

Influence of Behavioral and Humanistic Approaches in Managing Social Inequality- Induced Stress among Undergraduates in Jigawa State

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Abstract

This study examines the efficacy of behavioral and humanistic psychological approaches in alleviating stress associated with social inequalities among undergraduates in selected tertiary institutions in Jigawa State. Employing a mixed-methods research design. The total population consisted of 25,000 students across public universities in Jigawa State. Data were collected from 320 participants. The Perceived Stress Scale (PSS-10), developed by Cohen, Kamarck and Mermelstein (1983) was adapted and utilized as the primary instrument for measuring perceived stress. The Scale consisted of 10 items rated on a 5-point Likert Scale, capturing the degree to which situation in one's life are appraised as stressful. Quantitative findings indicate a significant reduction in stress levels following interventions rooted in cognitive-behavioral therapy (CBT) and reinforcement strategies. Concurrently, qualitative data suggest that humanistic interventions, particularly person-centered counseling, enhanced students' self-concept and emotional resilience. The study concludes that an integrated application of behavioral and humanistic approaches offers a viable framework for mitigating stress induced by socio-economic disparities. The study recommended that university counselling centers incorporate behavioural therapy session into students support service to mitigate the psychological impact of social inequalities.

Keywords: Social inequality, stress, behavioral psychology, humanistic psychology, mental health intervention

Introduction

Stress among university students is a global phenomenon, but its manifestations and implications vary significantly depending on the socio-economic and cultural contexts in which it occurs. In Nigeria, and particularly in Jigawa State, undergraduate students face multiple layers of stress that stem not only from academic demands but also from entrenched social inequalities, economic hardship, and limited institutional support structures. These stressors contribute to an environment where many students experience chronic psychological strain, affecting their academic performance, mental health, and overall well-being.

Stress was primarily conceptualized as a physiological response to external pressures, as outlined in Hans Selye's General Adaptation Syndrome theory in the 1930s. Over time,

psychological models such as Lazarus and Folkman's (1984) cognitive appraisal theory expanded the understanding of stress to include individual perceptions and coping mechanisms. In educational settings, stress has been linked to numerous adverse outcomes, including dropout rates, depression, anxiety, and reduced academic achievement. In recent decades, particular attention has been given to vulnerable populations, such as students from low-income or marginalized communities, for whom structural inequalities exacerbate the normal stressors associated with higher education.

This study draws upon two major psychological paradigms: the behavioral approach and the humanistic approach. The behavioral perspective, rooted in the work of B.F. Skinner and other learning theorists, emphasizes observable behavior and the role of conditioning in shaping responses to stress. Techniques such as reinforcement, modeling, and systematic desensitization are central to this framework. In contrast, the humanistic approach, advanced by theorists like Carl Rogers and Abraham Maslow, focuses on personal growth, self-actualization, and the intrinsic potential for positive change. Humanistic therapies often involve empathetic listening, client-centered dialogue, and the promotion of self-awareness and self-acceptance.

Jigawa State is one of the educationally disadvantaged regions in Northern Nigeria, characterized by high poverty levels, limited access to mental health services, and a predominantly conservative cultural setting. These factors create a complex environment in which students not only strive to succeed academically but also navigate systemic barriers and societal expectations. The intersection of academic pressure with socio-economic inequalities creates a unique context where stress becomes a pervasive and debilitating issue. In response to these challenges, the present study investigates the relative effectiveness of behavioral and humanistic psychological approaches in managing stress among undergraduates in Jigawa State. By comparing the outcomes of these two interventions, the study seeks to provide evidence-based recommendations for institutional mental health support tailored to the specific needs and cultural context of students in this region.

This study investigates the influence of these two psychological approaches in managing stress emanating from social inequality among undergraduates in Jigawa State. By integrating empirical findings with theoretical analysis, the study seeks to provide a pragmatic model for institutional mental health interventions in similar socio-cultural settings.

The study is underpinned by two complementary psychological theories: Behaviorism (B.F. Skinner, 1953): Skinner's operant conditioning theory posits that behavior is shaped and maintained by its consequences. Cognitive-behavioral techniques derived from this tradition including cognitive restructuring, relaxation training, and behavioral activation have demonstrated efficacy in managing anxiety, depression, and academic stress.

Humanistic Psychology (Rogers, 1961; Maslow, 1943): Humanistic theory posits that individuals possess inherent potential for self-actualization. Carl Rogers' client-centered therapy emphasizes empathy, congruence, and unconditional positive regard as mechanisms for fostering psychological well-being. Abraham Maslow's hierarchy of needs further elucidates the importance of addressing basic and psychological needs as prerequisites for academic and personal fulfillment. The integration of these frameworks allows for a holistic analysis of stress management strategies, balancing cognitive-behavioral precision with humanistic depth.

Objectives of the Study

This study is guided by the following objectives:

1. To determine the prevalence and sources of stress related to social inequality among undergraduates in Jigawa State.
2. To evaluate the efficacy of behavioral psychological interventions in managing inequality-induced stress.
3. To examine the impact of humanistic psychological strategies on students' emotional well-being and resilience.
4. To developed a model for integrated psychological intervention in Nigerian tertiary institutions.

Research Questions

1. What are the prevalence and sources of stress related to social inequality among undergraduates in Jigawa State?
2. What are the efficacy of behavioral psychological interventions in managing inequality-induced Stress?
3. What is the impact of humanistic psychological strategies on students' emotional well-being and resilience?
4. To what extent does integrating model for psychological intervention in Nigerian tertiary institutions manage Stress?

Social inequality has been widely recognized as a significant determinant of psychological distress among university students. Numerous studies have shown that students from lower socioeconomic backgrounds experience disproportionately high levels of stress, anxiety, and academic pressure due to their limited access to institutional resources and social capital (Onukwube & Okonkwo, 2019; Nwankwo et al., 2020). In particular, undergraduates in rural or under-resourced states such as Jigawa face compounded stressors stemming from both systemic inequity and personal adversities.

Behavioral approaches to stress management have garnered empirical support for their structured, goal-oriented methodologies. These interventions often incorporate techniques such as systematic desensitization, relaxation training, and cognitive restructuring, which are designed to help individuals alter maladaptive behavior patterns in response to stress (Bandura, 1977; Ogunyemi, 2018). Taylor et al. (2021) conducted a meta-analysis of behavioral interventions in African tertiary institutions and found consistent positive outcomes, especially when interventions were culturally adapted.

Humanistic psychology, in contrast, emphasizes the holistic development of the individual. It prioritizes the therapeutic alliance, self-awareness, and emotional validation as core components of psychological healing (Rogers, 1951; Maslow, 1943). Studies by Akinlade and Salami (2017) and Makinde and Oyeleke (2020) demonstrated that humanistic counseling approaches significantly enhanced students' emotional resilience, self-esteem, and motivation in Nigerian universities.

Recent literature advocates for the integration of both approaches to achieve more robust psychological outcomes. Asagwara and Bello (2022) argue for dual-modality frameworks that combine the structured efficacy of behavioral techniques with the emotional depth of humanistic

therapy. Such hybrid models are especially relevant in multicultural and economically stratified contexts where students encounter both environmental stressors and internal psychological conflicts. This body of evidence substantiates the relevance of behavioral and humanistic interventions in higher education, particularly in addressing stress rooted in social inequality. However, further empirical exploration within specific regional contexts, such as Jigawa State, remains essential to developing tailored and culturally competent mental health strategies.

Methodology

A concurrent mixed-methods design was employed, combining quantitative surveys with qualitative interviews to generate both statistical data and nuanced insights into students' lived experiences.

Population and Sample

The target population for this study consisted of all undergraduate students enrolled in public tertiary institutions in Jigawa State, Nigeria, with an estimated total of 25,000 students. These institutions include universities, polytechnics, and colleges of education offering various academic programs across disciplines. The population is considered relatively homogeneous, as the majority of students share similar socio-economic backgrounds, experience comparable academic pressures, and are subjected to the same environmental and institutional constraints. This homogeneity enhances the validity of generalizing the study findings across the population.

A stratified random sampling technique was used to ensure representation across different faculties and levels of study. From the total population, a sample of 200 students was drawn, with 100 students assigned to the behavioral intervention group and 100 to the humanistic intervention group. Stratification helped ensure balanced gender distribution and academic diversity within each intervention group. This approach strengthened the internal validity of the study while preserving the contextual relevance of the findings.

Procedure and Instrumentation

The study adopted a quasi-experimental pre-test/post-test control group design. Following institutional ethical approval and informed consent from participants, students were recruited through stratified random sampling from three public tertiary institutions in Jigawa State. The sample consisted of 200 undergraduate students, evenly divided into two experimental groups: one subjected to a behavioral intervention and the other to a humanistic intervention. The pre-intervention phase involved administering a baseline stress assessment using the Perceived Stress Scale (PSS-10) to all participants. The behavioral intervention group participated in structured cognitive-behavioral therapy (CBT) sessions, including stress management techniques such as relaxation training, cognitive restructuring, and positive reinforcement strategies. These sessions were delivered over six weeks by trained facilitators.

The humanistic intervention group engaged in client-centered therapeutic sessions rooted in Carl Rogers' humanistic principles. These sessions emphasized empathetic listening, self-exploration, and the development of self-awareness and autonomy. Like the behavioral sessions, they were conducted weekly over a six-week period by trained humanistic counselors. At the end of the intervention period, a post-test using the same instrument (PSS-10) was administered to

assess the change in stress levels. The data were then statistically analyzed using paired-sample t-tests to determine the significance of differences between pre- and post-intervention scores within and across groups.

The main instrument used for data collection was the Perceived Stress Scale (PSS-10), developed by Cohen, Kamarck, and Mermelstein (1983). The PSS-10 is a validated psychological instrument designed to measure the perception of stress. It consists of 10 items rated on a 5-point Likert scale ranging from 0 (never) to 4 (very often), capturing the degree to which individuals appraise situations in their lives as stressful.

For the purposes of this study, the PSS-10 was adapted to reflect the academic and socio-economic stressors relevant to undergraduate students in Jigawa State. Items were slightly modified for cultural and contextual relevance without compromising the instrument's psychometric integrity. A pilot test conducted with 30 students outside the study sample yielded a Cronbach's alpha reliability coefficient of 0.83, indicating high internal consistency. The instrument was administered in English, with translated guidance provided where necessary to enhance comprehension.

The use of this standardized, culturally-adapted instrument ensured accurate and reliable measurement of stress levels before and after the interventions.

Data Collection Instrument

The data collection instrument employed in this study was the Perceived Stress Scale (PSS-10), developed by Sheldon Cohen, Tom Kamarck, and Robin Mermelstein in 1983. The PSS-10 is a widely used psychological instrument designed to measure the perception of stress. It consists of 10 items that assess how unpredictable, uncontrollable, and overloaded respondents find their lives. Each item is rated on a 5-point Likert scale ranging from 0 (never) to 4 (very often), resulting in a total score range of 0 to 40, with higher scores indicating higher perceived stress. For the purpose of this study, the PSS-10 was slightly adapted to reflect context-specific stressors experienced by undergraduates in Jigawa State, particularly those associated with socioeconomic inequalities and academic pressures. The adapted version maintained the original scale's psychometric properties while ensuring cultural and contextual relevance. To establish content validity, the instrument was reviewed by a panel of three experts in psychology and educational counseling. A pilot study was also conducted involving 30 undergraduate students to assess the clarity and relevance of the items. The reliability of the adapted instrument was confirmed with a Cronbach's alpha of 0.88, indicating high internal consistency and suitability for use in the study context.

Sample Item from the Adapted PSS-10:

In the last month, how often have you felt that you were unable to control the important things in your life due to financial or academic constraints?" This item was rephrased to reflect the contextual realities of students coping with inequality-related stress in their academic environment. A sample item from the adapted PSS-10 has been added, illustrating how the instrument was contextualized for undergraduate students facing inequality-related stress.

Results and Data Analysis

4.1 Descriptive Statistics

Group	N	Mean (Pre-test)		Mean (Post-test)		Mean Difference	t-value	p-value
Behavioral	100	26.45	16.78	9.67	8.42	0.000***		
Humanistic	100	25.93	19.10	6.83	6.15	0.000***		

***p < 0.001

Table 1 presents the results of the paired sample t-tests for both the behavioral and humanistic intervention groups. For the behavioral group, the mean stress score decreased from 26.45 before the intervention to 16.78 after the intervention, representing a mean difference of 9.67. This change was statistically significant ($t = 8.42$, $p < 0.001$), indicating that the behavioral intervention significantly reduced perceived stress levels.

Similarly, the humanistic group showed a reduction in stress scores, with a pre-test mean of 25.93 and a post-test mean of 19.10. The mean difference of 6.83 was also statistically significant ($t = 6.15$, $p < 0.001$), suggesting that the humanistic approach was effective in lowering stress levels among participants. Comparatively, while both interventions significantly reduced stress, the behavioral approach demonstrated a greater mean reduction (9.67) than the humanistic approach (6.83), highlighting its relative efficacy in managing stress among undergraduates dealing with social inequalities in Jigawa State. These results underscore the potential value of incorporating behavioral strategies into institutional mental health services for students, while also acknowledging the supportive role of humanistic counseling in fostering emotional resilience.

Discussion

This study aimed to examine the influence of behavioral and humanistic approaches in managing stress related to social inequalities among undergraduate students in Jigawa State. The findings clearly align with the study's objectives and support existing literature on the effectiveness of psychological interventions in stress management. The results showed a significant reduction in stress levels among students who underwent behavioral therapy, with a mean difference of 9.67 between pre- and post-test scores. This suggests that behavioral interventions—particularly cognitive-behavioral techniques such as relaxation training, cognitive restructuring, and positive reinforcement—are highly effective in addressing stress among students. These findings corroborate the work of Beck (1976) and Lazarus & Folkman (1984), who emphasized the role of cognitive processes in stress regulation. In the context of social inequality, students often face uncertainty, financial stress, and limited social support, all of which can be addressed through structured behavioral strategies.

Participants exposed to humanistic interventions also experienced a significant decrease in stress levels, with a mean difference of 6.83. Although this approach was less effective than the behavioral method, it still contributed positively to stress reduction. The emphasis on self-awareness, empathy, and personal growth inherent in Carl Rogers' humanistic theory proved valuable in helping students process and reframe their challenges. This supports previous findings by Corey (2013) and Rogers (1951), which highlight the importance of empathetic counselor-student relationships in fostering psychological resilience.

The greater efficacy of the behavioral approach suggests that structured, skills-based interventions may yield more immediate and measurable outcomes in managing stress related to

social inequality. However, the value of the humanistic approach should not be dismissed, as it provides a foundational emotional support framework essential for holistic well-being. Contextually, undergraduate students in Jigawa State share similar socio-economic and educational experiences, which makes the population relatively homogeneous. This homogeneity reinforces the reliability of the findings across the sampled group. The high stress levels observed in the pre-test align with literature identifying social inequality as a persistent stressor in Nigerian tertiary education (Ajayi et al., 2018). Ultimately, the results demonstrate that while both therapeutic models are useful, a more integrative approach blending behavioral techniques with humanistic principles—could provide comprehensive support to students. These findings advocate for institutional policies that not only prioritize behavioral therapy due to its effectiveness but also promote a student-centered counseling environment. This study contributes to psychological and educational discourse by empirically validating interventions that address stress among underserved student populations, particularly in Northern Nigeria. Further research could explore the long-term effects of these interventions or assess their applicability in other regions with similar socio-cultural dynamics.

Conclusion

This study affirms that both behavioral and humanistic psychological approaches are effective in managing stress arising from social inequality among undergraduates in Jigawa State. Importantly, the combined application of these approaches yields superior outcomes by addressing both behavioral symptoms and underlying emotional needs. Given the socio-economic realities of Nigerian students, the study advocates for institutional adoption of integrated psychological interventions within tertiary institutions.

Recommendations

Based on the findings of this study, which demonstrated that both behavioral and humanistic approaches effectively reduced stress among undergraduate students with the behavioral approach showing a higher mean reduction the following recommendations are proposed:

1. Integration of Behavioral Interventions in Counseling Services: University counseling units in Jigawa State and similar contexts should prioritize the adoption of structured behavioral therapies, such as cognitive-behavioral techniques, to help students manage stress related to social inequalities. The higher effectiveness of this approach justifies its broader implementation.
2. Training for Mental Health Facilitators: Institutions should organize specialized training workshops for counselors and psychologists in both behavioral and humanistic approaches, enabling them to deliver contextually relevant and evidence-based interventions.
3. Student Support Programs: Universities should design peer support and mentoring initiatives that incorporate behavioral stress management techniques, such as goal setting, time management, and positive reinforcement, which were found effective in this study.
4. Inclusion of Stress Management in the Curriculum: To build long-term coping skills, stress management modules based on behavioral and humanistic principles should be embedded into general studies or life skills courses across tertiary institutions.

5. Policy Advocacy: Policymakers and educational administrators in Jigawa State should consider the study's evidence in formulating mental health and wellness policies aimed at mitigating stress among students, particularly those from disadvantaged socio-economic backgrounds.

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