

### Prevalence of Depression among Male Retirees in University of Nigeria, Nsukka: Relationship of Income and Age

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#### Abstract

Depression is the most common and serious medical illness that negatively affects people's feelings, thoughts, and actions, and retired civil servants are not left out in this scourge. This study investigated the relationship between income and age on depression among retired male civil servants in a university community in Nigeria. Three specific objectives guided the study. A correlational research design was adopted for the study. The population of the study comprised 5000 retired staff members of the University of Nigeria Nsukka. A random sampling method was used to select 350 retired staff. The instrument for data collection for the study was the Geriatric Depression Scale (GDS-15) which showed acceptable Cronbach's alpha internal consistency (0.752). Frequencies and percentages were used to answer the research questions while Chi-Square ( $\chi^2$ ) statistics at 0.05 level of significance were used to test the null hypotheses. Findings revealed that many (43.4%) of retired civil servants experienced depression. The income level of respondents was significantly associated with depression ( $\chi^2$  = 6.760, df = 2, p = 0.034). Retired civil servants who earned less than \$50,000experienced a moderate proportion (65.3%) of depression and retired civil servants who earned between ₩50,000-100,000 and above №100,000 experienced a moderate proportion (50.7%) and (51.2%) of depression respectively. The age of the respondents was not associated with depression ( $\chi^2 = 3.765$ , df = 2, p = 0.152). The study concluded that the prevalence of depression among retired civil servants was high. A recommendation was made for the government to be paying the gratuity and subsequent pension of the retired civil servants as at when due to check and avoid depression after service.

Keywords: Depression, Monthly Income, Age Retirement, Civil servants

#### Introduction

Depression is a common and serious medical illness that negatively affects feelings, thoughts and actions affecting people of diverse age group. Retired civil servants are not left out in this scourge of depression. According to the World Health Organization, between 2015 and 2050, the number is expected to increase from 900 million to 2 billion people aged 60 and above (WHO, 2017). According to the World Health Organization [WHO] (2017), between 2015 to 2050, the number of people aged 60 and above is expected to increase from 900 million to 2 billion. Globally, the total number of people with depression was estimated to exceed 300 million in the year 2015 and the prevalence rate of depression among males aged 55-74 years is 5.5% (WHO, 2017)

Zenebe et al. (2021) reported that the pooled prevalence of depression among the aged in developing countries was 40.78% compared to 17.05% in developed countries. Mental conditions such as depression in older adults account for 6.6 per cent of the total disability and nearly 15 per cent of adults aged 60 and above suffer from a mental health problem mainly depression (WHO,



From the foregoing, depression 2015). appears to affect the elderly group more as a result of the feeling of being constrained by some adverse situations surrounding retirement in the country. Depression appears to affect the elderly group more as a result of the feeling of being constrained by some adverse situations surrounding retirement in the country such as inconsistencies in payment of meagre pension Depression was found to be a widespread mental health problem among elderly community dwellers in 22 states of Nigeria with a prevalence of between 19.8 per cent and 26.2 per cent (Central Statistics Agency [CSA], 2018).

Depression is a mood disorder which affects feeling, thoughts and actions negatively with lack of interest or pleasure in activities and energy loss that lasts for two weeks or more (WHO, 2019). Zenger (2011) and WHO (2019), defined depression as a mood disorder which negatively affects feelings, thoughts and actions with a lack of interest or pleasure in activities and energy loss that lasts for two weeks or more. Guo et al. (2016) described depression as a common response to health problems which appears to be an under-diagnosed problem in the elderly European population. Alliance against Depression (2017) opined that depression results from a complex interaction of social, psychological and biological factors. People who have gone through adverse life events such as psychological trauma are more likely to develop depression. Depression is a major emotional health problem that is frequently undetected and untreated but has to potential of resulting to impaired quality of life among the elderly (Manaf et al., 2016; Mental Health Foundation, 2015) There is evidence that some natural body changes associated with aging may increase the risk of experiencing mental health problem such as anger and depression (American Psychological

Association, 2016) especially among the retired population.

Retirement can be seen as a transition from one status of life to another. It is a highly valued feat and retired civil servants in the parlance of the area of study are referred to as senior citizens (those who have stipulated completed their vears of government service). Pillah (2023) averred that retirement is the act of completion of regular work because of attaining a specified number of years. The years of retirement are streamlined in Sections 4(a) and (b) of the Miscellaneous Provisions University Amendments Act (UMPAA) of 2012 that the compulsory retirement age for academic staff in the professorial cadre and non-academic staff shall be 70 years and 65 years respectively (National Pension Commission, 2017). Therefore, every civil servant that is employed in any university in the country is required to serve effectively either as a nonacademic or academic till the completion of 65 or 70 years.

Civil servants are known to be generally categorized into federal, state, and local government workers. They are seen and referred to as government paid workers and are meant to receive their salaries monthly and consistently. However, it is disheartening that the reverse is the case with most civil servants both active and retired civil servants, as they are owed their salaries and are not being paid as at when due, resulting in mental health problems like depression (Elufidipe-Olumide, 2018). Retirement is an important moment that is accompanied by several issues to which individuals need to carefully adjust (Wetzel & Huxhold, 2016). These issues are normal with every transition in life but appear to be worsened by the thriving trend of irregularities in the payment of the retirees in Nigeria. The result is decline in life satisfaction after retirement (Zhu & He, 2015). This absence of fulfillment is caused by



several responsibilities following retirement which are hinged on some sociodemographic variables. However, this study is interested in two of these variables, income and age. The reason for the choice of these two variables in relation to depression is because income is vital at every stage of life, yet the capability of generating income is reduced at advanced years except with social support.

Income simply put is the amount of money that is acquired from savings, investments made, or work done for the purpose of satisfying needs at any given point in time. The income for the retired population mostly comes in form of pension. According to Central Statistics Agency (2018), the pension paid to these retired civil servants is quite insufficient to cover feeding, other housing, basic expenses, and healthcare. As a result, they experience financial difficulties. Retired civil servants are not paid their pension as at when due coupled with the fact that majority of them could not save and make investments in their service years since salaries paid could not cater for immediate needs of the family. Furthermore, retired civil servants are not paid their pensions on time, which further exacerbates their condition since the bulk of them were unable to save and invest throughout their service years. Retired civil servants are known to be paid a portion of their salaries as pension and are also exempted from subsidized medical care they were enjoying while in service. Udo (2021) noted that 86 per cent of retired civil servants who have been debarred from funded medical care they enjoyed in their service years now seek medical care from tradomedicare, prayer houses and chemists due to lack of sufficient income. The author further stated that even though these retired civil servants are subjected to regular verification exercises, their pension payment remains

irregular making it difficult for them to attend to their health and financial concerns. Consequently, many Nigerian older adults find it very difficult to adapt to life after retirement and experience mental health problems including depression. The incidence of depression is also impacted by age.

Age refers to the span of life or existence of an individual. Breheny and Griffiths (2017) defined age as the period someone has been alive, or something has existed. Department of Economic and Social Affairs, Population Division (2020) noted that the global population is ageing fast and that by 2020, 1 billion people were aged 60 years and above with the figure estimated to rise to 1.4 billion by 2030, signifying one in six persons globally. By 2050, the number of persons aged 60 years and above will have doubled to 2.1 billion. There is the possibility that as one advances in age and retires, many transactions are made on the mind such as the inability to achieve things planned during the service years. There is a probability that as one ages and retires, they may have a lot of ruminations, such as their inability to reach goals they set for themselves during their service years. These cascades of thought could trigger depression among retirees as they might have retired from service with little or no achievement as older adults. Studies (Salihu & Udofia, 2016; Shittu et al., 2014) have shown that an association exists between age and depression. However, in other studies (Lamidi, 2016; Nisar et al., 2017) age was found to have no significant association with depression.

Late-life depression is a common and disabling mental health problem (Haigh et al., 2018). World Health Organisation (2023) noted that mental health of the elderly are not only affected by their social environment but also by the pooled effects of their life experiences, lack of access to quality support



services and other stressors related to ageing such as hardship, decline in natural capacity and functional ability can all result in depression. It is possible that the socioeconomic challenges in the country may present the retirees with the risks of depression. Therefore, there is need for emphasis on the impact of income and advanced age on their new status as retirees. This study is focused on male retirees.

The rationale for using male retirees is that Nigeria is a patriarchal nation in which men have long been regarded as overseeing family obligations. They hold authority, direct the affairs of the home and virtually everything. Based on the aforementioned, the males cannot perform their responsibilities without regular inflow of income and when the expected is not achieved they appear to be at a higher risk of depression. Li et al. (2022) asserted that males and older workers with low socioeconomic status have high risk of depression. Contrarily, Fleischmann et al. (2020) observed that retirement was generally related to mental health improvements and that those who retired from poor working conditions experienced evident improvements in their mental health. This could be because of adjustments made over time. Centre for Disease Control and Prevention [CDC] (2022) observed that depression is not normal with aging, just that it is a medical condition which older adults are at increased risk of experiencing. By implication, if these older adults enjoy social care and financial support, they may not end up depressed.

### Theoretical Background of the Study

This study was anchored on operant conditioning model developed by Skinner in 1937. The theory of operant conditioning by Skinner, 1971 stated that reinforcement is a powerful tool in the shaping and controlling behavior (Staddon & Cerutti, 2003). Operant conditioning states that depression is caused by the removal of positive reinforcement from the environment (Lewinsohn, 1974). This theory relates to this study, in that an individual can get depressed when there is absence of positive reinforcement from the environment. With positive reinforcement, such as prompt payment of pension, enough to cater for immediate needs and social support, male retirees will undoubtedly experience conducive environment. Unfortunately, the reverse seems to be the case among retired civil staffs from University of Nigeria Nsukka, as a good number of them do not receive their gratuity and monthly pension years after retirement. To the best of the researcher's knowledge, no study has been conducted on the influence of income and age on depression among retired civil servants in University of Nigeria, Nsukka. Therefore, the study investigated the prevalence of depression among retired civil servants in a University in Nigeria. The relationship of income and age were also determined.

### **Research Questions**

The following research questions have been posed to guide the study.

- 1. What is the prevalence and level of depression among male retirees of the University of Nigeria, Nsukka?
- 2. What is the relationship between income and level of depression among the respondents?
- 3. What is the relationship between age and level of depression among the male retirees?

### Methodology

*Study Design*: The study adopted the descriptive and correlational research survey design. Descriptive design was used to obtain data on the prevalence of depression, while



correlation was used to determine the relationships among study variables.

*Study Population*: The population for the study comprised of 5000 male staff from the University of Nigeria, Nsukka who retired from January 2022 till date (Federal Universities Pensioners Association [FUPA], University of Nigeria, Nsukka, 2022).

Sample Size Selection Procedure: The sample size for the study comprises 350 retired staff. This was derived using Taro Yamane formula for determining the sample size of a given population (1967). Taro Yamane's formula is n = N / 1 + N(e)2 where n is the sample size, N is the population size, is the level of significance. Simple random sampling without replacement was used to draw 350 retired civil servants from the population.

Instrument for Data Collection: A structured questionnaire was used to collect information on the socio-demographic characteristics of the respondents. Data on depression among collected the retirees were using а standardized scale titled Geriatric Depression Scale (GDS-15) developed by Sheikh and Yesavage (1986). This comprised of 15 items to determine the proportion of the retired civil servants experiencing depression. The respondents were expected to tick "Yes" or "No" as it applied to them. GDS-15 has 15 items, 10 out of the 15 items indicated the presence of depression when it is answered positively (Yes), while the rest of the questions with numbers 1, 5, 7, 11, 13 indicated the presence of depression when answered negatively (No). The reliability test of the instrument using Cronbach's alpha showed acceptable internal consistence (0.752).

*Method of Data Collection*: To gain access to the retired civil servants, a letter was obtained from the Head, Department of Human Kinetics and Health Education, University of Nigeria, Nsukka. The letter was presented to the chairman of FUPA seeking permission to carry out the study. Next, the researcher met with the retired civil servants in their meeting place. Three hundred and fifty copies of the questionnaire were administered to the respondents and 348 copies of the completed questionnaires were collected. This gave a 99% return rate.

Data and Statistical Analysis: The returned copies of the completed questionnaire were properly cross-checked for completeness of responses. All the respondents that answered 'yes' to depression items were assigned 1 and the respondents that answered 'no' were assigned 2. However, the reverse coding was also assigned 1 because their answers were positive to depression items. The responses of each respondent were summed up to get the total score for each of them. Scores of 0-4 indicated normal range, 4-8 showed mild depression, indicated moderate 8-11 depression while scores of 11-15 showed severe depression. The information from the copies of the questionnaires were coded into the International Business Machine Statistical Package for Social Sciences, (IBM-SPSS), version 23.0. Data were analyzed using frequencies, percentages and chi-square. P < 0.05 was accepted as level of significance.

#### Results

#### Demographic data of the respondents

The age categories of the respondents were 65-74 years (27.3%), 75-84 years (40.8%), and 85+ years (31.9%). More than a quarter (29.0%) of them had a maximum of primary education, 43.4% had secondary education, and 27.6% had tertiary education. Some (21.8%) of them were single, 33.3% were married, 31.9% were divorced/ separated, and 12.9% were widowed. Retired civil servants earning less than \$50,000, \$50,000-10,000 and \$100,000 were 24.7% 35.6% and 39.7% respectively.



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### Prevalence and levels of depression among male retirees in UNN

The result in Figure 1 indicated that (44.0%) of retired civil servants experienced depression while 56.0% were not depressed.

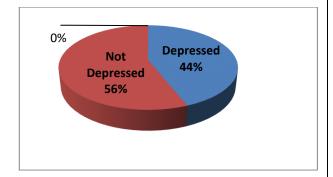


Figure 1: The prevalence of depression among retired male civil servants in UNN.

Figure 1 shows that all the retired male civil servants showed depression. More than half (56%) of retired male civil servants experienced moderate depression and 44% of retired male civil servants experienced severe depression.

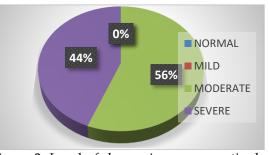


Figure 2: Level of depression among retired civil servants (Moderate to severe depression)

### Relationship between income and depression among male retirees

The result in table 1 showed that there was significant relationship between depression and income. The proportion of male retirees earning less than №50,000 (65.3%) that were moderately depressed was high compared to those earning higher amounts. Among respondents earning less than №50,000 65.3% had moderate depression and 34.7% had severe depression. Out of respondents earning ₦50.000-100.000, 50.7% had moderate depression and 49.3% had severe depression. Among respondents earning less than №100,000, 51.2% had moderate depression 48.8% had severe depression. and

Table 1: Relationshi	o between income	e and depression	among retired civil servants
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Income (₦)	Moderate depression F (%)	Severe depression F (%)	Total F (%)	χ <sup>2</sup> value	Df	<i>P-</i> Value
<₩50,000	81 (65.3)	43 (34.7)	124 (100)	6.750	2	0.034
₩50,000-100,000	70 (50.7)	68 (49.3)	138(100)			
> <del>N</del> 100,000	44 (51.2)	42 (48.8)	86(100)			

Key: F=Frequency, %=Percentages,  $\chi^2$  = Chi – square, Df = Degree of freedom, P-Value=Significant level

### Relationship between age and depression among male retirees

Table 2 showed that there was no significant relationship between age and depression among male retirees. However, severe depression was recorded more among male retirees aged 85 and above (51.4%) compared to younger retired civil servants. Among respondents aged 65-74years, 61.1% had moderate depression and 38.9% had severe depression. Out of respondents aged 75-84years, 58.5% had moderate depression and 41.5% had severe depression. Among respondents aged 85years and above, 48.6% had moderate depression and 51.4% had severe depression.



Age (Years)	Moderate depression	Severe depression	Total F (%)	χ <sup>2</sup> value	Df	<i>P-</i> Value
	F (%)	F (%)				
65-74	58 (61.1)	37 (38.9)	95 (100)	3.765	2	0.152
75-84	83 (58.5)	58 (41.5)	141 (100)			
≥85	54 (48.6)	57 (51.4)	111 (100)			

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Table 2: Relationshi	b between age and	l depression amo	ng retired civil servant
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Key: F=Frequency, %=percentages,  $\chi^2$  = Chi – square, Df= Degree of freedom, P-Value=Significant level

### Discussions

The study generated information on the monthly income and age association with depression among retired male civil servants in University of Nigeria Nsukka, Enugu state. The findings of the study are discussed below.

## Prevalence and levels of depression among male retired civil servants in UNN

The findings in figure 1 revealed that 56% of retired civil servants experienced moderate depression and 44% of retired civil servants experienced severe depression. This result is expected and not surprising because majority of the retired civil servants that the researchers interacted with where hugely complaining over the maltreatment of the government on them. This implies that a good number of retired civil servant of University of Nigeria Nsukka of Enugu state experienced depression. This is in accordance with that of Ojagbemi and Gureje (2019) who reported that moderate proportion of retired civil servant in University of Ibadan experienced depression. The findings also agree with that of Uwakwe (2000) who also reported that almost half of the retired civil servant of a Federal Ministry in Nigeria experienced depression. It is however contrary to the assertion of Fleischmann et al. (2020) who noted that retired civil servants experience good mental health. It is also contrary to that of Central Statistics Agency [CSA], 2018 that opined that depression in elderly community is low. The discrepancies could be because of geographical area as well

social support system that these different retirees are exposed to.

### Relationship between income and depression among male retired civil servants in UNN

Result from table 1 revealed that there was significant relationship between the level of depression of retired civil servants and monthly income. This is expected because it is naturally expected that there should be a relationship between depression and monthly income since retired civil servants are being owed their salaries. The finding is in tandem with those of Al-Shehri et al. (2022) who averred that there is a significant difference between depression and family income and that of Shittu et al. (2014) who observed a association strong statistical between depression and monthly income. However, this finding is contrary to those of Muhammad et al. (2018) who opined that there is no significant difference between low- and high-income earners on depression. This implies that there could be other factors apart from income that is responsible for depression among the retired civil servants in the area of study.

Result from table 1 also showed that the proportion of male retirees earning less than fifty thousand naira that were moderately depressed was high compared to those earning higher amounts. The implication is that earning less amount of money will increasing the occurrence of depression. The result is in line with those of Li et al. (2022) who observed that male retirees with low



income are at a higher risk of depression. Lack of income can heighten the development of depression which is associated with suicidal ideations and behaviors in the elderly (Petrova &Khvostikova, 2021). However, the study is divergent from those of Fleischmann et al. (2020) affirmed that retirement was generally related to mental health improvements and that those who retired from poor working conditions experienced evident improvements in their mental health. This disparity could be because of proper orientation given to the low-income workers from the onset of their service years resulting in financial and psychological adjustment. It could also be because some of these retirees are being paid handsomely in addition to social support from the family, community and the government.

# Relationship between age and depression among male retired civil servants in UNN

Result from table 1 showed that there was no significant difference in the proportion of retired civil servants who experience depression with age. This could imply that civil servants experiencing depression could be because of other factors aside age. This agrees with those of Yusuf and Adeoye (2011) who stated that though majority of civil servant are suffering from depression, there was no significant difference between the prevalence of depression among civil servants and age. Furthermore, Nisar et al. (2017) found that age has no significant depression association with as well. However, Shittu et al. (2014) observed an association between age and depression. This disparity could be because of socioeconomic, geopolitical and psychosocial variations among the retired civil servants.

Furthermore, result in table 2 showed that severe depression was recorded more among older male retirees compared to the younger

ones. This was expected because retired civil servants are aged individuals who retired from an organization after their active service for some years. Their retirement is meant to be a time of rest and remuneration with which to enjoy the fruit of their labour, but unfortunately, support for these retired civil servants is usually not adequate. The finding is in line with that of Nyberg et al. (2019), who averred that retired aged individuals with low social status predicted high depression. Haigh et al. (2018) also noted that depression follows a chronic course in older adults. The finding is contrary to the estimation of Centre for Disease Control and Prevention [CDC] (2022) who opined that depression is really not normal with old age. This implies that with conducive environment the old retirees may not experience depression.

### Conclusion

The study showed the relationship of income and age with depression among retired male civil servants in University of Nigeria, Nsukka. The result of the study indicated that depression the prevalence of among theretired civil servants was high. Significant relationship existed between depression and income among male retirees. The proportion of male retirees earning less than ₩50,000 that were moderately depressed was high compared to those earning higher amounts, indication that depression increases as income decreases. The study also showed no significant relationship between age and depression among male retirees. However, severe depression was recorded more among male retirees aged 85 and above compared to younger retired civil servants. This suggests that retired civil servants need to be cared for and supported so that they will live longer and enjoy their retirement years.

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### Recommendations

Based on the findings, discussion and conclusion thereof, it was recommended that:

- 1. The retired civil servants should be given proper attention after retirement from service by the government through paying their gratuity and subsequent pension as at when due.
- **2.** Health education talks could be organized for the retired civil servants during their periodic association meetings to boost their morale and help to elongate their years.

### **Suggestion for further studies**

The following areas were suggested for further research.

- 1. Prevalence of depression among retired female retirees in University of Nigeria, Nsukka.
- 2. Gender difference in the proportion of depression among retired civil servants of University of Nigeria, Nsukka.
- Location or residence (Rural and Urban) as a correlate of depression among retired civil servants of University of Nigeria, Nsukka.

### References

- American Psychological Association (APA) (2016). *Anger.* APA.https:// www.apa.org/topics/anger/.
- Al-Shehri, M. M., Harazi, N. M., Elmagd, M. H. A., Alghabbashi, M. T., & Alshmemri, M. (2022). Prevalence of depression, anxiety and stress among secondary school students in Jeddah City, Saudi Arabia. ASEAN Journal of Psychiatry, 23(6), 1-12. https:// doi.org/10.54615/2231-7805.4739
- Central Statistics Agency (2018). Statistical report on the 2018 urban employment unemployment survey. CSA. https:// nigerianstat.gov.ng/download/856.
- Central Statistics Agency (2018). The 2015/16 Ethiopian household consumption - expenditure (HCE) survey. CSA.

http://www.csa.gov.et/surveyreport/...ueues-2018...2018-ueus

- Centre for Disease Control and Prevention [CDC] (2022). Depression is Not a Normal Part of Growing Older. CDC. https://www.cdc.gov/aging/depression/ind ex.html
- Department of Economic and Social Affairs, Population Division (2020). World population prospect 2022: Release note about major differences in total population estimates for mid-2021 between 2019 and 2022 revisions. United Nations. https://population. un.org/ wpp/Publications/Files/WPP2022\_Release-Note-rev1.pdf
- European Alliance against Depression (2017). What you need to know about depression.Ifight. https://ifightdepression.com/en/
- Elufidipe-Olumide, H. A. (2018). Emotional health problems among civil servants in Nsukka Local Government Area, Enugu State [Unpublished Masters thesis]. University of Nigeria, Nsukka.
- Fleischmann, M., Xue, B., & Head, J. (2020). Mental health before and after retirementassessing the relevance of psychosocial working conditions: The whitehall II prospective study of British civil servants. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 75(2), 403–413. https://doi.org/10.1093/geronb/gbz042.
- Federal Universities Pensioners Association [FUPA] (2022). Population of retired male staff of University of Nigeria, Nsukka from January 2022 till date. FUPA, University of Nigeria, Nsukka.
- Guo, Y., Zhang, C., Huang, H., Zheng, X., Pan, X., & Zheng, J. (2016). Mental health and related influencing factors among the empty-nest elderly and the non-empty-nest elderly in Taiyuan, China: a cross-sectional study. *Public health*, 141, 210-217. https://doi.org/ 10.1016/j.puhe.2016.09.005
- Haigh, E. A. P., Bogucki, O. E., Sigmon, S. T., & Blazer, D. G. (2018). Depression among older adults: A 20-year update on five common myths and misconceptions. *The American Journal of Geriatric Psychiatry: Official Journal of the American Association for Geriatric*





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*Psychiatry*, 26(1), 107–122. https://doi.org/10.1016/j.jagp.2017.06.011

- Lewinsohn, P. M. (1974). A behavioral approach to depression. In R. J. Friedman & M. M. Katz (Eds.), *The psychology of depression: Contemporary theory and research*. John Wiley & Sons.
- Li, C., Ning, G., Wang, L., & Chen, F. (2022). More income, less depression? Revisiting the nonlinear and heterogeneous relationship between income and mental health. *Frontiers in Psychology*, *13*, 1016286. https://doi.org/ 10.3389/fpsyg.2022.1016286
- Lamidi, R. E. (2016). Prevalence and correlates of depression, anxiety and academic stress among science students in Oduduwa University, Ile-Ife, Nigeria. *Texila international journal of Public Health*, 4(3), 1-11. https//:doi.org/10.21522/TIJPH.2013.04.03.Art 001
- Lee, M., Regu, M., & Seleshe, S. (2015). Uniqueness of Ethiopian traditional alcoholic beverage of plant origin, *Tella Journal of Ethnic Foods*, 2(3), 110–114. https://doi.org/10.1016/ j.jef.2015.08.002
- Manaf, M. R. A., Mustafa, M., Rahman, M. R. A., Yusof, K. H., & Aziz, N. A. A. (2016). Factors influencing the prevalence of mental health problems among Malay Elderly residing in a rural community: A cross-sectional study. *PloS one*, 11(6), e0156937. https:// dx.doi.org/10.1371/journal.pone.0156937.
- Muhammad, K., Terna, I. K., & Saanyo, D. B. (2018). The relationship between depression and academic performance among undergraduate students of Benue State University Makurdi, Nigeria. International Journal of Education and Evaluation, 4(6), 77-85. https://www.iiardjournals.org/get/IJEE/VO L.%204%20NO.%206%202018/THE%20RELA TIONSHIP%20BETWEEN.pdf
- Nisar, S., Uzair, A., Khan, M. A., & Akhtar, S. (2017). Association of depression with sociodemographic factors in patients undergoing hemodialysis. *Pak Armed Forces Medical Journal*, 67(2), 232-3. https://api.semanticscholar. org/ CorpusID:250455162

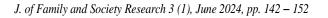
- National Pension Commission (2017). *Guidelines* for the administration of retirement benefits of professors and a category of political appointees. PENCOM. https://www.pencom. gov.ng/wp-content/uploads/2017/ 10/1504713826\_Final-Guidelines-for-Prof-Political-Appointees.pdf.
- Breheny, M., & Griffiths, Z. (2017). I had a good time when I was young: Interpreting descriptions of continuity among older people. *Journal of Aging Studies*, 41, 36–43. https://doi.org/ 10.1016/j.jaging.2017.03.003
- Nyberg, A., Peristera, P., Magnusson Hanson, L. L., & Westerlund, H. (2019). Socio-economic predictors of depressive symptoms around old age retirement in Swedish women and men. *Aging & Mental Health*, 23(5), 558–565. https://doi.org/10.1080/ 13607863.2018.1430741
- Ojagbemi A, &Gureje O. (2019) Social relationships and the association of loneliness with major depressive disorder in the Ibadan study of aging. *World Social Psychiatry*, *1*, 82–8. https://doi.org/10.4103/WSP.WSP\_6\_19.
- Pillah, T. P. (2023). Retirement in the Federal Civil Service of Nigeria: Conceptual Issues. International Journal of Public Administration and Management Research, 9(1), 40-46.

https://journals.rcmss.com/index.php/ijpamr/articl e/view/842

- Sheikh, J. I., & Yesavage, J. A. (1986). Geriatric Depression Scale (GDS): Recent evidence and development of a shorter version. *Clinical Gerontologist: The Journal of Aging and Mental Health*, 5(1-2), 165–173. https://doi.org/ 10.1300/J018v05n01\_09
- Staddon, J. E., & Cerutti, D. T. (2003). Operant conditioning. *Annual Review of Psychology*, 54, 115–144.

https://doi.org/10.1146/annurev.psych.54.10 1601.145124.

- Shittu, R., Odeigah, L., Issa, B., Olanrewaju, G., Mahmoud, A., & Sanni, M. (2014). Association between depression and social demographic factors in a Nigerian family practice setting. *Open Journal of Depression*, 3, 18-23. https://doi.org/10.4236/ ojd.2014.31006.
- Salihu, A. S., & Udofia, O. (2016). Prevalence and associated factors of depression among



general outpatients in a tertiary institution in Kano, North-Western Nigeria. *Open Journal of Psychiatry*, 06(03), 228–236. https:// doi.org/10.4236/ojpsych.2016.63028

- Uwakwe, R. (2000). The pattern of psychiatry disorders among the aged in a selective community. *International Journal of Geriatric Psychiatry*, 15, 355–362. https://doi.org/10.1002/ (sici)1099-1166(200004)15:4<355::aid-gps126>3.0.co;2-8
- Udo, U. J. (2021). Socio-economic implication of retirement on retired civil servants in Cross-River State, Nigeria. *International Journal of Advances in Engineering and Management (IJAEM)*, 3(8), 30-38. https://doi.org/10.35629/5252-03083038
- World Health Organisation [WHO] (2023). *Mental health of older adults.* WHO. https://www.who.int/news-room/factsheets/detail/mental-health-of-older-adults
- Wetzel, M., & Huxhold, O. (2016). Are leisure activity and health interconnected after retirement: Educational differences? Advances in Life Course Research, 30, 43–52. https://doi.org/10.1016/j.alcr.2016.03.007
- World Health Organization. (2015). World report on ageing and health. WHO. https://www.who.int/ageing/events/world-report-2015-launch/en/.
- World Health Organisation. (2017). "Depression: let's talk" says WHO, as depression tops list of causes of ill health. WHO. https://www.who.int/ news/item/30-03-



2017--depression-let-s-talk-says-who-as-depression-tops-list-of-causes-of-ill-health.

- WHO (2019). Depression and other common mental disorders global health estimates. WHO. https://iris.who.int/ bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf?sequence=1
- Yusuf, A.F., & Adeoye, E. A (2011) Prevalence and causes of depression among civil servants in Osun State: Implications for counseling. *Edo Journal of Counselling*, 4(1& 2), 92-102. https://api.semanticscholar.org/CorpusID:55 144344
- Zhu, R., & He, X. (2015). How does women's life satisfaction respond to retirement? A twostage analysis. *Economics Letters*, 137, 118–122. https://doi.org/ 10.1016/ j.econlet. 2015.11.002
- Zenebe, Y., Akele, B., W/Selassie, M., & Necho, M. (2021). Prevalence and determinants of depression among old age: A systematic review and meta-analysis. *Annals of General Psychiatry*, 20(1), 55. https://doi.org/ 10.1186/s12991-021-00375-x
- Zenger, M., Brähler, E., Berth, H., & Stöbel-Richter, Y. (2011). Unemployment during working life and mental health of retirees: results of a representative survey. *Aging and Mental Health*, 15(2), 178-85. https://doi.org/10.1080/ 13607863.2010.508775.