

Influence Of Sex And Educational Level On Psychological Well-Being Among Psychiatric Outpatients In Selected Tertiary Health Institutions In Benue State Nigeria

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Article History	Abstract
Original Research Article	<p><i>Psychological well-being among psychiatric outpatients remains a pressing concern globally, with disparities influenced by socio-demographic factors such as sex and educational attainment. The study investigated the influence of sex and educational level on psychological wellbeing among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria. The study utilized a cross-sectional survey design where two hundred and twenty-five (225) psychiatric outpatients; 125 (55.6%) males and 100 (44.4%) females were sampled for the study with the mean age of 39 years. The main and interaction effect of sex and educational level on psychological well-being of psychiatric was hypothesized and tested using Two-Way Analysis of Variance (ANOVA). There was no significant main effect of sex on psychological well-being, $F(1, 223) = 0.88, p = .349, \text{partial } \eta^2 = .004$. Also, there was a significant main effect of educational level on psychological well-being, $F(3, 223) = 3.15, p = .026, \text{partial } \eta^2 = .041$. Furthermore, interaction effect between sex and educational level was statistically significant, $F(3, 223) = 9.17, p < .001, \text{partial } \eta^2 = .110$. It was concluded that sex alone does not significantly influence psychological well-being but educational level plays a notable role while highlighting education and sex interplay in psychological well-being. It was therefore recommended that since educational level significantly influences psychological well-being, tertiary health institutions should integrate mental health literacy programs into outpatient care.</i></p> <p>Keywords: <i>Psychological Well-being, Sex, Educational Level, Psychiatric Outpatients, Makurdi.</i></p>
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<p>Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p> <p>Citation: Nguemo Agatha Hemba, Samuel Terzungwe Anhang, Joyce Mcivir Terwase, & Moses Denen Chiahemba. (2026). Influence of sex and educational level on psychological well-being among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria. <i>UKR Journal of Arts, Humanities and Social Sciences (UKRJAHS)</i>, 2(1), 250–255.</p>	

INTRODUCTION

Psychological well-being among psychiatric outpatients is a global concern, with disparities influenced by sex and educational attainment. In Africa and Nigeria, these factors intersect with systemic gaps in mental health services, while Benue State reflects localized challenges in tertiary health institutions. Over one billion people worldwide live with mental health conditions, yet most lack adequate care, making psychiatric well-being a pressing global issue (WHO, 2025). Mental health disorders are among the leading causes of disability globally, with socioeconomic determinants such as education strongly influencing

outcomes (Moitra et al., 2023). UNICEF emphasizes that psychosocial well-being is integral to achieving Sustainable Development Goal 3, highlighting the importance of inclusive interventions across age and gender (UNICEF, 2023).

Sub-Saharan Africa faces severe shortages of mental health professionals and facilities, with stigma and limited resources exacerbating inequalities (Atewologun et al., 2025). Sex disparities are evident, as women often experience higher rates of depression and anxiety, while

men face barriers in seeking care. Educational level significantly impacts coping strategies and access to psychiatric services, with lower education linked to poorer outcomes.

Recent reforms, including the revitalization of national mental health policy, aim to bridge gaps in psychiatric care (WHO Nigeria, 2025). Educational disparities and gender roles strongly influence psychological well-being, with women and less-educated individuals disproportionately affected. Benue State's Comprehensive Community Mental Health Programme (CCMHP) has expanded psychiatric outpatient services through tertiary institutions and community outreach (MHIN, 2025). Studies in Benue highlight the psychological trauma among vulnerable populations, with resilience and education serving as protective factors (Omachi & Anhang, 2024; Chiahemba et al., 2025). Outpatient clinics remain overburdened, and disparities in sex and educational level continue to shape patient well-being.

This study situates the influence of sex and educational level on psychological well-being within a broader context of global inequities, African systemic challenges, Nigeria's evolving mental health landscape, and Benue State's localized realities. It underscores the need for gender-sensitive and education-focused interventions to improve psychiatric outcomes.

Statement of the Problem

Psychological well-being among psychiatric outpatients remains a pressing concern globally, with disparities influenced by socio-demographic factors such as sex and educational attainment. Evidence shows that women often report higher rates of depression and anxiety, while men face cultural barriers to seeking care, leading to underdiagnosis and poor outcomes. Similarly, educational level strongly shapes coping strategies, health literacy, and adherence to treatment. Individuals with higher education are more likely to access resources and demonstrate resilience, whereas those with limited education often struggle with stigma and poor health-seeking behavior (WHO, 2025; Omachi & Anhang, 2024).

In Nigeria, despite recent reforms in mental health policy, less than 10% of people living with mental illness receive adequate treatment and tertiary health institutions remain overstretched (Healthwise, 2025). In Benue State, psychiatric outpatient clinics face increasing demand, yet little is known about how sex and educational level interact to influence psychological well-being. This gap necessitates empirical investigation to guide targeted interventions.

Aim and Objectives of the Study

The aim of the study is to investigate the influence of sex and educational level on psychological well-being of psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria. The specific Objectives includes:

- i. To investigate the main effect of sex on psychological well-being among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria.
- ii. To investigate the main effect of educational Level on psychological well-being among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria.
- iii. To examine the interaction effect of sex and educational level on Psychological Well-being among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria.

Research Questions

The following research questions were formulated.

- i. What main effect will sex have on psychological well-being among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria?
- ii. What main effect will Educational Level have on Psychological Well-being among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria.
- iii. What interaction effect will sex and educational level have on Psychological Well-being among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria.

Significance of the study

This study is significant to psychiatric outpatients, healthcare providers and researchers as it explores the demographic factors (sex and educational level) on psychological well-being. Globally, it will provide discourse on mental health, particularly the role of socio-demographic factors such as sex and educational level in shaping psychological well-being among psychiatric outpatients. The findings will provide context-specific insights for mental health practitioners, policymakers, and educators in Nigeria and the study holds academic significance by filling a gap in literature and serving as a reference for future research in psychology, psychiatry, and public health.

Theoretical Review

The Social Determinants of Health (SDH) Theory provides the most suitable framework to explain the influence of sex and educational level on psychological well-being among psychiatric outpatients in Benue State, Nigeria. This theory posits that health outcomes are not solely determined by

biological or clinical factors but are significantly shaped by social, economic, and demographic variables (Marmot, M., & Wilkinson, 2005). Sex and education, as key social determinants, directly affect access to resources, coping strategies, and resilience in managing psychiatric conditions. In context, women often face higher risks of depression and anxiety due to gendered social roles, while men may encounter cultural barriers that discourage help-seeking behavior. Similarly, educational attainment influences health literacy, treatment adherence, and the ability to navigate stigma associated with mental illness. Patients with higher education are more likely to understand their conditions and utilize support systems, whereas those with limited education may experience poorer psychological outcomes (WHO, 2023; 2008).

Applying the SDH framework to psychiatric outpatients in Benue State highlights how structural inequalities intersect with individual characteristics to shape psychological well-being. This theory underscores the need for gender-sensitive and education-focused interventions in tertiary health institutions, ensuring equitable mental health care delivery.

Research Hypotheses

The following hypotheses were formulated for the study.

- i. There will be a significant main and interaction effect of sex and educational level on psychological well-being between among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria.

METHOD

Design of the Study

This study employed a cross-sectional survey design to investigate the influence of sex and educational level on psychological well-being of psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria. The design, suitable for observing relationships without manipulation, collects data at one point in time (Shindi, 2017).

Study Setting

The setting of the study is Benue State. While the study specific institutions where data was collected remain Federal Medical Centre, Makurdi, and Benue State University Teaching Hospital, Makurdi located within the State Capital, Makurdi.

Participants

Participants for the study comprise of 231 psychiatric outpatients, drawn from the population of 574 from Federal Medical Centre and Benue State University Teaching Hospital all in Makurdi. One hundred and sixty-six (166)

participants were sampled from Federal Medical Center, Makurdi while sixty-five (65) participants from the Benue State University Teaching Hospital, Makurdi.

Sampling

Purposive sampling was employed to select hospitals and participants. Psychiatric outpatients from Federal Medical Centre and Benue State University Teaching Hospital who were available and willing to complete the questionnaires. This method was chosen due to challenges with probability sampling, as participants were receiving treatment on an outpatient basis, ensuring relevant data collection.

Instruments

The study used a self-report questionnaire for data collection. The questionnaire comprised of participants socio-demographic information such as sex, age, marital status, educational level in section 'A' while section 'B' comprised of items of Ryff Psychological Well-being Scale.

The Ryff Psychological Well-being Scale

The Psychological Well-being Scale was developed by Ryff and Keyes (1995), as a shortened version of the original Ryff Psychological Wellbeing Scale. The scale contains 18 items, and measures psychological wellbeing using a 7-point scale such as: 1 = strongly agree; 2 = somewhat agree; 3 = a little agree; 4 = neither agree nor disagree; 5 = a little disagree; 6 = somewhat disagree; and 7 = strongly disagree. The Scale has six subscales which are: Autonomy; Environmental Mastery; Personal Growth; Positive Relations with Others; Purpose in Life; and Self-acceptance. The scale has a reliability Cronbach alpha of 0.88 for the entire scale. The following reliability was recorded for its subscales: Autonomy = .70; Environmental Mastery = .72; Personal Growth = 0.81; Positive Relations with Others = 0.75; Purpose in Life = 0.77; Self-Acceptance = 0.75. Lee, et al., (2019) reported a positive correlation between perceived health and the 18-item psychological wellbeing scale ($r = .20, p < .001$), indicating adequate criterion validity. In terms of scoring, items 1, 2, 3, 8, 9, 11, 12, 13, 17, and 18 will be reversed-scored. Higher scores indicate higher levels of psychological wellbeing, while lower scores mean poor psychological wellbeing.

Procedure

The researcher obtained a letter of introduction from the Head of Department of Psychology, Benue State University, Makurdi, which facilitated permission for the pilot study and access to Federal Medical Centre and Benue State University Teaching Hospital. Ethical approval was secured, and trained research assistants assisted in administering questionnaires, including interpreting items for non-English speakers. Rapport was established with

participants, and informed consent was obtained, emphasizing voluntary participation and the right to withdraw without consequences. Confidentiality was assured by excluding names on forms. Questionnaires were administered only to willing psychiatric outpatients, retrieved afterward, and prepared for data analysis.

Table 1. Summary Table of Two-Way Analysis of Variance (ANOVA) of Psychological Wellbeing by Gender and Educational Level among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria.

Source	SS	df	MS	F	P	Partial η^2
Sex	25.40	1	25.40	0.88	.349	.004
Educational Level	272.06	3	90.69	3.15	.026	.041
Sex x Educ. Level	792.32	3	264.11	9.17	.001	.110
Error	6424.69	223	28.81			
Total	452576.00	231				
Corrected Total	7469.51	230				

Dependent variable: psychological well-being

Model $R^2 = .140$, Adjusted $R^2 = .113$.

Significance level set at $\alpha = .05$.

The results in Table 1 showed no significant main effect of sex on psychological wellbeing, $F(1, 223) = 0.88, p = .349$, partial $\eta^2 = .004$, indicating that males and females did not differ significantly in their overall levels of psychological wellbeing. There was a significant main effect of educational level on psychological wellbeing, $F(3, 223) = 3.15, p = .026$, partial $\eta^2 = .041$. This suggests that psychological well-being varied significantly across different levels of education. Importantly, the interaction effect between sex and educational level was statistically significant, $F(3, 223) = 9.17, p < .001$, partial $\eta^2 = .110$. This indicates that the effect of educational level on psychological well-being differed for males and females. In other words, sex moderated the relationship between educational attainment and psychological wellbeing. Overall, the model explained approximately 14% of the variance in psychological wellbeing ($R^2 = .140$), representing a moderate explanatory effect.

DISCUSSION OF FINDINGS

The study investigates the influence of sex and educational level on psychological well-being of psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria. The hypothesis which states that there will be a significant main and interaction effect of sex and educational level on psychological well-being between among psychiatric outpatients in selected tertiary health institutions in Benue State, Nigeria was partially confirmed. This implies that psychological well-being varied

Data Analysis

Data collected were coded and analyzed using IBM SPSS version 23. To test hypotheses, Two-Way Analysis of Variance (ANOVA) was used.

RESULTS

significantly across different levels of education and importantly, the interaction effect between gender and educational level was statistically significant. This finding supported the work of van Ditzhuijzen and Overeem (2024); Shojaei and Glick (2025) maintaining sex and education as a significant factor of psychological well-being. The current study on the main effect of sex was not significant while Shojaei and Glick (2025) pointed that psychological well-being of the participants significantly improved among female than for males which education was critical factor.

Also, Akter et al., (2025) emphasized that both sex and education are critical determinants of psychiatric outcomes, and interventions should address gender-specific vulnerabilities while promoting educational empowerment. In the direction, Balia et al., (2025) demonstrated that curricula addressing gender norms and power dynamics improved psychological well-being among psychiatric patients, particularly women. These studies support the notion that, in clinical settings, psychological well-being may differ significantly educational level reinforcing the findings from the current study in Benue State.

CONCLUSION

Based on the findings of the study, it was concluded that sex alone does not significantly influence psychological well-being but educational level plays a notable role

while highlighting education and sex interplay in psychological well-being.

Recommendations

Since educational level significantly influences psychological well-being, tertiary health institutions should integrate mental health literacy programs into outpatient care. These programs can empower patients with lower education levels by simplifying treatment information, teaching coping strategies, and reducing stigma.

Although sex alone showed no significant main effect, the interaction with education was critical. Mental health practitioners should adopt gender-sensitive counselling and support strategies that consider how educational attainment differently impacts men and women.

Implications of the study findings

The findings highlight that while sex alone does not significantly predict psychological well-being, educational level plays a crucial role, and its impact differs across genders. This implies that interventions in psychiatric outpatient care must prioritize education-sensitive strategies while also considering gender dynamics. For policymakers, the results underscore the need to integrate mental health literacy programs tailored to varying educational backgrounds and gender-specific needs. Clinicians should adopt personalized approaches that address these disparities, thereby improving treatment adherence and resilience. Academically, the study enriches literature on socio-demographic influences, offering a framework for future research in Nigeria and beyond.

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