

Effects of Dialectical Behaviour Therapy Skills Delivered by Trained Peer Mentors and Standard School Counselling on Emotional Dysregulation Among Senior Secondary School Students in Nasarawa State, Nigeria

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Abstract

This study examined the effects of Dialectical Behaviour Therapy (DBT) skills delivered by trained peer mentors and standard school counselling on emotional dysregulation among senior secondary school students in Nasarawa State, Nigeria. Emotional dysregulation is a transdiagnostic mechanism underlying the most prevalent adolescent mental health presentations in secondary school settings, yet evidence-based task-shifting models for its treatment in low- and middle-income country school contexts remain critically underexplored. A quasi-experimental pre-test post-test control group design was employed. A purposive sample of 48 Senior Secondary School Two (SS2) students (24 males, 24 females) meeting clinical screening thresholds for emotional dysregulation was drawn from three public secondary schools across the Karu, Keffi, and Lafia Local Government Areas of Nasarawa State. Participants were assigned to peer mentor-delivered DBT skills ($n = 16$), standard school counselling ($n = 16$), or a waitlist control condition ($n = 16$), with one condition per school. Both active interventions were delivered over 12 weeks in structured weekly group sessions. The Difficulties in Emotion Regulation Scale (DERS) served as the validated primary outcome measure. Analysis of Covariance (ANCOVA), with pre-test DERS scores as the covariate, was employed to test the null hypotheses at the 0.05 significance level. Both peer mentor-delivered DBT skills and standard school counselling produced statistically significant reductions in emotional dysregulation relative to the waitlist control. Peer mentor-delivered DBT skills demonstrated significantly greater efficacy than standard school counselling, with a large effect size ($\eta^2p = .69$). These findings provide evidence for the feasibility and effectiveness of task-shifting DBT skills delivery to trained

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peer mentors in Nigerian secondary schools, with significant implications for scalable adolescent mental health service models in low-resource settings.

Keywords: *dialectical behaviour therapy; peer mentors; emotional dysregulation; task-shifting; school counselling; adolescent mental health; secondary schools; Nasarawa State; Nigeria; quasi-experimental design.*

Introduction

Emotional dysregulation—defined as the inability to modulate the intensity, duration, and behavioural expression of emotional responses in a contextually appropriate manner—is increasingly recognised as a transdiagnostic mechanism underlying most clinically significant mental health presentations in adolescence (Gratz & Roemer, 2024). Rather than a discrete diagnostic category, it functions as a shared root process driving prevalent secondary school mental health problems, including self-harm, suicidal ideation, aggressive behaviour, substance misuse, and school refusal (Crowell et al., 2019). Its role in preceding and amplifying these outcomes has intensified research interest in early, school-based interventions. In Nigeria, the burden of adolescent mental health difficulties linked to emotional dysregulation is substantial yet under-served. Behavioural disorders affect an estimated 15.1% of school-age adolescents, while depression and anxiety impact approximately 27% and 30% respectively (Ogunlade et al., 2025). Despite this, the treatment gap in sub-Saharan Africa remains close to 90% (WHO, 2022). In Nasarawa State, public secondary schools reflect these systemic challenges, with limited mental health provision, a shortage of trained counselling personnel, and high levels of unmet psychological need (Momoh et al., 2025).

Dialectical Behaviour Therapy (DBT), developed by Marsha Linehan (1993), is a structured, evidence-based intervention originally designed for pervasive emotion dysregulation and later adapted for adolescents as DBT-A (Rathus & Miller, 2015). It targets emotional dysregulation through four core skill domains: mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness. Evidence from randomised controlled trials and meta-analyses demonstrates its effectiveness in reducing emotional dysregulation, self-harm, and suicidal ideation among adolescents (Kothgassner et al., 2021; McCauley et al., 2018; Mehlum et al., 2014). Notably, DBT skills training—the group-based component of the model—is particularly suitable for delivery by trained non-specialists, making it well aligned with task-shifting approaches (Zapolski & Smith, 2017). Task-shifting, which involves delegating mental health care responsibilities to trained non-specialists, is widely recommended for addressing service gaps in low- and middle-income countries (Patel et al., 2018; WHO, 2022). Within school settings, senior peer mentors offer a practical and contextually embedded workforce, given their accessibility and social credibility. While peer-led interventions have shown effectiveness across diverse settings (Teufel-Shone et al., 2018), no study

has examined peer-led DBT skills delivery for emotional dysregulation in Nigerian secondary schools, highlighting a critical gap in the literature.

Standard school counselling in Nigerian public secondary schools remains inconsistent in both structure and quality. Counsellors are typically trained in general guidance rather than evidence-based interventions targeting specific psychological mechanisms. Consequently, sessions are often directive or supportive, lacking structured skills training aimed at addressing emotional dysregulation. Although such approaches provide valuable support, their capacity to achieve clinically significant outcomes is limited by the absence of a protocol-driven framework. This study therefore evaluates whether DBT skills delivered by trained senior peer mentors produce significantly greater reductions in emotional dysregulation than standard school counselling among senior secondary school students in Nasarawa State, Nigeria.

Research Questions

RQ1. What is the effect of Dialectical Behaviour Therapy skills delivered by trained peer mentors on emotional dysregulation among senior secondary school students in Nasarawa State, Nigeria?

RQ2. What is the effect of standard school counselling on emotional dysregulation among senior secondary school students in Nasarawa State, Nigeria?

RQ3. Is there a significant difference between the effects of DBT skills delivered by trained peer mentors and standard school counselling on emotional dysregulation among senior secondary school students in Nasarawa State, Nigeria?

Null Hypotheses

H₀₁. Dialectical Behaviour Therapy skills delivered by trained peer mentors have no significant effect on emotional dysregulation among senior secondary school students in Nasarawa State, Nigeria, at the 0.05 level of significance.

H₀₂. Standard school counselling has no significant effect on emotional dysregulation among senior secondary school students in Nasarawa State, Nigeria, at the 0.05 level of significance.

H₀₃. There is no significant difference between the effects of DBT skills delivered by trained peer mentors and standard school counselling on emotional dysregulation among senior secondary school students in Nasarawa State, Nigeria, at the 0.05 level of significance.

Methodology

A quasi-experimental pre-test–post-test control group design was used to examine the effects of peer mentor-delivered Dialectical Behaviour Therapy (DBT) skills and standard school counselling on emotional

dysregulation among senior secondary school students in Nasarawa State, Nigeria. Forty-eight SS2 students (aged 15–18) from three purposively selected public secondary schools in Karu, Keffi, and Lafia were recruited through counsellor nomination and screening using the Difficulties in Emotion Regulation Scale (DERS), with eligibility defined by scores at or above the clinical threshold. Participants without active psychiatric hospitalisation or concurrent psychological intervention were assigned to DBT ($n = 16$), standard counselling ($n = 16$), or a waitlist control group ($n = 16$), with one condition implemented per school.

Five SS3 students per treatment school were trained as peer mentors through a structured two-week DBT facilitation programme covering core skills, group management, and safeguarding, with weekly supervision provided. The DBT intervention, adapted from Rathus and Miller (2015), was delivered over 12 weeks in weekly 60-minute sessions across four modules: mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness. The standard counselling group received weekly sessions delivered by school counsellors following routine practice.

Emotional dysregulation was assessed using the DERS (Gratz & Roemer, 2004), a 36-item validated measure ($\alpha = 0.88$ in this study), with teacher observations providing supplementary data. Ethical approval was obtained, with parental consent, student assent, confidentiality, and safeguarding procedures maintained. Data were analysed using descriptive statistics and ANCOVA to compare post-test scores across groups while controlling for baseline differences, with significance set at $p < .05$ and effect sizes reported as partial eta-squared (η^2p) (Cohen, 1988).

Results and Discussion

Results are presented in line with the research questions and corresponding hypotheses. Descriptive statistics are followed by ANCOVA results and integrated interpretation.

Research Question 1

Table 1 shows that students in the peer mentor-delivered DBT group recorded a substantial reduction in emotional dysregulation, with mean scores decreasing from 116.88 ($SD = 11.44$) to 74.31 ($SD = 10.17$), representing a reduction of **42.57 points** over 12 weeks. This indicates a strong improvement in emotional regulation following structured DBT skills training.

Table 1. Peer Mentor-Delivered DBT Skills Group.

N	Pre-Test Mean	SD	Post-Test Mean	SD	Mean Difference
16	116.88	11.44	74.31	10.17	42.57

Research Question 2

Table 2 indicates that students in the standard school counselling group showed a moderate reduction in emotional dysregulation, with mean scores decreasing from 117.44 (SD = 12.06) to 95.19 (SD = 11.83), representing a 22.25-point improvement.

Table 2. Standard School Counselling Group.

N	Pre-Test Mean	SD	Post-Test Mean	SD	Mean Difference
16	117.44	12.06	95.19	11.83	22.25

Research Question 3

Table 3 shows that the DBT group recorded the highest improvement, followed by counselling, while the control group showed minimal change. This suggests both interventions were effective, with DBT demonstrating superior outcomes.

Table 3. All Groups Comparison.

Group	N	Pre-Test Mean	SD	Post-Test Mean	SD	Mean Difference
DBT Peer Mentors	16	116.88	11.44	74.31	10.17	42.57
School Counselling	16	117.44	12.06	95.19	11.83	22.25
Control	16	117.06	11.77	116.50	11.94	0.56

Hypothesis Testing

Hypothesis One

ANCOVA revealed a significant effect of DBT skills on emotional dysregulation after controlling for pre-test scores, $F(1, 30) = 79.12$, $p < .001$, $\eta^2p = .69$.

Therefore, H_{01} was rejected. DBT skills delivered by peer mentors significantly reduced emotional dysregulation.

Hypothesis Two

ANCOVA showed that standard school counselling significantly reduced emotional dysregulation compared to control, $F(1, 30) = 49.02$, $p < .001$, $\eta^2p = .62$.

Thus, H_{02} was rejected.

Hypothesis Three

A significant difference was found between DBT and counselling groups, $F(1, 30) = 34.44$, $p < .001$, $\eta^2p = .53$. Hence, H_{03} was rejected, with DBT showing superior effectiveness.

Discussion of Findings

This study examined the effects of peer mentor-delivered DBT skills and standard school counselling on emotional dysregulation among senior secondary school students in Nasarawa State, Nigeria. Both interventions produced statistically significant reductions, with peer mentor-delivered DBT skills showing greater efficacy. Students in the DBT group demonstrated a substantial reduction in DERS scores (mean difference = 42.57), while the counselling group showed moderate improvement (mean difference = 22.25), leading to the rejection of H_{01} and H_{02} . These findings are consistent with prior research highlighting the effectiveness of DBT skills in addressing core deficits in emotion regulation among adolescents (Rathus & Miller, 2015; Kothgassner et al., 2021). The results further indicate that structured DBT skills can be effectively delivered by trained peer mentors, extending existing evidence into a school-based Nigerian context.

A significant difference between the two interventions (H_{03} rejected) confirms the superior impact of DBT skills, likely due to its structured, skills-based approach compared to the supportive nature of standard counselling. While standard counselling demonstrated meaningful benefits, its lack of targeted skill acquisition limits its overall effectiveness. The findings therefore support a tiered intervention model, where standard counselling serves as a foundational support, and DBT skills function as a targeted intervention. Importantly, the success of peer mentor delivery highlights the viability of task-shifting as a cost-effective and scalable strategy for addressing adolescent mental health needs in resource-constrained school settings.

Conclusion

This study demonstrated that both DBT skills delivered by trained peer mentors and standard school counselling significantly reduced emotional dysregulation in senior secondary school students in Nasarawa State, Nigeria, with peer mentor-delivered DBT skills producing significantly superior outcomes. The findings establish peer mentor-delivered DBT skills as a feasible, effective, and scalable task-shifting model for emotional dysregulation treatment in Nigerian secondary schools, and confirm that standard school counselling, whilst less potent, produces meaningful clinical improvement warranting retention as a universal first-level provision. It is recommended that the Nasarawa State Ministry of Education develop a policy framework integrating structured DBT skills group programmes, delivered by trained and supervised

senior peer mentors, into secondary school counselling as a targeted second-level intervention for students meeting DERS screening thresholds, whilst retaining and strengthening standard counselling as a universal provision through targeted capacity-building for school counsellors. Future research should address the study's primary limitations — small sample size, single-state setting, and absence of follow-up data — through larger multi-state replication studies incorporating three- and six-month follow-up assessments and systematic fidelity monitoring of peer mentor delivery. Taken alongside complementary evidence from the Federal Capital Territory, the findings of this study contribute to a growing Nigerian evidence base for school-based psychological interventions directly relevant to the global challenge of delivering scalable, low-resource adolescent mental health support without exclusive reliance on specialist clinical provision.

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