EDUMALSYS
Journal of Research in Education Management

e-ISSN : 2988-1188
p-ISSN : 2988-1196

Index : Dimensions, Scilit, Crossref, Garuda, Semantic, Google Scholar, Base, etc

https://doi.org/10.58578/edumalsys.v4i1.7670

Comparative Assessment of Depression Level Among Polytechnic Staff

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Article Info:

Submitted:	Revised:	Accepted:	Published:
Nov 1, 2025	Nov 23, 2025	Dec 5, 2025	Dec 10, 2025

Abstract

This study investigates the prevalence and variation of depressive symptoms across staff categories in two polytechnics in the southwestern part of Nigeria, against a backdrop of workplace stress, job insecurity, workload, and institutional pressures that threaten employee well-being. Adopting a cross-sectional survey design, the research employs standardized psychological instruments, specifically the *Beck Depression Inventory (BDI)*, to assess depressive symptoms among academic and non-academic staff. Data collected from respondents were analyzed using descriptive statistics and inferential tests, including t-tests and ANOVA, to identify significant sociodemographic variables associated with depression levels. The findings indicate varying degrees of depression, with non-academic staff exhibiting higher levels of depressive symptoms, influenced by job roles, support systems, and workload. Male staff are significantly more depressed than female staff, while those aged 30–49 years also show higher levels of depression, and Christian respondents emerge as the most depressed among the examined religious groups. The study concludes that depression among polytechnic staff is differentially distributed across staff categories and sociodemographic groups, underscoring the

importance of institutional mental health policies and proactive interventions to foster a healthier and more productive workforce. It recommends the implementation of regular mental health screenings, workplace counselling services, and targeted support programs to address identified vulnerabilities and promote staff well-being.

Keywords: Depression; Polytechnic Staff; Sociodemographic Factors; Beck Depression Inventory; Workplace Mental Health

INTRODUCTION

Mental health is increasingly becoming a critical component of global health concerns in the workplace generally and in institutional settings like polytechnics in particular. Depression, a prevalent mental disorder, is one of the leading causes of disability and productivity loss worldwide (WHO, 2023). According to the World Health Organization (2023), over 280 million people globally suffer from depression, and this number is steadily increasing, especially in low- and middle-income countries.

In Nigeria, mental health awareness is still in its developmental phase, with societal stigma and inadequate health infrastructure compounding the challenge (Afolabi et al., 2022). Considering the recent economic conundrum in Nigeria, depression among working professionals, particularly staff in tertiary institutions, is becoming more apparent. These institutions, which are supposed to be sanctuaries for intellectual and career development, are increasingly becoming pressure zones due to high workloads, insufficient remuneration, job insecurity, and administrative instability (Ogunleye & Musa, 2021). The dual pressures of academic responsibilities and personal life demands often result in burnout, anxiety, and depression. The situation is further aggravated by the limited access to mental health services and support systems on campuses (Balogun & Okoro, 2023). Depression may subtly manifest through absenteeism, poor job performance, and disinterest in social interaction. These symptoms often go unnoticed or unaddressed.

There are limited empirical investigations on depression levels among staff in Nigerian polytechnics. Staff members are expected to remain functional and productive despite their emotional states. This unrealistic expectation further deepens their mental health struggles. According to Nwachukwu et al. (2024), nearly 35% of surveyed academic staff in southwestern Nigeria reported symptoms of moderate to severe depression.

Investigating the levels of depression among their staff provides insights into how institutional factors, including work environment, management style, and welfare policies, may influence mental health outcomes (Ajayi & Osunlola, 2020). Depression, when not diagnosed early or when not properly managed, can impair cognitive functioning and decision-making capacity, critical requirements for effective service delivery. The rising cases of workplace dissatisfaction, staff attrition, and reduced academic quality may be rooted in mental health crises such as depression (Bamidele & Ogundele, 2023).

Cultural and social contexts in Nigeria also influence how depression is perceived and treated. In some cases, staff members internalize their emotional pain due to fear of being labelled as weak or unstable (Ibrahim & Chika, 2022). This further complicates efforts to collect valid data and intervene effectively. Moreover, the COVID-19 pandemic introduced new stressors and worsened mental health outcomes among employees globally. Remote working challenges, increased responsibilities at home, job insecurity, and pandemic anxiety have heightened the risk of depression among workers in educational settings (Adeyemi & Falade, 2021). The after-effects of the pandemic linger and continue to affect staff morale and mental stability.

The role of management in mental health advocacy is critical. Where institutional leadership demonstrates concern for staff well-being through counselling services, flexible work policies, and open-door communication staff members tend to report lower levels of stress and depression (Kehinde & Olatunji, 2023). However, such proactive efforts are still largely absent in many Nigerian public polytechnics.

Despite increasing global emphasis on mental health, depression among staff in Nigerian polytechnics remains poorly addressed. The prevalence is likely underestimated due to underreporting, stigma, and lack of institutional data. Staff are often burdened with heavy workloads, poor remuneration, unstable academic calendars, and inadequate recognition conditions that can trigger depressive episodes. This study emerges from the need to generate statistically grounded evidence on the levels of depression among polytechnic staff. By comparing two polytechnics, one relatively new (Federal Polytechnic, Ile-Oluji) and one more established (Federal Polytechnic, Ado-Ekiti). This research aims to identify trends, sociodemographic factors, and possible institutional interventions. Given the growing importance of workplace mental health and the limited attention given to depression among Nigerian polytechnic staff, this study will fill a critical gap in research

and inform policy recommendations aimed at improving employee well-being and institutional performance.

The significance of this study lies in its contribution to the growing discourse on mental health in Nigerian tertiary institutions, particularly among staff of polytechnics. While the mental health of students has been widely studied, there is a noticeable gap in research focusing on staff members those responsible for administrative and academic continuity. From a statistical standpoint, the study provides empirical evidence using quantitative techniques to analyze relationships between depression levels and various sociodemographic and institutional variables. The findings will offer outputs that can be used by future researchers, policymakers, and mental health professionals in developing effective interventions. Furthermore, staff unions and advocacy groups may find this research instrumental in lobbying for better working conditions, mental health insurance schemes, and comprehensive staff wellness programs. Federal Polytechnic, Ile-Oluji and Federal Polytechnic, Ado-Ekiti serve as vital case studies due to their different developmental stages, workforce sizes, and institutional structures. The study focuses on both academic and non-academic staff, considering factors such as gender, age, marital status, length of service, workload, institutional policies, and access to mental health support

Literature Review

Concept of Depression

Depression is a pervasive and disabling mental health disorder that affects individuals' emotional, cognitive, and behavioral functioning, it involves persistent low mood, fatigue, diminished interest in activities, and in severe cases, thoughts of self-harm or suicide (WHO, 2023). It is a mental health disorder characterized by persistent sadness, loss of interest in activities, and a range of emotional and physical problems which mostly affects how a person feels, thinks, and behaves, and can interfere significantly with work and daily activities (WHO, 2023). Depression is a latent variable that is measurable through other variables psychometric tools like the Patient Health Questionnaire-9 (PHQ-9), Beck Depression Inventory (BDI), and the Center for Epidemiologic Studies Depression Scale (CES-D). Researchers use these instruments to quantify mental states, making depression measurable and subject to analysis (Adebayo & Yusuf, 2021).

Depression can be influenced by workload pressure, poor work-life balance, inadequate remuneration, Job insecurity, lack of recognition or promotion, interpersonal conflicts with colleagues or students and a lot more (Ogundele & Ayodeji, 2023). It is a major contributor to loss of productivity and employee turnover, and often goes undetected in professional environments, especially where mental illness is stigmatized. According to Adesina et al. (2024), Nigerian workplaces, particularly public institutions, rarely integrate mental health monitoring into routine HR assessments, allowing depression to grow unnoticed.

Masked depression occurs when individuals continue to function professionally while suffering internally. This condition is prevalent among educators and administrators who may suppress their emotions to avoid perceived incompetence (Balogun & Okoro, 2023). Such silent suffering not only affects job output but also personal relationships and overall quality of life. Depression level can as well be categorized by severity, ranging from mild to severe. Mild depression involves slight impairment in daily functioning, while severe depression can lead to complete withdrawal from occupational and social activities. Quantifying these levels enables targeted intervention planning (Ogundele & Ayodeji, 2023).

Understanding depression as a measurable, multidimensional construct forms the foundation for this research. It allows for a structured investigation into its prevalence, distribution, and determinants among staff members in the examined institutions.

Workplace Mental Health in Academic Institutions

Workplace mental health is the emotional and psychological well-being of individuals in their occupational setup. This encompasses how individuals cope with demands of work, build relationships at work, and manage stress and emotions in ways that affect job performance (ILO, 2021). In academic environment, workload is intellectually demanding and expectations are high, and the mental health of staff members is crucial to institutional success. Responsibilities of academic include lecturing, research, administrative duties, mentoring students, meeting institutional targets, among others. These pressures contribute to job strain and emotional exhaustion, which are precursors to depression (Adeyemi & Falade, 2021).

Workers in Nigeria struggling with psychological distress are often advised to “pray about it” or “snap out of it”, reflecting a deep-rooted cultural misunderstanding of mental

illnesses. This discourages open discussion and help-seeking behavior, especially in public institutions like polytechnics (Ibrahim & Chika, 2022). Institutions that value mental health typically implement support structures like wellness programs, confidential counseling, and emotional resilience training. According to Ogunyemi and Adewale (2022), Nigerian private universities that adopted such measures reported higher levels of staff engagement and retention.

A recent study shows that untreated mental health conditions like depression cost employers billions in lost productivity annually (WHO, 2023). Polytechnics that fail to invest in staff well-being may incur hidden costs, including reduced academic quality, increased absenteeism, and a poor institutional image. It is also critical to understand the intersection between mental health and job satisfaction. Staff who perceive their work environments as fair, inclusive, and rewarding are less likely to report depression symptoms (Ogunleye & Musa, 2021). Conversely, toxic work cultures that feature favoritism, unclear job roles, and excessive workload can exacerbate mental health conditions. In summary, workplace mental health is not just a health issue but a strategic element of institutional performance.

Depression among Polytechnic Staff

Polytechnic staff are exposed to different stressors. These include poor infrastructure, irregular funding, salary arrears, delayed promotion, unstable academic calendars, and frequent industrial actions (Ajayi & Osunlola, 2020). When such challenges persist, they erode morale and may lead to depression.

The level of depression among polytechnic staff can vary depending on gender, age, job rank, and marital status. For instance, female staff often juggles domestic responsibilities alongside full-time professional duties, increasing the risk of emotional burnout (Adebayo & Yusuf, 2021). Similarly, junior staffs are more vulnerable to depression due to job insecurity and limited income. Another overlooked issue is the lack of accessible mental health services in most polytechnics. Unlike universities, which sometimes have psychological units or social science faculties to support staff, polytechnics often lack these structures. This limits opportunities for mental health awareness, assessment, or intervention (Eze & Adebayo, 2021).

Inclusion in governance and transparency in human resource practices can boost staff morale and reduce feelings of helplessness (Ogundele & Ayodeji, 2023). This study

considers these contextual realities in comparing the depression levels between staff in Federal Polytechnic, Ile-Oluji and Federal Polytechnic, Ado-Ekiti. It draws attention to the need for institution-specific mental health interventions that address the unique administrative and operational challenges of each campus.

Beck's Depression Inventory (BDI)

BDI is developed by Aaron T. Beck in 1961. It is one of the most widely used psychometric tools for detecting the presence and severity of depression. Scores from BDI are interpreted as:

- Score 0-13: Minimal depression
- Score 14-19: Mild depression
- Score 20-28: Moderate depression
- Score 29-63: Severe depression

Theoretical Review

Stress-Vulnerability Model

The model was first proposed by Zubin and Spring in 1977. It posits that the development of mental disorders, such as depression, results from the interaction between external stressors and internal vulnerability. Vulnerability can be influenced by genetic predispositions, personality traits, childhood experiences, and previous psychological trauma (Zubin & Spring, 2021). This model is widely used in mental health studies to explain why not everyone exposed to the same level of stress experiences the same psychological outcomes.

In workplace environments like polytechnics, this theory explains why some staff members cope effectively under stressful conditions such as excessive workloads, salary delays, or administrative conflicts while others develop depression. It suggests that individuals with higher psychological resilience or social support are better able to manage these stressors (Ogundele & Ayodeji, 2023). Vulnerability, in this sense, acts as a moderating variable in statistical analysis. In the polytechnic setting, where job stress is prevalent, identifying staff with high vulnerability is essential for early intervention strategies (Afolabi et al., 2022).

From a quantitative research perspective, the Stress-Vulnerability Model supports the use of interaction terms in regression analysis, where the effect of stress on depression

can be moderated by vulnerability factors such as social support or coping skills. This makes it highly applicable for a statistics-based investigation, allowing researchers to explore how two or more independent variables interact to influence depression levels.

The model offers insights into preventive interventions. If stressors cannot be completely eliminated because of different institutional limitations, increasing individual resilience through workshops, counseling, and community support can reduce vulnerability and thus minimize the incidence of depression (Adeyemi & Falade, 2021). In this study, the Stress-Vulnerability Model is used as a foundation to explore how different polytechnic environments and staff characteristics influence depression outcomes. It justifies the inclusion of socio-demographic data (e.g., age, gender, and years of experience) and institutional stressors (e.g., workload, administrative style) in the research instrument and statistical modeling.

Cognitive Behavioral Theory (CBT)

The theory was developed by Aaron T. Beck in the 1960s. It posits that individuals' thoughts, rather than external events alone, are the primary drivers of emotional responses and behaviors (Beck, 2020). The CBT suggests that maladaptive thinking patterns such as negative self-appraisals, hopelessness, or catastrophizing can lead to emotional distress and dysfunctional behavior. The "negative cognitive triad" forms the theoretical foundation of the BDI, as it assesses emotional, behavioral, and cognitive symptoms.

In academic work environments, particularly in under-resourced institutions like Nigerian polytechnics, staff often encounter disappointments such as unmet expectations, delayed promotions, and lack of appreciation. CBT explains that these experiences may not automatically result in depression unless they are internalized and interpreted through negative cognitive filters (Ogunyemi & Adewale, 2022).

The model highlights automatic negative thoughts as central to the development of depression. For instance, a staff member overlooked for promotion may begin to think, "I'm not good enough" or "I'll never succeed", which may spiral into low self-esteem and depressive symptoms. CBT interventions aim to challenge these thoughts and replace them with more constructive and realistic beliefs (Adebayo & Yusuf, 2021).

In a study conducted among academic staff in four Nigerian tertiary institutions, Adesina et al. (2024) found that CBT-based group counseling significantly reduced depressive symptoms and improved job performance. These findings validate the

theoretical and practical relevance of CBT in occupational mental health. Statistically, CBT lends itself to research designs involving Likert-scale measurement of cognitive distortions, workplace satisfaction, and depression symptoms. These can be quantitatively analyzed using methods such as factor analysis, correlation, and multiple regression to determine the strength and direction of associations (Chukwu & Lawal, 2022).

In this study, CBT helps explain how individual mental frameworks can either buffer or magnify the impact of institutional stressors on staff mental health. The theory offers a complementary perspective to the Stress-Vulnerability Model, focusing more on thought patterns than on biological predispositions.

Maslow's Hierarchy of Needs Theory

Proposed by Abraham Maslow in 1943 and later refined in 1970, the theory postulates that individuals are motivated by the desire to satisfy five levels of needs: physiological, safety, love/belonging, esteem, and self-actualization. The theory holds that unless lower-level needs are satisfied, higher-level needs cannot be meaningfully pursued (Maslow, 2020).

In the context of depression among polytechnic staff, this theory explains how unmet basic needs such as job security (safety), adequate salary (physiological), and a sense of belonging at work can contribute to emotional exhaustion and depression. When staff constantly struggle with job instability, unpaid salaries, or poor leadership, they may feel unmotivated and disconnected from institutional goals (Ajayi & Osunlola, 2020). Maslow's model has often been criticized for its linearity, but its relevance in occupational psychology is still significant. Polytechnic staff may never attain self-actualization (e.g., professional fulfillment or academic recognition) if they are worried about delayed salaries or toxic work environments that affect psychological safety (Bamidele & Ogundele, 2023).

In this study, Maslow's framework supports the interpretation of depression as a result of cumulative unmet needs rather than isolated incidents. Institutions that want to address depression among staff must consider how policies and culture fulfill or frustrate these needs. The application of the Maslow's theory in this study broadens its understanding of depression to include motivational deficits, not just stress or cognitive distortions, and offers human resource departments a framework for redesigning workplace experiences around human needs.

Herzberg's Two-Factor Theory

Also known as the Motivation-Hygiene theory, this theory categorizes job factors into two groups: motivators (e.g., achievement, recognition, the work itself) and hygiene factors (e.g., salary, job security, and working conditions). According to Herzberg (2021), the absence of hygiene factors causes dissatisfaction, while the presence of motivators fosters job satisfaction. In application to polytechnic staff, the theory provides a lens to understand how the lack of certain work conditions (e.g., delayed salary payments, poor communication, and untidy workspaces) can create dissatisfaction and increase vulnerability to depression. Conversely, the absence of motivational factors like recognition and personal growth may not cause dissatisfaction directly but will likely stifle morale and engagement (Kehinde & Olatunji, 2023).

Herzberg argued that employers often focus only on improving hygiene factors (like pay) without addressing the deeper motivators of human engagement (like career development), which ultimately leaves employees unfulfilled (Adeyemi & Falade, 2021). Empirical studies show that motivation-hygiene imbalances are linked to depressive symptoms in educational settings. For example, a study by Adesina et al. (2024) on staff morale among polytechnics in southwestern Nigeria found that those who received regular feedback and participated in decision-making were less likely to report symptoms of depression.

Herzberg's theory can guide administrative reforms in Nigerian polytechnics by encouraging a shift from reactive, wage-based motivation to a holistic, purpose-driven engagement approach. It also offers a practical lens for evaluating which institutional factors (hygiene or motivational) correlate most with staff depression. In summary, Herzberg's theory enhances the institutional side of the depression model by linking job characteristics to emotional outcomes, providing actionable insight into workplace improvement strategies.

Social Comparison Theory

Social Comparison Theory suggests that individuals determine their own social and personal worth based on how they stack up against others. This theory is relevant to depression studies because constant unfavorable comparisons can lead to low self-esteem, anxiety, and depressive symptoms (Festinger, 2022).

In polytechnic environments, where staff from different departments or campuses may experience varying degrees of career progression, resources, and institutional attention, feelings of inadequacy can emerge. Staff in newer polytechnics may compare their growth opportunities or workloads unfavorably to those in older, better-funded institutions (Olatunji & Kehinde, 2022). Such comparisons are often intensified by social media or inter-institutional networking, where achievements, promotions, and conference attendances are openly shared. For staff struggling with recognition or promotion, these comparisons can result in feelings of failure, self-doubt, and eventually, depression.

This theory helps explain peer-induced stress, where junior or contract staffs feel inferior to their permanent or senior colleagues. According to Adebayo and Yusuf (2021), these perceived inequities are significant predictors of psychological strain in academic environments. In this study, the theory can inform the analysis of staff perceptions about fairness, equity, and peer benchmarking. These variables can be measured through survey items and tested statistically using correlational or ANOVA techniques.

Empirical Review

Several empirical studies have focused on mental health conditions, particularly depression, among working populations in Nigeria and international studies. For instance, Adeyemi and Falade (2021) investigated depression levels among university workers in Ondo and Ekiti states using the PHQ-9 scale. They found that 41.7% of respondents experienced mild to severe depressive symptoms, with higher prevalence among non-academic staff. They used cross-tabulation and chi-square analysis to examine associations with demographic variables. Scarpis et al. (2022) and Winefield and Jarrett (2001) reported a higher prevalence of symptoms of depression among academic community than in the general population while in a study among America faculty members, Meeks et al. (2021) reported a moderate prevalence of depression.

Onuoha et al. (2022) employed logistic regression analysis to assess predictors of depression among lecturers in southeastern Nigerian polytechnics. Their results showed that workload, job insecurity, and lack of institutional recognition were statistically significant predictors (p-value < 0.05). Balogun and Okoro (2023) conducted a post-pandemic study across three polytechnics in Southwest Nigeria using structured questionnaires analyzed with ANOVA and Pearson correlation. They observed that

younger staff, especially those under 35 years, showed significantly higher levels of depression, citing financial instability and the psychological toll of remote learning adjustments as key contributors.

In a nationwide survey involving 600 academic staff, Bamidele and Ogundele (2023) found that 34% met criteria for moderate depression and 12% for severe depression. Their regression model revealed that emotional exhaustion, poor leadership, and job-role conflict significantly increased depression levels ($R^2 = 0.64$). Olatunji and Kehinde (2022) compared depression rates among staff of new and old tertiary institutions in Nigeria using independent sample t-tests. They found statistically significant differences (p-value < 0.01), suggesting that younger institutions experienced more mental health issues due to administrative instability and lack of clear career progression frameworks. Nwimo & Onwunaka (2015) in Nigeria revealed that over 35% of academic staff reported moderate to severe levels of depression using BDI-II.

Adebayo and Yusuf (2021) focused on gender-based depression analysis using multivariate analysis of variance (MANOVA) among 150 staff of polytechnics in Kwara State, Nigeria. They reported that female staff had higher depression scores compared to their male counterparts, largely due to work-family balance challenges and gender discrimination in administrative appointments.

In a related study by Ibrahim and Chika (2022), the multi-stage sampling technique was used to survey 200 polytechnic employees. The study applied factor analysis to reduce depression-related items into core dimensions: emotional distress, professional dissatisfaction, and institutional neglect. Their findings suggest that staff mental health is not only influenced by individual traits but also by the organizational climate. Also,

Very few of these studies have included both academic and non-academic staff in their analysis or explored depression within the specific context of Federal Polytechnic, Ile-Oluji and Federal Polytechnic, Ado-Ekiti. This study is therefore unique in that it offers a comparative, data-driven analysis using both descriptive and inferential statistical tools, focusing on depression levels, demographic predictors, and institutional factors among staff of two distinct polytechnics in Southwestern Nigeria.

METHODS

This study employs a primary data using a questionnaire method. The independent samples t-test, Levene's test, one way analysis of variance, and other statistical tools are used to examine whether a statistically significant difference exists in depression levels among examine covariates. The population used for this study comprises of staff in Federal Polytechnic Ile-Oluji and The Federal Polytechnic Ado-Ekiti. A total of 300 questionnaires were distributed with equal allocation across both institutions to ensure adequate representation of both academic and non-academic staff.

The primary instrument for data collection was a structured self-administered questionnaire consisting of two sections. Section A gathered respondents' socio-demographic information, including age, gender, job category, and religion. Section B comprised 21 items adapted from the Beck Depression Inventory (BDI), a standardized tool used to assess the severity of depressive symptoms. Each item offered four graded response options scored from 0 to 3. The total score obtained from the BDI was used to determine the depression level of each respondent. The instrument has been widely validated and was pilot-tested for reliability, yielding a Cronbach's alpha of 0.87 in this study.

RESULTS

Table 1 shows the overall statistics of the BDI scores for all respondents. Approximately, all examined respondents are mildly depressed with an average BDI score of 19.26. The skewness value of 0.623 is considered moderate, and this suggests that the distribution is not severely skewed. Also, a kurtosis value close to zero (0.011) suggests that the distribution is relatively normal in terms of tail heaviness. These values, supported by the Normal Q-Q plot in Figure 1 where the points are very close to the straight line implying that the BDI scores are likely normally distributed. The normality assumption is required for the usage of both the independent sample t-test (for comparison of two means) and the one way analysis of variance (for comparison of more than two means), the two inferential statistics used for comparison of the BDI scores across different sociodemographic divides in this study.

Table 1. Descriptive Statistics for the BDI Score

	Mean	Skewness	Kurtosis	Std. Deviation
Statistic	19.26	0. 623	0. 011	8. 22

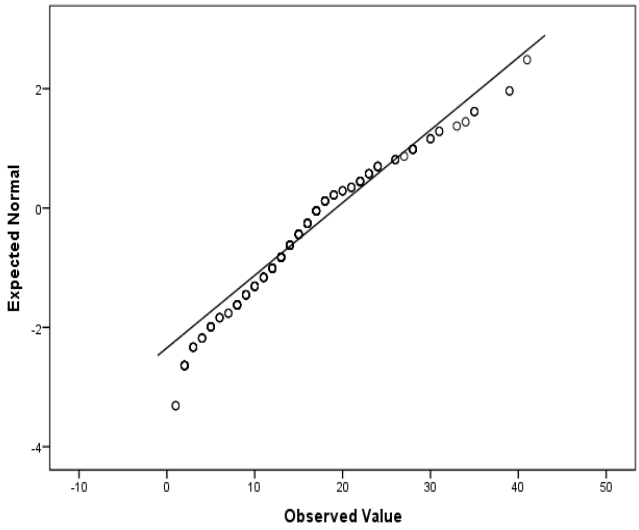

Figure 1. Normal Q-Q Plot of the BDI Score

The descriptive statistics for the BDI's score for gender of respondents is presented in Table 2. Male respondents scored higher (mean = 20.42 and Std. Deviation = 8.66) than female respondents (mean = 17.58 and Std. Deviation = 7.20), with a mean difference of approximately 2.84 and standard deviation of 1.46 approximately. This implies that male respondents (moderate depression) are significantly more depressed than female respondents (mild depression) with a a p-value (0.000) less than 5% level of significance.

Table 2. Comparison of the BDI score for the the gender of the respondents

	Mean	Std. Deviation	t-Stat (P-value)
Male	20.42	8. 66	9.806 (0.000)
Female	17.58	7. 20	

Table 3 shows that the mean score for the Fed. Poly, Ile-Oluji (19.48) is slightly higher compared to that of Fed. Poly, Ado-Ekiti (19.16), the independent sample t-test, however reveals that the difference is not significant at 0.05 level.

Table 3. Comparison of the BDI score for the institutions of the respondents

	Mean	**Std. Deviation**	**t-Stat (P-value)**
Fed. Poly, Ile-Oluji	19.48	9. 02	1.033 (0.302)
Fed. Poly, Ado-Ekiti	19.16	7. 82	

The result of comparison of the BDI scores for the considered age-groups is presented in Table 4. Age group 30-49 years has the significantly highest mean depression score (19.88) and the age group below 30 years has the lowest mean score (17.97). The table also shows that there is no significant difference in the depression score for both age-groups *below 30 years* and *50 years and above*, while the age-group *30-49 years* is significantly different.

Table 4. Comparison of the BDI score among different age groups

	Mean	**Std. Deviation**	**F-Stat (P-value)**
Below 30	17.97[a]	7. 81	16594 (0.000)
30-49	19.88[b]	8. 24	
50 and above	18.25[a]	8. 20	

[a,b] indicate a homogeneous subset

Table 5 shows that respondents who are Christians have the significantly highest mean depression score (19.87) and those practicing other religion has the lowest mean score (17.12). Post-hoc test reveal that the depression score for those practicing Islam and those practicing other religion are not significantly different at 5% level.

Table 5. Comparison of the BDI score among religion of respondents

	Mean	**Std. Deviation**	**F-Stat (P-value)**
Christianity	19.87[b]	8. 83	16.579 (0.000)
Islam	18.31[a]	7. 18	
Others	17.12[a]	2. 68	

[a,b] indicate a homogeneous subset

The result of test of significantly difference in the level of depression among the respondents' unit in the polytechnics is presented in Table 6. The table shows that the senior administrative staff have the significantly highest mean depression score (20.56), while the ad hoc staff have the significantly lowest mean score (16.54). Post-hoc test

further reveals that there is no significant difference in the BDI score between (i) academic staff and junior administrative staff, (ii) senior and junior administrative staff, while the adhoc-staff are the least depressed.

Table 6. Comparison of the BDI score among units of the respondents

	Mean	Std. Deviation	F-Stat (P-value)
Academic staff	18.73[b]	8. 35	26.536 (0.000)
Senior Administrative staff	20.57[c]	7. 88	
Junior Administrative staff	19.64[b,c]	8. 74	
Adhoc staff	16.54[a]	7. 31	

[a,,b,c] *indicate homogeneous subset*

DISCUSSION

This study investigates the differences in depression levels among Polytechnic staff in Nigeria across various demographic variables, including age, religion, gender, and units, using the Beck's Depression Inventory (BDI) scores. The findings of this study provide valuable insights into the mental health of Polytechnic staff and have implications for mental health support and interventions.

Depression Levels by Gender

The results indicated a significant differences in depression levels between males and females. Male staff are found to be more depressed than female staff. The possible reasons for these differences could be attributed to cultural and societal believes in the environment where the study was carried out (southwestern part of Nigeria), where male are responsible for overall wellbeing of both immediate and extended family. The struggle to meet up with societal expectations and coupled with the demand of job may be contributing factors. This finding is consistent with a previous research among polytechnic staff (Adetunji & Ademuyiwa, 2019) where female staff were reported to experience lower levels of depression than males. Other studies (Adebayo & Yusuf, 2021; Arenliu et al., 2016; Pătraşcu et al., 2024; Rakhmanov et al., 2020; Zhao et al. 2020) however reported a conflicting result where female staff were reported to be more depressed. Psychosocial and biological factors have been reported as possible explanations for gender differences in depression level (Yoon & Kim, 2018).

Depression Levels by Institution

Although the depression is higher among staff of the Federal Polytechnic, Ile-Oluji (more recently established institution), the difference is however not significant. Newly established institutions like the Federal Polytechnic, Ile-Oluji often face administrative instability, limited personnel, and poor welfare structures, which can make working conditions even more stressful. Staff members in such institutions may carry multiple roles, increasing emotional and physical fatigue (Olatunji & Kehinde, 2022). By contrast, older institutions like the Federal Polytechnic, Ado-Ekiti may suffer from systemic inertia, including outdated structures, rigid promotion protocols, and inadequate staff development opportunities. These affect job satisfaction and mental health, but from a different angle linked more to stagnation than start-up stress (Bamidele & Ogundele, 2023).

Depression Levels by Age

Results also revealed significant differences in depression levels among different age groups. Staff in the middle age group (30-49 years) are found to have a significantly higher depression level when compared with older and younger participants with significantly lower scores of depression. Among possible reasons for these differences could be attributed to life stage, responsibilities, and stressors associated with the age group. While older staff may have higher resilience and may be able to balance personal life with their work and also engage in certain activities that increase social support, younger staff may have lesser responsibilities in early stage of life and may be satisfied with their current situation.

This finding is consistent with previous studies (Hybels et al., 2022; Talukder et al., 2014) that have reported varying levels of depression across different age groups. In a similar study among polytechnic staff, Adetunji and Ademuyiwa (2019) reported that depressions decrease as age increases. Daily work fulfilment, perceived control, and changes in economic status are important factors that can explain the difference between older and younger staff (Kim, 2010). Some authors (O'Laughlin et al., 2005; Darabi et al., 2017) reported no significant difference in respondents' age and depression level

Depression Levels by Religion

According to the findings in the study, Christians are the most depressed staff with a significantly higher BDI score. This finding is in line with Braama and Koenig (2019). However, Waite (2017) suggested that religion may not be a significant predictor of

depression level. The relationship between religion and depression is complex, and further research is needed to understand the underlying mechanisms.

Depression Levels by Units

The study found significant differences in depression levels among staff in different units. Generally, administrative staff are found to be more depressed than academic staff. In the ace of current economic challenges, it is easier for academic staff to adjust their time table (working hours) to just a few days in a week, reducing the cost of transportation and other logistics to work. The situation is not the same for administrative staff who are expected to be at their duty post five days a week, usually, under the strict supervision of their immediate boss. This finding suggests that the work environment and job demands may play a role in contributing to depression among staff. Previous research has highlighted the importance of workplace factors in mental health. Findings from other studies (Adetunji & Ademuyiwa, 2019; Rakhmanov et al., 2020) also support the result in this study.

CONCLUSION

This study underscores the importance of sociodemographic variables in understanding depression among Polytechnic staff in Nigeria. The findings indicate that age and work-related pressures play a substantial role, particularly for individuals in mid-life and those with senior academic responsibilities. Male staff reported significantly higher depression scores than female staff, while respondents in the 30–49-year age group exhibited higher, though statistically non-significant, levels of depression compared with other age groups. Job unit showed a statistically significant effect, with senior academic staff at the highest risk of depression. Although religion demonstrated associations with depressive symptoms, the strongest predictors that emerged from the analysis were age and employment status.

The study contributes to the literature on workplace mental health in academic settings by identifying specific sociodemographic profiles that are more vulnerable to depression, thereby providing an empirical basis for designing targeted mental health strategies. Practically, the results support the establishment or strengthening of psychological support services and counselling units, particularly for senior staff and middle-aged employees who face heightened role demands. Institutions are encouraged to

integrate periodic mental health screening into human resource and staff welfare programmes, develop tailored interventions for staff in the 30–49-year age group and those in senior academic positions, organise stress-reduction and work–life balance workshops, and implement sustained awareness campaigns, especially among male staff who may underreport symptoms. In addition, inclusive religious and spiritual outreach is recommended to ensure that the diverse religious needs of staff are recognised and supported as part of a holistic approach to mental well-being.

Future research should explore in greater depth the mechanisms underpinning the observed sociodemographic patterns, including why male respondents record higher depression scores and how cultural or occupational stressors contribute to this disparity. Studies involving larger and more diverse samples across multiple institutions would enhance the generalisability of the findings and allow for more robust modelling of age, employment status, religious affiliation, and unit-based differences. Further work is also needed to design, implement, and rigorously evaluate tailored mental health interventions for Polytechnic staff, thereby informing evidence-based policies to promote psychological well-being in Nigerian higher education.

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