

RELATIONSHIP BETWEEN AGEING AND ACADEMIC ACHIEVEMENT OF LEARNERS IN THE SCHOOL OF CONTINUING EDUCATION, BAYERO UNIVERSITY, KANO, KANO STATE

BY

Prof. Ya'u Haruna Usman: Department of adult Education and Community Services, Bayero University, Kano; /+2348065729945

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Sunusi Garba Shehu: Department of Adult Education and Community Services, Bayero University, Kano;

E-mail: sunusigajale@gmail.com/ +2348060822576

Abstract

This study examined the relationship between ageing and academic achievement of learners in the School of Continuing Education (SCE), Bayero University, Kano (BUK). The study sought to determine the age groups of learners, academic achievement of learners by their age groups and the relationship between ageing and academic achievement of learners in the School of Continuing Education, Bayero University, Kano. The researcher adopted correlational research design. The total population of the study was 1662 and a sample size of 310 was used. The procedure used in selecting sample was proportionate sampling, and the instruments used in collecting the data were Inventory of Adult Learners and GSP 2202 Examination Question Paper for 2015/2016 academic session and to validate the instrument, raw scores of GSP 2202 of 2015/2016 was transformed. The methods used for data analysis in this study were frequency count, percentage, mean, standard deviation and Pearson Product Moment Correlation. The findings of the study indicated that, the learners in SCE, BUK were in between the age groups of 25-34, 35 – 44, 45-54, and 55- above years. That there is significant relationship between ageing and academic achievement among learners in the School of Continuing Education, Bayero University, Kano, at 0.01 level of significant. Based on the findings of the study the researcher recommended that, the University management and other critical stakeholders should mobilize and create more awareness to enable individual learners between the age of 55-years and above to actively participate in such an important programme since they are in the better position to benefit from it. The teaching and learning processes in the School of Continuing Education should be more practical than theory, and learners experience should be given priority especially in the context of lecture preparation and assessment of their performances considering their age and level of their social responsibilities.

Key words: Ageing, Academic achievement, Continuing education, Learner

Introduction

Human ageing is a physiological change that takes place in the human body leading to senescence, the decline of biological functions and of the ability to adapt to metabolic stress. In humans, the physiological developments are normally accompanied by psychological and behavioral changes, and other changes involving social and economic factors, also occurs. Ageing begins as soon as adulthood is reached and is as much as human life as in infancy, childhood, and adolescence. Gerontology (i.e. the study of ageing) is concerned primarily with the changes that occur between the attainment of maturity and death of the individual. Ageing is complex in the sense that it is a period when some physiological changes take place in human being. These changes bring about some weaknesses or even impairments on somebody organ and functions. For example, degenerative disease might cause physiological disorders and in turn psychological disorders. Similarly such changes may affect sensory organs, motor capacities and central information processing functions, which are associated with learning (Oduaran, 1996; Usman, 2005 in Sharada 2016; Yusuf, 2021).

He, Goodkind and Kowal (2016) assert that unlike all other regions, Africa, the youngest region, is still largely in the early stages of demographic transition with high fertility rates and a young age structure, especially in Western, Middle, and some Eastern African countries. The vast majority of African countries today have less than 5 percent of the total population aged 65 and above, and in 21 countries, the share is 3 percent or less (e.g., Ethiopia 2.9% and Uganda 2.0%). Africa, as a region, is exceptional not only for being young in 2015, but also for being projected to remain young over the next few decades, largely because of sustained high

fertility levels leading to a young age structure in most sub-Saharan countries. By 2050, the older population share is projected to continue below 7% in Africa. However, Northern Africa departs from the African regional pattern- in Tunisia; the older population share is projected from 8.0% in 2015 to 24.3% in 2050. A number of Eastern African countries will also age relatively rapidly in the next few years. For example, the older population share in Kenya is projected to triple from 2015 (2.9%) to 2050 (9.2%). While Africa is a young region, some African countries already have a large number of older people. In 2015, the older population exceeds 1 million in 11 African countries, including Nigeria with 5.6 million, Egypt 4.6 million, South Africa 3.1 million. By 2050, more than 1 million older people, including 3 countries that will exceed 10 million (Nigeria, 18.8 million; Egypt, 18.1 million; and Ethiopia, 11.5 million) and another 6 countries with more than 5 million.

Nigeria is the most populous country in Africa and currently has the highest older person's population in Africa (Kinsella & Velkoff 2001). With the largest population in Africa and the ninth in the world, it is estimated that by the year 2025, the population of Nigerians aged 60 and above will constitute 6 percent of the entire population. The academic achievement of learners is an essential indicator of academic success at learning institutions. Adult learners with higher levels of achievement at institutions are more likely to obtain good employment and salaries. In short, academic achievement is important because it promotes success later in life. Although, adults' academic achievement is not only concerned with cognitive factors such as IQ and standardize test scores, there are many other variables that may have influence on learners' ability to achieve academically, including non-cognitive factors such as motivation, the lecturers, family circumstances, background, previous academic performances, study skills and many more. A study conducted by Kausler (1990) revealed that, achievement motives declines with age, which also might affect memory performance. He added that older participants in general performed poorly on memory tasks, but high implicit motive scores have a positive influence on memory recall in older people.

However, the influence of ageing on adult learners in the School of Continuing Education, Bayero University, Kano is not limited to physical and/or cognitive ability only; it also affects many aspects of their life including those aspects which are very essential for learning especially formal learning. For example, ageing affects adult motives as well as their approaches to learning, and these in turn influence adult's commitment and of course their general performances and academic achievement in educational activities. The situation regarding these issues is yet to be determined in the School of Continuing Education, Bayero University, Kano. This is the reason this study is conducted to examine the relationship between aging and academic achievement of learners in SCE, BUK. The objectives of this study were:

1. To determine the age group of learners in the School of Continuing Education, Bayero University, Kano.
2. To determine the academic achievement of learners by their age groups in the School of Continuing Education, Bayero University, Kano.
3. To examine the relationship between ageing and academic achievement of learners in the School of Continuing Education, Bayero University, Kano.

The study answered the following research questions:

1. What is the age group of learners in the School of Continuing Education, Bayero University, Kano?
2. What is the academic achievement of learners by their age groups in the School of Continuing Education, Bayero University, Kano?

The study tested the following hypothesis:

Ho₁. There is no significant relationship between ageing and academic achievement of learners in the School of Continuing Education, Bayero University, Kano.

Review of Related Literature

From the literature survey, this study discovers that there are numerous studies on the relationship between ageing and academic achievement in global, African and Nigerian contexts. A review of some related literature which deals with the concepts relevant to the research has been attempted, so as to conceptualize the

significance of the study. Therefore, conceptual issues concerning ageing and academic achievement were reviewed. The world's population is ageing more rapidly than at any time in history (United Nations Population Division, 2009). The other driver of ageing within society is the higher number of people reaching old age. For most of this decade, humanity as a whole has fit the UNPD definition of ageing society – one in which more than 7% of the population is over the age of 65. In absolute numbers, as the UNDP demographers revealed that, “the number of older persons has triple again over the last 50 years; it will more than triple again over the next 50 years” (World Population Ageing; 2002). The population of all countries will continue to age substantially. For example, the median age of the world will rise from 28 years today to 38 years in 2050. The number of persons aged 60 years or over will rise from 10 percent of the population today to 22 percent in 2050. The percentage aged 80 years or over will rise from just 1 percent today to 4 percent in 2050 (Population Challenges and Development Goals; 2005).

Ageing is considered as biological constraint, because most of human cells, tissues and organs as well as functional systems in the body deteriorate with age. The brain and the nervous system degenerate and become less efficient with age; also there is evidence that intelligence decrease, older individuals or the adult learners should not find it difficult to understand and even participate in selected activities which are moderately physical in nature (Allbrook, Han & Hellmuth, 1971). The adult learner need to draw from his/her wealth of experience in life to be able to participate usefully and actively in activities requiring higher levels of brain work and muscle work. The slow reaction time in the adult due to his degenerating neuromuscular system, sensory acuity and diminishing muscular strength, no doubt force him/her to be a bit more careful and of course, slow to react to academic issues. It may take a relatively longer time for adult learner to stand up in the class, adjust or put on his glasses and it may take him a little more time to Marshall his points in his brain before attempting to answer a question or make his point.

Some obstacles for learning in older age exist. Although learning of new abilities is possible in old age, memory generally declines on some dimensions and learning something completely new is harder for older adults. Fluid intelligence in old age, whereas crystalline intelligence is robust for age effects and only starts to decline in very old age (Zimprich, 2004). Also in older age, neuronal plasticity still exists, although the range of plasticity is narrower than in younger age (Linderberg & Kray, 2005). This means that learning something new, which is associated with fluid intelligence and with neuronal plasticity, is harder in older age, but that recall of existing knowledge does not decline with age as it is associated with crystalline intelligence. Learning something new is still possible, but might need more rehearsal and effort. Also the speed of information processing and reaction speed decline, people cannot deal as good as at younger age with time pressure and it is harder to focus on different aspects in the same time. More over, hearing and visual performance declines; senses which are important in many learning contexts also declines. But skills like apprehension, retentiveness and concentration do not decline as long as the learning content is important to the older adult learner. Skills like embedding the learning content in a broader perspective even seem to grow with increasing age and also social skills which are also relevant in many social learning situations increase with age (Nuissl, 2009).

As people grow older they differ in their approaches to learning, and these differences originated from their motives for attending adult education programmes. Most adults approach learning activities with specific expectations about what they will gain from the experience. Some adult learners really go to learning centers in order to learn, while others just want to attend. When some group of women adult learners were interviewed on why they enrolled in formal adult education classes, their reasons was that, ‘to get away from home for a few hours’ (Jones, 1969; Usman 2005 in Sharada 2016). One of the previous experience that affect adult learning and achievement is early childhood and adolescent education. This preparatory experience can help or deter subsequent learning endeavour with adults. If the previous experience was a record of failure, the likely results are reduced accumulated knowledge, learning skills, persistence in school, self-confidence as learners, as well as participation and interest in educative activities. But where the experience was positive the learner would have greater educational interest that will encourage and support educative activity (Campbell, 1965a and Usman, 2005 in Sharada, 2016).

Methodology

This study adopted correlational design, using the population of 1662 learners from the study area with 310 as sample size. Inventory of adult learners and GSP2202 Examination Question Paper for 2015/2016 academic session were used as instruments for data collection. Descriptive statistics used in data analysis include frequency count, simple percentage, mean, standard deviation and Pearson Product Moment Correlation.

Results and Discussions

Table 1: Distribution of the learners in SCE by age groups

Age groups	Frequency	Percent%
25-34 Years	76	24.5
35-44 Years	196	63.2
45-54 Years	32	10.3
55-above Years	06	1.9
Total	310	100.0

Table 1 revealed that the learners between the age of 25-34 were (24.5%), followed by the age group of 34-44 years (63.2%), then 10.3% belong to 45-54 years age group and finally only 1.9% belong to 55 and above years age group. Based on the presentation above, it shows that learners between the age group of 35-44 have the highest number of frequency with 63.3% and those between the age group of 55-and above have the lowest number of frequency with 1.9%. This may be connected to the persistent decline in the age-specific fitness, level of their commitments and other social responsibilities.

Table 2: GSP2202 Scores of learners in SCE by age groups

	Age groups	Frequency	Mean	Std. Deviation
GSP2202 Scores	25 - 34 years	76	46.2763	15.09402
	35 - 44 years	196	54.2704	13.18715
	45 - 54 years	32	40.6563	13.54707
	55 above	6	39.3333	19.65367
	Total	310		

Table 2 revealed that the mean score for age group 25 – 34 years is 46.2763, 35 – 44 years is 54.2704, 45 – 54 years is 40.6563 and finally for 55 years and above is 39.3333. The table revealed that 35 – 44 years age group performed better than the other age groups, followed by 25 -34 years age group, then 45 – 54 years age group and finally 55 years and above age group. All the standard deviations were less than the mean scores. It also revealed that most of the scores cluster close to the mean scores, as such, all the standard deviations are small relative to the means. The rule is that, lesser the standard deviation the more consistent is your data and the greater the standard deviation the less consistent is your data. When the standard deviation gets larger the sample mean may not be a good representative of the population. Finally, going by the frequency and mean scores, the performance of learners between the age group of 35-44 is higher, and the learners between the age group of 55-above have the lowest performance, this can be as a result of ageing and other social responsibilities

Hypothesis Testing

The study tested the following null hypothesis:

H₀₁. There is no significant relationship between ageing and academic achievement of learners in the School of Continuing Education, Bayero University, Kano.

Table 3: Relationship between Ageing and Academic Achievement of Learners in SCE

		GSP2202 Scores	Age of Respondents
GSP2202 Scores	Pearson Correlation	1	.244**
	Sig. (2-tailed)		.000
	N	310	310
Age of Respondents	Pearson Correlation	.244**	1
	Sig. (2-tailed)	.000	
	N	310	310

** . Correlation is significant at the 0.01 level (2-tailed).

In Table 4, the value against Pearson correlation, i.e., 0.244 is the r-value. Since, the r-value is positive and significance (2-tailed) value of 0.000 (the p-value) is below 0.05, the H_0 was rejected and accept alternate hypothesis and infer that there is significant relationship between the age of the respondents and their academic achievement.

Discussion

The discussion of the study was based on the findings of the research questions. The first findings revealed that the learners in SCE, BUK were in between the age groups of 25-34, 35 – 44, 45-54, and 55- above years. It equally shows that learners between the age group of 35-44 have the highest number of frequency with 63.3% and those between the age group of 55-and above have the lowest number of frequency with 1.9%. This may be connected to the persistent decline in the age-specific fitness, level of their commitments and other social responsibilities. The finding is in line with the opinion of Rose (1991) in the book of evolutionary biology sees ageing “as a persistent decline in the age-specific fitness components of an organism due to internal physiological degeneration”. At the level of the individual, the intrinsic physiological state at a specific age determines, among other things, whether an individual is dead or alive and how much it reproduces. At the level of the cohort, the underlying physiological states of the individuals translate into the age-specific rates of mortality or reproduction. Mapleson (1996) viewed ageing “as a progressive physiological process that is characterized by degeneration of organ systems and tissue with consequent loss of functional reserve of these systems”.

However, the second finding was based on determining the academic achievement of adult learners by their age groups. The finding revealed that the mean of the academic achievement of learners in the School of Continuing Education, Bayero University, Kano by their age groups were 25-34 (46.2), 35 – 44 (54.29), 45-54 (40.66), and 55- above years (39.33), going by the frequency and mean scores, the performance of learners between the age group of 35-44 is higher, and the learners between the age group of 55-above have the lowest performance, this can be as a result of ageing and other social responsibilities. The finding is in persuarance with that of Oduaran (1996 ; Usman, 2005 in Sharada 2016), that the effect of age on adults is not limited to cognitive ability only; it also affects many aspects of their lives including those aspects, which are very essential for learning especially formal learning. For example, age affects adults’ motives as well as their approaches to learning, and these in turn influence adults’ commitment and of course their general performances in educational activities.

Similarly, the third finding revealed that there is significant relationship between ageing and academic achievement of learners in the School of Continuing Education, Bayero University, Kano, at 0.01 level of significant. The finding is in line with the view of Vatuk (1980) that some obstacles for learning in older age exist. Although learning of new abilities is possible in old age, memory generally declines on some dimensions and learning something completely new is harder for older adults. Fluid intelligence in old age, whereas crystalline intelligence is robust for age effects and only starts to decline in very old age (Zimprich, 2004). Also in older age, neuronal plasticity still exists, although the range of plasticity is narrower than in younger age (Linderberg & Kray, 2005). This means that learning something new, which is associated with fluid intelligence and with neuronal plasticity, is harder in older age, but that recall of existing knowledge does not decline with age as it is associated with crystalline intelligence. Learning something new is still possible, but might need more rehearsal and effort. Also the speed of information processing and reaction speed decline, people cannot deal as good as at younger age with time pressure and it is harder to focus on different aspects in the same time. More over, hearing and visual performance declines; senses which are important in many learning contexts also declines.

Conclusion

Conclusively, the study provides support for the research questions as it shown that the learners in SCE, BUK were in between the age groups of 25-34, 35 – 44, 45-54, and 55- above years, the means of the academic achievement of learners in the School of Continuing Education, Bayero University, Kano by their age groups were 25-34 (46.2), 35 – 44 (54.29), 45-54 (40.66), and 55- above years (39.33). That there is significant

relationship between ageing and academic achievement of learners in the School of Continuing Education, Bayero University, Kano, at 0.01 level of significant.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. The University management, SCE and other critical stakeholders should mobilize and create more awareness to enable individual learners between the age of 55-years and above to actively participate in such an important programme since they are in the better position to benefit from it.
2. The teaching and learning processes in the School of Continuing Education should be more practical than theory, and learners experience should be given priority especially in the context of lecture preparation and assessment of their performances considering their age and level of their social responsibilities.
3. The SCE, BUK should ensure that the curriculum and the teaching methods are made flexible and simple all through the programme, to enable learners understand the subject matter.

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