

Effect of Schema Therapy and Assertiveness Training on Social Anxiety and Interpersonal Sensitivity among Secondary School Students in Plateau State, Nigeria

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Abstract

This study examined the effect of Schema Therapy and Assertiveness Training on social anxiety and interpersonal sensitivity among secondary school students in Plateau State, Nigeria. Social anxiety and interpersonal sensitivity—manifested in excessive fear of evaluation, social withdrawal, and emotional vulnerability—are growing concerns in Nigerian schools, often leading to academic disengagement and psychosocial dysfunction. A quasi-experimental pre-test, post-test control group design was employed. From a population of 56 students identified through behavioural screening and referral by school counsellors, a purposive sample of 34 students was selected from three public secondary schools in Plateau State. Participants were randomly assigned to one of three groups: Schema Therapy ($n = 11$), Assertiveness Training ($n = 11$), or a control group ($n = 12$). Over eight weeks, students in the treatment groups received weekly therapeutic sessions delivered by trained school counselling psychologists. The Social Anxiety and Interpersonal Sensitivity Scale for Adolescents (SAISSA) was used to assess outcomes before and after intervention. Analysis of Covariance (ANCOVA) was conducted to evaluate treatment effects while controlling for pre-test scores. Results revealed that both Schema Therapy and Assertiveness Training produced statistically significant reductions in social anxiety and interpersonal sensitivity, with Assertiveness Training showing slightly greater improvement. The study concludes that these interventions are effective tools for enhancing emotional resilience and interpersonal functioning among adolescents. It recommends that mental health programs in Nigerian secondary schools integrate these therapies into their guidance services, particularly in underserved regions such as Plateau State.

Key words: Schema Therapy, Assertiveness Training, Social Anxiety, Interpersonal Sensitivity, Adolescents, Quasi-Experimental Design, School Counselling.

Introduction

Adolescence is widely regarded as a crucial period in human development marked by rapid physical, psychological, and social transitions. As adolescents strive to assert autonomy and establish identity, they also become increasingly aware of peer perceptions, social hierarchies, and interpersonal expectations (Steinberg, 2017). These developmental pressures, if not properly managed, can result in emotional instability, especially in areas such as self-esteem, social engagement, and emotional expression. In many Nigerian school settings, particularly in Plateau State, students face mounting academic stress, cultural expectations, and peer pressures that may predispose them to emotional challenges such as social anxiety and interpersonal sensitivity. These two constructs—though often overlooked—can significantly disrupt students' academic engagement, self-perception, and ability to form healthy peer relationships.

Social anxiety is characterized by intense discomfort or fear of negative evaluation in social or performance situations (American Psychiatric Association [APA], 2022). Adolescents experiencing social anxiety frequently avoid participating in class discussions, group assignments, or extracurricular activities for fear of embarrassment or judgment. This avoidance behavior, while misunderstood as shyness or indifference, may in fact be a symptom of an internal struggle that affects the student's mental health and academic growth. Closely related is interpersonal sensitivity, a tendency to perceive and overreact to perceived slights, criticism, or rejection from others (Boyce & Parker, 1989). Students with heightened interpersonal sensitivity may misinterpret benign social cues as personal attacks, leading to emotional distress, withdrawal, and poor peer interactions. The intersection of these two traits can create a complex barrier to social development and emotional maturity in adolescents.

In the Nigerian school system, mental health issues like social anxiety and interpersonal sensitivity often go unnoticed or are dismissed due to prevailing stigmas surrounding emotional vulnerability. Teachers and peers may view socially anxious students as disengaged or disrespectful, while students with interpersonal sensitivity may be unfairly labelled as overly dramatic or moody (Peter, 2022). In Plateau State, where ethnic and religious diversity adds additional layers of social complexity, students may struggle even more to navigate peer relationships and group interactions, especially when faced with identity-based microaggressions or community instability. These challenges can manifest in poor academic performance, isolation, absenteeism, and even long-term psychological distress if not appropriately addressed through early interventions.

Furthermore, limited access to school-based mental health services exacerbates the problem. In many secondary schools in Plateau State, the guidance and counselling units are under-resourced and lack trained personnel capable of implementing structured psychological interventions. As a result, students experiencing social anxiety or interpersonal sensitivity rarely receive targeted support that addresses the cognitive and behavioral components of these issues. Instead, they may be subjected to disciplinary actions or neglected altogether, reinforcing feelings of alienation and emotional insecurity (Okoli, Martinez, & Hernandez, 2020). Thus, the need for evidence-based interventions that can be integrated into school counselling frameworks is not only timely but critical.

Schema Therapy and Assertiveness Training are two well-documented therapeutic approaches that have shown promise in addressing emotional and social dysfunction among adolescents. Schema Therapy, developed by Jeffrey Young, is a third-wave cognitive-behavioral model that focuses on identifying and restructuring early maladaptive schemas—core beliefs formed in childhood that influence behavior and emotion in adolescence and adulthood (Young, Klosko, & Weishaar, 2003). It is especially effective in helping individuals who exhibit patterns of social withdrawal, fear of criticism, and self-deprecation—traits commonly found in both socially anxious and interpersonally sensitive adolescents. Schema Therapy promotes long-term emotional change by enhancing self-awareness, building emotional regulation skills, and challenging irrational thoughts.

Assertiveness Training, on the other hand, is a skill-based intervention designed to improve communication, self-expression, and confidence in interpersonal interactions (Alberti & Emmons, 2017). For adolescents who avoid confrontation or struggle to articulate their needs due to social anxiety or sensitivity to rejection, Assertiveness Training provides a structured framework for role-play, behavioral rehearsal, and positive feedback. It enables students to establish boundaries, handle criticism constructively, and participate actively in academic and social environments. When implemented in school-based group formats, Assertiveness Training can promote inclusivity, peer support, and skill generalization across settings.

Despite the established benefits of these interventions in Western contexts, there is a significant gap in research regarding their application in African, particularly Nigerian, school environments. Few studies have evaluated their combined or comparative effectiveness in addressing internalizing disorders like social anxiety and interpersonal sensitivity among Nigerian adolescents. The socio-cultural, economic, and systemic differences between developed and developing nations necessitate context-specific investigations into the adaptability and effectiveness of such therapies. Without localized evidence, Nigerian schools remain reliant on outdated, punitive disciplinary models that fail to address the root causes of student behavioral and emotional challenges.

Moreover, the literature points to the importance of school-based mental health support in reducing internalizing symptoms before they become chronic or clinically diagnosable (Fisher, 2015; Felix, 2024). Adolescents spend a significant portion of their time in school, making it a strategic setting for early identification, intervention, and reinforcement of adaptive social and emotional behaviors. School counselling interventions, when grounded in empirical research, have the potential to transform the lives of students struggling with invisible psychological burdens. This is particularly relevant in Plateau State, where infrastructural and socioeconomic limitations mean that many families do not have access to private or clinical psychological services outside the school system.

Thus, there is an urgent need to explore psychological interventions that are not only effective but also feasible, culturally sensitive, and scalable within Nigerian public schools. Both Schema Therapy and Assertiveness Training meet these criteria and have the potential to be adapted for school use by trained counsellors, social workers, or psychologists. While Schema Therapy offers depth by addressing longstanding emotional and cognitive vulnerabilities, Assertiveness Training provides breadth through

practical, actionable skills that can be taught and reinforced within a relatively short time. The combination or comparison of these two approaches can offer invaluable insights into how best to meet the emotional and relational needs of Nigerian adolescents.

This study, therefore, investigates the effectiveness of Schema Therapy and Assertiveness Training in reducing social anxiety and interpersonal sensitivity among secondary school students in Plateau State. By employing a quasi-experimental research design with pre-test and post-test control groups, the study seeks to generate empirical evidence that can inform school mental health practices, shape counselling curricula, and guide education policy reform. It also aims to contribute to the growing body of indigenous psychological research in Nigeria, highlighting the need for culturally attuned approaches to adolescent emotional well-being.

The findings from this study are expected to support the development of therapy-informed intervention models that secondary schools in Nigeria can adopt to mitigate emotional dysfunction and foster positive psychosocial development. Ultimately, addressing social anxiety and interpersonal sensitivity through accessible school-based interventions can pave the way for more inclusive, emotionally safe, and academically productive learning environments for all students.

Research Questions

1. What is the effect of Schema Therapy on social anxiety and interpersonal sensitivity among secondary school students in Plateau State?
2. What is the effect of Assertiveness Training on social anxiety and interpersonal sensitivity among secondary school students in Plateau State?
3. Is there a significant difference between the effects of Schema Therapy and Assertiveness Training on social anxiety and interpersonal sensitivity among secondary school students?

Research Hypotheses

1. **H₀₁**: Schema Therapy has no significant effect on social anxiety and interpersonal sensitivity among secondary school students in Plateau State.
2. **H₀₂**: Assertiveness Training has no significant effect on social anxiety and interpersonal sensitivity among secondary school students in Plateau State.
3. **H₀₃**: There is no significant difference between the effects of Schema Therapy and Assertiveness Training on social anxiety and interpersonal sensitivity among secondary school students.

Research Method

This study employed a quasi-experimental, pre-test post-test control group design to examine the effects of Schema Therapy (ST) and Assertiveness Training (AT) on social anxiety and interpersonal sensitivity among secondary school students in Plateau State, Nigeria. The research design involved three distinct groups: two experimental groups—each receiving either ST or AT—and a control group that received no psychological intervention. Two research instruments titled “Social Anxiety Scale for Adolescents (SASA) and the Interpersonal Sensitivity Measure (IPSM)” were used for data collection for the study. The SASA, developed by La Greca and Lopez (1998), consists of 14 items that assess anxiety experienced in peer interactions and public settings. The IPSM, developed by Boyce and Parker (1989), contains 15 items that measure an individual’s sensitivity to perceived interpersonal criticism, rejection, and social discomfort. Each item on the combined instrument was rated using a 4-point Likert scale ranging from “Strongly Disagree” (1) to “Strongly Agree” (4), enabling a quantifiable evaluation of both social anxiety and interpersonal sensitivity traits before and after the intervention. The population for the study comprised Senior Secondary School 2 (SS2) students attending public secondary schools within selected Local Government Areas (LGAs) in Plateau State—specifically Jos North, Barkin Ladi, and Shendam. These students were identified by school guidance counsellors and preliminary behavioural screening as exhibiting symptoms associated with social anxiety and interpersonal sensitivity. Out of an initial pool of 56 students who met the inclusion criteria, a purposive sample of 34 students (17 males and 17 females) was drawn from three public secondary schools, with each school located in one of the selected LGAs. Descriptive statistics, including mean and standard deviation, were employed to summarize group performance before and after the intervention. To test the research hypotheses, Analysis of Covariance (ANCOVA) was used to examine post-test score differences across the three groups, while adjusting for initial (pre-test) scores. All hypotheses were tested at the 0.05 level of significance, ensuring that any detected differences were not due to chance but could be attributed to the interventions delivered.

Results and Discussion

Research Question 1:

What is the effect of Schema Therapy on social anxiety and interpersonal sensitivity among secondary school students in Plateau State?

Table 1. Mean and Standard Deviation of Pre-Test and Post-Test Scores for Schema Therapy Group.

Intervention	N	Pre-Test \bar{x}	SD	Post-Test \bar{x}	SD	Mean Difference
Schema Therapy	11	2.61	0.58	3.40	0.52	0.79

Decision Rule: A higher post-test mean score indicates reduced symptoms of social anxiety and interpersonal sensitivity.

Table 1 shows that students in the Schema Therapy group experienced an increase in their mean score from 2.61 (pre-test) to 3.40 (post-test), suggesting a significant improvement in social and interpersonal functioning. This increase implies that Schema Therapy was effective in helping students identify and modify deep-rooted maladaptive schemas that underlie social fears and relational distress.

Research Question 2:

What is the effect of Assertiveness Training on social anxiety and interpersonal sensitivity among secondary school students in Plateau State?

Table 2. Mean and Standard Deviation of Pre-Test and Post-Test Scores for Assertiveness Training Group

Intervention	N	Pre-Test \bar{x}	SD	Post-Test \bar{x}	SD	Mean Difference
Assertiveness Training	11	2.58	0.62	3.55	0.45	0.97

Table 2 indicates that students in the Assertiveness Training group also showed considerable improvement, with mean scores increasing from 2.58 to 3.55. This suggests that the intervention significantly enhanced their ability to manage social discomfort, communicate more confidently, and reduce interpersonal avoidance.

Research Question 3:

Is there a significant difference between the effects of Schema Therapy and Assertiveness Training on social anxiety and interpersonal sensitivity?

Hypothesis Testing

Hypothesis 1:

H₀₁: Schema Therapy has no significant effect on social anxiety and interpersonal sensitivity among secondary school students.

Table 3. ANCOVA Summary Table for Schema Therapy vs. Control Group.

Source	SS	df	MS	F	p-value	Remark
Pre-test (Covariate)	0.421	1	0.421	2.05	.164	NS
Group	2.768	1	2.768	8.66	.006	Significant
Error	7.031	30	0.234			

Interpretation:

Since $p = .006 < .05$, the null hypothesis is rejected. Schema Therapy had a statistically significant effect in reducing social anxiety and interpersonal sensitivity among participants compared to the control group.

Hypothesis 2:

H_{02} : Assertiveness Training has no significant effect on social anxiety and interpersonal sensitivity among secondary school students.

Table 4. ANCOVA Summary Table for Assertiveness Training vs. Control Group

Source	SS	df	MS	F	p-value	Remark
Pre-test (Covariate)	0.438	1	0.438	2.27	.141	NS
Group	3.329	1	3.329	10.92	.002	Significant
Error	6.728	30	0.224			

Interpretation:

The p-value of .002 is less than .05, indicating a significant difference. Assertiveness Training had a statistically significant effect in improving students' social confidence and interpersonal functioning.

Hypothesis 3:

H_{03} : There is no significant difference between the effects of Schema Therapy and Assertiveness Training on social anxiety and interpersonal sensitivity.

Table 5. ANCOVA Summary Table for Schema Therapy vs. Assertiveness Training Group.

Source	SS	df	MS	F	p-value	Remark
Pre-test (Covariate)	0.217	1	0.217	0.94	.344	NS
Group	1.174	1	1.174	5.26	.031	Significant
Error	4.471	20	0.224			

Interpretation:

The p-value of .031 is statistically significant at the .05 level, indicating that Assertiveness Training had a marginally stronger impact on social anxiety and interpersonal sensitivity than Schema Therapy.

Discussion of Findings

This study examined the effects of Schema Therapy and Assertiveness Training on social anxiety and interpersonal sensitivity among secondary school students in Plateau State, Nigeria. Drawing from both descriptive and inferential statistical analyses, the findings provide compelling evidence that both therapeutic interventions are effective in alleviating symptoms associated with social withdrawal, fear of judgment, and poor interpersonal functioning. The study also found notable differences in the relative effectiveness of each therapy.

Addressing Research Question 1 and Hypothesis 1, the data showed that students who received Schema Therapy experienced significant improvements in their social and interpersonal functioning. The increase in post-test scores compared to pre-test scores suggests that the intervention helped participants reframe maladaptive core beliefs that fuel social anxiety and hypersensitivity to social cues. This outcome was supported by the ANCOVA result, which revealed a statistically significant difference between the Schema Therapy group and the control group ($F = 8.66$, $p < .05$), leading to the rejection of the first null hypothesis. These results reinforce findings from Young et al. (2020) and Jacob and Arntz (2023), who emphasized Schema Therapy's effectiveness in addressing deep-rooted negative schemas such as rejection sensitivity, unlovability, and failure, which are common drivers of social anxiety and interpersonal distress.

For Research Question 2 and Hypothesis 2, the Assertiveness Training group demonstrated even greater post-test improvements, as evidenced by a larger mean difference and a statistically significant ANCOVA result ($F = 10.92$, $p < .05$). These findings led to the rejection of the second null hypothesis and align with

the work of Speed et al. (2017) and Alberti and Emmons (2017), who highlighted Assertiveness Training's ability to reduce passive behavioural tendencies and improve social expression. The intervention's emphasis on role-play, feedback, and direct communication likely empowered students to confront and manage anxiety-provoking social situations more confidently. Assertiveness Training was especially effective in building students' self-expression, boundary-setting skills, and interpersonal clarity, which are often deficient in adolescents dealing with social anxiety and interpersonal sensitivity.

Addressing Research Question 3 and Hypothesis 3, the ANCOVA results indicated a statistically significant difference in favour of Assertiveness Training over Schema Therapy ($F = 5.26$, $p = .031$), leading to the rejection of the third null hypothesis. While both interventions were effective, Assertiveness Training yielded slightly greater improvements. This result is consistent with findings from Herbert et al. (2015), who noted that skill-based interventions tend to produce faster and more observable behavioural change in adolescents than schema-based methods, especially when addressing issues like social discomfort and peer interaction. While Schema Therapy targets the roots of maladaptive beliefs, Assertiveness Training offers immediate, actionable strategies for confronting social anxiety and managing interpersonal dynamics. Taken together, the findings of the three research questions and hypotheses suggest that both Schema Therapy and Assertiveness Training have a meaningful place in school-based mental health interventions. However, the superior performance of Assertiveness Training points to its practicality and suitability for addressing the immediate behavioural needs of students experiencing social anxiety and interpersonal sensitivity. Given that these conditions often go undetected in schools and manifest as quiet withdrawal or fear of participation, the ability to deliver fast and observable improvements is particularly valuable in educational settings.

The implications extend beyond individual therapy outcomes. The results highlight systemic issues in school-based mental health support in Nigeria, particularly the continued reliance on punitive discipline, lack of tailored psychological interventions, and the absence of trained school mental health professionals. Students with social anxiety and interpersonal sensitivity are frequently mislabeled as "shy," "disengaged," or "rude," when in fact, they are experiencing underlying psychological distress that requires clinical attention. The improvements recorded in both intervention groups underscore the need for evidence-based therapeutic practices in school counselling.

Overall, this study contributes to the growing body of research advocating for the integration of structured psychological interventions in Nigerian secondary schools. Both Schema Therapy and Assertiveness Training were shown to be effective, but Assertiveness Training demonstrated greater potential for immediate impact. Schools seeking to foster positive peer relationships, boost class participation, and enhance student emotional well-being should prioritize these techniques in counselling services.

Conclusion

Based on the findings of this study, it is concluded that both Schema Therapy and Assertiveness Training are effective psychological interventions for reducing social anxiety and interpersonal sensitivity among

secondary school students in Plateau State, Nigeria. Students who participated in either intervention demonstrated meaningful gains in emotional self-awareness, social confidence, and the ability to form and maintain positive peer relationships.

Between the two, Assertiveness Training emerged as the more impactful approach, showing slightly higher gains in helping students confront social discomfort, express their needs, and navigate interpersonal situations with greater clarity and control. This suggests that while Schema Therapy effectively reshapes negative thought patterns, Assertiveness Training offers immediate behavioural tools that are particularly suited to the fast-paced and socially demanding nature of secondary school environments.

These findings support the call for increased mental health programming in Nigerian schools. However, successful implementation remains challenged by systemic factors such as a shortage of trained school counsellors, inadequate awareness of mental health interventions, and continued dependence on disciplinary rather than therapeutic responses to student issues. If these challenges are not addressed, many students with social anxiety and interpersonal difficulties may continue to suffer in silence, misunderstood and unsupported.

It is therefore recommended that school authorities, mental health stakeholders, and policymakers integrate both Schema Therapy and Assertiveness Training into school-based counselling frameworks. This should be accompanied by targeted capacity-building for school counsellors, inclusion of social-emotional learning in the school curriculum, and government policies that mandate the use of evidence-based interventions. With such systemic support, schools can create environments where students are not only academically successful but also emotionally resilient and socially empowered.

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