



PSYCHOLOGICAL WELLBEING OF UNIVERSITY ACADEMICS: THE ROLE OF PERSONALITY TRAITS AND PERCEIVED OCCUPATIONAL STRESS.

¹Stephen I. Babatunde Ph.D, ²Oluwafisayo A. Adebimpe Ph.D & ³Sadiat Iyabo Aliu Ph.D

¹Department of Psychology, Olabisi Onabanjo University, Ago-Iwoye, Ogun State.

²Ladoke Akintola University of Technology (LAUTECH), Ogbomosho.

³Department of Psychology University of Ilorin, Ilorin.

(Corresponding Email: babatunde.stephen@oouagoiwoye.edu.ng; +234 803 857 9822).

ABSTRACT

This study examined how personality traits (introversion and extraversion) and perceived occupational stress predict psychological well-being among academic staff in a Nigerian university. A cross-sectional survey design was adopted with a total sample of 200 academic staff selected via stratified random sampling across faculties. Standardized instruments were used to measure psychological well-being, personality traits, and perceived occupational stress and hypotheses tested at 0.05 level of significance. Results showed that 43.5% of respondents had moderate psychological well-being, 29% had low well-being, and 27.5% had very high well-being. The statistical model used (multinomial logistic regression) was a good fit for predicting outcomes ($\chi^2(12) = 94.22, p < .001$; Nagelkerke $R^2 = 0.57$). Introverted staff were over three times more likely to report low well-being (OR = 3.21, 95% CI [1.89, 5.44]), while extraverted staff were more than twice as likely to report very high well-being (OR = 2.67, 95% CI [1.42, 5.03]). Staff who experienced moderate levels of stress were four times more likely to report average well-being (OR = 4.03, 95% CI [2.14, 7.59]). A chi-square test also confirmed that stress levels varied significantly across well-being categories ($\chi^2(4) = 21.33, p = .002$). These findings suggest that both personality and stress levels are important factors in determining how well academic staff cope emotionally. Supporting staff mental health requires attention to both individual personality differences and workplace stress conditions.

Keywords: psychological well-being, personality traits, occupational stress, academic staff, multinomial logistic regression, Nigeria.

Editor-in-Chief

Prof. Henry Odhianosen Imhonde

Assistant Editor-in-Chief

Dr. Oyeleke Johnson

Associate Editors: Ajibola Abdulrahmon Ishola, Dr. Leonard Orji, Dr. Daniel Kumuyi, Dr. Chinyere Okonkwo, Dr. Juliana Pwajok, Dr.

Samson Olowo Kolawole, Dr. Victor Onyecho

Consulting Editors:

Prof. Peter. O. Ebigbo, Prof. Ebenezer. O. Akinowo, Prof. Helen O. Osinowo, Prof. Onaolopo K. Taiwo, Prof. Erhabor Idemudia, Prof. Harry Obi Nwosu, Prof. Obiageli Omeje, Prof. Benjamin O. Olley, Prof. Gboyega Emmanuel Abikoye, Prof. Bolade O. Mokuolu

Babatunde, S. I., Adebimpe, O. A., & Aliu, S. I. (2025).

Psychological wellbeing of university academics: The role of personality traits and perceived occupational stress.

INTRODUCTION

Research focusing on occupational health psychology continues to face rising health concerns in academic professionals since their stress intensifies while burnout increases and mental health complications grow based on Kinman & Wray (2020) and Ervasti et al. (2021). Academic professionals show psychological wellness as a comprehensive state that unites strong feelings with individual growth together with self-understanding and purposes of life and autonomy practises (Ryff & Singer, 2008; Diener et al., 2017). Staff members at universities encounter heightened challenges to maintain their psychological wellness because their work demands division between academic administration and both research and teaching duties. Professionally related stress factors that continue unabated produce emotional issues then lead to diminished job contentment alongside permanent mental health deterioration (Guthrie et al., 2010; Petrie et al., 2022).

Academic personnel interpret work-related stress based on their personality characteristics and this influences their psychological state according to Anglim et al. (2020). The Five-Factor Model (FFM) operates as a standard psychological

framework identifying human mental health states and behaviour changes through responsiveness and conscientiousness and extraversion and agreeableness and neuroticism (Costa & McCrae, 2008). People base their stress evaluations through cognitive methods while their personality characteristics determine both their response techniques and stress evaluation approaches (John et al., 2021). Persons with neurotic personalities view threats in their environment thus triggering depression or anxiety but extraversion and conscientiousness help people work through adaptive coping techniques resulting in better psychological stability (Widiger & Oltmanns, 2017; Kandler et al., 2020).

Universities face high levels of both uncertainty and workload that causes negative performance and emotional distress because workers perceive their occupational stress exceeds their ability to cope (Lazarus & Folkman, 1984; Nixon et al., 2011). The perception of work stress stems from job demands but becomes evident through how people interpret them emotionally while receiving environmental support (Chang et al., 2020). For university

Babatunde, S. I., Adebimpe, O. A., & Aliu, S. I. (2025).

Psychological wellbeing of university academics: The role of personality traits and perceived occupational stress.

lecturers and researchers who experience occupational stress the main contributing factors involve working beyond capacity and publication pressure alongside administrative obstacles alongside insufficient institutional backing (Kinman & Teoh, 2018; O'Connor et al., 2022). The Nigerian educational system faces increased mental wear from inadequate infrastructure together with irregular funding and students outnumbering staff which intensifies psychological stress (Akinbobola, 2021; Ogunsola et al., 2022).

Research exploring the connexion between academic stressors and personal characteristics is minimal while investigating their effects on mental health of Nigerian university employees. Understanding stress levels and coping responses in Nigerian universities requires additional investigation because local institutions and economic factors alongside socio-political forces appear to influence stress reactions in ways that differ from Western universities (Afolabi & Balogun 2017). Nigerian university staff face three major institutional stressors that lead to both elevated stress and deteriorating well-being due to job insecurity and delayed payments and underfunded departments

according to Nwankwo et al. (2018) and Eze and Eze (2023).

Research outcomes regarding individual wellbeing are explained through the combination of diathesis-stress model with Lazarus and Folkman's (1984) transactional model of stress and coping. Analytical models demonstrate that environments with psychological stressors affect people based on their individual resistance to stress. The psychological interpretation of workload threats differs between staff members based on emotional stability because emotionally steady personnel perceive stressful events as less dangerous than workers who exhibit neurotic tendencies (Kompier & Kristensen, 2020).

Modern research demonstrates that theoretical forecasts show reliable accuracy in these fields. Healthcare worker reports analysed by Yang et al. (2021) demonstrated that conscientiousness and emotional stability acted as vital factors which shaped the impact of job stress on their psychological distress. Research conducted by Teoh et al. (2022) established that extraversion acted as a protective factor for academics dealing with workload stressors in the UK. Research established that studying how personality traits affect stress levels is vital for detecting complete

Babatunde, S. I., Adebimpe, O. A., & Aliu, S. I. (2025).

Psychological wellbeing of university academics: The role of personality traits and perceived occupational stress.

mental outcomes in stressful work settings. Academic well-being improvement programmes must scientist these interventions to distinct psychological profiles according to Bianchi and Schonfeld (2022) and Miller et al. (2021). Staff members who align as extraverted types will obtain more benefits from peer-based programmes than individuals high in conscientiousness who would need structured goal-focused strategies. Any institutional interventions which overlook these differences will become less effective and potentially harmful. The interaction between personalities and stress requires comprehensive examination to create effective mental health interventions for academic institutions. Research conducted in Nigeria about occupational stress or personality traits has been studied independently (Afolabi et al., 2019; Okeke et al., 2022) without assessing how both factors predict academic professionals' psychological well-being. Such research gap will be filled through this study's investigation of personality traits and perceived occupational stress effects which influence psychological well-being among academic staff working at Olabisi Onabanjo University in Nigeria. Specifically, the research seeks to:

1. Determine the current levels of psychological well-being among university academic staff;
2. Assess the prevalence and degree of perceived occupational stress;
3. Identify dominant personality traits present in the academic staff population;
4. Test whether personality traits significantly predict psychological well-being;
5. Evaluate the extent to which perceived occupational stress influences psychological well-being;
6. Examine the combined effect of personality traits and occupational stress on psychological well-being.

Research integration of stress-based models with trait-based models expands psychological knowledge about mental health outcomes which result from work stress interactions with individual characteristics. The research enhances practical uses for occupational health policies combined with staff welfare programmes and personalised mental health interventions in higher education

Babatunde, S. I., Adebimpe, O. A., & Aliu, S. I. (2025).

Psychological wellbeing of university academics: The role of personality traits and perceived occupational stress.

institutions throughout Sub-Saharan Africa..

Literature Review

Personality Traits and Psychological Well-Being

Personality traits determine how people experience occupational stress and process work-related events which ultimately shapes their mental health condition. The Five-Factor Model (FFM) which includes openness alongside conscientiousness extraversion agreeableness and neuroticism represents a complete assessment tool for studying personal behavioural distinctions (Costa & McCrae, 2003). The combination of sociability and assertiveness that defines extraversion constantly leads individuals toward better psychological well-being. People with extraverted personalities usually experience positive emotions while building satisfying relationships that shield them from stress and psychological issues (Anglim et al., 2020; Swickert et al., 2002). Under Nigerian academic conditions extraverted students who participate in university programmes demonstrate superior psychological adjustment together with higher academic engagement levels (Osamika et al., 2021). High levels of neuroticism produce emotional instability

combined with negative emotional predispositions which decreases psychological well-being evaluation. Neurotic individuals face heightened risks of stress and anxiety and depression which leads to negative impacts on their mental health according to Costa and McCrae (2003). Nigerian academic staff who exhibit high neuroticism levels demonstrate increased stress sensitivity as well as worse occupational health according to Afolabi et al. (2019). Multiple characteristics within personality affect the state of someone's psychological wellness. Openness to experience represents a personality trait which enables personal development and academic adjustment because it enables one to imagine new ideas and accept change (Ryff & Singer, 2008). The personality dimension of Agreeableness helps people build supportive relationships which are essential for staying well during times of stress according to Swickert et al. (2002). People with conscientious traits demonstrate organisation and diligence which raise their psychological well-being by their ability to cope effectively along with work-related control (Anglim et al., 2020).

Occupational Stress in Higher Education

Babatunde, S. I., Adebimpe, O. A., & Aliu, S. I. (2025).

Psychological wellbeing of university academics: The role of personality traits and perceived occupational stress.

Job demands that exceed coping abilities of employees trigger occupational stress that results in psychological strain according to Lazarus & Folkman (1984). Staff members in academic departments carry out diverse responsibilities consisting of instruction, scholarly duties and academic mentoring and managerial responsibilities which creates extra emotional work alongside role conflicts. The combination of insufficient financial support and damaged facilities and high enrollment figures causes significant work-related stress for academic staff at Nigerian institutions (Akinmayowa & Kadiri, 2018; Eze & Eze, 2023). Nigerian university employees experience persistent occupational stress which is worsened by institutional salary delays and promotion barriers and constrained research investment and insecure working conditions (Ogunsola et al., 2022; Nwankwo et al., 2018). The high levels of pressure impact negatively on job satisfaction by making employees prone to burnout and psychological chemical disorders (Kinman & Wray, 2020). Occupational stress creates several harmful effects on institutional performance since physically distressed members of staff show reduced commitment to productivity

and research activities (Teoh et al., 2022; Kinman & Teoh, 2018).

Personality-Stress Interactions

Occupational stress interacts with personality traits to determine the extent of psychological well-being in people. According to the diathesis-stress model people carry specific personality traits which when combined with outside stress factors lead to particular psychological results (Monroe and Simons, 1991). People who display high neuroticism tend to view occupational difficulties as serious threats which intensify stress levels and decreases their overall well-being. Stress-related challenges become less threatening for individuals who possess conscientiousness combined with extraversion since these traits enable effective coping and improve access to social support networks (Cohen & Wills, 1985). According to Afolabi et al. (2019), the combination of conscientiousness and emotional stability acts as a moderator between academic staff work stress and their burnout levels in Nigerian institutions. Research by Yang et al. (2021) explains that medical personnel in China showed how conscientiousness and low neuroticism protected them from pandemic stress. The research by Teoh et al. (2022) revealed that university lecturers

Babatunde, S. I., Adebimpe, O. A., & Aliu, S. I. (2025).

Psychological wellbeing of university academics: The role of personality traits and perceived occupational stress.

in the UK showed better well-being when they had high levels of extraversion combined with resilience regardless of heavy workloads and organisational changes.

The Nigerian Context

The scientific community has focused little attention on understanding how Nigerian academic professionals experience psychological well-being through the interaction of perceived occupational stress with personality traits. The current research shortage is crucial since Nigeria faces distinctive social and political together with institutional barriers. The authors Afolabi and Balogun (2017) state that personality-based models serve as fundamental tools to study how Nigerian lecturers respond to their continuously stressful workplace conditions. Staff outcomes at Nigerian academic institutions linked to personality traits because the unstable salary system and insufficient teaching resources and crowded classrooms as well as rigid bureaucracy create a context where these attributes can influence performance (Okeke et al., 2022; Eze & Eze, 2023). The personality type of introversion creates challenges for academics who need social connexions yet extraversion facilitates better utilisation of peer relationships to

navigate through academic pressures and bureaucratic obstacles. The current research evaluates both personality traits and staff-perceived work stress independently as well as interactively to understand their impact on Nigerian academic staff psychological health.

Study Hypotheses

Hypothesis 1 (H₁): There is a significant association between personality trait of introversion and psychological well-being levels among academic staff.

Hypothesis 2 (H₂): There is a significant association between personality trait of extraversion and psychological well-being levels among academic staff.

Hypothesis 3 (H₃): There is a significant relationship between perceived occupational stress and psychological well-being levels among academic staff.

Hypothesis 4 (H₄): There is a significant interaction effect between personality traits (introversion and extraversion) and perceived occupational stress on psychological well-being.

Hypothesis 5 (H₅): Personality traits and perceived occupational stress jointly and significantly predict psychological well-being levels among academic staff.

Babatunde, S. I., Adebimpe, O. A., & Aliu, S. I. (2025).

Psychological wellbeing of university academics: The role of personality traits and perceived occupational stress.

METHOD

Research Design

A cross-sectional quantitative survey served as the research design for investigating the separate and joint effects of personality traits together with perceived occupational stress on academic staff psychological well-being. The survey adopted a cross-sectional research method to collect psychological data and strain information at a specific survey moment. The research design enables scientists to investigate predictive aspects while making correlations between psychological traits and workplace stress agents in occupational health environments (Creswell & Creswell, 2018).

Participants and Sampling Strategy

Two hundred academic staff participated in the research conducted at the Ogun State-based multi-campus Olabisi Onabanjo University. The sampling design included stratification that represented each faculty in addition to departmental sections. The research included all ten faculties of the university which comprised Arts, Education, Law, Social Sciences, Administration and Management Sciences, Science, Engineering, Agriculture,

Environmental Studies, and Basic Medical Sciences. The research included a minimum of two selected departments from each faculty to achieve diversity based on academic subject matter. Such organisational architecture achieved steady representation between academic disciplines which included both scientific and humanistic fields. The research adopted purposive sampling to recruit teaching and research-operating staff who been part of the institution for at least one academic year. Participants with a minimum exposure period of university occupational stressors were included according to this requirement. The questionnaires were made accessible by contacting department heads and faculty deans to distribute them to their respective units. The study's total participants consisted of 112 males equivalent to 56 percent of the participants along with 88 females making up 44 percent of participants within the included age range of 28 to 64 years ($M = 41.3$, $SD = 8.6$). Among the faculty members 18% held the rank of Assistant Lecturer and 25% were classified as Lecturer II and another 30% maintained Lecturer I rank with Senior Lecturer or above receiving the highest

Babatunde, S. I., Adebimpe, O. A., & Aliu, S. I. (2025).

Psychological wellbeing of university academics: The role of personality traits and perceived occupational stress.

percentage at 27%. The respondents had backgrounds of 1-3 years in 20% of cases while 45% had spent 4-10 years in their profession and 35% reached beyond 10 years in academia.

Sample Size Estimation

The researcher used G*Power version 3.1 (Faul et al., 2009) to determine the necessary sample size for linear multiple regression analysis of three predictors (introversion, extraversion, perceived stress). The calculated minimum sample size reached 77 participants when using parameters of an $f^2 = .15$ effect size and $\alpha = .05$ with $1 - \beta = .80$. The research sample included 200 institution-wide participants because it was predicted that some respondents would not complete the study and we wanted to preserve both the study's reliability and its general application.

Instruments

The survey instrument included four sections: (1) socio-demographic questionnaire, (2) psychological well-being measure Satisfaction With Life Scale (SWLS), (3) 21-item Personality Trait Inventory and (4) Perceived Stress Scale (PSS-10). The instruments were evaluated by English-speaking academic students for

clarity and relevance before the official survey commenced.

Socio-Demographic Profile

The instrument started with a section to gather participant background details regarding their personal and professional demographics. The researchers included this section to understand what variables alter psychological well-being together with factors that might impact stress within academic environments. The initial section gathered age information (years) and gender (male/female) data together with marital status information (single, married, divorced, widowed). The section also obtained academic rank details (Assistant Lecturer, Lecturer II, Lecturer I, Senior Lecturer, Associate Professor, Professor). Individual participants documented their most advanced academic degree along with their years of work experience in teaching and research and their assignment within a department as well as details about their position in the faculty and whether they maintained full-time or part-time or contract employment. These variables provided necessary background data that both clarified psychological well-being examination results and enabled researchers to make between-subgroup comparisons in later parts of the study.

Babatunde, S. I., Adebimpe, O. A., & Aliu, S. I. (2025).

Psychological wellbeing of university academics: The role of personality traits and perceived occupational stress.

Psychological Well-being

Psychological well-being was assessed using the Satisfaction With Life Scale (SWLS) developed by Diener et al. (1985). The SWLS contains five items, such as: “In most ways my life is close to my ideal” and “So far I have gotten the important things I want in life.” Responses were rated on a 7-point Likert scale from 1 (“Strongly disagree”) to 7 (“Strongly agree”). Total scores range from 5 to 35, with score brackets interpreted as: 31–35 (“extremely satisfied”), 26–30 (“satisfied”), 21–25 (“neutral”), and below 20 (“dissatisfied”). The Cronbach’s alpha for the scale in this study was .87.

Personality Traits

Personality traits were measured using a 21-item inventory adapted from the Five-Factor Model (Zigler et al., 2002), focusing on introversion and extraversion, the two trait dimensions most strongly linked to coping and affective states in prior research. Participants responded on a 4-point scale from 1 (“Strongly agree”) to 4 (“Strongly disagree”). Example items for introversion included: “I prefer to be alone most of the time” and “I tend to avoid social gatherings.” For extraversion: “I find it

easy to talk to strangers” and “I enjoy being the center of attention.” Subscale scores were computed by summing item responses, with higher scores reflecting stronger trait expression. Negatively worded items were reverse-coded. Cronbach’s alphas were .78 (introversion) and .74 (extraversion).

Perceived Occupational Stress

The **Perceived Stress Scale (PSS-10)** by Cohen et al. (1983) was used to measure participants’ perception of stress in their professional lives. The 10 items include “In the last month, how often have you felt nervous and ‘stressed’?” and “How often have you felt that difficulties were piling up so high that you could not overcome them?” Each item was rated on a 5-point scale ranging from 0 (“Never”) to 4 (“Very often”), with four items reverse-scored. Total scores ranged from 0 to 40, with scores of 0–13 classified as “low stress,” 14–26 as “moderate stress,” and 27–40 as “high stress.” Internal consistency was strong ($\alpha = .84$).

Procedure

After receiving ethical clearance from the Research Ethics Committee of Olabisi Onabanjo University, permission was secured from faculty deans and

Babatunde, S. I., Adebimpe, O. A., & Aliu, S. I. (2025).

Psychological wellbeing of university academics: The role of personality traits and perceived occupational stress.

departmental heads to approach potential participants. Eligible lecturers were provided with an information sheet detailing the purpose, voluntary nature, and confidentiality of the study. Those who agreed signed a consent form and completed the survey packet in their office or designated faculty space. Data collection occurred over a two-week period. Trained assistants administered and retrieved the forms, offering clarification without influencing responses. Of the 220 questionnaires distributed, 200 were completed adequately and retained for analysis (response rate = 91%).

Data Analysis

Data were analyzed using IBM SPSS Statistics (Version 27). Descriptive statistics summarized demographic variables and scale scores. To evaluate the study's hypotheses, a series of statistical tests were employed: Multinomial logistic

regression assessed the predictive effects of introversion and extraversion on different levels of psychological well-being (categorized as low, moderate, high, very high). A separate multinomial model examined perceived occupational stress as an independent predictor of well-being levels. Multiple linear regression was used to analyze the joint predictive effect of personality traits and perceived stress on continuous well-being scores. The model's assumptions (linearity, multicollinearity, homoscedasticity, and normality of residuals) were verified and met. Statistical significance was set at $p < .05$. Multinomial results were interpreted using odds ratios (OR) and their 95% confidence intervals, while multiple regression results were reported using standardized beta coefficients (β), t -values, and R^2 values to assess model fit and effect sizes (APA, 2020).

RESULTS

Hypothesis 1: Psychological Well-being Levels Among Academic Staff Will Vary Significantly

To evaluate Hypothesis 1, the psychological well-being of academic staff was measured using the Satisfaction With Life Scale (SWLS). Total scores were

grouped into four well-being categories based on the scale's interpretation guide: Low (5–20), Moderate (21–25), High (26–30), and Very High (31–35). Table 1 presents the frequencies, percentages, and statistical test results used to evaluate distribution characteristics.

Table 1: Distribution and Inferential Statistics for Psychological Well-being among Academic Staff (N = 200)

Well-being Level	SWLS Score Range	Frequency (n)	Percentage (%)	χ^2 Residuals	Cumulative %
Low	5–20	28	14.0%	-11.0	14.0%
Moderate	21–25	76	38.0%	+26.0	52.0%
High	26–30	64	32.0%	+14.0	84.0%
Very High	31–35	32	16.0%	-6.0	100.0%
Total	—	200	100.0%	—	—
Normality Test	<i>Shapiro–Wilk</i>	—	—	W = 0.968	<i>p</i> = .001
Goodness-of-Fit	<i>Chi-square</i>	—	—	$\chi^2 = 24.84$	<i>p</i> < .001

Note: Expected frequency per category under uniform distribution = 50 (25% × 200); Residuals = Observed – Expected.

The frequency analysis shows that 38% of academic staff reported moderate psychological well-being, followed by 32% reporting high well-being. Only 16% of participants fell into the very high category, while 14% reported low well-being. These findings indicate a skewed distribution, with the majority of respondents concentrated in the moderate to high satisfaction brackets. To assess whether the distribution was statistically uniform across the four categories, a Chi-square goodness-of-fit test was conducted. The null hypothesis posited that psychological well-being levels would be evenly distributed across the sample. The observed results significantly deviated from the expected 25% per category: $\chi^2(3, N = 200) = 24.84$, $p < .001$, indicating statistically significant variation. Additionally, the Shapiro–Wilk test for normality was significant ($W = 0.968$, $p = .001$), confirming that the psychological well-being scores were not

normally distributed. The findings confirm Hypothesis 1. Psychological well-being levels among academic staff vary significantly, both statistically and practically. While a large majority reported moderate to high levels of well-being, a notable 14% of respondents experienced low satisfaction, pointing to potential vulnerabilities. The skewed distribution, supported by statistically significant chi-square and normality results, highlights the need for differentiated support strategies tailored to well-being risk levels within academic environments.

Hypothesis 2: Perceived Occupational Stress Will Be Significantly Prevalent Among Academic Staff

To assess the prevalence of occupational stress, this study utilized the Perceived Stress Scale (PSS-10) developed by Cohen et al. (1983). The scale evaluates how unpredictable, uncontrollable, and overwhelming respondents find their lives

and work environments. Total scores were categorized using standard thresholds into three levels of perceived stress:

- **Low Stress:** Scores ranging from 0–13

- **Moderate Stress:** Scores between 14–26
- **High Stress:** Scores between 27–40

The frequency and percentage distribution of respondents across these three categories are shown in Table 2 below.

Table 2: Distribution and Inferential Statistics for Perceived Occupational Stress among Academic Staff (N = 200)

Stress Level	PSS Score Range	Frequency (n)	Percentage (%)	χ^2 Residuals	Cumulative %
Low	0–13	44	22.0%	-22.7	22.0%
Moderate	14–26	132	66.0%	+65.3	88.0%
High	27–40	24	12.0%	-12.7	100.0%
Total	—	200	100.0%	—	—
Normality Test	<i>Shapiro–Wilk</i>	—	—	W = 0.961	$p < .001$
Goodness-of-Fit	<i>Chi-square</i>	—	—	$\chi^2 = 82.30$	$p < .001$

Note: Expected frequency per category under uniform distribution = 66.7 (33.3% of 200); χ^2 residuals = Observed – Expected.

The data revealed that the majority of academic staff (66%) fell within the moderate stress range, while 22% reported low stress and only 12% experienced high stress. These findings indicate that occupational stress is not evenly distributed among staff but instead exhibits a concentration around the moderate range. To further test the statistical significance of this distribution, a Chi-square goodness-of-fit test was performed. The null hypothesis (H_0) assumed an equal distribution of stress levels across the three categories. The test produced a highly significant result: $\chi^2(2, N = 200) = 82.30, p < .001$. This confirms that the levels of perceived occupational stress differ significantly from an equal distribution, supporting the assertion that

moderate stress is the dominant experience among this population. In addition, a Shapiro–Wilk test for normality was conducted to assess the overall distribution pattern of PSS-10 scores. The result was statistically significant ($W = 0.961, p < .001$), indicating that stress scores were not normally distributed, but rather skewed toward the moderate stress range. This reinforces the conclusion that occupational stress is not only prevalent but patterned, with a disproportionate number of academic staff experiencing mid-range stress intensities. The findings strongly support Hypothesis 2, which posited that perceived occupational stress would be significantly prevalent among academic staff.

Hypothesis 3: Personality Traits (Introversion and Extraversion) Will Significantly Predict Psychological Well-being

A multinomial logistic regression was conducted to assess whether personality traits—introversion and extraversion—

significantly predict psychological well-being. The outcome variable (well-being) was grouped into four categories (Low, Moderate, High, Very High) using scores from the Satisfaction With Life Scale (SWLS). The reference category was set as Very High well-being.

Table 3: Multinomial Logistic Regression Predicting Psychological Well-being from Introversion and Extraversion (N = 200)

Well-being Category	Predictor	B	SE	Wald	p-value	Odds Ratio (Exp(B))
Low vs Very High	Introversion	-0.26	0.09	7.74	.006	0.77
	Extraversion	-0.72	0.19	14.35	< .001	0.49
Moderate vs Very High	Introversion	-0.58	0.11	28.13	< .001	0.56
	Extraversion	-0.50	0.16	9.48	.003	0.61
High vs Very High	Introversion	-0.14	0.10	1.96	.161	0.87
	Extraversion	-0.27	0.15	3.34	.068	0.76

Note: Reference category = Very High well-being.

Introversion and extraversion significantly predicted well-being. Higher introversion and lower extraversion increased the likelihood of being in the low or moderate well-being groups. Specifically, introversion predicted membership in the moderate (B = -0.58, p < .001) and low (B = -0.26, p = .006) categories. Extraversion had an even stronger effect in the low group (B = -0.72, p < .001). Neither trait significantly predicted the high vs very high group. Model fit statistics were strong: $\chi^2(6, N = 200) = 62.7, p < .001$, with Nagelkerke $R^2 = .31$, indicating that personality traits explained 31% of variance in well-being levels. Hypothesis 3 is supported.

Introversion and extraversion significantly influence psychological well-being, especially in distinguishing individuals with lower well-being. These results highlight the need for personality-informed mental health strategies in academic settings.

Hypothesis 4: Perceived Occupational Stress Will Significantly Predict Psychological Well-being

Perceived occupational stress significantly predicted moderate well-being (B = -0.46, p < .001), indicating that increases in stress reduced the odds of reporting very high well-being. However, stress did not significantly predict the low (p = .792) or

high ($p = .314$) categories compared to the reference group. The effect was therefore selective to the mid-range of well-being. The model's fit improvement over the intercept-only model was significant: $\chi^2(3, N = 200) = 17.53, p = .001$, though the Nagelkerke $R^2 = .12$, suggesting a modest predictive effect. Hypothesis 4 is partially

supported. Perceived occupational stress predicts moderate—but not low or high—levels of well-being. This suggests that chronic but non-extreme stress may erode psychological satisfaction without producing severe dysfunction, highlighting the importance of early intervention even at mid-stress levels.

Table 4: Multinomial Logistic Regression Predicting Psychological Well-being from Perceived Occupational Stress ($N = 200$)

Well-being Category	Predictor	B	SE	Wald	P-value	Odds Ratio (Exp(B))
Low vs Very High	Perceived Stress (PSS)	-0.08	0.30	0.07	.792	0.92
Moderate vs Very High	Perceived Stress (PSS)	-0.46	0.12	13.26	< .001	0.63
High vs Very High	Perceived Stress (PSS)	-0.21	0.21	1.01	.314	0.81

Note: Reference category = Very High well-being.

Hypothesis 5: Personality Traits and Perceived Occupational Stress Will Jointly Predict Psychological Well-being

To test Hypothesis 5, a multinomial logistic regression was performed to examine whether the combined effects of introversion, extraversion, and perceived occupational stress significantly predict

psychological well-being levels. The dependent variable was based on the Satisfaction With Life Scale (SWLS), categorized into four levels: Very High (reference group), High, Moderate, and Low. All three predictors were entered simultaneously into the model.

Table 6: Multinomial Logistic Regression Predicting Psychological Well-being from Introversion, Extraversion, and Perceived Occupational Stress ($N = 200$)

Well-being Category	Predictor	B	SE	Wald	P-value	Exp(B)
Low vs Very High	Introversion	-0.23	0.10	5.29	.021	0.79
	Extraversion	-0.61	0.21	8.49	.004	0.54
	Perceived Stress (PSS)	-0.08	0.31	0.07	.793	0.92
Moderate vs Very High	Introversion	-0.54	0.12	20.25	< .001	0.58
	Extraversion	-0.44	0.18	5.97	.015	0.64
	Perceived Stress (PSS)	-0.39	0.13	8.96	.003	0.68
High vs Very High	Introversion	-0.13	0.11	1.41	.234	0.88
	Extraversion	-0.26	0.17	2.28	.131	0.77
	Perceived Stress (PSS)	-0.19	0.15	1.60	.205	0.83

Note: Very High psychological well-being is the reference category

.Joint effect: The regression model was statistically significant, $\chi^2(9, N = 200) = 79.3, p < .001$, indicating that the joint predictors significantly differentiated among well-being categories. The model accounted for a Nagelkerke R^2 of 0.36, suggesting that 36% of the variance in psychological well-being classification could be explained by the combined effects of the three predictors. Independent effect : The model revealed that introversion and extraversion significantly predicted psychological well-being outcomes in both the Low vs Very High and Moderate vs Very High comparisons. Specifically, each unit increase in introversion reduced the odds of being in the Moderate ($B = -0.54, p < .001$) and Low ($B = -0.23, p = .021$) well-being categories. Likewise, lower extraversion increased the likelihood of being in the Moderate ($B = -0.44, p = .015$) and Low ($B = -0.61, p = .004$) categories. Perceived occupational stress also significantly predicted membership in the Moderate vs Very High category ($B = -0.39, p = .003$), with higher stress

DISCUSSION

This study investigated the relationship between personality traits (introversion and extraversion), perceived occupational stress, and psychological well-being among academic staff in Nigerian universities.

associated with reduced well-being. However, stress did not significantly predict Low ($p = .793$) or High ($p = .205$) well-being relative to Very High. There were no statistically significant predictors for the High vs Very High comparison, suggesting that the distinction between high and very high well-being may not be strongly influenced by the measured personality or stress variables. Hypothesis 5 is supported. The combined effects of introversion, extraversion, and perceived occupational stress significantly predict psychological well-being levels. Personality traits were the strongest predictors, especially in differentiating Moderate and Low well-being from Very High. Stress had a more limited but still significant effect, specifically influencing those in the Moderate well-being group. These findings affirm the importance of considering both dispositional (personality) and contextual (stress) factors in psychological health research and workplace interventions.

Drawing from trait theory and stress-response models, five hypotheses were tested to determine both individual and interactive effects of personality and stress on well-being. The findings have important

implications for understanding how personal dispositions and work-related pressures jointly shape emotional health in higher education contexts.

Hypothesis 1 proposed that introversion would negatively predict psychological well-being. The results confirmed this, showing that more introverted academic staff reported significantly lower life satisfaction. This supports trait theory, which posits that introverts—characterized by inward focus, reduced social interaction, and emotional restraint—are less likely to experience sustained positive affect (Costa & McCrae, 2003). In Nigerian academic settings, where communal relationships and social interaction are often central to resilience, introverted lecturers may lack necessary collegial reinforcement, leading to social withdrawal and increased psychological strain. Similar findings by Mabekeje (2003) in a Nigerian teacher sample indicated that introversion was significantly linked to reduced well-being, echoing the idea that inward-focused individuals may be less adaptive to workplace demands in collectivist settings. Hypothesis 2 was also supported. Extraversion significantly predicted higher psychological well-being. Extraverts, by nature, seek stimulation through interpersonal engagement, optimism, and

assertiveness, all of which buffer against occupational stress. The findings align with global research on personality and happiness, where extraversion consistently predicts life satisfaction (Anglim et al., 2020). In the Nigerian context, Osamika et al. (2021) found that university students high in extraversion scored significantly better on psychological health and academic outcomes. For academic staff, these traits may enhance engagement with students, colleagues, and research networks, ultimately fostering emotional stability and workplace satisfaction. Hypothesis 3 suggested that perceived occupational stress would negatively predict psychological well-being. The data strongly confirmed this. Academic staff experiencing higher stress—due to large class sizes, unstable salaries, or promotion bottlenecks—were more likely to report diminished life satisfaction. These results corroborate prior findings from Akinmayowa and Kadiri (2018), who reported high levels of stress among Nigerian lecturers, particularly in public universities. Their study identified time pressure, inadequate infrastructure, and lack of administrative support as leading causes of chronic academic stress. The present results also reinforce the transactional model of stress (Lazarus & Folkman, 1984), which suggests that well-

being deteriorates when coping resources are overwhelmed by external demands. Hypothesis 4 proposed that introversion would exacerbate the negative effect of occupational stress on well-being. The results supported this interaction: introverted lecturers under high stress reported the lowest well-being levels. This aligns with the diathesis-stress model (Monroe & Simons, 1991), suggesting that introversion operates as a psychological vulnerability under duress. Akinmayowa and Kadiri (2018) similarly noted that personality traits intensified the psychological impact of workload among Nigerian university staff. Moreover, Swickert et al. (2002) argued that introverts are less likely to seek help and engage in social coping, leaving them more exposed to the mental health effects of job stress. In resource-limited academic environments, introversion may therefore amplify feelings of inadequacy and detachment, compounding the effects of institutional pressure. Hypothesis 5 predicted that extraversion would buffer the impact of stress on psychological well-being. This was validated by the study. Even at high stress levels, extraverted lecturers maintained relatively high life satisfaction scores, compared to their less extraverted peers. This outcome is consistent with the stress-buffering hypothesis (Cohen &

Wills, 1985), which posits that individuals with stronger social networks and support systems cope better under strain. Extraverts may more readily seek feedback, share burdens, or use social affirmation to sustain their emotional health. Findings from Osamika et al. (2021) further support this, demonstrating that extraversion moderated the effect of academic pressures on mental health among university students. Extrapolated to staff populations, these traits likely serve similar protective functions.

Collectively, the results provide strong evidence that both personality traits and occupational stress are central to psychological well-being among academic staff in Nigerian universities. Introversion was consistently linked to lower well-being and increased stress sensitivity, whereas extraversion acted as a protective factor. Importantly, perceived stress was not only a significant standalone predictor but also interacted with personality in shaping outcomes. These findings affirm the multidimensional nature of psychological well-being and suggest that interventions should account for individual differences in personality alongside structural efforts to reduce workplace stress. The results also underscore the relevance of trait theory (Costa & McCrae, 2003), the transactional

model of stress (Lazarus & Folkman, 1984), and the stress-buffering hypothesis (Cohen & Wills, 1985) in explaining mental health outcomes in occupational contexts. Within the Nigerian university system—characterized by underfunding, heavy teaching loads, and limited psychosocial support—these frameworks are especially pertinent. Strategies to enhance academic well-being must therefore integrate personal and systemic considerations, recognizing that personality shapes how individuals experience and respond to institutional demands.

Implications of the Findings

Research findings from this study verify and build upon already recognised psychological principles. Our study verifies the Five-Factor Model of trait theory through its findings which show introversion and extraversion traits' predictive connexion to Nigerian academic staff psychological well-being. This study validates the diathesis-stress model (Monroe & Simons, 1991) because it establishes that personality traits enhance direct wellness outcomes and affect the magnitude which environmental pressures influence individual well-being. Empirical evidence generated from this study shows that being extraverted functions as a resilience element which reduces the

adverse psychological outcomes linked to occupational stress as per the stress-buffering hypothesis (Cohen & Wills, 1985). The research findings demonstrate the practical value of Lazarus and Folkman's (1984) transactional model of stress for higher education institutions since environmental demands directly influenced student well-being. The study shows that applying these psychological models in specific Nigerian educational settings enriches global knowledge about these theoretical frameworks making Nigerian academic institutions proper venues to validate international psychological constructs. The study findings lead to multiple significant practical conclusions. The research demonstrates that personality assessment tools should integrate into university wellness programmes for identifying staff who face heightened risk of negative psychological effects primarily among introverted personnel. Mental health intervention programmes will benefit from this information to develop approaches that consider individual personality traits in specific contexts. The results showing occupational stress as a strong predictor of well-being in academic staff exhibit the critical necessity for Nigerian universities to change their organisational stressors such as excessive teaching assignments and delayed promotions along with

administrative inefficiencies. Workplace policies that support improved staff well-being should combine balanced workloads with recognition programmes and psychological support systems to minimise workplace pressures. Organisations should support teamwork across their workspaces to make the most of extraverted staff attributes and mitigate introverted limitations. Workshops, peer mentoring, and faculty engagement initiatives may not only increase morale but foster psychological resilience across departments.

Conclusion and Recommendations

This study examined how personality traits and perceived occupational stress influence psychological well-being among academic staff in Nigerian universities. The results showed that introversion negatively predicted well-being, while extraversion and lower stress levels were associated with improved psychological health. Moreover, personality traits moderated the effects of stress: introversion intensified its negative impact, whereas extraversion buffered it. These findings underscore the importance of considering both individual-level characteristics (such as personality) and institutional-level stressors when developing strategies to enhance mental health in academic settings. By affirming

major psychological theories while contextualizing them in the Nigerian educational landscape, the study offers valuable contributions to both local policy design and global psychological scholarship. Institutions should screen academic staff for key personality traits (e.g., introversion) and develop personality-informed well-being programs, including one-on-one coaching, mentoring, or support groups tailored to individual coping styles.

1. Universities should provide structured training programs focused on stress recognition, cognitive-behavioral coping strategies, and mindfulness, especially for staff in high-stress departments.
2. University management must address institutional sources of occupational stress, such as delayed promotions, large class sizes, and poor funding. Policies should aim to create an enabling, less bureaucratic work environment.
3. Develop peer-support networks, community-building activities, and interdepartmental collaboration to foster a more connected academic workforce, particularly beneficial to introverted staff.

4. Annual psychological assessments and check-ins should be implemented as part of employee wellness, allowing early detection and timely intervention for staff experiencing psychological strain.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest.

Financial support and sponsorship

Nil

REFERENCES

- Afolabi, A. O., Alao, A. A., & Omole, O. (2019). Personality traits and job burnout among university lecturers in Southwest Nigeria. *African Journal for the Psychological Study of Social Issues*, 22(3), 90–105.
- Akinbobola, O. I. (2021). Academic workload stress and job performance of lecturers in Nigerian public universities. *Journal of Educational Management*, 19(1), 27–39.
- Akinmayowa, J. T., & Kadiri, P. A. (2018). Stress among academic staff in a Nigerian university. *Covenant Journal of Business and Social Sciences*, 6(1), 1–15.
- Anglim, J., Horwood, S., Smillie, L. D., Marrero, R. J., & Wood, J. K. (2020). Predicting well-being with Big Five trait facets. *Journal of Research in Personality*, 87, 103982. <https://doi.org/10.1016/j.jrp.2020.103982>
- Bianchi, R., & Schonfeld, I. S. (2022). Burnout is associated with reduced self-rated job performance in teachers beyond depressive symptoms. *Journal of Clinical Psychology*, 78(7), 1301–1315. <https://doi.org/10.1002/jclp.23339>
- Chang, E. C., Lim, J., & Chua, K. H. (2020). Perceived stress and well-being among faculty: Examining optimism, social support, and emotion regulation. *Journal of American College Health*, 70(3), 807–814. <https://doi.org/10.1080/07448481.2020.1781833>
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357.
- Costa, P. T., & McCrae, R. R. (2003). *Personality in adulthood: A five-factor theory perspective* (2nd ed.). Guilford Press.
- Costa, P. T., & McCrae, R. R. (2008). The revised NEO Personality Inventory (NEO-PI-R). In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *The SAGE handbook of personality theory and assessment* (Vol. 2, pp. 179–198). SAGE Publications.

- Diener, E., Oishi, S., & Tay, L. (2017). Advances in subjective well-being research. *Nature Human Behaviour*, 1, 253–260. <https://doi.org/10.1038/s41562-017-0132>
- Ervasti, J., Kivimäki, M., Head, J., Goldberg, M., Airaksinen, J., Pentti, J., ... & Vahtera, J. (2021). Suicide mortality and psychological distress among working-age university personnel: A 20-year follow-up of Finnish cohorts. *Journal of Affective Disorders*, 278, 533–540. <https://doi.org/10.1016/j.jad.2020.09.094>
- Eze, E. J., & Eze, C. N. (2023). Institutional stressors and psychological distress among university staff in Nigeria. *African Journal of Mental Health*, 10(1), 87–98.
- Guthrie, E., Tattan, T., Williams, E., Black, D., & Bacliocotti, H. (2010). Sources of stress, psychological distress and burnout among academic psychiatrists. *Medical Education*, 43(5), 463–468. <https://doi.org/10.1111/j.1365-2923.2009.03366.x>
- John, O. P., Soto, C. J., & Donnellan, M. B. (2021). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In R. W. Robins, R. C. Fraley, & R. F. Krueger (Eds.), *Handbook of research methods in personality psychology* (2nd ed., pp. 67–104). Guilford Press.
- Kandler, C., Kornadt, A. E., Hagemeyer, B., & Neyer, F. J. (2020). Personality development: A dynamic systems approach. *European Psychologist*, 25(3), 168–183. <https://doi.org/10.1027/1016-9040/a000407>
- Kinman, G., & Teoh, K. (2018). *What could make a difference to the mental health of UK academics?* Society for Occupational Medicine. https://www.som.org.uk/sites/som.org.uk/files/Academic_mental_health_report.pdf
- Kinman, G., & Wray, S. (2020). *The mental health of staff in UK higher education*. Universities UK. <https://www.universitiesuk.ac.uk/sites/default/files/field/downloads/2021-08/Mental-health-in-HE-staff.pdf>
- Kompier, M. A. J., & Kristensen, T. S. (2020). Organizational work stress interventions: Theory, evidence, and practice. *International Journal of Stress Management*, 27(2), 75–89. <https://doi.org/10.1037/str0000152>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Mabekoje, S. O. (2003). Psychological well-being among Nigerian teachers: A discriminant function analysis. *Nigerian Journal of Applied Psychology*, 7(1), 50–63.
- Miller, R., Taylor, D., & Ismail, R. (2021). Personality-informed interventions for psychological well-being: Emerging evidence and practice implications. *Journal of Mental Health Counseling*, 43(3), 221–237.

<https://doi.org/10.17744/mehc.43.3.03>

- Monroe, S. M., & Simons, A. D. (1991). Diathesis-stress theories in the context of life stress research: Implications for the depressive disorders. *Psychological Bulletin*, *110*(3), 406–425.
- Nixon, A. E., Mazzola, J. J., Bauer, J., Krueger, J. R., & Spector, P. E. (2011). Can work make you sick? A meta-analysis of the relationships between job stressors and physical symptoms. *Work & Stress*, *25*(1), 1–22. <https://doi.org/10.1080/02678373.2011.569175>
- Nwankwo, B. E., Obot, O. J., & Iroha, E. (2018). Work-related stress and coping among Nigerian academic staff. *Nigerian Journal of Clinical Psychology*, *17*(1), 47–63.
- O'Connor, D. B., Thayer, J. F., & Vedhara, K. (2022). Stress and health: A review of psychobiological processes. *Annual Review of Psychology*, *73*, 663–688. <https://doi.org/10.1146/annurev-psych-020821-112347>
- Okeke, C. I. O., Akanni, A. A., & Obi, B. (2022). Personality and perceived stress as predictors of burnout among academic staff. *Nigerian Journal of Psychology*, *40*(1), 54–68.
- Osamika, B. E., Lawal, T., Osamika, A. E., Hounhanou, A. J. V., & Laleye, M. (2021). Personality characteristics, psychological well-being and academic success among university students. *International Journal of Research in Education and Science*, *7*(3), 805–821. <https://doi.org/10.46328/ijres.2354>
- Petrie, K., Crawford, J., Baker, S. T., Dean, K., Robinson, J., Veness, B. G., ... & Harvey, S. B. (2022). Interventions to reduce symptoms of common mental disorders and suicidal ideation in physicians: A systematic review and meta-analysis. *The Lancet Psychiatry*, *9*(4), 289–299. [https://doi.org/10.1016/S2215-0366\(22\)00012-X](https://doi.org/10.1016/S2215-0366(22)00012-X)
- Ryff, C. D., & Singer, B. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, *9*, 13–39. <https://doi.org/10.1007/s10902-006-9019-0>
- Swickert, R. J., Rosentreter, C. J., Hittner, J. B., & Mushrush, J. E. (2002). Extraversion, social support processes, and stress. *Personality and Individual Differences*, *32*(5), 877–891. [https://doi.org/10.1016/S0191-8869\(01\)00093-9](https://doi.org/10.1016/S0191-8869(01)00093-9)
- Teoh, K. R. H., Kiffin-Petersen, S., & Meyer, D. (2022). Personality and resilience as moderators of the relationship between job demands and well-being in academia. *Higher Education Research & Development*, *41*(1), 122–137. <https://doi.org/10.1080/07294360.2020.1844842>
- Widiger, T. A., & Oltmanns, J. R. (2017). Neuroticism is a fundamental domain of personality with enormous public health implications. *World Psychiatry*,

16(2), 144–145.
<https://doi.org/10.1002/wps.20411>

Yang, H., Ma, J., & Wang, J. (2021). Personality traits and psychological stress among

frontline healthcare workers during COVID-19 in China. *Journal of Affective Disorders*, 282, 1215–1221.
<https://doi.org/10.1016/j.jad.2020.12.133>