

# Socio-economic factors influencing ageism among undergraduates of the University of Lagos, Nigeria

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**Abstract.** Ageism is a complex social problem that affects older people negatively in terms of care, support, employment opportunities and social integration, among others. It is a complex phenomenon because most young adults hold ageist perceptions that they are not aware of, even when such negative perceptions harm older people (Raina & Balodi, 2014). This study examined the socio-economic factors influencing negative perceptions of older people among undergraduates of the University of Lagos, Nigeria. Modernization and social exchange theories of ageing are adopted as theoretical tools. In order to achieve the study objectives, a non-experimental research design was adopted while cross-sectional survey and descriptive method were adopted as research methods. A total of 240 respondents was selected for the survey using purposive sampling technique and snowball sampling technique. The dependent variable which is negative perceptions of older people was measured by poor knowledge of Palmore 'Facts on Ageing Quiz' (Palmore, 1977). Hypotheses were formulated and tested using binary logistic regression and Pearson's chi-square and the significant level was set at less than 0.05. The findings reveal that male students were 1.252 times more likely to have poor knowledge of 'Facts on Ageing Quiz' than female students of the University of Lagos. The level of study was a predictor of poor knowledge of 'Facts on Ageing Quiz' among undergraduates of the institution. The study concludes with the need to have evidence-based advocacy and effective policies which will promote public awareness about ageing process and influence positive perceptions of older people, among undergraduates of the University of Lagos, Nigeria.

**Keywords:** *ageism, older people, socio-economic factors, undergraduates, ageing quiz.*

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## Introduction

Ageism is an ideology that justifies stereotypes or discrimination based on age (Butler, 1969). It involves the maltreatment of people usually older people because of their age, and the use of physical traits such as wrinkled skin/face, grey hair as signs of personal deficiency or incompetence (Amaike, 2017; Okoye & Obikeze, 2005). Ageism is ubiquitous; it is in our perception of older people, and in our actions towards them. Elements of ageism can be found in individual behaviours, cultural values and organizational regulations (Ayalon & Tesch Romers, 2018; Palmore, 1977). In individual behaviours, ageism can be subtle, for example, when a young girl prefers to sit far away from an older woman in a bus (because of fear of witchcraft attack). In cultural values, ageism can be overt, for example, a young man without being asked, rushes to carry groceries bag for an older woman; this means that he has assumed that she is fragile and weak. However, in organizational regulations, ageism is institutionalized, for example, formal organizations like the Zenith Bank insist that, the maximum age of entry for new employees is 26 years, a major reason for this is that, older adults are assumed to be slower and less productive than young adults. Such stereotypes are simply misconceptions. Thus, Wilkinson and Ferraro (2002) defined ageism as prejudicial attitudes towards older people, old age and the ageing process, discriminatory practices against older people and institutional practices and policies that perpetuate stereotypes about older people.

There are different forms of stereotypes against older people, which include defining old age as being synonymous with disease, decline and deterioration. Ageing is therefore despised in modern society which places high premium on vitality and youthfulness, with concomitant negative effects on the quality of care and support available to older people (Ayalon & Tesch Romers, 2018; Morgan & Kunkel, 2015; Moody, 2002; Butler, 1969). Similarly, older persons are described as being of little value; a burden to the family and society; old-fashioned; difficult or impossible and slow to accept change. Thus, older people are seen as senile, sterile, eccentric, childish and irrational (Amaike, 2017; North & Fiske, 2015; Morgan & Kunkel, 2015).

Ageist stereotypes often lead to discrimination and mistreatment of older people. A recent Health Service Executive (HSE) (2009), "*Open your eyes*" highlighted how people's attitudes and perceptions can have a significantly negative impact on the lives of older people. The report states *inter alia*: "Ageism and ageist attitudes are not the sole factors contributing to elder abuse but can give rise to a culture which creates a fertile environment in which elder abuse can develop, leading to age discrimination, and devaluing and disempowering older people" (HSE 2009, p. 21). In addition, ageist stereotypes towards older adults may lead older people to act as he or she is expected to behave, making ageism 'a self-fulfilling prophecy' (Ayalon & Tesch Romers, 2018). Therefore, in a bid to avoid negative stereotypes, older adults (people aged 60 years and older) strive to look younger than their age (Schoemann & Branscombe, 2011). For example, in Nigeria, they dye their hair, buy expensive cosmetics products and treat themselves to luxurious spas. However, as they grow extremely older, it becomes difficult to conceal signs of ageing. Then, they are faced with ageism which they have tried so hard to avoid.

Growing old is a natural biological phenomenon; that is, everyone will grow old in the absence of death (Amaike, 2017). Therefore, stereotyping ageist belief may label or define older adults, but it also tells us how our own future will look like or how we will be perceived by others (Raina & Balodi, 2014; Butler, 1969). It is in view of such, that this study was set to investigate the influence of socio-economic factors on ageist perceptions of older persons among undergraduates in the University of Lagos.

### **Theoretical underpinnings**

Modernization theory of ageing argues that as societies modernize (transit from agrarian to industrial societies), the roles and status of older people decrease, they become vulnerable and more likely to experience neglect, maltreatment and ageism in the society (Amaike, 2009; Cowgill & Holmes, 1972; Butler, 1969). In agricultural or traditional society, older people had well defined roles through which they contributed their own quota to the development of society and improved their status and quality of life. The modernization of production changed everything including how society functioned (Morgan & Kunkel, 2015). Youthful generations are preferred and celebrated in the automated production process thereby relegating older persons whose skills are considered obsolete and no longer required for the smooth running of the society (Cowgill & Holmes, 1972). Modernization theory has been criticized as being Eurocentric in nature and it also fails to recognize the peculiarities of different societies (Homans, 1961; Morgan & Kunkel, 2015). For example, despite modernization, older people are still respected in Africa. Social exchange theory of ageing is the second theoretical tool. It asserts that the role and status of individuals in social relationships depend on the exchange of social resources such as time, money, power and support (Homans, 1961). This is premised on the cost-benefit analysis where individuals calculate the costs and benefits, they stand to receive from social interactions. Since older people are less likely to bring valuable resources to social interactions, their roles and status will diminish because they have little or no benefits for others to exchange with them (Dowd, 1975) which invariably exposes them to negative perception (ageism). Social exchange theory has been criticized for focusing on only material exchanges and failing to consider altruism in social exchange.

### **Research methods**

The research method of this study entailed the independent variable such as “socio-economic factors” explained through the lenses of gender, ethnicity, religious affiliation, level of study and parents’ income while the dependent variable “ageism” was measured by the indicator ‘poor knowledge of Facts on Ageing Quiz’. A non-experimental research design which consisted of cross-sectional survey and descriptive method was used to generate quantitative data for this study. A total of two hundred and forty undergraduate students of the University of Lagos was covered through questionnaire. In order to have gender balance, equal copies of questionnaire were allocated to both male and female undergraduates. After the quota system, the researcher analyzed 240 copies of the questionnaire. Respondents were selected for the survey using purposive sampling technique and snowball sampling

technique. Each respondent was duly informed about the study objectives before their consent was obtained.

In addition, in order to ensure confidentiality, the respondents were assured that their responses will be used for the study only. Descriptive statistical tools such as frequencies, percentages, tables, cross-tabulation, binary logistic regression and chi-square were used to analyze the findings from the quantitative data and the statistical significance level was set at less than 0.05.

## **Results**

### *Socio-economic and demographic background of respondents*

Table 1 shows the percentage distribution of the respondents according to their socio-economic and demographic background. The table clearly shows that the study analyzed equal number of male and female respondents. Clearly, the majority of the respondents (57.1%) were between the ages of 20 to 24 years, single, 236 (98.3%) and from Yoruba ethnic group 175 (72.9%). Similarly, most respondents, 188 (78.3%) were Christians, followed by Muslims, 43 (17.9%). On levels of study, the majority of the sampled undergraduate students, 61(25.4%) were in 300 level and the majority of the respondents' fathers, 108 (45.0%) earned N150, 000 and above (\$417 and above) per month, while majority of their mothers, 76 (31.7%) earned between N50, 000-N149, 999 (\$139 - \$417) per month. Most respondents' parents' monthly income was average, 117(48.8%).

**Table 1: Percentage distribution of respondents by their socio-economic and demographic background**

<b>Socio-economic and Demographic Variables</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>SEX</b>		
Male	120	50.0
Female	120	50.0
<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>AGE GROUPS</b>		
15-19 years	81	33.8
20-24 years	137	57.1
25-29 years	20	8.3
30 years and above <b>mean age = 21years.</b>	2	0.8
<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>MARITAL STATUS</b>		
Single	236	98.3
Married	3	1.2
Separated	1	0.4
<b>Total</b>	<b>240</b>	<b>100.0</b>

<b>Ethnicity</b>		
Yoruba	175	72.9
Igbo	36	15.0
Hausa	2	0.8
Others	27	11.2
<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Religious affiliation</b>		
Christianity	188	78.3
Islam	43	17.9
Traditional Religion	3	1.2
None	6	2.5
<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Level of study</b>		
100 level	45	18.8
200 level	50	20.8
300 level	61	25.4
400 level	56	23.3
500 level	22	9.2
600level	2	0.8
Extra year	4	1.7
<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Range of fathers' monthly income</b>		
Below N18,000 ((\$50)	14	5.8
N18,000 -N49,999 (\$50 - \$139)	32	13.3
N50,000-N149,999 (\$139 - \$417)	69	28.8
N150,000 and above (\$417 and above)	108	45.0
No response	17	7.1
<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Range of mothers' monthly income</b>		
Below N18,000 (\$50)	24	10.0
N18,000-N49,999 (\$50 - \$139)	55	22.9
N50,000-N149,999 (\$139 - \$417)	76	31.7
N150,000 and above (\$417 and above)	73	30.4
No response	12	5.0
<b>Total</b>	<b>240</b>	<b>100.0</b>
<b>Range of both parents' monthly income</b>		
Below N100,000 (\$278)	40	16.7
N100,000-N299,999 (\$278 - \$833)	117	48.8
N300,000 and above (\$833 and above)	64	26.7
No response	19	7.9
<b>Total</b>	<b>240</b>	<b>100.0</b>

*Gender and poor knowledge of 'Facts on Ageing Quiz'*

This section examines the influence of gender on poor knowledge of 'Facts on Ageing Quiz'. The findings are presented in Table 2.

**Table 2: Percentage distribution of respondents by their sex and poor knowledge of 'Facts on Ageing Quiz'**

<b>All five senses tend to decline in old age</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
True	86 (71.7%)	80(66.7%)	166(69.2%)
False	34(28.3%)	40 (33.3%)	74 (30.8%)
<b>Most older people are set in their ways and unable to change</b>			
True	95(79.2%)	88(73.3%)	183(76.2%)
False	25(20.8%)	29(24.2%)	54(22.5%)
No response	0(0.0%)	3(2.5%)	3(1.2%)

The above table presents the percentage distribution of respondents by sex and responses on poor knowledge of 'Facts on Ageing Quiz', among undergraduates of the University of Lagos. According to the table, 86 (71.7%) among male respondents it was reported true that all five senses tend to decline in old age, while the remaining 34 (28.3%) reported this as false, while 80 (66.7%) of the female respondents reported that it was true that all five senses tend to decline in old age, while the remaining 40 (33.3%) of them reported false. Furthermore, when the respondents were asked whether most older people were set in their ways and unable to change, 95 (79.2%) of the male respondents believed that most older people were set in their ways and unable to change, while 25(20.8%) of them believed that most older people could change. On the other hand, 88 (73.3%) of the female respondents believed that most older people were set in their ways and unable to change, 29 (24.2%) of them believed that most older people could change, while the remaining 3 (1.2%) of them did not answer the question. The conclusion one can draw from this finding, is that, the majority of the respondents 183 (76.2%) believed that most older people were old fashioned and set in their way.

*Religious affiliation and poor knowledge of 'Facts on Ageing Quiz'*

This section examines the influence of religious affiliation on poor knowledge of 'Facts on Ageing Quiz'. The findings of the study are presented below.

**Table 3: Percentage distribution of respondents by their religious affiliation and poor knowledge of 'Facts on Ageing Quiz'**

<b>About 80% of the elderly are healthy enough to carry out their normal activities</b>	<b>Christianity</b>	<b>Islam</b>	<b>Traditional</b>	<b>None</b>	<b>Total</b>
True	91 (48.4%)	21 (48.8%)	0 (0.0%)	4 (66.7%)	116 (48.3%)
False	97 (51.6%)	22 (51.2%)	3 (100.0%)	2 (33.3%)	124 (51.7%)
<b>Majority of older people (past age 65years) are senile (i.e. defective memory, disoriented or demented)</b>					
True	100 (53.2%)	25 (58.1%)	0 (0.0%)	4(66.7%)	129 (53.8%)
False	86 (45.7%)	18 (41.9%)	3 (100.0%)	2 (33.3%)	109 (45.4%)
No response	2 (1.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.8%)

Table 3 presents the percentage distribution of the respondents' religious affiliation and their responses on poor knowledge of 'Facts on Ageing Quiz'. According to the table, 91 (48.4%) of the Christian respondents believed that 80% of older persons were healthy enough to carry out their normal activities, while the remaining 97 (51.6%) of them disagreed, 21 (48.8%) of the Muslim respondents believed that 80% of older persons were healthy enough to carry out their normal activities, while the remaining 22 (51.2%) of them disagreed, 3 (100.0%) of the respondents who practiced African traditional religions believed that 80% of older persons were not healthy enough to carry out their normal activities, 4 (66.7%) of the respondents that did not affiliate with any of the religions believed that 80% of older persons were healthy enough to carry out their normal activities, while the remaining 2 (33.3%) of them disagreed. Furthermore, when the respondents were asked to give their responses on whether majority of older people were senile (defective memory, disoriented or had other symptoms of dementia), 100 (53.2%) of the Christian respondents believed that majority of older people were senile, 86 (45.7%) of them dissented, while the remaining 2(1.1%) did not answer the question, 25 (58.1%) of the Muslim respondents believed that majority of older people were senile, while the remaining 18 (41.9%) of them dissented, 3 (100.0%) of the respondents that practiced African traditional religions disagreed that majority of older people were senile, 4 (66.7%) of the respondents that did not affiliate with any of the religions believed that older people were senile, while the remaining 2(33.3%) of them dissented. It can therefore be established from this study that majority of the respondents, 129 (53.8%) believed that most older people were senile.

*Ethnicity and poor knowledge of 'Facts on Ageing Quiz'*

This section shows the distribution of respondents by ethnic origin and poor knowledge of 'Facts on Ageing Quiz'. The findings of the study are presented in Table 4.

**Table 4: Percentage distribution of respondents by their ethnic origin and poor knowledge of 'Facts on Ageing Quiz'**

<b>Physical strength tends to decline in old age</b>	<b>Yoruba</b>	<b>Igbo</b>	<b>Hausa</b>	<b>Others</b>	<b>Total</b>
True	159 (90.9%)	32 (88.9%)	2 (100.0%)	24 (88.9%)	217 (90.4%)
False	13 (7.4%)	3 (8.3%)	0 (0.0%)	3 (11.1%)	19 (7.9%)
No response	3 (1.7%)	1 (2.8%)	0 (0.0%)	0 (0.0%)	4 (1.7%)
<b>Majority of older people have incomes below the poverty level (as defined by international standard, \$1.90 a day)</b>					
True	105 (60.0%)	23 (63.9%)	2 (100.0%)	11 (40.7%)	141 (58.8%)
False	66 (37.7%)	12 (33.3%)	0 (0.0%)	15 (55.6%)	93 (38.8%)
No response	4 (2.3%)	1 (2.8%)	0 (0.0%)	1 (3.7%)	6 (2.5%)
<b>Majority of older people would like to have some work to do including housework and volunteer work</b>					
True	118 (67.4%)	24 (66.7%)	2 (100.0%)	16 (59.3%)	160 (66.7%)
False	54 (30.9%)	11 (30.6%)	0 (0.0%)	11 (40.7%)	76 (31.7%)
No response	3 (1.7%)	1 (2.8%)	0 (0.0%)	0 (0.0%)	4 (1.7%)

The above table presents the percentage distribution of respondents' ethnic origin and their responses on poor knowledge of 'Facts on Ageing Quiz'. From the table, it can be observed that 159 (90.9%) of the Yoruba respondents believed that physical strength tends to decline in old age, 13 (7.4%) of them disagreed, while the remaining 3 (1.7%) did not respond to the question. 32 (88.9%) of the Igbo respondents believed that physical strength tends to decline in old age, 3 (8.3%) of them disagreed, while the remaining of them 1 (2.8%) did not respond to the question. 2 (100.0%) Hausa respondents believed that physical strength tends to decline in old age, 24 (88.9%) of respondents that belonged to other ethnic groups believed that physical strength tends to decline in old age, while the remaining 3 (11.1%) of them dissented. Table 4 also reveals that 105 (60.0%) of the Yoruba respondents believed that majority of older people had incomes below the poverty level as defined by international standard, \$1.90 a day, 66 (37.7%) of them dissented, while the remaining 4 (2.3%) of them did not answer the question, 23 (63.9%) of Igbo respondents believed that majority of the older people had incomes below the poverty level as defined by international standard, 12 (33.3%) of them dissented, while the remaining 1 (2.8%) of them did not answer the question. 2(100.0%) Hausa respondents believed that majority of the older people had incomes below the poverty level as defined by international standard, 11 (40.7%) of respondents who belonged to other ethnic groups believed that majority of the older people had incomes below the poverty level as defined by international standard, 15 (55.6%) of them dissented, while the remaining 1 (3.7%) of them did not answer the question. Furthermore, when respondents were asked whether majority of older people would like to have some work to do, including housework and volunteer work, 118 (67.4%) of the Yoruba respondents believed that majority of older people would like to have some work to do, 54 (30.9%) of them said it was not true that older people didn't want to do any kind of work, while the remaining 3 (1.7%) of them did not respond to

the question. 24(66.7%) of the Igbo respondents believed that majority of older people would like to have some work to do, 11(30.6%) of them said it was not true that older people didn't want to do any kind of work, while the remaining 1(2.8%) of them did not respond to the question. 2 (100.0%) Hausa respondents believed that majority of older people would like to have some work to do, 16 (59.3%) of the respondents who belonged to other ethnic groups believed that majority of older people would like to have some work to do, while the remaining 11 (40.7%) of them dissented. Therefore, it can be established from the study that a lesser percentage of the respondents 76(31.7%) believed that older adults were sources of burden to their families and the society.

#### *Levels of study and poor knowledge of 'Facts on Ageing Quiz'*

This section sought to examine the relationship between levels of study and poor knowledge of 'Facts on Ageing Quiz'. Some questions were asked in this regard and the responses of the respondents are presented in table 5.

Table 5 presents the percentage distribution of respondents by their levels of study and responses on poor knowledge of 'Facts on Ageing Quiz'. From the table, it can be observed that 37 (82.2%) of the respondents in their 100 level believed that the reaction time of most older people tends to be slower than the reaction time of younger people, 7(15.6%) of them dissented, while the remaining 1 (2.2%) of them did not respond to the question. 41 (82.0%) of respondents in 200 level believed that the reaction time of most older people tends to be slower than reaction time of younger people, while the remaining 9 (18.0%) of them dissented. 48 (78.7%) of respondents in 300 level believed that the reaction time of most older people tends to be slower than reaction time of younger people, while the remaining 13 (21.3%) of them disagreed. 46 (82.1%) of respondents in 400 level believed that the reaction time of most older people tends to be slower than the reaction time of younger people, while the remaining 10 (17.9%) of them dissented. 17 (77.3%) of respondents in 500 level believed that the reaction time of most older people tends to be slower than the reaction time of younger people, 4 (18.2%) of them dissented, while the remaining 1 (4.5%) of them did not answer the question. 2 (100.0%) of respondents in 600 level believed that the reaction time of most older people tends to be slower than the reaction time of younger people, 4(100.0%) of respondents that had extra year believed that the reaction time of most older people tends to be slower than the reaction time of younger people.

Table 5 also reveals that 27 (60.0%) of the respondents in 100 level, agreed that most older people were pretty much alike, 16 (35.6%) of them said false; older people were not pretty much alike, while the remaining 2 (4.4%) of them did not answer the question. 33(66.0%) of 200 level respondents believed that most older people were pretty much alike while the remaining 17 (34.0%) of them dissented. 38 (62.3%) of 300 level respondents believed that most older people were pretty much alike, 21 (34.4%) of them disagreed, while the remaining 2 (3.3%) of them did not respond to the question. 36 (64.3%) of 400 level respondents believed that most older people were pretty much alike, 17 (30.4%) of them dissented, while the remaining 3 (5.4%) of them did not answer the question. 12 (54.5%) of 500 level respondents believed that most older people were pretty much alike, 9 (40.9%) of them dissented, while

the remaining 1 (4.5%) of them did not answer the question. 2 (100.0%) of 600 level respondents believed that most older people were not pretty much alike while 4 (100.0%) of respondents that had extra year believed most older people were pretty much alike.

**Table 5: Percentage distribution of respondents by their level of study and poor knowledge of 'Facts on Ageing Quiz'**

The reaction time of most older people tends to be slower than reaction time of younger people	100	200	300	400	500	600	Extra year	Total
True	37 (82.2%)	41 (82.0%)	48 (78.7%)	46 (82.1%)	17 (77.3%)	2 (100.0%)	4 (100.0%)	195 (81.2%)
False	7 (15.6%)	9 (18.0%)	13 (21.3%)	10 (17.9%)	4 (18.2%)	0 (0.0%)	0 (0.0%)	43 (17.9%)
No response	1 (2.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (4.5%)	0 (0.0%)	0 (0.0%)	2 (0.8%)
<b>In general, most older people are pretty much alike.</b>								
True	27 (60.0%)	33 (66.0%)	38 (62.3%)	36 (64.3%)	12 (54.5%)	0 (0.0%)	4 (100.0%)	150 (62.5%)
False	16 (35.6%)	17 (34.0%)	21 (34.4%)	17 (30.4%)	9 (40.9%)	2 (100%)	0 (0.0%)	82 (34.2%)
No response	2 (4.4%)	0 (0.0%)	2 (3.3%)	3 (5.4%)	1 (4.5%)	0 (0.0%)	0 (0.0%)	8 (3.3%)
<b>It is almost impossible for most older people to learn something new.</b>								
True	22 (48.9%)	26 (52.0%)	22 (36.1%)	35 (62.5%)	5 (22.7%)	1 (50.0%)	1 (25.0%)	112 (46.7%)
False	23 (51.1%)	24 (48.0%)	39 (63.9%)	21 (37.5%)	17 (77.3%)	1 (50.0%)	3 (75.0%)	128 (53.3%)

Furthermore, when respondents were asked if it was almost impossible for most older people to learn something new, 22 (48.9%) of the respondents in 100 level believed that it was almost impossible for most older people to learn something new, while the remaining 23 (51.1%) of them did not agree. Most older people could learn something new, regularly, 26 (52.0%) of the respondents in 200 level believed that it was almost impossible for most older people to learn something new, while the remaining 24 (48.0%) of them did not agree. Most older people could learn something new, regularly, 22 (36.1%) of the respondents in 300 level believed that it was almost impossible for most older people to learn something new, while the remaining 39(63.9%) of them did not agree. Most older people could learn something new, regularly, 35

(62.5%) of the respondents in 400 level believed that it was almost impossible for most older people to learn something new, while the remaining 21(37.5%) of them did not agree. Most older people could learn something new, regularly, 5(22.7%) of the respondents in 500 level believed that it was almost impossible for most older people to learn something new, while the remaining 17 (77.3%) of them did not agree. Most older people could learn something new, regularly, 1 (50.0%) respondent in 600 level believed that it was almost impossible for most older people to learn something new, while the remaining 1 (50.0%) did not agree. Most older people could learn something new, regularly, 1 (25.0%) of the respondents that had extra year believed that it was almost impossible for most older people to learn something new, while the remaining 3 (75.0%) of them did not agree. The conclusion one can draw from these findings is that a lesser percentage of the respondents 112 (46.7%) believed that older adults were slow to accept change.

*Parents' income and poor knowledge of 'Facts on Ageing Quiz'*

This section interrogates the nexus between range of respondents' parents' monthly income and poor knowledge of 'Facts on Ageing Quiz'. The findings of the study are presented in Table 6.

**Table 6: Percentage distribution of respondents by the range of their parents' monthly income and poor knowledge of 'Facts on Ageing Quiz'**

Majority of older people are seldom bored	Below N100,000 (\$278)	N100,000 - N299,999 (\$278 -\$833)	N300,000 and above (\$833 & above)	No response	Total
True	25 (62.5%)	68 (58.1%)	33 (51.6%)	13 (68.4%)	139 (57.9%)
False	15 (37.5%)	47 (40.2%)	31 (48.4%)	6 (31.6%)	99 (41.2%)
No response	0 (0.0%)	2 (1.7%)	0 (0.0%)	0 (0.0%)	2 (0.8%)
<b>Older workers cannot work effectively as younger workers.</b>					
True	34 (85.0%)	103 (88.0%)	58 (90.6%)	17 (89.5%)	212 (88.3%)
False	6 (15.0%)	13 (11.1%)	6 (9.4%)	2 (10.5%)	27 (11.2%)
No response	0 (0.0%)	1 (0.9%)	0 (0.0%)	0 (0.0%)	1 (0.4%)

Table 6 presents the percentage distribution of range of respondents' parents' monthly income and their responses on poor knowledge of 'Facts on Ageing Quiz'. The table reveals that 25 (62.5%) of the respondents whose parents earned below N100,000 (\$278) per month believed that majority of older people were seldom bored, while the remaining 15 (37.5%) of them responded that it was not true (false) that older people were always bored, 68 (58.1%) of the respondents whose parents earned between N100,000 –N299,999 (\$278-\$833) per month believed that majority of older people were seldom bored, 47 (40.2%) of them reported that it

was not true (false); older people were always bored while the remaining 2 (1.7%) of them did not answer the question, 33 (51.6%) of the respondents whose parents earned N300,000 and above (\$833 and above) per month believed that majority of older people were seldom bored, while the remaining 31 (48.4%) of them reported that it was not true (false), 13 (68.4%) of respondents who did not indicate their parents' monthly income believed that majority of older people were seldom bored, while the remaining 6 (31.6%) of them said it was false; older people were always bored. Furthermore, when respondents were asked to give their responses on whether older workers couldn't work effectively like younger workers, 34 (85.0%) of the respondents whose parents earned below N100,000 (\$278) per month believed that older workers couldn't work effectively like younger workers, while the remaining 6 (15.0%) of them believed that they could, 103 (88.0%) of the respondents whose parents earned between N100,000 - N299,999 (\$278 - \$833) per month believed that older workers couldn't work effectively like younger workers, 13 (11.1%) of them believed that they could, while 1(0.9%) did not respond to the question, 58 (90.6%) of the respondents whose parents earned N300,000 (\$833) and above per month believed that older workers couldn't work effectively like younger workers, while the remaining 6 (9.4%) of them believed that they could, 17(89.5%) of respondents who didn't indicate their parents' monthly income believed that older workers couldn't work effectively like younger workers, while the remaining 2 (10.5%) of them believed that they could. The conclusion one can draw from these findings is that majority of the respondents 212 (88.3%) believed that older people were frail and weak.

**Test of hypotheses**

This section seeks to address the specific objectives of this study. The hypotheses formulated in this study were also tested. To achieve this, Binary Logistic Regression and Pearson Chi-square ( $X^2$ ) statistical methods were adopted.

*Hypothesis one*

**H<sub>1</sub>:** Male students are less likely to have poor knowledge of 'Facts on Ageing Quiz' than female students of the University of Lagos.

**Table 7: Classification table**

Observed		Predicted			
		Most older people are set in their ways and unable to change.		Percentage Correct	
		True	False		
Step 1	Most older people are set in their ways and unable to change.	True	183	0	100.0
		False	54	0	.0
Overall Percentage					77.2

a. The cut value is .500

The binomial logistic regression was used because the dependent variable of this study was dichotomous or binary in nature. That is, the responses of the dependent variable were coded as either true or false. Also, the test was used because the independent variable was a nominal variable which was gender, of which the males were the target group. In essence, the data analysis technique was used because hypothesis one met all the assumptions needed to use a binary logistic regression test and it was also deemed the most appropriate, since it shows whether male students were more likely to agree that older people were set in their ways and unable to change than the female students of the University of Lagos, which other tests such as Pearson chi-square would have not been able to show in a relationship.

**Table 8: Variables in the equation**

	B	S.E.	Wald	Df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup> Gender	.225	.310	.525	1	.469	1.252	.681	2.301
Constant	-1.335	.225	35.273	1	.000	.263		

a. Variable(s) entered on step 1: Gender.

Table 7 explains the variation in the dependent variable. The majority of the respondents agreed that most older people were set in their ways and unable to change, while a lesser number of respondents stated this was not true (false). Furthermore, the overall percentage row reveals that this prediction is correct 77.2% of the time. On the other hand, table 8 reveals that gender was not a statistically significant predictor of negative perceptions of older persons ( $p > 0.05$ ), and it is accurate 77.2% of the time.

A logistic regression test was performed to ascertain the influence of gender on poor knowledge of 'Facts on ageing Quiz'. The association was not statistically significant,  $X^2 = 0.525$ , and  $p = 0.469$ . That is,  $p > 0.05$ . The model explained 3.0% (Nagelkerke  $R^2$ ) of the variance in poor knowledge of 'Facts on Ageing Quiz' and correctly classified 77.2% of cases. The null hypothesis is accepted. Male students were 1.252 times more likely to have poor knowledge of 'Facts on Ageing Quiz' than female students of the University of Lagos.

*Hypothesis two*

**H<sub>2</sub>:** There is a relationship between religious affiliation and poor knowledge of 'Facts on Ageing Quiz' among undergraduates of the University of Lagos.

**Table 9: Religious affiliation and poor knowledge of ‘Facts on Ageing Quiz’**

Religious affiliation	Majority of older people (past age 65years) are senile (i.e defective memory, disoriented, or demented)			Total
	True	False	No response	
Christianity	100(53.2%)	86(45.7%)	2(1.1%)	188(100.0%)
Islam	25(58.1%)	18(41.9%)	0(0.0%)	43(100.0%)
Traditional	0(0.0%)	3(100.0%)	0(0.0%)	3(100.0%)
None	4(66.7%)	2(33.3%)	0(0.0%)	6(100.0%)
<b>Total</b>	<b>129(53.8%)</b>	<b>109(45.4%)</b>	<b>2(0.8%)</b>	<b>240 (100.0%)</b>
<b>X<sup>2</sup> = 4.802, df=6, p=0.569</b>				

Table 9 presents the results of cross-tabulation with chi-square that shows the relationship between religious affiliation and poor knowledge of ‘Facts on Ageing Quiz’, among undergraduates of the University of Lagos. The data indicates that 100 (53.2%) among Christian respondents believed that majority of older people were senile, 86 (45.7%) opined that this was not true (false), while the remaining 2 (1.1%) of them did not respond to the question. This was followed by 25 (58.1%) of Muslim respondents that believed that majority of older people were senile, while the remaining 18 (41.9%) of them opined it was not true (false).

A chi-square test was conducted to determine the relationship between religious affiliation and poor knowledge of ‘Facts on Ageing Quiz’, among undergraduates of the University of Lagos. The test indicates that the relationship was not statistically significant,  $X^2 = 4.802$ , and  $p=0.569$ . That is, ( $p>0.05$ ). The null hypothesis is accepted. There is no relationship between religious affiliation and poor knowledge of ‘Facts on Ageing Quiz’, among undergraduates of the University of Lagos.

*Hypothesis three*

**H<sub>3</sub>:** There is a relationship between ethnicity and poor knowledge of ‘Facts on Ageing Quiz’ among undergraduates of the University of Lagos.

**Table 10: Ethnicity and poor knowledge of 'Facts on Ageing Quiz'**

Ethnic Origin	Majority of older people would like to have some work to do (including housework and volunteer work)			Total
	True	False	No response	
Yoruba	118(67.4%)	54(30.9%)	3(1.7%)	175(100.0%)
Igbo	24(66.7%)	11(30.6%)	1(2.8%)	36(100.0%)
Hausa	2(100.0%)	0(0.0%)	0(0.0%)	2(100.0%)
Others	16(59.3%)	11(40.7%)	0(0.0%)	27(100.0%)
<b>Total</b>	<b>160(67.8%)</b>	<b>76(32.2%)</b>	<b>4(1.7%)</b>	<b>240(100.0%)</b>
<b>X<sup>2</sup>=2.709, df=6, p=0.844</b>				

Table 10 presents the results of cross-tabulation with chi-square that shows the relationship between ethnicity and poor knowledge of 'Facts on Ageing Quiz', among undergraduates of the University of Lagos. The results indicate that significant number of Yoruba respondents 118 (67.4%) believed that majority of older people would like to have some kind of work to do, including housework and volunteer work, 54 (30.9%) stated that this was not true (false); older people wouldn't want to do any kind of work, while the remaining 3 (1.7%) of them did not answer the question. This was followed by 24 (66.7%) of Igbo respondents that believed that majority of older people would like to have some work to do, 11 (30.6%) of them dissented, while the remaining 1(2.8%) of them did not respond to the question.

A chi-square test was conducted to ascertain the relationship between ethnicity and poor knowledge of 'Facts on Ageing Quiz', among undergraduates of the University of Lagos. The test indicates that the relationship was not statistically significant. This is because the chi-square value was  $X^2 = 2.709$ , and  $p = 0.844$ . That is, ( $p > 0.05$ ). The null hypothesis is accepted. There is no relationship between ethnicity and poor knowledge of Facts on Ageing Quiz, among undergraduates of the University of Lagos.

*Hypothesis four*

**H<sub>4</sub>:** There is a relationship between level of study and poor knowledge of 'Facts on Ageing Quiz' among undergraduates of the University of Lagos.

**Table 11: Level of study and poor knowledge of 'Facts on Ageing Quiz'**

Level of study	It is almost impossible for most older people to learn something new		Total
	True	False	
100level	22(48.9%)	23(51.1%)	45(100.0%)
200level	26(52.0%)	24(48.0%)	50(100.0%)
300level	22(36.1%)	39(63.9%)	61(100.0%)
400level	35(62.5%)	21(37.5%)	56(100.0%)
500level	5(22.7%)	17(77.3%)	22(100.0%)
600level	1(50.0%)	1(50.0%)	2(100.0%)
Extra year	1(25.0%)	3(75.0%)	4(100.0%)
<b>Total</b>	<b>112(46.7%)</b>	<b>128(53.3%)</b>	<b>240(100.0%)</b>
<b>X<sup>2</sup>=14.885, df=6, p=0.021</b>			

Table 11 presents the results of cross-tabulation with chi-square that shows the relationship between level of study and poor knowledge of 'Facts on Ageing Quiz', among undergraduates of the University of Lagos. The table indicates that 22 (48.9%) of undergraduate students in 100 level believed that it was almost impossible for most older people to learn something new, while the remaining 23 (51.1%) of them disagreed; older people could learn something new, regularly. This was followed by 26 (52.0%) of undergraduate students in 200 level, who believed that it was almost impossible for most older people to learn something new, while the remaining 24 (48.0%) disagreed.

A chi-square test that was performed to ascertain the relationship between level of study and poor knowledge of 'Facts on Ageing Quiz' indicates a statistically significant relationship. This is because the chi-square value was  $X^2 = 14.885$ , and  $p=0.021$ . That is, ( $p<0.05$ ). The alternate hypothesis is accepted. There is a relationship between level of study and poor knowledge of 'Facts on Ageing Quiz', among undergraduates of the University of Lagos.

*Hypothesis five*

**H<sub>s</sub>:** There is a relationship between parents' income and poor knowledge of 'Facts on Ageing Quiz' among undergraduates of the University of Lagos.

**Table 12: Parents' income and poor knowledge of 'Facts on Ageing Quiz'**

Range of both Parents' monthly income	Older workers cannot work effectively as younger workers			Total
	True	False	No response	
Below N100,000 (\$278)	34 (85.0%)	6 (15.0%)	0 (0.0%)	40 (100.0%)
N100, 000-N299, 999 (\$278 - \$833)	103 (88.0%)	13 (11.1%)	1 (0.9%)	117 (100%)
N300, 000 and above (\$833 and above)	58 (90.6%)	6(9.4%)	0 (0.0%)	64 (100.0%)
No response	17 (89.5%)	2 (10.5%)	0 (0.0%)	19 (100.0%)
<b>Total</b>	<b>212 (88.3%)</b>	<b>27 (11.2%)</b>	<b>1 (0.4%)</b>	<b>240 (100.0%)</b>
<b>X<sup>2</sup>= 1.854, df=6, p=0.933</b>				

Table 12 presents the results of cross-tabulation that shows the relationship between parents' income and poor knowledge of 'Facts on Ageing Quiz', among undergraduates of the University of Lagos. The table indicates that 34 (85.0%) of respondents, whose parents earned below N100, 000 (\$278) per month, believed that older workers could not work effectively like younger workers, while the remaining 6 (15.0%) of them believed that they could. This was followed by 103 (88.8%) of respondents, whose parents earned between N200, 000-N399, 999 (\$278 - \$ 833) per month, who believed that older workers could not work effectively like younger workers, 13 (11.1%) of them believed that they could, while the remaining 1 (0.9%) of them did not answer the question.

A chi-square test that examined if any relationship existed between parents' income and poor knowledge of 'Facts on Ageing Quiz', among undergraduates of the University of Lagos indicated that the relationship was not statistically significant at  $X^2 = 1.854$  and  $p=0.933$ , that is, ( $p>0.05$ ). Therefore, the null hypothesis is accepted. There is no relationship between parents' income and poor knowledge of 'Facts on Ageing Quiz', among undergraduates of the University of Lagos.

### Discussion of findings

The main objective of this study was to examine the socio-economic factors influencing negative perceptions of older persons, among undergraduates of the University of Lagos. Five hypotheses were tested, after which four null hypotheses were accepted and one alternate hypothesis was accepted. From the results, it was discovered that male students were more likely to have poor knowledge of 'Facts on Ageing Quiz' than female students of the University of Lagos. This is because the p-value produced in this regard was greater than the alpha of 0.05. This finding corroborates the findings of Bernardini Zambrini *et al.*, (2008); Allan & Johnson (2009); Kalavar (2001) that on the average, males exhibit more negative perceptions towards older people and fewer positive ageist behaviours than females. The finding also aligns with the assumption of the modernization theory of ageing that as societies transit from

agrarian to industrial societies, the status of older persons decreases, and they are increasingly more likely to experience neglect, stereotypes and ageism (Morgan & Kunkel, 2015; Moody, 2002). This finding is also supported by the findings of Amaiike (2009); Akeredolu-Ale & Aribiah (2001); Song & Bian (2014); Bookman & Kimbrel (2011) and Okoye & Obikeze, (2005) who discovered that in Nigerian societies, the norms of filial piety were practiced and extended to older relatives and neighbours in the communities. Therefore, types or forms of old age care and support were strongly linked to relationship types (relationship status) that existed between the older persons and their caregivers. Since daughters were socialized to be caregivers, they often provided both material and non-material supports. Expectedly, females were more likely than males to be primary care givers and exhibit less ageist behaviours (Bookman & Kimbrel, 2011; Moody, 2002).

This study also revealed that there was no relationship between religious affiliation and poor knowledge of 'Facts on Ageing Quiz', among undergraduates of the University of Lagos. This is because the chi-square test produced a p-value of 0.569 which is greater than the alpha of 0.05. This analysis depicts that whether the respondents were Christians or Muslims or Traditionalists, their religious affiliation did not influence them to have negative perceptions of older persons. This was also established by North & Fiske (2015) who affirmed that religions such as Confucianism of China, Hinduism of India and Christianity promote value and respect of older persons. Similar observation was also made by Sagner (2001), who found that negative perceptions of older persons do not exist among the Xhosa people of Southern Africa, because of the influence of Xhosa traditional religious worldview. This phenomenon is probably due to the fact that most religions such as Christianity, Islam and African traditional religions teach and enforce moral codes of conduct, such as greeting, respect, and value of older people. For example, in the Bible, 1 Timothy 5:1 says "Do not sharply rebuke an older man, but rather appeal to him as a father, to the younger men as brothers". However, the finding was inconsistent with the postulation of the age stratification theory of ageing that posited that older adults were discriminated against by younger adults, because of their chronological age and norms within that particular society (Morgan & Kunkel, 2015; Moody, 2002; Palmore, 1977; Cowgill & Holmes, 1972). This is because the norms or doctrines of religious affiliation such as Christianity, Islam and African traditional religions were not biased or prejudiced, if they were, majority of the respondents, who affiliate with these religions, would hold negative perceptions of older persons.

The study also revealed that there was no relationship between ethnicity and poor knowledge of 'Facts on Ageing Quiz', among undergraduates of the University of Lagos. The chi-square test in this regard produced a p-value of 0.844 which is greater than the alpha of 0.05 which led to the conclusion that there was no relationship between ethnicity and negative perceptions of older persons, among undergraduates in the institution. The analysis depicts that regardless of the ethnic group, the sampled respondents belonged to, it didn't influence them to have negative perceptions of older persons. This finding is supported by Sung (2001) who in his study discovered that non-western cultures in sub-Saharan Africa were influenced by the values of filial piety and the practice of ancestor worship, which are thought to promote positive views of ageing and high esteem for older persons. However, the finding was contrary to the finding of Ajala (2006) who in his study claimed that negative perceptions of

older persons exist among the Yorubas of Southwestern Nigeria and that there was the conceptualization of a stage of old age as “over-age” or senescence, and death in the Yoruba culture, where older persons were regarded as hopeless and pathetic, and were seen as a burden to the society in the Yoruba culture and among other cultures in contemporary Nigerian society. This is because majority of the sampled respondents of this study were Yorubas, yet their ethnicity did not predispose them to see older adults as a burden to the society. This is probably because our cultural values and norms promote respect and value of older people. For example, a young Yoruba boy is expected to prostrate completely, when greeting an older person. Expectedly, these values promote positive perceptions of older persons.

The study also revealed that the level of study influenced poor knowledge of ‘Facts on Ageing Quiz’, among undergraduates of the University of Lagos. The chi-square test conducted in this regard produced a p-value of 0.021 which is less than the alpha of 0.05 which led to the conclusion that respondents’ level of study is a significant factor to explain negative perceptions of older people. This finding corroborates the finding of an earlier study conducted by Okoye and Obikezie (2005) where respondents with higher levels of education possessed fewer ageing stereotypes than the less educated respondents. A possible reason why levels of study influenced negative perceptions of older persons, is because most undergraduate students in 100 and 200 levels were still quite young, majority of them were in their teens, therefore they were more likely to be under the tutorship of their parents or guardians (older persons), who had enforced discipline on them, which must have influenced them to hold negative perceptions of older persons compared to undergraduate students in 300, 400, 500 and 600 levels.

It was further revealed that there was no relationship between parents’ income and poor knowledge of ‘Facts on Ageing Quiz’, among undergraduates of the University of Lagos. This is based on the result of the chi-square test that was conducted to ascertain if any relationship existed between the two variables. The test produced a p-value of 0.933, which is greater than the alpha level of 0.05. This analysis depicts that whether the respondents’ parents were high, average or low monthly income earners, it did not influence the respondents to have negative perceptions of older persons. This is contrary to the postulation of the social exchange theory of ageing that in as much as relationships are based on mutual exchanges, as older persons become less able to exchange resources, they see their social status diminishes, because there are less benefits for others to exchange with them (Moody, 2002; Homans, 1961; Dowd, 1975). In essence, the study revealed that negative perceptions of older persons were not economically determined.

## **Conclusion**

The study was conducted to interrogate the fact that negative perceptions of older people are inevitable which have grave implications for their quality of life and life satisfaction in old age. Specifically, ageist attitudes and perceptions jeopardize older adults’ life chances, employment opportunities, social integration, quality of health care services and living conditions among others. The predictors (factors) influencing negative perceptions of older

persons among undergraduates from this study are gender of the perceiver and level of study. In the light of this, it is imperative to focus more on young male adults rather than young female adults and on undergraduates' lower levels of study, in order to prevent the prevalence of ageist perceptions of older people in Nigerian society.

### *Recommendations*

The recommendations of the study are:

- The socialization of children especially the University undergraduates should emphasize the importance of sustainable informal old age care and intergenerational relations/transfers. Parents and extended families should educate both boys and girls to discharge the age-long traditional old age care and support which will reduce ageist attitudes and perceptions among young adults.
- United Nations (UN) and World Health Organization (WHO), among others should establish programmes that promote the idea of care giving roles among young male adults in Nigeria. If the programmes are properly designed and implemented, boys will accept care giving roles, which in turn will influence positive perceptions of older people among young male adults in Nigeria.
- More Youth should be encouraged to enroll for courses or programmes in Gerontology at the University which will improve their knowledge of ageing process and perceptions of older people.
- Introduction to Gerontology should be included in the General Studies (GST) for all fresh entry undergraduate students of the University of Lagos. For example, 100 level and Direct Entry students should take the introductory course in Gerontology which will improve their understanding and appreciation of the contributions of older people in traditional and modern African societies. This will improve their knowledge of the contributions of older adults to the society and invariably influences positive perceptions of older people.
- Governments should embark on continuous public awareness and education about ageing process and the relevance of older people in Nigeria.
- Non-Governmental Organizations (NGOs) should adopt evidence-based advocacy and rights approach to promote positive attitudes and perceptions of older people in Nigeria.

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