

**EFFECT OF COGNITIVE BEHAVIOURAL THERAPY AND SOCIAL SKILLS TRAINING ON
SECONDARY SCHOOL STUDENTS' ANGER IN JALINGO LOCAL GOVERNMENT AREA OF
TARABA STATE.**

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Abstract

The current study examined the effectiveness of cognitive behavioural therapy (CBT) combined with social skills training in managing anger among secondary school students in Jalingo Local Government Area, Taraba State, Nigeria. Two objectives were established to guide the study, along with two null hypotheses tested at the 0.05 level of significance. A one-group, pre-test/post-test quasi-experimental design was employed. One public secondary school from the Jalingo L.G.A. was purposively selected, targeting 50 SS II students identified as exhibiting angry behaviour. From this population, a purposive sample of 23 SS II students, comprising 8 males and 15 females, was selected. Data were collected using Spielberger's State-Trait Anger Expression Inventory (STAXI), a 44-item instrument with a Cronbach's alpha reliability coefficient of 0.84. Descriptive statistics (mean and standard deviation) were used to answer the research questions, while the Wilcoxon signed-rank test was employed to test the hypotheses. Based on the data collected and analyzed, the following key findings emerged: The reduction in mean anger scores from the pre-test to the post-test for both genders suggests that the intervention effectively reduced anger levels. The intervention appears to have effectively reduced anger scores in both genders, with a slightly greater reduction observed among females. Based on the findings of this study, the following are recommended, among others: (i) Educational authorities in Taraba State and Nigeria at large should integrate cognitive behavioural therapy and social skills training into the guidance and counselling services of secondary schools to address anger-related behaviours. (ii) Schools should implement screening mechanisms to identify students at risk of anger and aggressive behaviours early and provide targeted cognitive behavioural therapy and social skills training-based interventions. In conclusion, the integration of cognitive behavioural therapy and social skills training offers a holistic approach to emotional regulation, blending cognitive restructuring with social behaviour enhancement. Thus, combined cognitive behavioural therapy and social skills training should be considered a viable tool in addressing emotional and behavioural challenges among students within Nigerian secondary schools.

Keywords: Cognitive Behavioural Therapy, Social Skills Training, Anger, Secondary School Students, Gender.

Introduction

Anger is a common emotional experience during adolescence, but when it becomes intense, frequent or poorly regulated, it can develop into a serious behavioural problem. Secondary school students encounter developmental, academic, social and family-related pressures that may trigger frustration and anger. When anger is not appropriately managed, it may be expressed through shouting, insults, threats, defiance, fighting, destruction of property and other aggressive behaviours. Research indicates that anger and aggression during adolescence are associated with important social and psychological consequences, making effective intervention particularly relevant in school settings (Richard, Tazi, Frydecka, Hamid, & Moustafa 2022; Vega, Cabello, Megías-Robles,

Gómez-Leal, & Fernández-Berrocal, 2022). A systematic review and meta-analysis by Castillo-Eito, Armitage, Norman, Day, Dogru and Rowe (2020) further showed that psychosocial interventions can significantly reduce aggressive behaviour among adolescents, highlighting the importance of structured approaches to managing anger-related behaviours.

Anger refers to an emotional response that may arise when an individual experiences frustration, perceived injustice, threat, rejection or obstruction of personal goals. Although anger itself is not necessarily harmful, difficulties in regulating it may result in impulsive reactions and aggression. During adolescence, developing emotional regulation skills is particularly important because young people are still acquiring the cognitive and interpersonal abilities needed to manage intense emotions. Richard et al. (2022) noted that anger and aggression involve important cognitive processes, including attention to anger-related stimuli and impulsivity. Similarly, Vega et al. (2022), in a systematic review and meta-analysis, found a relationship between emotional intelligence and aggressive behaviours among adolescents, suggesting that difficulties in understanding and regulating emotions may increase vulnerability to aggressive responses.

The consequences of poorly managed anger can extend beyond the individual student to the school environment. Students who frequently respond to frustration with anger may experience difficulties concentrating, participating constructively in classroom activities and maintaining positive relationships with teachers and peers. Anger may also contribute to verbal conflicts, bullying, physical aggression and disruption of classroom activities. A large meta-analysis by Castillo-Eito et al. (2020), which reviewed interventions for adolescent aggression, found a significant overall effect of psychosocial interventions in reducing aggressive behaviour. The study further indicated that behavioural practice and problem-solving were potentially important components of effective interventions. These findings suggest that helping students develop appropriate emotional and behavioural responses may contribute to a safer and more supportive school environment.

The Nigerian school context makes the problem particularly important. Secondary school students may encounter academic pressure, peer influence, family difficulties, economic hardship and exposure to conflict or violence, all of which may increase emotional stress and contribute to inappropriate expressions of anger. Where students have limited access to structured emotional and behavioural support, anger may be expressed through confrontation, fighting, insults and other disruptive behaviours. Exposure to violence can also have lasting psychological and behavioural consequences for young people. Lindert, Jakubauskiene, Natan, Wehrwein, Bain, Schmahl, Kamenov, Carta, and Cabello (2020), in a systematic review of psychosocial interventions for violence-exposed youth, found that interventions addressing the psychological consequences of violence are important for improving young people's well-being. Consequently, school-based counselling interventions that help students understand, regulate and appropriately express anger are particularly relevant in contexts where students experience multiple social stressors.

Cognitive Behavioural Therapy (CBT) provides one useful approach to addressing anger because it focuses on the relationship among thoughts, emotions and behaviours. The cognitive-behavioural perspective assumes that individuals' interpretations of situations influence their emotional and behavioural responses. Thus, a student who interprets a peer's comment as deliberate disrespect may experience intense anger and respond aggressively, whereas a student who develops a more balanced interpretation may respond more appropriately. CBT helps students identify irrational or unhelpful thoughts, examine evidence for those thoughts, develop alternative interpretations and practise more adaptive responses. Research on anger and aggression has identified cognitive restructuring, problem-solving, relaxation and related behavioural techniques as important components of cognitive-behavioural approaches to anger management among young people (Richard et al., 2022).

Recent evidence also supports the relevance of cognitive and behavioural interventions for adolescent aggression and emotional difficulties. Castillo-Eito et al. (2020) found that psychosocial

interventions were effective in reducing aggressive behaviour among adolescents, highlighting the importance of interventions that address behavioural and psychological factors associated with aggression. Richard et al. (2022) further reviewed cognitive, clinical and neural evidence concerning anger and aggression and concluded that cognitive and behavioural processes are central to understanding anger-related behaviour. These findings suggest that helping students identify anger-triggering thoughts, challenge cognitive distortions, practise problem-solving and develop alternative behavioural responses may reduce the likelihood of anger escalating into aggression.

Social Skills Training (SST) complements CBT by focusing on the interpersonal behaviours that students need to manage social situations effectively. Social skills include communication, active listening, empathy, assertiveness, cooperation, conflict resolution and appropriate responses to disagreement. Deficits in these skills may make it difficult for students to handle interpersonal conflicts without becoming angry or aggressive. SST uses techniques such as instruction, modelling, role-play, behavioural rehearsal and feedback to help students learn and practise appropriate social responses. De Mooij, Fekkes, Scholte and Overbeek (2020), in a multilevel meta-analysis of 97 articles and 839 effect sizes, found that SST programmes produced positive effects on interpersonal and emotional skills among children and adolescents. The findings suggest that structured skill-building and psychoeducation can strengthen the social and emotional competencies needed for more appropriate interpersonal behaviour.

The relevance of SST to adolescent behaviour is also supported by more recent evidence. Gilmore, Ziviani, Chatfield, Goodman, and Sakzewski (2022), in a systematic review of 16 studies involving 1,119 adolescents, found that group social-skills interventions improved social skills, social knowledge and social functioning. Although much of this evidence involved adolescents with disabilities, it demonstrates the potential of structured social-skills approaches to improve interpersonal functioning. In addition, Castillo-Eito et al. (2020) found that psychosocial interventions can reduce aggressive behaviour among adolescents. This finding is relevant to anger management because students who develop appropriate behavioural and interpersonal responses may be better able to regulate anger and prevent it from escalating into aggressive behaviour.

The combination of CBT and SST may therefore provide a more comprehensive approach to reducing anger among secondary school students. CBT primarily addresses the cognitive and emotional processes underlying anger, while SST focuses on the interpersonal behaviours through which anger may be expressed. A student may, for example, learn through CBT to identify the thought that a classmate intentionally insulted him or her and replace that interpretation with a more balanced one. Through SST, the same student can practise expressing displeasure assertively, listening to the other person's explanation, negotiating a solution and resolving the disagreement without aggression. The complementary nature of cognitive and skills-based interventions is consistent with evidence showing that psychosocial interventions combining behavioural practice, problem-solving and other therapeutic components can reduce adolescent aggression (De Mooij et al., 2020).

The theoretical foundation of the CBT component of this study is Cognitive Behavioural Theory. The theory proposes that emotional and behavioural responses are influenced by how individuals interpret events. In relation to anger, students may develop distorted or hostile interpretations of social situations, which can intensify emotional arousal and lead to impulsive reactions. CBT seeks to interrupt this process by helping students recognise anger-triggering thoughts, evaluate their accuracy, replace unhelpful interpretations and develop alternative behavioural responses. The cognitive emphasis is supported by evidence that anger and aggression involve cognitive processes such as attention to anger-related cues, impulsivity and maladaptive interpretations (Richard et al., 2022). Cognitive Behavioural Theory therefore provides a suitable framework for explaining how changing students' thoughts and interpretations may contribute to improved anger regulation.

Social Learning Theory provides a complementary theoretical foundation for the SST component. The theory emphasises that behaviour can be learned through observation, imitation, practice and

reinforcement. Students may acquire aggressive responses by observing peers, siblings, adults or other models who use aggression to resolve disagreements. Conversely, they can learn constructive ways of handling conflict when appropriate behaviours are demonstrated, practised and reinforced. SST reflects these principles through modelling, role-playing, rehearsal, feedback and reinforcement. Evidence from De Mooij et al. (2020) supports the effectiveness of structured skill-building approaches for improving interpersonal and emotional skills, while Gilmore et al. (2022) provides further evidence that group social-skills interventions can improve social functioning among adolescents. Thus, Social Learning Theory helps explain how students can replace inappropriate anger-related responses with more adaptive interpersonal behaviours.

Despite evidence supporting CBT, SST and other psychosocial interventions for anger and aggression, important gaps remain. Much of the available literature has examined aggression, social-emotional difficulties or specific clinical populations rather than anger among ordinary secondary school students in Nigeria. Furthermore, although CBT and SST have individually demonstrated value in addressing emotional and behavioural difficulties, limited research has directly examined their combined effect on anger among secondary school students in Taraba State. The existing evidence therefore provides a basis for investigating whether integrating cognitive restructuring, self-monitoring, relaxation, problem-solving, modelling, role-play, communication and conflict-resolution skills can produce meaningful reductions in students' anger.

The need for such research is particularly evident in Jalingo Local Government Area of Taraba State, where school counsellors require contextually appropriate and evidence-based strategies for helping students manage emotional and behavioural difficulties. A school-based intervention that combines CBT and SST may help students understand the relationship between their thoughts, emotions and actions while also developing practical skills for communicating, resolving conflicts and responding appropriately to provocation. Therefore, the present study, titled "Effect of Cognitive Behavioural Therapy and Social Skills Training on Secondary School Students' Anger in Jalingo Local Government Area of Taraba State," seeks to determine the effect of the combined intervention on students' anger. The findings are expected to provide empirical evidence that may assist guidance counsellors, teachers, school administrators and educational policymakers in developing effective approaches to anger management and promoting a safer and more supportive secondary school environment.

Statement of the Problem

Anger is an important behavioural concern among secondary school students. When poorly managed, it may be expressed through verbal abuse, aggression, fighting, defiance and other disruptive behaviours, which can affect students' learning, relationships and emotional well-being and may undermine a safe school environment. Nigerian studies have reported behavioural problems involving aggression and conduct difficulties among adolescents, indicating the need for effective school-based interventions (Kumuyi, Akinawo, Akpunne, Akintola, Onisile & Aniemeka, 2022; Mayowa, 2022).

Although interventions have been used to address behavioural difficulties among Nigerian adolescents, limited evidence exists on structured interventions specifically targeting students' anger, particularly in Jalingo Local Government Area of Taraba State. Kumuyi, Akinawo, Akpunne, Akintola, Onisile and Aniemeka (2022) found that Cognitive Behavioural Therapy (CBT), Social Skills Training (SST), and their combination were effective in managing conduct disorder among in-school adolescents, with the combined intervention producing a faster therapeutic effect. Similarly, Mayowa (2022) reported that SST significantly reduced aggressive behaviour among secondary school students. However, these studies did not specifically examine the effect of combining CBT and SST on students' anger in Jalingo Local Government Area.

The gap is important because anger may involve both unhelpful thoughts and difficulties in communication, interpersonal relationships and conflict management. CBT helps students identify

and modify unhelpful thoughts, while SST develops appropriate communication, interpersonal and problem-solving skills. Combining the two approaches may therefore provide a more comprehensive way of managing students' anger.

Based on the researchers' observations and interactions with students, anger-related behaviours remain a concern in the secondary school environment, while structured interventions for managing such behaviours appear inadequate or underutilised. Therefore, this study seeks to determine the effect of Cognitive Behavioural Therapy and Social Skills Training on secondary school students' anger in Jalingo Local Government Area of Taraba State, with the aim of providing evidence for improved school counselling practice and healthier emotional and interpersonal functioning among students.

Purpose of the Study

The main goal of this study was to assess how effective it is to combine cognitive behavioural therapy and social skills training in managing anger among secondary school students in Jalingo Local Government Area, Taraba State, Nigeria. Specifically, the study seeks to explore the following objectives:

1. effect of cognitive behavioural therapy and social skills training on secondary school students' anger in Jalingo Local Government Area in Taraba State, Nigeria.
2. effect of cognitive behavioural therapy and social skills training on male and female secondary school students' anger in Jalingo Local Government Area in Taraba State, Nigeria.

Research Questions

1. To what extent does cognitive behavioural therapy and social skills training affect the anger of secondary school students in Jalingo Local Government Area. in Taraba State, Nigeria?
2. What is the difference in the mean anger rating of high anger male and female students exposed to cognitive behavioural therapy and social skills training in secondary schools in Jalingo Local Government Area in Taraba State, Nigeria?

Research Hypotheses

1. Cognitive behavioural therapy and social skills training do not have significant effect on the anger of secondary school students in Jalingo L. G. A. in Taraba State, Nigeria.
2. Cognitive behavioural therapy and social skills training do not have significant effect on the anger of male and female secondary school students in Jalingo L. G. A. in Taraba State.

Research Methods

This study employed a quasi-experimental pre-test/post-test design, which was considered suitable given the practical challenges of implementing a true experimental approach within a school environment. Quasi-experimental designs are especially appropriate in educational settings where random assignment is often impractical and where maintaining the integrity of school schedules is essential. As explained by Miller, Smith and Pugatch (2020), quasi-experimental studies allow the evaluation of interventions in real-world environments where random assignment is not feasible, while still maintaining substantial methodological integrity.

In this design, the researcher deliberately introduced an intervention, Cognitive Behavioural Therapy (CBT) combined with Social Skills Training (SST), to determine its effect on students' anger levels. CBT/SST served as the independent variable, while students' anger levels were the dependent variable. A pre-test was administered to identify students who exhibited high levels of anger and to establish a baseline for comparison. The post-test was administered after the intervention to assess changes attributable to the treatment.

The target population comprised fifty (50) Senior Secondary School II (SS 2) students from a selected secondary school in Jalingo Local Government Area, Taraba State, who demonstrated symptoms of anger. Eligibility for the study was based on scores between 60 and 176 on the Spielberger's State-Trait Anger Expression Inventory (STAXI), indicating a high level of anger.

A purposive sampling technique was employed to select a final sample of twenty-three (23) students who consented to participate in the intervention. Purposive sampling allowed for the deliberate selection of individuals who met specific criteria, ensuring relevance and quality of data. The sample included 8 males and 15 females; all placed in a single treatment group.

The primary instrument for data collection was the Spielberger's State-Trait Anger Expression Inventory (STAXI), a 44-item standardized questionnaire designed to assess levels of anger. Items are rated on a 4-point Likert scale: Almost Never = 1, Sometimes = 2, Often = 3, Almost Always = 4.

The total score ranges from 44 to 176, with higher scores indicating more intense anger. In this study, students who scored 60 and above were categorized as exhibiting high levels of anger.

To ensure content validity, the STAXI, along with the study objectives, was reviewed by experts in Measurement and Evaluation, Guidance and Counselling, and Psychology at the Faculty of Education, Taraba State University. These experts evaluated item relevance, clarity, and alignment with study objectives. Based on their recommendations, minor modifications were made to improve contextual appropriateness. For example: "I am furious" was rephrased as "I feel furious most of the time" "I feel irritated" was revised to "I feel irritated when making arguments with my classmates" The revised version was used for both pre-test and post-test administrations.

The internal consistency of the adapted STAXI was assessed using Cronbach's alpha, yielding a reliability coefficient of 0.84, indicating good internal reliability. This reliability estimate was based on a pilot study conducted with 42 students purposively selected from a school in Zing Local Government Area which was not included in the main study sample.

The intervention consisted of six sessions of CBT combined with SST, targeting students' emotional regulation and interpersonal problem-solving skills. The sessions were structured to help participants: identify triggers of anger, challenge maladaptive thoughts, practice relaxation and self-regulation techniques, learn and rehearse prosocial communication and conflict-resolution strategies. Following the completion of the intervention, a post-test was administered using the same STAXI instrument.

Data were analysed using descriptive and inferential statistics. Mean and standard deviation were used to answer the research questions by describing the level of students' anger before and after the intervention and the differences in the observed scores across the relevant groups. The mean provided an indication of the average anger score, while the standard deviation showed the extent to which students' scores varied around the mean.

The Wilcoxon Signed-Rank Test was used to test the hypotheses. It is a non-parametric test appropriate for comparing two related or paired sets of scores, particularly when the assumptions of parametric tests are not satisfied (Rey & Neuhäuser, 2014). In this study, the test was used to determine whether there was a significant difference between students' pre-test and post-test anger scores and whether the observed changes differed significantly between male and female participants. The test ranks the absolute differences between paired observations and considers the direction of the changes to determine whether the median difference is statistically significant. The hypotheses were tested at the 0.05 level of significance.

Result

Research Question One

To what extent does cognitive behavioural therapy and social skills training affect the anger of secondary school students in Jalingo Local Government Area in Taraba State, Nigeria?

Table 1

Mean and standard deviations scores on the effect of cognitive behavioural therapy and social skills training on secondary school students' anger in Jalingo L. G. A. in Taraba State, Nigeria.

Anger	N	mean	std. dev	percentiles		
				25 th	50 th	75 th
Pretest	23	2.52	0.61	1.93	2.59	3.11
Post-test	23	1.72	0.32	1.48	1.55	1.98

Source: Field Survey, 2023

Results in Table 1 show that before the administration of cognitive behavioural therapy and social skills training, the pretest mean score on anger was 2.52, with a standard deviation of 0.61. The post-test mean score is 1.72, with a standard deviation of 0.32. The median scores indicated in percentiles that anger decreased to 1.55 on the post-test from 2.59 on the pretest an indication that cognitive behavioural therapy and social skills training decreases anger among secondary school students.

Research Question Two

What is the difference in the mean anger rating of high anger male and female students exposed to cognitive behavioural therapy and social skills training in secondary schools in Jalingo L. G. A. Taraba State, Nigeria?

Table 2

Mean and standard deviations score on the anger of male and female students exposed to cognitive behavioural therapy and social skills training in secondary school in Jalingo L. G. A. in Taraba State

Gender	N	Pretest (anger)		Posttest (anger)		mean gain
		mean	std. dev	mean	std. dev	
female	15	2.62	0.61	1.72	0.33	-1.43
male	8	2.33	0.61	1.72	0.31	-0.97
Mean diff		0.29		0.00		0.29

Table 2 provides data on anger scores before and after cognitive behavioural therapy and social skills training in secondary school in Jalingo Local Government Area in Taraba State. The female's mean anger score decreased by 0.90 points from the pretest to the post-test, while the male decreased by 0.61 points from the pretest to the post-test. The pretest mean difference between females and males is 0.29. This indicates that, on average, females had slightly higher anger scores compared to males before the intervention. The post-test mean difference between female and male is 0.00, an indication that, on average, females and males had the same anger scores after the cognitive behavioural therapy and social skills training. The gain difference indicates that the reduction in anger scores was greater for females compared to males, with a mean difference in gain of 0.29 points. In conclusion, the intervention appears to have effectively reduced anger scores in both genders, with a slightly greater reduction observed among females.

Hypothesis 1

Cognitive behavioural therapy and social skills training do not have significant effect on the anger of secondary school students in Jalingo Local Government Area in Taraba State, Nigeria.

Table 3

Wilcoxon signed-rank test of the effect of cognitive behaviour therapy and social skills on the anger of secondary school students in Jalingo L. G. A. in Taraba State.

	Posttest pretest
N	46
Z	-3.924
Asymp. Sig. (2-tailed)	0.000

Source: Field Survey, 2023

Results from Table 3 show the Wilcoxon signed rank test conducted to compare the effect of cognitive behaviour therapy and social skills training on the anger of secondary school students Jalingo L. G. A. in Taraba State, Nigeria. The results indicate that the difference between pretest scores and post-test scores is statistically significant as indicated by $z = -3.924, p = 0.00 < 0.05$. The magnitude of the difference in the pretest and post-test scores $\frac{z}{\sqrt{N}} = .58$ indicates a large effect size. The median score on shyness decreased from the pretest ($M = 2.59$) to the post-test ($M = 1.55$). This is to say that cognitive behaviour therapy and social skills training have contributed 58% to reducing anger. Since the difference between anger before and after therapy is statistically significant, the hypothesis that cognitive behaviour therapy and social skills training do not have a significant effect on the anger of secondary school students in Jalingo Local Government Area in Taraba State is hereby rejected. That is cognitive behaviour therapy and social skills training have a significant effect on the anger of secondary school students in Jalingo Local Government Area in Taraba State, Nigeria.

Hypothesis Two

Cognitive behavioural therapy and social skills training do not have significant effect on the anger of male and female secondary school students in Jalingo Local Government Area in Taraba State.

Table 4

Wilcoxon signed-rank test of the effect of cognitive behaviour therapy and social skills on the anger of secondary school students in Jalingo L. G. A. in Taraba State.

	Cognitive behavioural therapy and social skills training Anger Female - Anger Male
N	23
Z	-.700 ^b
Asymp. Sig. (2-tailed)	.484

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Results from Table 4 show the Wilcoxon signed rank test conducted to compare the effect of cognitive behavioural therapy and social skills training on anger of male and female secondary school students in Jalingo L. G. A. in Taraba State. The results indicate that the difference between male scores and female scores is statistically insignificant as indicated by $z = -.700, p = 0.484 > 0.05$. Since the *p-value* is greater than 0.05, the null hypothesis which states that cognitive behavioural therapy and social skills training do not have significant effect on anger of male and female secondary school students in Jalingo L. G. A. in Taraba State is retained. That is cognitive behavioural therapy and social skills training have no significant effect on the anger of male and female secondary school students in Jalingo L. G. A. in Taraba State, Nigeria. The male mean score

on anger ($M = 1.72$) is equal to female mean score ($M = 1.72$). The magnitude of the difference in the male and female scores $\frac{z}{\sqrt{N}} = -0.146$ indicates a small effect size.

Discussion of Findings

Combined Effect of Cognitive Behavioural Therapy and Social Skills Training on Secondary School Students' Anger in Jalingo Local Government Area of Taraba State, Nigeria

The finding of the study revealed that Cognitive Behavioural Therapy (CBT) and Social Skills Training (SST) significantly reduced anger among secondary school students in Jalingo Local Government Area of Taraba State. The mean anger score decreased from 2.52 at pre-test to 1.72 at post-test, while the standard deviation reduced from 0.61 to 0.32, indicating lower and more consistent anger responses after the intervention. The Wilcoxon signed-rank test confirmed a significant difference ($Z = -3.924$, $p < .05$), with a large effect size ($r = 0.58$). This finding indicates that the combined intervention had a substantial effect on students' anger regulation.

The finding is consistent with Kumuyi et al. (2022), who found that Cognitive Behavioural Therapy (CBT), Social Skills Training (SST), and their combination were effective in managing conduct-related problems among in-school adolescents, with the combined intervention producing a faster therapeutic effect. The finding also agrees with Mayowa (2022), who reported that Social Skills Training significantly reduced aggressive behaviour among secondary school students in Lagos State. The present finding extends these earlier results by showing that the combination of CBT and SST can significantly reduce anger among secondary school students in Jalingo Local Government Area. This suggests that addressing both students' thought patterns and their social and interpersonal skills may provide a more comprehensive approach to anger management.

The finding agrees with Castillo-Eito et al. (2020), who found that psychosocial interventions were effective in reducing aggressive behaviour among adolescents, supporting the use of structured psychological and behavioural interventions in addressing adolescent behavioural difficulties. It also supports Richard et al. (2022), who emphasised the role of cognitive and behavioural processes in anger and aggression. The present finding may therefore be explained by the ability of CBT to help students identify anger-provoking thoughts, challenge unhelpful interpretations and develop more adaptive responses. SST complemented CBT by providing opportunities to practise communication, empathy, assertiveness and conflict-resolution skills. De Mooij et al. (2020) found that SST positively affects interpersonal and emotional skills among children and adolescents, supporting the relevance of social-skills development in managing anger-related behaviours.

The finding is further consistent with Emansi Saliha, Eddy Wibowo and Awalya (2021), who found that combining anger-management and social-skills training techniques was more effective in reducing physical aggression among junior high school students than some alternative approaches. This finding supports the present study because both interventions were combined to address students' anger-related behaviours. Similarly, Mokhber et al. (2016) found that social-skills training and anger-management training significantly improved the social, emotional and educational adjustment of adolescent girls. Although their study did not examine a combined CBT and SST intervention, the findings demonstrate the usefulness of both approaches in addressing emotional and behavioural difficulties among adolescents. The present study therefore extends previous evidence by examining the combined effect of CBT and SST specifically on anger among secondary school students in Jalingo Local Government Area of Taraba State. The result also supports the use of cognitive restructuring, problem-solving, behavioural practice and social-skills development in addressing anger and related aggressive behaviours (Richard et al., 2022).

The finding can also be explained by Cognitive Behavioural Theory and Social Learning Theory. Cognitive Behavioural Theory suggests that students' emotional and behavioural responses are

influenced by their interpretations of situations. CBT techniques used in the study, including thought records, reframing, imagery, affirmation and self-monitoring, helped students recognise and modify unhelpful thoughts associated with anger. Social Learning Theory, on the other hand, explains that behaviours can be learned through observation, modelling, practice and reinforcement. Through instruction, modelling, role-play and feedback, SST enabled students to practise more appropriate ways of responding to provocation and interpersonal conflict. The significant reduction in anger therefore supports the complementary contribution of cognitive change and behavioural skills training.

Gender Differences in the Effect of CBT and SST on Students' Anger

The finding revealed that the combined Cognitive Behavioural Therapy (CBT) and Social Skills Training (SST) intervention reduced anger among both male and female students. Females had a higher pre-test mean anger score ($M = 2.62$) than males ($M = 2.33$), but both groups recorded the same post-test mean ($M = 1.72$). Consequently, females showed a greater mean reduction (gain = -0.90) than males (gain = -0.61). However, the Wilcoxon test showed that the gender difference was not statistically significant ($Z = -0.700$, $p = .484$), with a small effect size ($r = -0.146$). Thus, the result does not provide sufficient evidence that the combined intervention produced significantly different outcomes for male and female students.

The non-significant gender difference may be explained by the fact that the intervention addressed cognitive, emotional and interpersonal processes that are relevant to both male and female students. CBT helped students recognise and modify anger-provoking thoughts and develop more appropriate responses, while SST provided opportunities to practise communication, emotional regulation and conflict-resolution skills. Richard et al. (2022) highlighted the importance of cognitive and behavioural processes in anger and aggression, while De Mooij et al. (2020) found that SST programmes positively influence interpersonal and emotional skills among children and adolescents. Similarly, Vega et al. (2022) reported that higher emotional intelligence, including the ability to understand and regulate emotions, was associated with lower aggressive behaviour among adolescents. These findings support the view that interventions targeting emotional regulation and social skills may benefit students across gender groups.

Although females showed a somewhat greater reduction in anger, this difference should be interpreted cautiously because the male subgroup was relatively small and the gender groups were unequal. The lack of statistical significance may also indicate that the observed difference was not large enough to establish gender as a meaningful moderator of treatment outcome. Overall, the study demonstrates that the combined CBT and SST intervention significantly reduced students' anger, while the gender analysis suggests that the intervention may be useful for both male and female students. Future studies with larger and more balanced gender samples are needed to determine whether gender influences students' responses to combined CBT and SST interventions for anger.

Conclusion

Based on the findings of this study, it can be concluded that Cognitive Behavioural Therapy (CBT) and Social Skills Training (SST) combined was an effective intervention in significantly reducing anger levels among secondary school students in Jalingo Local Government Area of Taraba State, Nigeria. This intervention proved beneficial regardless of gender, with no statistically significant differences between male and female students in their post-intervention anger scores. The integration of cognitive behavioural therapy and social skills training offers a holistic approach to emotional regulation, blending cognitive restructuring with social behaviour enhancement. Thus, combined cognitive behavioural therapy and social skills training should be considered a viable tool

in addressing emotional and behavioural challenges among students within Nigerian secondary schools.

Recommendations

Based on the findings, the following recommendations are made:

1. Educational authorities in Taraba State and Nigeria at large should integrate cognitive behavioural therapy and social skills training into the guidance and counselling services of secondary schools to address anger-related behaviours.
2. School personnel should be provided with professional development opportunities on the delivery of cognitive behavioural therapy and social skills training interventions to effectively support students dealing with anger and emotional regulation challenges.
3. Schools should implement screening mechanisms to identify students at risk of anger and aggressive behaviours early and provide targeted cognitive behavioural therapy and social skills training-based interventions.
4. The Ministry of Education and related bodies should develop policies that mandate emotional and behavioural support programs, including cognitive behavioural therapy and social skills training combined treatment, as part of the core wellness curriculum in Nigerian secondary schools.

Suggestions for Further Studies

To expand upon the findings of this study, the following research avenues are suggested:

1. Longitudinal study on the sustained effects of cognitive behavioural therapy and social skills training combined treatment: Future research could examine whether the improvements in anger management are sustained over longer periods (e.g., 6 months or 1 year post-intervention).
2. Comparative study with other psychological interventions: Further studies could compare the effectiveness of cognitive behavioural therapy and social skills training combined treatment with other interventions such as mindfulness-based stress reduction, emotional intelligence training, or psychoeducation.
3. Larger and more diverse sample studies across Nigeria: A broader study involving a larger sample across different geopolitical zones could determine if the effectiveness of combined cognitive behavioural therapy and social skills training observed in Jalingo Local Government Area is generalizable to other parts of Nigeria.

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