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Quick Response Code:

Website: www.jehp.net
DOI: 10.4103/jehp.jehp_1034_22

# Predictive influence of personality traits on retirement anxiety among universities staff in Osun State, Nigeria

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## Abstract:

**BACKGROUND:** Retirement anxiety may occur in retirement-eligible staff, and their reaction may depend on their personality traits. This study examined the predictive influence of five-factor personality traits on retirement anxiety among non-academic staff in some selected universities in Osun State, Nigeria.

**MATERIALS AND METHODS:** The study utilized a multistage sampling technique. Two self-administered instruments, Redeemer's University Retirement Anxiety Scale and Mini-International Personality Item Pool were completed by 463 non-academic staff in five selected universities in Osun State, Nigeria. Descriptive statistics (frequency and percentages) and inferential statistics (hierarchical regression, two-sample *t*-test, and one-way ANOVA) were used to analyze data.

**RESULTS:** The study found a high prevalence rate of retirement anxiety (85.1%) among university staff in Nigeria. In all, 13%, 16%, and 12.5% of the participants showed high levels of retirement anxiety dimensions (personal obligation, financial planning, and social detachment), respectively. Sociodemographic and personality traits jointly accounted for statistically significant (16%, 29%, and 22%) changes in personal obligation ( $R^2 = 0.16$ ,  $P < .01$ ), financial planning ( $R^2 = 0.29$ ,  $P < .01$ ), and social detachment ( $R^2 = .22$ ,  $P < .01$ ), respectively. Personality traits (extraversion, agreeableness, conscientiousness, and neuroticism) and socio-demographic variables (age, educational level, job tenure, and job status) jointly contributed to the prediction of retirement anxiety dimensions (obligation concerns, financial planning, and social detachment).

**CONCLUSION:** The findings highlighted the need for psychosocial interventions targeting the at-risk population was highlighted.

## Keywords:

Anxiety, Nigeria, personality, retirement, university

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Received: 20-07-2022  
Accepted: 29-10-2022  
Published: 31-03-2023

## Introduction

Retirement is a dynamic means of gradual termination from employment activities that result in different changes and adjustments in lifestyle, friendship, and identity<sup>[1,2]</sup> and is often identified with the collection of gratuities and pensions.<sup>[3]</sup> As enunciated in the literature, the journey to retirement, for many employees, is supposed to have started earlier before their actual exit from official work. This is

necessary so that they can recognize the need to prepare adequately for their future retirement.<sup>[3,4]</sup> For many people, the period between active working life and retirement can be demanding and anxiety inducing, subject to individual assessment of their readiness, considering the sustainability of their savings and pension benefits.<sup>[2,5]</sup> To this end, Nsirimobi and Ajuwede<sup>[6]</sup> reported that some employees see retirement as a threat to their sense of identity and may feel devalued because of the thought that

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**How to cite this article:** Ogunsemi JO, Akinnawo EO, Akinbobola OI, Olajire OO, Olusa AO, Okunola JL. Predictive influence of personality traits on retirement anxiety among universities staff in Osun State, Nigeria. *J Edu Health Promot* 2023;12:96.

retirement would take their work away. For some, their concern is how they would get themselves engaged by finding activities needed during their retirement-induced spare time. Similarly, others get nervous about how possible it would be for them to cater for shelter and fulfil future obligations after they eventually retire.<sup>[5]</sup> The aforementioned summarized some of the mindsets of many people, which not only make retirement unattractive but also degenerate into a psychological condition known as retirement anxiety.

Findings from social research have shown that retirement anxiety makes staff perceive retirement as a problematic process with more shortcomings than benefits. Thus, retirement is seen as an unhealthy or traumatic event.<sup>[2,3]</sup> Corroborating this assertion, Akinawo *et al.*<sup>[2]</sup> posited that inadequate or perceived lack of preparation for retirement by staff could elicit anxiety and subsequently limit what should be satisfying retirement outcomes. However, studies have attested to the prevalence of retirement anxiety among different categories of employees,<sup>[2,3,7]</sup> very few of these studies considered different dimensions of retirement anxiety together.<sup>[8-10]</sup> According to statistics, retirement anxiety occurs in different dimensions, but three major areas have been identified.<sup>[8,11,12]</sup> Particularly, studies investigating retirement anxiety have identified the social detachment dimension as concerns relating to the perception and attitude of employees to loss of social connections or change in the social cycle due to retirement.<sup>[8,11]</sup> In a related development, another study identified the role of health and income-related concerns, loss of work-related identity, and changes in social connections on retirement anxiety among university academicians<sup>[9]</sup> while Szinovacz *et al.*<sup>[12]</sup> considered the anxiety that arises as a result of huge financial obligations in the familial context. Such desire arises due to the fear regarding where they would get the needed money to settle future expenses arising from educational tuition, housing rent, or ill health after retirement.<sup>[12-14]</sup>

Since people can differ in their reactions and preparation for retirement, how they handle changes during the transition can also vary depending on their personalities.<sup>[15,16]</sup> Personality traits are described as consistent and enduring patterns or characteristics that underlie individual differences in behavior, cognition, and emotion.<sup>[15]</sup> Accordingly, personality has the ability to significantly predict behavioral and health outcomes.<sup>[17]</sup> They have been related to how people adjust to life events, like marriage, career shifts, and retirement, because an individual's identity and pattern of self-appraisals, coping strategies, and motivational priorities are moderated by it.<sup>[18-20]</sup> The most widely cited big five factors model of personality: Extraversion (lively versus solitary), agreeableness (warm versus competitive),

conscientiousness (disciplined versus careless), neuroticism (emotional instability versus emotional stability), and openness to experience (curious versus pragmatic), was adopted in the current study.<sup>[15,18]</sup> The link between personality traits and retirement transition has been established in past studies.<sup>[8,16,18,19]</sup>

Literature is inundated with the fact about how some traits propel people to take personal initiative towards financial investments, savings, and enterprising activities to keep liquidated after the stoppage of salary work.<sup>[8,16,20]</sup> People that take these initiatives are likely to look towards retirement with eagerness;<sup>[18-20]</sup> individuals who are extraverted, open to experience, or conscientious have also been observed to be better prepared for the changes that come with retirement.<sup>[21]</sup> However, persons with high neuroticism traits could have a negative view of the conditions leading to retirement.<sup>[16]</sup> In the event of retirement, personality traits and social detachment concerns (SDC) have been linked.<sup>[8,21]</sup> Findings from eclectic studies equally show that persons who are extraverted, agreeable, or self-conscious respond differently to issues relating to concerns for social detachment and loss of identity as they thrive on maintaining active interpersonal relationships due to their tendency to seek excitement and warmth.<sup>[8,21]</sup> In spite of the foregoing, statistics on the influence of the five-factor personality on dimensions of retirement anxiety are scanty, creating a need to address how the five-factor traits impact the pre-retirees level of retirement anxiety; hence, the need for the current study.

Aside from the need to fill the gaps mentioned above, there is a dearth of research on retirement anxiety in Nigeria.<sup>[2,8]</sup> Available studies indicated that about 70% of school principals in a southwestern state in Nigeria experience a high level of retirement anxiety.<sup>[2]</sup> Some other studies have affirmed the presence of retirement anxiety among civil servants,<sup>[6]</sup> academicians,<sup>[9]</sup> and private-sector staff.<sup>[5]</sup> However, information on the experience of the university's non-academic staff, who are at the centre of the university's administrative and technical support services, has not been documented.<sup>[22]</sup> Although anxiety about retirement may be a common experience for most people during their working life,<sup>[3,4]</sup> the ripple effect on the staff's work, mental health, and family life can be overwhelming.<sup>[2,3]</sup> The experience could alter the staff's attitude to work,<sup>[7,13]</sup> leading to drop-in job performance, productivity, motivation,<sup>[2,5]</sup> and work absenteeism.<sup>[23]</sup> Additionally, research has shown that retirement anxiety can potentially affect staff's physical and mental well-being<sup>[1,3]</sup> and is associated with work-family spillover, thereby creating a hostile atmosphere for spouses, children, and relatives.<sup>[22,24]</sup>

Considering the paucity of statistics on the incidence of retirement anxiety in literature, especially in the Nigerian context, no study has sufficiently considered the impact of the five-factor personality traits on the dimensions of retirement anxiety, particularly among this population. Thus, this study investigated the predictive influence of personality traits on retirement anxiety dimensions (personal obligation concerns [POC], financial planning concerns [FPC], and SDC) among university staff in Osun State, Nigeria.

## Materials and Methods

### Study design and setting

The study employed a descriptive cross-sectional survey. The study was conducted among the university's non-academic staff in five selected universities in Osun State, southwestern Nigeria.

### Sampling procedure

A multistage sampling technique was utilized to select participants for the study. The sampled universities were stratified based on ownership and faith affiliation. Sampling was done in two phases; five universities were randomly selected through balloting from the nine universities located in Osun State. As highlighted above, the selection of the sampled universities was based on faith affiliation and ownership of such institutions. Two public universities (Obafemi Awolowo University, Ile-Ife, and Osun State University, Osogbo), two privately owned/faith-based universities (Bowen University, Iwo, and Fountain University, Oshogbo), and one private non-faith-based University (Oduduwa University, Ipetumodu) were included in the study. The sample size of the total participants for the study was determined using Yamane<sup>[25]</sup> formula at a 0.95% confidence level and desired a 10% level of precision [Table 1].

The sample size calculated for the study was 366. However, a projected 10% attrition was added to accommodate incomplete and missing data. The sample size calculation was based on the table of sample size determination published by Glenn.<sup>[26]</sup> To account for attrition, a sample size of an aggregate of 403 (36.6 + 366) was determined for the study. A total of 520 copies

of questionnaires made up of (250, 150, 50, 40, and 30), respectively, were distributed in each of the five universities based on their estimated staff strength.

### Inclusion/exclusion criteria

All non-academic staff working in the selected universities on a full-time basis and not below 40 years old were eligible to participate in the study. Those who are unwilling to participate, not in good physical condition (self-reported), and are below 40 years were excluded. The age set for the study was in line with the age limit used in the past retirement studies.<sup>[5]</sup> Literature observed that people are generally working to make a living, build their life, and plan for their future during middle adulthood. To this end, it is possible that thoughts about retirement could elicit stress and anxious anticipations during this period.<sup>[5,27]</sup>

### Participants

A total of 463 university's non-academic staff belonging to various work-related cadres from five universities in Osun State participated in the study. Of the 463 participants, 233 (50.3%) were males, while 230 (49.7%) were females whose ages ranged from 40 to 64 years (M = 50.91, SD = 6.26). Distribution based on participants' educational qualifications showed that 146 (21.5%) completed a diploma, 217 (46.9%) completed their first degree, and 100 (21.6%) had postgraduate education and had their job tenure showed they had spent between 1 and 35 years working (M = 13.56, SD = 8.72). Statistics according to participants' job status showed that 225 (48.6%) were senior (administrative) staff, 103 (22.2%) were senior (technical) staff, and 135 (29.2%) were junior staff. Based on participants' workplaces, 243 (52.5%) were working at Obafemi Awolowo University, Ile-Ife; 134 (28.9%) at Osun State University, Osogbo; 42 (9.1%) at Bowen University, Iwo; 27 (5.8%) at Fountain University, Osogbo; while 17 (3.7%) at Oduduwa University, Ipetumodu.

### Data collection/procedure

Seven field assistants were recruited and trained on the objectives of the study as well as the use of the instrument for field data collection. A letter seeking permission to conduct the study was written to the registrar of each of the selected universities. In addition, another assistant was saddled with the responsibility of coordinating the distribution and collection of the research instrument. The study's objectives were relayed to the participants, while participation in the study was made voluntary. The data collection was conducted for a period of two weeks. Of the 520 copies of the questionnaire administered, 491 were returned. However, 463 (yielding a response rate of 89.04%) of the copies of the research instrument that were filled appropriately by participants that were 40 years old and above were selected and used for the analysis.

**Table 1: Population distribution of staff in the selected universities**

Universities	Population (non-academic staff)
Obafemi Awolowo University	2300
Osun State University	1270
Bowen University	350
Fountain University	210
Oduduwa University	150
Total	4280

Source: Field survey

### Ethical considerations

The study obtained ethical approval from the Research Ethics Board of Redeemer's University, Nigeria, with Ref. No.: REC/30/08/2021/RUN/10. An information page detailing the aims of the research and what participation would involve was provided to each participant. Participation in the study was voluntary, and informed consent was taken before the commencement of the study. After consent had been obtained, participants were assured of the confidentiality of their data and freedom to exit from the study.

### Instruments

The battery of instruments comprised of measures of retirement anxiety, personality traits, and socio-demographic characteristics of the participants was utilized.

### Section A: Socio-demographic characteristics

This section included questions aimed at eliciting information about the socio-demographic attributes of the participants, such as age, sex, educational level, job tenure, and job status.

### Section B: Mini International Personality Item Pool

Is a 20-item brief of the five-factor model of personality traits developed by Donnellan *et al.*<sup>[28]</sup>, to assess personality traits. It comprised five subscales, that is, extraversion (E), agreeableness (A), conscientiousness (C), neuroticism (N), and openness (O); each subscale is represented by four questions, rated on a 5-point Likert response scale (1 "strongly disagree" to 5 "strongly agree"). The reliabilities of the scale yielded a Cronbach's ( $\alpha$ ) of .81 (E), .73 (A), .70 (C), .74 (N), and .69 (O) in four studies.<sup>[28]</sup> The psychometric properties of the scale have been verified for use among Nigerian samples by Ogunsemi *et al.*<sup>[29]</sup>

### Section C: Redeemer's University Retirement Anxiety Scale (RURAS)

Redeemer's University Retirement Anxiety Scale (RURAS) is a 13-item multidimensional screening tool for retirement anxiety developed by Ogunsemi *et al.*<sup>[30]</sup> An initial study of the development of the RURAS involved item generation, after which content validity was performed on the first items pooled by experts in the field of psychiatry and psychology. An exploratory factor analysis was conducted for the item purification and yielded three dimensions, and the model was subjected to confirmatory factor analysis, which confirmed the three dimensions with satisfactory model fit indices. The RURAS three dimensions, namely POC (6,7,9,11), FPC (1,3,4,12,13), and SDC (2,5,8,10), yielded satisfactory internal consistencies of  $\alpha = 0.90$  for the full scale. Cronbach alpha's coefficient values of 0.79, 0.84, and

0.74 were reported for the three dimensions (POC, FPC, and SDC), respectively. The validation of the RURAS with other measures such as the Hospital Anxiety and Depression Scale, Rosenberg Self-Esteem Scale, and the Connor-Davidson Resilience Scale-10 yielded moderate and satisfactory convergent and divergent validity coefficient.

### Mode of data analysis

Analysis of data was done using software that is known as Statistical Package for Social Sciences version 26. Descriptive statistics (mean, standard deviations, frequency, and percentages) and inferential statistics (hierarchical linear regressions) were equally utilized [Tables 2–5]. Descriptive statistics were applied to present information on the socio-demographic attributes, age, sex, marital status, educational level, job tenure, and job status. Hierarchical regression was used in testing the three hypotheses assessing the predictive influence of personality traits on the three dimensions of retirement anxiety among the participants.

## Results

Hierarchical linear regression was employed in the study to examine the influence of personality traits on dimensions of retirement anxiety (POC, FPC, and SDC), while the sociodemographic characteristics included in the analysis were used as the control for the main hypothesis. The controlled variables in this study were age, gender, educational qualifications, job tenure (years in service), and job status. Studies have suggested that personal and situational characteristics of workers often play significant roles in determining retirement readiness and stress experienced by retiring staff. For instance, a significant number of literatures reviewed in this study have consistently shown that age, job status, job tenure, educational qualification, and sex are related to retirement anxiety.<sup>[2,5,6,8,31,32]</sup>

Table 2 shows the patterns of retirement anxiety among the participants. Regarding retirement anxiety, the mean (SD) of retirement anxiety, personal obligation, financial planning, and social detachment were 32.99 (11.64), 9.72 (3.95), 13.13 (5.32), and 10.01 (3.94), respectively. Sixty-nine (14.9%) of the sampled non-academic staff members reported no symptoms of retirement anxiety. However, the prevalence rate of retirement anxiety was 394 (85.1%), out of which 158 (34.1%) had a low level of retirement anxiety, 160 (34.6%) had a moderate level of retirement anxiety, and 76 (16.4%) had a high level of retirement anxiety. For the dimensions, eighty-two (17.7%) non-academic staff members reported no symptom of retirement anxiety, 141 (30.5%) had a low level of POC, 180 (38.9%) and 60 (13.0%) had moderate to high levels of POC respectively. On financial

**Table 2: Patterns of retirement anxiety and its three dimensions**

	n	Mean	SD	Prevalence							
				No symptoms		Low		Moderate		High	
				F	%	F	%	F	%	F	%
Retirement anxiety	463	32.99	11.64	69	14.9	158	34.1	160	34.6	76	16.4
Personal obligation	463	9.72	3.95	82	17.7	141	30.5	180	38.9	60	13.0
Financial planning	463	13.13	5.32	87	18.8	117	25.3	185	40.0	74	16.0
Social detachment	463	10.01	3.94	67	14.5	149	32.2	189	40.8	58	12.5

F, frequency

**Table 3: Demographic characteristics associated with dimensions of retirement anxiety (personal obligation, financial planning, and social detachment)**

Variable	Personal obligation				Financial planning				Social detachment			
	n	Mean	SD	t/F	n	Mean	SD	t/F	n	Mean	SD	t/F
Gender												
Male	233	9.92	3.97	1.15	233	13.44	5.30	1.24	233	10.10	3.97	0.553
Female	230	9.50	3.94		230	12.83	5.32		230	9.90	3.91	
Educational level												
Completed diploma	146	10.52	3.97		146	14.47	5.3		146	10.50	4.02	
Completed first degree	217	9.35	3.82	4.53*	217	13.04	5.17	10.55**	217	9.96	3.98	2.63
Postgraduate education	100	9.33	4.08		100	11.37	5.18		100	9.34	3.67	
Job status												
Junior	135	10.02	4.02		135	14.34	5.68		135	10.89	4.07	
Senior (admin. & technical)	328	9.58	3.92	1.09	328	12.63	5.09	3.16*	328	9.63	3.84	3.16*

\*\*P<0.01, \*P<0.05, n=463

**Table 4: Hierarchical multiple regression showing socio-demographic variables and personality traits predicting personal obligation concerns among non-academics in universities in Osun State, Nigeria**

Predictors	Step 1		Step 2	
	β	t	β	t
Socio-demographic variables				
Age	-.05	-.90	-.06	-1.18
Gender	-.06	-1.21	-.06	-1.32
Educational qualification	-.10	-2.01*	-.05	-1.18
Job tenure	-.07	-1.27	-.06	-1.23
Job status	0.07	1.33	0.02	0.387
Personality traits				
Extraversion			-.17	-3.70**
Agreeableness			-.06	-1.24
Conscientiousness			-.22	-4.42**
Neuroticism			0.21	4.75**
Openness to experience			0.02	0.32
R	0.16		0.40	
R <sup>2</sup>	0.02		0.16	
ΔR <sup>2</sup>	-		0.13	
Df	5, 457		10, 452	
F	2.27		8.33**	
ΔF	-		14.08**	

\*\*P<0.01, \*P<0.05, n=463. Gender was coded 1=male, 2=female; educational qualification was coded 1=completed diploma or below, 2=completed a first degree, 3=postgraduate education; job status was coded 1=junior staff, 2=senior staff (administrative and technical staff)

planning matters, eighty-seven (18.8%) of the sampled participants experienced no symptoms, 117 (25.3%) experienced a low level of symptoms, 185 (40%) sampled participants experienced a moderate level, and 74 (16%)

had a high level of FPC. On SDC, sixty-seven (14.5%) experienced no symptoms, 149 (32.2%) experienced low levels of symptoms, 189 (40.8%) experienced moderate levels, and 58 (12.5%) had high levels of SDC.

Table 3 shows the mean, SD, and significance level of the socio-demographic characteristics related to dimensions of retirement anxiety (personal obligation, financial planning, and social detachment) using a two-sample *t*-test or one-way ANOVA technique. The result revealed that there is no statistically significant difference between the mean score of the male and female participants across the various dimensions of retirement anxiety (personal obligation, financial planning, and social detachment) (*P* >.05). It was also observed that educational level was significantly associated with POC (*P* <.05) and FPC (*P* <.01) but not with SDC (*P* >.05). There is no significant difference between the mean of junior and senior staff in the score of POC (*P* >.05). Still, a statistically significant difference exists between the mean of the junior and senior staff in the score on FPC (*P* < 0.05) and SDC (*P* <.05). Marital Status was not considered in the study; hence it was not in the Table 3.

Table 4 shows the result of a hierarchical linear regression conducted in two steps. The first step of the regression analysis included socio-demographics (age, gender, educational qualification, job tenure, and job status) as control items, while the second step comprised the five dimensions of personality traits (extraversion, Agreeableness, conscientiousness, neuroticism,

**Table 5: Hierarchical multiple regression showing socio-demographic variables and personality traits predicting financial planning concerns among sampled non-academic staffers in some selected universities in Osun State, Nigeria**

Predictors	Step 1		Step 2	
	$\beta$	$t$	$\beta$	$t$
Socio-demographic variables				
Age	-.11	-2.29*	-.11	-2.41*
Gender	0.07	1.62	0.07	1.70
Educational qualification	-.19	-3.86**	-.14	-3.17**
Job tenure	-.04	-.67	-.02	-.39
Job status	-.12	-2.41*	-.06	-1.26
Personality traits				
Extraversion			-.16	-3.92**
Agreeableness			-.16	-3.63**
Conscientiousness			-.29	-6.41**
Neuroticism			0.20	4.88**
Openness to experience			0.05	0.29
$R$	0.27		0.54	
$R^2$	0.07		0.29	
$\Delta R^2$	-		0.22	
Df	5, 457		10, 452	
$F$	7.24**		18.39**	
$\Delta F$	-		27.44**	

\*\* $P < 0.01$ , \* $P < 0.05$ ,  $n = 463$ . Gender was coded 1=male, 2=female; educational qualification was coded 1=completed diploma, 2=completed a first degree, 3=postgraduate education; job status was coded 1=junior staff, 2=senior staff (administrative and technical staff)

and openness to experience). Socio-demographic characteristics contributed just 2% of changes but have no statistically significant implications on POC dimension of retirement anxiety [ $R^2 = 0.02$ ,  $F(5,457) = 2.27$ ,  $P > .05$ ], personality traits accounted for statistically significant 16% more variation [ $R^2 = 0.16$ ,  $F(10,452) = 8.33$ ,  $P < .01$ ], when added to the model in step 2. However, a significant 13% change in POC was attributed to only personality traits ( $\Delta R^2 = .13$ ,  $\Delta F = 14.08$ ,  $P < .01$ ).

Further analysis of the contribution of the individual predictors shows that for socio-demographic characteristics controlled in the analysis, only educational qualifications ( $\beta = -.10$ ,  $P < .05$ ) have a statistical association with the retirement anxiety (POC) dimension. The implication of this is implying that those that have completed an ordinary diploma or other educational qualifications below a diploma are likely to experience a higher level of POC. The findings of the study regarding the contribution of the various dimensions of personality traits revealed that extraversion ( $\beta = -.17$ ,  $P < .01$ ), conscientiousness ( $\beta = -.22$ ,  $P < .01$ ), and neuroticism ( $\beta = 0.21$ ,  $P < .01$ ) have a statistically significant association with retirement anxiety (personal obligations concerns) dimension. Based on this, the positive association observed in the neuroticism score indicated that the more the neuroticism trait is expressed, the more likely the participants are to experience personal obligation

concerning the dimension of retirement anxiety. For extraversion and conscientiousness, the negative association with a positive relationship indicated that the higher the trait increases, the more the tendency to experience a POC the dimension of retirement anxiety.

Table 5 shows the result of a hierarchical linear regression conducted in two steps. The first step of the regression analysis included socio-demographics (age, gender, educational qualification, job tenure, and job status) as control items, while the second step comprised the five dimensions of personality traits (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience). Socio-demographic characteristics contributed statistically significant 7% changes in FPC dimension of retirement anxiety [ $R^2 = 0.07$ ,  $F(5,457) = 7.24$ ,  $P < .01$ ], while personality traits accounted for a statistically significant 29% more changes [ $R^2 = 0.29$ ,  $F(10,452) = 18.39$ ,  $P < .01$ ], when added to the model in step 2. However, a significant 22% change in FPC was attributed only to personality traits ( $\Delta R^2 = .22$ ,  $\Delta F = 27.44$ ,  $P < .01$ ).

A further examination of the contribution of the individual predictors shows that three socio-demographic characteristics of age ( $\beta = -.11$ ,  $P < .05$ ), educational qualification ( $\beta = -.19$ ,  $P < .01$ ), and job status ( $\beta = -.12$ ,  $P < .05$ ) and four dimensions of personality traits, extraversion ( $\beta = -.16$ ,  $P < .01$ ); agreeableness ( $\beta = -.16$ ,  $P < .05$ ), conscientiousness ( $\beta = -.29$ ,  $P < .01$ ) and neuroticism ( $\beta = 0.20$ ,  $P < .01$ ) contributed to the significance of the model. Based on this, the negative relationship between the controlled variables of age, educational qualification, and job status implied that the younger people that had completed an ordinary national diploma or below and were also the junior staff were likely to experience a higher level of FPC dimension of retirement anxiety. Likewise, a negative association was observed in the score of extraversion, agreeableness, and conscientiousness. The indication of this is that the more they express these traits, the less likely they are to experience FPC. However, being high on the neuroticism trait indicated the tendency to experience higher levels of FPC.

Table 6 shows the result of a hierarchical linear regression conducted in two steps. The first step of the regression analysis included socio-demographics (age, gender, educational qualification, job tenure, and job status) as control items, while the second step comprised the five dimensions of personality traits (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience). Socio-demographic characteristics contributed statistically significant 5% changes in SDC dimension of retirement anxiety [ $R^2 = 0.05$ ,  $F(5,457) = 4.58$ ,  $P < .01$ ], adding personality traits in step 2 accounted for a statistically significant 22%

**Table 6: Hierarchical multiple regression showing socio-demographic variables and personality traits predicting social detachment concern (dimension of retirement anxiety) among non-academic in universities in Osun State Nigeria**

Predictors	Step 1		Step 2	
	$\beta$	$t$	$\beta$	$t$
Socio-demographic variables				
Age	-.09	-1.78	-.08	-1.76
Gender	-.03	-.74	-.04	-.88
Educational qualification	-.06	-1.28	-.02	-.48
Job tenure	0.11	2.05*	0.09	1.89
Job status	0.18	3.56**	0.12	2.56*
Personality traits				
Extraversion			-.13	-2.88**
Agreeableness			-.10	-2.18*
Conscientiousness			-.30	-6.34**
Neuroticism			0.19	4.37**
Openness to experience			0.04	0.91
$R$	0.22		0.47	
$R^2$	0.05		0.22	
$\Delta R^2$	-		0.17	
Df	5, 457		10, 452	
$F$	4.58**		12.84**	
$\Delta F$	-		20.14**	

\*\* $P < 0.01$ , \* $P < 0.05$ . \*\* $P < 0.01$ , \* $P < 0.05$ ,  $n = 463$ . Gender was coded 1=male, 2=female; educational qualification was coded 1=completed diploma, 2=completed a first degree, 3=postgraduate education; job status was coded 1=junior staff, 2=senior staff (administrative and technical staff)

more changes in the model [ $R^2 = 0.22$ ,  $F(10, 452) = 12.84$ ,  $P < .01$ ]. However, a statistically significant 17% change in SDC was attributed to only personality traits ( $\Delta R^2 = .17$ ,  $\Delta F = 20.14$ ,  $P < .01$ ).

A further examination of the contribution of the individual predictors shows that two controlled variables (socio-demographic characteristics), job tenure ( $\beta = 0.11$ ,  $P < .01$ ) and job status ( $\beta = 0.18$ ,  $P < .01$ ), and four dimensions of personality traits, extraversion ( $\beta = -.16$ ,  $P < .01$ ); agreeableness ( $\beta = -.16$ ,  $P < .05$ ), conscientiousness ( $\beta = -.29$ ,  $P < .01$ ) and neuroticism ( $\beta = .20$ ,  $P < .01$ ) contributed to the significance of the model. Based on this, the positive relationship between the controlled variables, job tenure and job status, implied that those who have spent more years in employment and are senior members of staff were likely to experience a higher level of SDC dimension of retirement anxiety. Likewise, the negative association observed in the score of extraversion, Agreeableness and conscientiousness indicated that the more expressed the traits are in individuals, the less likely they are to experience SDC. However, being high on the neuroticism trait indicated the tendency to experience higher levels of SDC.

## Discussions

This study investigated the impact of personality traits

on different aspects of retirement anxiety: financial planning, personal obligation, and social detachment, while controlling for socio-demographic characteristics among non-academic staff in five universities in Osun State, Nigeria. The study found a significant relationship between Big five personality traits and POC (dimension of retirement anxiety). The reported negative association between extraversion and conscientiousness with personal obligation concerns denotes that introverted and low conscientious individuals expressed a higher level of anxiety in personal obligation during retirement transition. This result was consistent with<sup>[16]</sup> relating high conscientiousness with ambitious motivation for retirement. On the other hand, the positive association between neuroticism and POC suggests that individuals with high neuroticism (emotional instability) would experience a greater state of retirement anxiety in the aspect of personal obligation, as they may feel uncomfortable with retirement because of a perceived inability to meet up with future responsibilities. Although individuals with many financial responsibilities for themselves and other dependents may not consider retirement,<sup>[13]</sup> personality traits were found to play a role in how individuals make decisions for the future and their perceived capability to fulfil future obligations in retirement.<sup>[3,14,19]</sup> For example, some studies have linked personality and earnings/income<sup>[20]</sup> and savings behaviors<sup>[19]</sup> regarding which personality will save for the future. Ugwu *et al.*<sup>[8]</sup> suggested that being proactive, often found in highly conscientious individuals, promotes the ability to see the bigger picture of the situation around them rather than their present conditions. Since the anxious preoccupation about personal obligations during retirement could be associated with low earnings and savings behaviors among pre-retirees, it can be deduced from the assumption that neuroticism display incompatibility when faced with challenging conditions. So, they are incapable of managing and controlling situations, which could trigger a sense of helplessness in controlling their income or planning to save or invest for future spending that would make them fulfill their roles after leaving active service.<sup>[32,33]</sup> From the result, the inability of some of the participants to prepare for retirement based on a perceived lack of capacity to meet future family needs and other obligations has been linked with a possible negative attitude to risk-taking behavior like investing and savings, this activities could be a fall back for the shortage of income due to retirement.<sup>[8,19,20]</sup>

Further investigation showed that personality traits predicted FPC. The reported negative association implied that the lesser the personality traits (extraversion, agreeableness, and conscientiousness) expressed in individuals, the deeper the concern for the financial planning aspect of retirement anxiety. Neuroticism's positive association with FPC has also been affirmed

in past studies.<sup>[16]</sup> In support of these findings, some studies have indicated a potential relationship between personality and retirement financial planning variables such as income, savings, and investment or spending, identified that conscientiousness saves more for retirement due to their natural attribute of being deliberate, well-organized and because they consider that being involved in one's retirement plan will affect their future outcomes.<sup>[9,16,18,20]</sup> In support of this view,<sup>[34]</sup> found that individuals who are high in conscientiousness traits were associated with better financial preparedness for retirement, whereas<sup>[34]</sup> could not find any association between high extraversion and motivated savings, while the inverse association was observed between agreeableness and saving behavior. Personality attributes such as emotional instability, dependence, and introversion were robust predictors of poor saving behaviors. At the same time, conscientiousness, agreeableness, and extraversion explained the variance in certain forms of finance-related planning for retirement.<sup>[35]</sup> Individuals with specific personality attributes might be predisposed to make an effort to fix themselves financially for future uncertainties, either by engaging in other income-generating activities, changing jobs to earn more, or saving for retirement.<sup>[20,34,35]</sup> Conscientiousness, extraversion, and agreeableness traits facilitate the capacity to make cognitive choices that support their traits and which sustain higher levels of financial fortunes;<sup>[20,34]</sup> relatedly, the preference for enterprising activities and tendency towards achievement and responsibilities collectively propel the individual to implementing economic strategies that require calculated risk, thereby reducing the anxiety about financial planning before eventual retirement compared to others who are introverted, emotionally unstable or low conscientiousness.<sup>[36-38]</sup>

For the SDC aspect of retirement anxiety, it was concluded that those who are introverted, low in agreeableness, and conscientiousness exhibit higher SDC regarding retirement. Surprisingly, neuroticism does not have a significant relationship with SDC. SDC are related to worries about social isolation, boredom, lack of productivity, and losing social identity/significance.<sup>[8]</sup> The alleged relationship between personality and concerns for social detachment, loss of identity, and loneliness in retirement could be because personality is connected with individuals' emotions, feelings, thoughts patterns, and behaviors.<sup>[18,19,21]</sup> These behaviors, thoughts, and feelings will possibly have an impact on how individuals appraise themselves and others, and they interpret or adjust to social interaction with others.<sup>[21]</sup> Findings from other studies have shown that extraversion, agreeableness, and conscientiousness are negatively associated with social connections during retirement transition or post-retirement due to the

prevailing traits of being sociable, energetic, organized, warm, friendly, and calm.<sup>[32,33,35]</sup> This could be interpreted that being extraverted, agreeable, conscientious, and open would nurture social relationships that will go beyond pre-retirement. It has been revealed that people often maintain social relationships till old age, and many of these interactions last long due to the prevailing attributes of warmth and sociability.<sup>[21,32]</sup> However, this relationship might be moderated by age, for some traits suggest that young extroverted individuals often keep friends and interact more than older extroverted individuals.<sup>[21]</sup> In contrast, high openness in adults was positively related to keeping and spending time with friends, possibly reducing loneliness and SDC.

### Limitations and suggestions for future research

This study, like many other research works conducted by humans, is bound to have its limitations. The fact that the study was conducted on non-academic staff in five selected universities in Osun state called for caution in generalizing the findings on the totality of non-academic staff in all the universities in the southwestern part of Nigeria. The main suggestion for further studies is hinged on the fact that since the study sample was drawn from five selected universities in Osun state, a more extensive study should be carried out in all six geopolitical zones in the country in the nearest future. Like other cross-sectional studies, the findings of this study can only give a snap-shot opinion of the variables investigated. There are also other variables such as marital status, socio-economic status, living with a dependent, family size, and social support that could influence retirement anxiety but were not considered in this study. To this end, there is a need to investigate the mediating/moderating of these variables in future research.

### Conclusion/Recommendations

The study concluded that retirement anxiety is mental health concern population understudy and those socio-demographic characteristics (age, educational level, job tenure, and job status) and personality traits (extraversion, agreeableness, conscientiousness, and neuroticism) contributed to the experience of retirement anxiety (personal obligation, financial planning, and social detachment) among non-academic staff in University's in Osun State, Nigeria. The finding of this study showed that anxiety about retirement could take a different shape and go beyond financial planning challenges but involve concerns including personal obligation and social detachment, and the precursors have been identified to be diverse. Government/private-employing organizations could address the impact of the socio-demographic characteristics by facilitating early intervention/counseling for pre-retirees to build resources for retirement's financial, social, and



emotional aspects. Early contact with a well-thought-out orientation program for workers of different ages will go a long way in preparing them early for retirement; the organization can adopt various resource-oriented group intervention programs for their employees; as soon as they assume duty.<sup>[39,40]</sup> The orientation they received would have better positioned them to identify areas of preparation for their retirement. For the government, the findings of this study point to the need for employment and retirement policies overhaul to address the prevailing realities. The government should formulate policies and laws that encourage employing organizations to attend to their workers' retirement concerns and promote enabling individuals to access resources for retirement planning.

The result of the study showed that FPC and POC have the highest prevalence. The dominant trait could moderate the internal tension associated with retirement anxiety in individuals. Clinicians understanding their clients' cognitive processes and retirement goals might help personalize the therapeutic approach to manage the negative emotions related to retirement. Intervention can focus on addressing irrational thinking using the cognitive behavioral therapy approach (cognitive restructuring, problem-solving, social skill training, and relaxation training), intermittent sensitization using educational programs can be organized on financial management, need for retirement planning, and health promotion can be initiated by the health advisors/psychologists/human resources in different organization for preventive measure.<sup>[41]</sup>

### Ethics approval

This study design and protocols were approved by the Research Ethics Committee of Redeemer's University, Ede, Osun State, Nigeria. The approval number is REC/30/08/2021/RUN/10. The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

### Authors contribution

This work was carried out in collaboration among all authors. JOO and EAO designed the study, wrote the first draft, and were the major contributors to writing the manuscript. AOO and JOO managed the statistical analysis of the study; IOA, OOO, and JLO managed the literature search and full editing of the manuscript. All authors read and approved the final manuscript.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

### References

1. Wang M, Shultz KS. Employee retirement: A review and recommendations for future investigation. *J Manag* 2010;36:172-206.
2. Akinnawo OE, Aniameka OO, Onisile D. Retirement anxiety: A psychological trauma for selected head teachers in Ogun State. Paper presented at the Nigerian Association of Clinical Psychologists (NACP) 2017 Annual Continuing Education Scientific Conference, Nigeria. Available from: <https://www.researchgate.net/publication/336313649266-290>.
3. Segel-Karpas D, Bergman YS. Retirement anxiety and depressive symptoms among middle-aged adults: An indirect effect through death anxiety. *Death Stud* 2020;46:245-9.
4. Noone JH, Stephens CV, Alpass FM. The Process of retirement planning scale (PRePS): Development and validation. *Psychol Assess* 2010;22:520-31.
5. Arogundade OT. A psychological appraisal of Pre-retirement anxiety among some selected workers in Lagos metropolis. *Stud Soc Sci* 2016;7:1-5.
6. Nsirimobi OS, Ajuwede IM. Effectiveness of group counselling and bibliography on workers' pre-retirement adjustment in Port-Harcourt Local Government Area of Rivers State. *Counsellor* 2005;21:136-45.
7. van Solinge H, Henkens K. Adjustment to and satisfaction with retirement: Two of a kind? *Psychol Aging* 2008;23:422-34.
8. Ugwu LE, Enwereuzor IK, Nwankwo BE, Ugwueze S, Ogba FN, Nnadozie EE, et al. 2021. Proactive personality and social support with pre-retirement anxiety: Mediating role of subjective career success. *Front Psychol* 2021;2:569065.
9. Hayslip B, Beyerlein M, Nichols JA. Assessing anxiety about retirement: The case of academicians. *Int J Aging Hum Dev* 1997;44:15-6.
10. Ugwu LE, Enwereuzor IK, Mefoh PC, Ugwu LI, Onyishi IE. Pre-retirement anxiety: Development and validation of a measurement instrument in a Nigerian sample. *J Psychol Afr* 2019;29:43-8.
11. Fletcher WL, Hansson RO. Assessing the social components of retirement anxiety. *Psychol Aging* 1991;6:76-5.
12. Szinovacz ME, DeViney S, Adam D. Influences of family obligations and relationships on retirement: Variations by gender, race, and marital status. *J Gerontol Series* 2001;56:20-7.
13. Kiso H, Rudderow AL, Wong JD. Financial and parental stress as predictors of retirement worry. *J. Financ. Ther* 2019;10:3.
14. Hershey DA, Mowen JC. Psychological determinants of financial preparedness for retirement. *Geront* 2000;40:687-97.
15. McCrae RR, Costa PT. A five-factor theory of personality. In: John OP, Robins RW, Pervin LA, editors. *Handbook of Personality: Theory and Research*. New York: Guilford Press; 1999.
16. Robinson OC, Demetre JD, Corney RH. Personality and retirement: Exploring the links between the Big Five personality traits, reasons for retirement and the experience of being retired. *Pers Individ Differ* 2010;48:792-7.
17. Terracciano A, Löckenhoff CE, Crum RM, Bienvenu OJ, Costa PT. Five-factor model personality profiles of drug users. *BMC Psychiatry* 2008;8:22.
18. Löckenhoff CE, Terracciano A, Costa PT. Five-factor model personality traits and the retirement transition: Longitudinal and cross-sectional associations. *Psychol Aging* 2009;24:722-8.
19. Lodi-Smith J., Roberts BW. Social Investment and Personality: A Meta-analysis of the relationship of personality traits to

- investment in work, family, religion, and volunteerism. *Pers Soc Psychol Rev* 2007;11:68-86.
20. Nabeshima G, Seay MC. Wealth and personality: Can personality traits make you rich. *J Financ Plan* 2015;28:50-7.
  21. Schwaba T, Bleidorn W. Personality trait development across the transition to retirement. *J Pers Soc Psych* 2019;116:651-65.
  22. Amstad FT, Semmer NK. Spill-over and crossover of work- and family-related negative emotions in couples. *Psychol* 2011;44:3-55.
  23. van den Berg, TIJ, Elders LAM, Burdorf A. Influence of health and work on early retirement. *J Occ Env Med* 2010;52:576-83.
  24. Repetti R, Wang S, Saxbe D. Bringing it all back home: How outside stressors shape families' everyday lives. *Curr Direct Psychol Sci* 2009;18:106-11.
  25. Yamane T. *Statistics: An Introductory Analysis*, 2<sup>nd</sup> ed. New York, Harper and Row; 1967.
  26. Glenn ID. *Determining Sample Size*. Fact Sheet PEOD-6, Florida Cooperative Extension Services, Institute of Food and Agricultural Sciences, University of Florida, Gainesville; 1992.
  27. Habibi E, Poorabadian S, Shakerian M. Job strain (demands and control model) as a predictor of cardiovascular risk factors among petrochemical personnel. *J Edu Health Promo* 2015;4:16.
  28. Donnellan MB, Oswald FL, Baird BM, Lucas RE. The Mini-IPIP scales: Tiny-yet-effective measures of the big five factors of personality. *Psychol Assess* 2006;18:192-203.
  29. Ogunsemi JO, Akinnawo EO, Akinbobola OI, Ariyo JO, Babatunde SI, Akpunne BC. Psychometric properties and validation of mini-international personality item pool (Mini-IPIP) among Nigerian Population. *Adv Res* 2022;23:49-57.
  30. Ogunsemi, JO, Akinnawo EO, Akinbobola OI, Aloba OO, Akpunne BC, Olusa AO, *et al.* Development and psychometric examination of a new brief retirement associated anxiety instrument. *Redeemer's University Retirement Anxiety Scale (RURAS)*; 2022.
  31. Abuo CB, Effiom BE. Demographic variable and retirement anxiety among public secondary school teachers in Calabar education zone of Cross River State Nigeria. *Prestige J Edu* 2020;3:221-9.
  32. Watson DB, Clark, LA. Extraversion and its positive emotional core. In: Hogan R, Johnson JA, Briggs SR. editors. *Handbook Pers Psychol*. Academic Press; 1997;767-93. Available from: <https://doi.org/10.1016/B978-012134645-4/50030-5>.
  33. Ebstrup JF, Eplov LF, Pisinger C, Jørgensen T. Association between the five factor personality traits and perceived stress: Is the effect mediated by general self-efficacy? *Anxiety Stress Coping* 2011;24:407-19.
  34. Nyhus EK, Webley P. The role of personality in household saving and borrowing behaviour. *Eur J Pers* 2001;15:S85-103.
  35. Pundt LM, Wöhrmann AM, Deller J, Shultz, KS. Differential predictors of post-retirement life and work satisfaction. *J Manag Psychol* 2015;30:216-31.
  36. Robbins SB, Payne EC, Chartrand JM. Goal instability and later life adjustment. *Psychol Aging* 1990;5:447-50.
  37. Gunthert KC, Cohen LH, Armeli S. The role of neuroticism in daily stress and coping. *J Pers Soc Psychol* 1999;77:1087-100.
  38. Topa G., Valero E. Preparing for retirement: How self-efficacy and resource threats contribute to retirees' satisfaction, depression, and losses. *Eur J Work Organ Psychol* 2017;26:811-27.
  39. Seiferling N, Michel A. Building resources for retirement transition: Effects of a resource-oriented group intervention on retirement cognitions and emotions. *Work. Aging Retire* 2017;3:325-42.
  40. Dehghan R, Mafimoradi S, Hadi M. Need Assessment of staffs' welfare services at Tehran University of Medical Sciences: A cross-sectional study. *J Edu Health Promot* 2015;4:7.
  41. Hill-Mey PE, Kumpfer KL, Merrill RM, Reel J, Hyatt-Neville B, Richardson GE. Worksite health promotion programs in college settings. *J Educ Health Promot* 2015;4:12.