achieve the RO-2 as follows: -

H<sub>0</sub>1: There was no difference in mean household income of poor and younger respondents by sex disaggregation.

H<sub>0</sub>2: There was no difference in mean household income of non-poor and younger respondents by sex disaggregation.

H<sub>0</sub>3: There was no difference in mean household income of poor and older respondents by sex disaggregation.

H<sub>0</sub>4: There was no difference in mean household income of non-poor and older respondents by sex disaggregation.

**Table 2: Distribution of Mean (SD) of Household Income by Level of Poverty, Age Categories and Sex of the Respondents (n=4428)**

Categories of Household Income	younger				older			
	Poor		Non-poor		Poor		Non-poor	
	Male	Female	Male	Female	Male	Female	Male	Female
Mean (RM)	683.74	654.66	3969.81	3816.33	<b>600.88</b>	<b>532.62</b>	3085.54	28877.07
SD (RM)	215.59	224.88	3208.49	3214.24	<b>276.37</b>	<b>292.76</b>	2743.03	2349.02
<i>t</i>	1.13		0.97		3.67		1.65	
<i>p</i>	0.260		0.335		0.000		0.990	
Ho	H <sub>01</sub>		H <sub>02</sub>		H <sub>03</sub>		H <sub>04</sub>	

note: USD exchange RM1=USD=0.23

Only H<sub>03</sub> significantly ( $p < 0.05$ ) shows a difference in mean household income between a poor older male and female respondents. Therefore, only H<sub>03</sub> was rejected; the H<sub>01</sub>, H<sub>02</sub>, and H<sub>04</sub> were failed to reject. Older males and females are vulnerable to poverty. The mean household income of elderly males was RM600.88, while elderly females were RM532.62. The mean income of poor older males and females is below the poverty line of RM980 (USD225.4). The elderly female respondents in this paper, most probably the head of the households, earn less than the elderly men respondents. Gornick *et al.* (2009) added that older women heads of households are poorer than older male heads of households in almost every age group, younger or older. In the United States, older women were at risk of poverty as 25 per cent or more of older household heads were poor (Smeeding, 2003). In line with previous studies, poverty usually becomes a problem among women aged 75 years living alone (UNDESA, 2015; Smeeding, 2003). Women aged 65 and older who live alone are at greater risk of poverty (Gornick *et al.*, 2009). For some reason, even older people who receive a pension cannot survive because it is not enough. This is the main reason why the elderly is more dependent on their family members (Beard, Biggs, Bloom, Fried, Hogan, Kalache, & Olshansky, 2012). Wong and Verbrugge (2009) stated that some older people are unwilling to retire or prefer to return to work because of financial security issues.

The leading causes of income poverty among older men and women in Malaysia are their high dependence on their children or other family members (Masud *et al.*, 2008) and pension for a retired older person. According to Smith (1997), the mean level of income received by the older people in the US from children or other family members tends to be low compared to other sources of income. Unfortunately, both the income from family members and the regularity of income is not assured. Therefore, older people in Malaysia have financial security problems, especially older women, as they are more marginalized and at higher risk of becoming poor than older men (Dhar, 2020; Masud *et al.*, 2008). According to Gornick, Sierminska, and Smeeding (2009),

poverty among older women is yet to be eradicated mainly in developing countries, and old-age poverty remains a problem worldwide.

Dhar (2020) and Barrientos *et al.* (2003) state that older people without children and single mothers are more at risk of poverty. The reason is that single mothers are vulnerable in residence, inheritance, remarriage, and employment (Chen & Dreze, 1995). Therefore, the feminization of the elderly is a significant concern for all elderly women in society. This has been confirmed by Jeyalakshmi, Chakrabarti, and Gupta (2011), who found that only 14 to 17 per cent of elderly women in India are economically independent while the elderly men are relatively more independent as nearly 51 to 56 per cent of them are financially dependent. The literature is mainly concerned with health, housing, and the labour market, but older people's feminization has resulted in some limitations (Dhar, 2020).

### Relationship between the levels of poverty and age categories by sex disaggregated

This subtopic discussed findings on RO-3 (to measure the relationship between the levels of poverty and age categories by sex disaggregation). Two null hypotheses were tested to achieve RO-3 as follows: -

H<sub>05</sub>: There was no relationship between poverty levels and age categories among male respondents.

H<sub>06</sub>: There was no relationship between poverty levels and age categories among female respondents.

**Table 3: Distribution of Respondents by Poverty Level, Age Categories and Sex of the Respondents**

Poverty Level	Male (Chi=67.71, p=0.000)				Female (Chi=64.36, p=0.000)				Total	
	Younger		Older		Younger		Older			
	n	%	n	%	n	%	n	%	n	%
Poor	129	26.93	350	<b>73.07</b>	183	31.02	407	<b>68.98</b>	1069	24.3
Non-poor	827	48.00	896	52.00	812	50.22	805	49.78	3340	75.7
Total	956	43.42	1246	56.58	995	45.08	1212	54.92	4409	100

Note: PLI=RM980 (USD225.4)

The H<sub>05</sub> and H<sub>06</sub> were tested to achieve RO-3, and significant (p < 0.05) relationships were found by the Chi-square test between the poverty level and age categories among male and female respondents, respectively (Table 3). Thus, H<sub>05</sub> and H<sub>06</sub> had

been rejected. From the results, it can be concluded that there is a relationship between poverty level and age categories among male and female respondents, respectively. This table also shows that most (73.07%) poor males are older than the younger ones (26.93%). Similarly, the vast majority (68.98%) of the poor females are older than the younger ones (31.02%) (Table 3).

These findings suggest that poverty, old ages, and gender are interlinked. Many studies have found that older people are usually associated with poverty (Dhar, 2020; Masud *et al.*, 2018; Barrientos *et al.*, 2003). According to Barrientos (2003), poverty rates between age groups generally conclude that poverty is higher among young and older people who are not working than their productive counterparts. It clearly shows that older women are more vulnerable to poverty than older men and are mostly single parents (Niimi & Horioka, 2021; Cawthorne & Americans, 2008; Rupp, Strand, & Davies 2003; Brrientos, 2003). The increase in poverty and vulnerability in the future reduces the ability of the elderly to care for themselves.

According to Minkler and Stone (1985), marital status in old age plays an important role in understanding old-age poverty, as many older people are disadvantaged because of their marital status. For example, single elderly mothers suffer from much higher poverty rates than married elderly women, with 90 per cent of older women being poor (Minkler & Stones, 1985). Butler (1975) notes that older, female, and single women are at particular risk of poverty. In addition, many older women are more likely to experience medical conditions such as injuries, bedriddenness, and limited activity compared to their male counterparts (Sangaramoorthy, 2019). Moreover, women are not only poorer than men as they age, but they also become poorer as they age because they are single mothers, suffer from serious illnesses, and receive unequal incomes in society (Cohen & Kiran, 2020; Vlassoff, 2007; Winter 1983). According to Mohd *et al.* (2018), older people have limited opportunities to escape poverty due to their health status, preventing them from participating in the labour market.

According to Mohd, Mansor, Awang, and Ahmad (2015), income in old age is often considered insufficient, and the elderly are often supported by the family and the government elderly assistance program. Moreover, the elderly have been marginalized in all sectors of the economy, especially women, which affects their household income (Klasen *et al.*, 2015). Therefore, the government needs to ensure that older women are actively involved in entrepreneurship to ensure that they can sustain their household income. In addition, low academic background plays an important role in poor communities because older people with the high academic background can increase their income (Zin, 2017), especially those living in rural areas as they should be more involved in educational programs to eradicate poverty (Dawood & Khoo, 2017).

## Conclusion

This paper arrives at two important findings. First, older and poor female households are poorer than older and male heads of households. Second, this paper suggests that poverty, old age and gender are interlinked. This paper adds to poverty studies that are gender and elderly related issues. The feminization is not only in poverty but also in the elderly; thus elderly also related and associated with poverty issues. Thus, older people with a high income can help to prevent them from falling into poverty. This paper suggests gender-specific programs and policies that focus on eradicating poverty among the elderly, especially among elderly women. Besides focusing on the need of elderly men and women to on specific and relevant programs to reduce poverty at vulnerable ages, there is also a need to increase the social security for older ages that should be appropriately planned at a younger age.

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