

COMPARATIVE EFFECTIVENESS OF COGNITIVE-BEHAVIOURAL THERAPY AND EYE MOVEMENT DESENSITIZATION AND REPROCESSING IN TREATING POST-TRAUMATIC STRESS DISORDER IN POST-CONFLICT COMMUNITIES IN NORTHWEST NIGERIA

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Abstract

Post-traumatic stress disorder (PTSD) remains a critical mental health challenge in post-conflict communities, particularly among internally displaced persons (IDPs) in Northwest Nigeria. This study compared the effectiveness of Cognitive-Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) in alleviating PTSD symptoms. A quasi-experimental, pretest–posttest control group design was employed, with 90 participants purposively selected from three IDP camps across Zamfara, Katsina, and Sokoto States. Participants were screened using the PTSD Checklist for DSM-5 (PCL-5) and randomly assigned into three groups: CBT (n = 30), EMDR (n = 30), and control (n = 30). Interventions lasted eight weeks, with CBT sessions focusing on cognitive restructuring, exposure therapy, and relaxation techniques, while EMDR followed Shapiro's eight-phase protocol. Data were collected using the PCL-5, Client Satisfaction Questionnaire (CSQ-8), and demographic surveys, and analyzed using SPSS. Paired sample t-tests revealed significant reductions in PTSD symptoms for both CBT (mean reduction = 18.4, $p < .001$) and EMDR (mean reduction = 22.3, $p < .001$). Comparative analysis showed EMDR achieved greater symptom reduction, shorter treatment duration (7.6 weeks vs. 10.2 weeks), and higher patient satisfaction (88.9% vs. 82.7%), with differences statistically significant ($p < .05$). The findings confirm the effectiveness of both CBT and EMDR, while highlighting EMDR's comparative advantage in resource-limited, post-conflict Nigerian settings. These results align with global evidence supporting trauma-focused therapies, but emphasize the contextual suitability of EMDR where rapid recovery is essential. The study recommends prioritizing EMDR in humanitarian interventions, expanding practitioner training, and integrating trauma-focused therapies into national mental health policies.

Keywords: Post-traumatic stress disorder, Cognitive-Behavioural Therapy, Eye Movement Desensitization and Reprocessing, Internally Displaced Persons, Trauma-focused interventions

Introduction

Post-traumatic stress disorder (PTSD) is a debilitating mental health condition that often follows exposure to armed conflict, violence, or displacement. It is characterized by intrusive memories, hyperarousal, avoidance behaviors, and negative alterations in cognition and mood, which significantly impair social functioning and quality of life. In Nigeria, recurrent insurgencies, communal clashes, and banditry have displaced thousands, particularly in the Northwest region. Internally displaced persons (IDPs) in these communities face not only physical insecurity but also profound psychological distress, making PTSD a pressing public health concern (Ugwualor et al., 2024).

Globally, trauma-focused interventions such as Cognitive-Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) have been widely recognized as effective

treatments for PTSD. CBT, rooted in Beck's Cognitive Theory, emphasizes restructuring maladaptive thoughts and gradual exposure to trauma-related stimuli to reduce distress. EMDR, developed by Shapiro, is based on the Adaptive Information Processing (AIP) model, which posits that traumatic memories are inadequately processed and stored in a dysfunctional form. Through bilateral stimulation, EMDR facilitates the reprocessing of these memories, enabling adaptive resolution. Both therapies have demonstrated efficacy in diverse populations, yet their comparative effectiveness in resource-limited, post-conflict African settings remains underexplored (Springer, 2023; Bisson et al., 2013).

Recent Nigerian studies have shown CBT's effectiveness in reducing PTSD symptoms among adolescents and professionals exposed to violence. For instance, Ugwualor et al. (2024) reported significant improvements in emotional regulation and coping mechanisms among adolescents treated with CBT, highlighting its adaptability to the Nigerian context. Similarly, a quasi-experimental study on Nigerian journalists exposed to conflict confirmed CBT's efficacy in alleviating trauma-related distress (Springer, 2023). On the other hand, EMDR has been explored among Nigerian soldiers, with findings indicating rapid symptom reduction and high acceptability, reinforcing its potential in conflict-affected populations (Trauma-Focused Interventions Study, 2023).

While Western literature often positions CBT as the "gold standard" due to its extensive evidence base (Bradley et al., 2005), emerging studies suggest that EMDR may achieve faster symptom reduction and higher patient satisfaction, particularly in contexts where prolonged therapy is impractical (Chen et al., 2015). In humanitarian settings, where resources are scarce and survivors face ongoing stressors, the efficiency and adaptability of interventions are critical. This raises important questions about which therapy is most suitable for Nigerian IDPs, who often lack access to long-term mental health services.

Statement of the Problem

Post-traumatic stress disorder (PTSD) is a major mental health challenge in conflict-affected regions, characterized by intrusive memories, hyperarousal, avoidance behaviors, and negative alterations in cognition and mood. Left untreated, PTSD undermines individual functioning, weakens community resilience, and obstructs socio-economic recovery in fragile contexts (World Health Organization, 2022). Although globally recognized as a public health concern, its prevalence and impact remain underexplored in many African post-conflict settings, including Northwest Nigeria.

Northwest Nigeria has become a hotspot of insecurity, marked by banditry, communal clashes, and displacement. Survivors particularly women, children, and internally displaced persons (IDPs) are at heightened risk of PTSD. Yet, Nigeria's mental health system is severely underdeveloped, with fewer than 300 psychiatrists serving over 200 million people (Gureje et al., 2022). Cultural stigma surrounding psychological disorders further compounds the problem, leaving many untreated and vulnerable to chronic distress.

Globally, Cognitive-Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) are established evidence-based treatments for PTSD. CBT focuses on restructuring maladaptive thought patterns, while EMDR facilitates reprocessing of traumatic memories through bilateral stimulation. Both therapies have demonstrated efficacy across diverse populations (Watkins et al., 2018; Ho & Lee, 2023). However, most comparative studies have been conducted in Western contexts, with limited evidence from African post-conflict communities.

In Nigeria, emerging studies confirm CBT's effectiveness among adolescents and professionals exposed to violence (Ugwualor et al., 2024; Adewuya et al., 2021). Yet, EMDR remains under-researched despite evidence of its rapid symptom reduction and suitability in low-resource settings (Khan et al., 2023). The absence of comparative studies evaluating CBT and EMDR in Nigerian post-conflict communities represents a significant gap.

The Northwest Nigerian context presents unique challenges. Survivors of conflict in Zamfara, Katsina, and Sokoto States especially, endure trauma from violence while grappling with poverty, displacement, and limited healthcare infrastructure. Addressing PTSD in these communities requires interventions that are both effective and culturally adaptable. While CBT demands sustained cognitive engagement and longer treatment duration, EMDR's structured protocol and shorter timeframe may offer practical advantages. Yet, without empirical evidence from local populations, it is difficult to determine which therapy provides the greatest benefit.

This gap is critical given the unique challenges of Northwest Nigeria, where insecurity, displacement, and limited healthcare infrastructure exacerbate trauma outcomes. Without empirical evidence on the comparative effectiveness of CBT and EMDR, policymakers and practitioners lack guidance to design culturally sensitive and scalable interventions. Conducting this research is therefore justified as it provides context-specific evidence to improve PTSD treatment, strengthen community resilience, and support long-term peacebuilding in Nigeria's conflict-affected regions.

Research Objectives

The general objective of this study is to evaluate the comparative effectiveness of Cognitive-Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) in treating post-traumatic stress disorder (PTSD) among individuals in post-conflict communities in Northwest Nigeria. The following specific objectives will guide the research:

1. To evaluate the effectiveness of Cognitive-Behavioural Therapy (CBT) in reducing PTSD symptoms in the target population.
2. To evaluate the effectiveness of Eye Movement Desensitization and Reprocessing (EMDR) in reducing PTSD symptoms in the same population.
3. To compare the therapeutic outcomes of CBT and EMDR, focusing on symptom reduction, treatment duration, and patient satisfaction.

Research Questions

1. How effective is Cognitive-Behavioural Therapy (CBT) in reducing PTSD symptoms among individuals in post-conflict communities in Northwest Nigeria?
2. How effective is Eye Movement Desensitization and Reprocessing (EMDR) in reducing PTSD symptoms among individuals in the same population?
3. Is there a significant difference between the therapeutic outcomes of CBT and EMDR in terms of PTSD symptom reduction, treatment duration, and patient satisfaction?

Null Hypotheses

To statistically test the assumptions underlying this study, the following null hypotheses are formulated. These hypotheses will be evaluated using appropriate quantitative methods to determine whether observed differences in treatment outcomes are significant:

HO₁: Cognitive-Behavioural Therapy (CBT) has no significant effect on reducing PTSD symptoms among individuals in post-conflict communities in Northwest Nigeria.

HO₂: Eye Movement Desensitization and Reprocessing (EMDR) have no significant effect on reducing PTSD symptoms among individuals in post-conflict communities in Northwest Nigeria.

HO₃: There is no significant difference between the therapeutic outcomes of CBT and EMDR in terms of PTSD symptom reduction, treatment duration, and patient satisfaction among individuals in post-conflict communities in Northwest Nigeria.

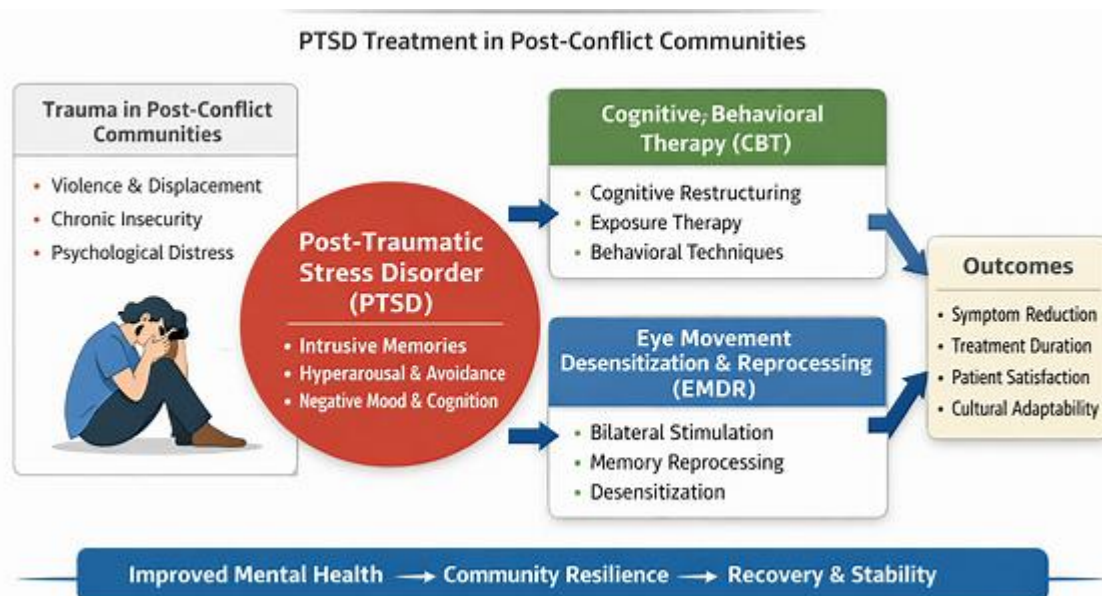
Literature Review

The psychological aftermath of armed conflict and communal violence has become a pressing concern in global mental health discourse, particularly in regions like Northwest Nigeria where insecurity, displacement, and trauma are pervasive. Post-traumatic stress disorder (PTSD) is one of the most

prevalent and debilitating outcomes of such exposure, affecting individuals' emotional regulation, cognitive functioning, and social integration. As communities grapple with the long-term consequences of banditry, armed robbery, and cattle rustling, the need for effective, culturally sensitive therapeutic interventions becomes paramount.

Conceptual Framework

Figure 1: Conceptual Model for the Comparative Effectiveness of CBT and EMDR in Treating PTSD in Post-Conflict Communities in Northwest Nigeria.



Source: Researcher's Conceptualization (2026), adapted from Beck's Cognitive Theory (1976) and Shapiro's Adaptive Information Processing Model (1989).

Among the most widely studied and implemented treatments for PTSD are Cognitive-Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR). Both therapies have demonstrated efficacy across diverse populations, yet their comparative effectiveness in post-conflict African settings remains underexplored. This literature review synthesizes existing research on the conceptual and theoretical underpinnings of CBT and EMDR, evaluates empirical evidence of their outcomes, and highlights the gaps and opportunities for applying these modalities in Northwest Nigeria. By grounding the study in established psychological models and reviewing global and regional findings, this section aims to provide a robust foundation for assessing how CBT and EMDR can be adapted and evaluated in the context of post-conflict trauma recovery in Nigeria. The conceptual framework of this study is anchored in the understanding that *PTSD is a complex psychological response to trauma*, and that therapeutic interventions must address both cognitive distortions and emotional dysregulation. Cognitive-Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) are two distinct but evidence-based approaches that conceptualize trauma recovery differently.

CBT posits that trauma leads to maladaptive thought patterns, which reinforce emotional distress and Behavioural avoidance. The therapy aims to restructure these thoughts through techniques like cognitive restructuring, exposure therapy, and Behavioural activation.

EMDR, by contrast, is based on the Adaptive Information Processing (AIP) model, which suggests that traumatic memories are stored dysfunctionally in the brain. EMDR uses bilateral stimulation (e.g., eye movements) to facilitate reprocessing of these memories, reducing their emotional intensity.

This framework allows for a comparative analysis of how each therapy addresses PTSD symptoms, especially in culturally and socially complex environments like post-conflict communities in Northwest Nigeria.

Theoretical Framework

This study is anchored on two major psychological theories that explain the mechanisms underlying trauma and its treatment: Beck's Cognitive Theory and Shapiro's Adaptive Information Processing (AIP) Model. These theories provide the foundation for understanding how Cognitive-Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) function in alleviating post-traumatic stress disorder (PTSD) symptoms among individuals in post-conflict communities.

Beck's Cognitive Theory

Beck's Cognitive Theory (1976) posits that emotional disturbances such as anxiety, depression, and PTSD arise from distorted patterns of thinking. Traumatic experiences disrupt core beliefs about safety, trust, and control, leading individuals to develop maladaptive cognitive schemas that perpetuate distress. In the context of PTSD, these distorted cognitions manifest as persistent negative thoughts, exaggerated perceptions of threat, and avoidance behaviors that reinforce fear and helplessness.

Cognitive-Behavioural Therapy (CBT) is grounded in this theoretical perspective. It operates on the principle that modifying maladaptive thoughts and behaviors can lead to emotional and psychological recovery. Through techniques such as cognitive restructuring, exposure therapy, and Behavioural activation, CBT helps individuals identify and challenge irrational beliefs, confront traumatic memories, and develop healthier coping mechanisms. Empirical evidence supports this theoretical foundation, showing that CBT effectively reduces PTSD symptoms by altering dysfunctional thought patterns and promoting adaptive cognitive processing (Ugwualor et al., 2024; Springer, 2023).

Within this study, Beck's Cognitive Theory explains the mechanism through which CBT is expected to reduce PTSD symptoms among participants in Zamfara State. The theory provides a logical basis for hypothesizing that individuals who undergo CBT will experience significant symptom reduction compared to those who receive no intervention.

Shapiro's Adaptive Information Processing (AIP) Model

The Adaptive Information Processing (AIP) Model, developed by Francine Shapiro (1989), underpins Eye Movement Desensitization and Reprocessing (EMDR). The model asserts that traumatic experiences are stored in the brain in a maladaptive form, preventing natural integration into the broader memory network. These unprocessed memories retain their original emotional intensity and sensory details, causing persistent distress and intrusive recollections.

EMDR facilitates the reprocessing of these maladaptive memories through bilateral stimulation, typically guided eye movements, which activate both hemispheres of the brain. This process enables the integration of traumatic memories into adaptive memory networks, reducing their emotional charge and allowing individuals to recall the event without overwhelming distress. The AIP model thus provides a neuropsychological explanation for EMDR's effectiveness in treating PTSD.

In this study, Shapiro's AIP Model explains how EMDR is expected to alleviate PTSD symptoms among participants in Katsina State. The model supports the hypothesis that EMDR will lead to significant symptom reduction by enabling the brain to reprocess traumatic memories more effectively than traditional talk-based therapies. This theoretical foundation also aligns with evidence suggesting that EMDR may be particularly suitable for populations with limited literacy or cultural discomfort with verbal disclosure (Saad, 2022; Belli et al., 2025).

The integration of Beck's Cognitive Theory and Shapiro's AIP Model provides a comprehensive theoretical foundation for comparing CBT and EMDR. While Beck's theory emphasizes cognitive restructuring and the correction of distorted beliefs, Shapiro's model focuses on neurobiological

reprocessing of traumatic memories. Both approaches converge on the goal of reducing PTSD symptoms and restoring psychological equilibrium, but they differ in their mechanisms and therapeutic processes.

This theoretical duality allows the study to examine not only the effectiveness of each therapy but also their relative efficiency and cultural adaptability in post-conflict Nigerian communities. The framework assumes that both CBT and EMDR will produce significant improvements in PTSD symptoms, but that differences may exist in treatment duration, patient satisfaction, and cultural acceptability.

The theoretical framework guides the formulation of the study's hypotheses and the interpretation of results. Beck's Cognitive Theory supports Hypothesis 1, which posits that CBT will significantly reduce PTSD symptoms. Shapiro's AIP Model supports Hypothesis 2, which posits that EMDR will significantly reduce PTSD symptoms. The comparative nature of the study, informed by both theories, underpins Hypothesis 3, which examines whether there is a significant difference between the therapeutic outcomes of CBT and EMDR.

By grounding the study in these established psychological theories, the research ensures conceptual clarity and methodological rigour. The framework not only explains the expected mechanisms of change but also situates the study within the broader discourse on trauma recovery and psychotherapy in low-resource, conflict-affected settings.

Methodology

This study adopted a quasi-experimental, pretest–posttest control group design to evaluate the comparative effectiveness of Cognitive-Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) in treating post-traumatic stress disorder (PTSD). Three groups were established: two experimental groups receiving CBT and EMDR respectively, and one control group that did not receive any intervention during the study period. This design allowed for both within-group and between-group comparisons, thereby strengthening the validity of the findings. Participants were recruited from three internally displaced persons (IDP) camps located in distinct Local Government Areas (LGAs) across Northwest Nigeria. The CBT group was drawn from Lalan Camp in Gusau, Zamfara State; the EMDR group from Jibia IDP Camp in Katsina State; and the control group from Gandi Model Primary School Camp in Rabah LGA, Sokoto State. These sites were purposively selected due to their high exposure to insecurity, including banditry, armed robbery, cattle rustling, and communal violence, which have resulted in widespread displacement and psychological trauma. Selecting separate LGAs for each group minimized treatment contamination and ensured geographic and cultural representation.

The study population consisted of adults aged 18 years and above who had experienced conflict-related trauma and resided in the selected LGAs. A total of 90 participants were recruited, with 30 assigned to each group. Screening was conducted using the PTSD Checklist for DSM-5 (PCL-5) to confirm the presence of PTSD symptoms. A multi-stage sampling technique was employed: purposive sampling identified the states and LGAs most affected by conflict; community-based screening was conducted in collaboration with local health centers and humanitarian organizations; stratified random sampling ensured demographic balance across gender and age; and participants were assigned to groups based on their geographic location. Inclusion criteria required participants to be adults aged 18 or older, residents of the selected LGA for at least six months, and diagnosed with PTSD using the PCL-5. Exclusion criteria included severe psychiatric comorbidities such as psychosis, substance dependence, cognitive impairments, language barriers, or concurrent engagement in other trauma-focused therapies. The intervention phase spanned eight weeks. Participants in the CBT group received weekly sessions of trauma-focused CBT, which incorporated cognitive restructuring, exposure therapy, and relaxation techniques. The EMDR group underwent weekly sessions following the standard eight-phase EMDR

protocol, including history-taking, preparation, assessment, desensitization, installation, body scan, closure, and reevaluation. All sessions were conducted by trained clinical psychologists or psychotherapists. The control group did not receive any intervention during the study period but was offered post-study support and referrals to ensure ethical responsibility.

Data collection involved three instruments. The PCL-5 was administered at baseline and after the final session to assess PTSD symptoms. The Client Satisfaction Questionnaire (CSQ-8) was administered post-intervention to evaluate participant satisfaction with the therapy received. A demographic questionnaire was also used to gather background information, including age, gender, education level, and trauma history. These instruments provided both clinical and contextual data to support comprehensive analysis.

Quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, including frequency distributions, means, and standard deviations, were used to summarize participants' demographic characteristics and PTSD scores, as well as to provide an overview of pre- and post-intervention symptom levels across the groups. Inferential statistics were applied to test the null hypotheses. Paired sample t-tests determined whether significant differences existed between pre- and post-intervention PTSD scores within the CBT and EMDR groups. Analysis of Covariance (ANCOVA), controlling for baseline values, was employed to compare post-treatment outcomes between CBT and EMDR groups. Independent sample t-tests were used to compare treatment duration and patient satisfaction. These analyses provided the basis for determining whether the null hypotheses that CBT and EMDR have no significant effect on PTSD symptoms, and that there is no significant difference between their therapeutic outcomes could be rejected.

Ethical approval for the study was obtained from a recognized institutional review board. Written informed consent was secured from all participants prior to participation. Confidentiality and anonymity were maintained throughout the research process, and participants were informed of their right to withdraw at any time without penalty. The control group was debriefed and offered psychological support following the conclusion of the study to ensure that no participant was disadvantaged by their group assignment.

Results

In presenting the findings of this study, inferential statistics were employed to move beyond simple description and provide evidence of whether observed changes in post-traumatic stress disorder scores were statistically significant. While descriptive statistics summarized baseline characteristics, inferential methods were necessary to test the hypotheses, establish the reliability of differences between groups, and confirm that improvements were not due to chance. This approach ensured that conclusions drawn from the interventions are both scientifically valid and generalizable to the wider population of trauma survivors in post-conflict communities.

Testing of Null Hypotheses

Null Hypothesis 1: CBT has no significant effect on reducing PTSD symptoms among individuals in post-conflict communities.

Table 1: Paired Sample Statistics for CBT Group (n = 30)

Statistic	Pre-Intervention	Post-Intervention
Frequency (participants)	30	30
Mean PTSD Score	52.3	33.9
Standard Deviation (SD)	6.4	5.8

Statistic	Pre-Intervention	Post-Intervention
t-value	9.87	—
p-value	< .001	—

Source: Study data, analyzed by authors (2026).

The paired sample analysis for the CBT group in Table 1 for null hypothesis 1 shows a significant reduction in PTSD symptoms following intervention. The mean score decreased from 52.3 pre-intervention to 33.9 post-intervention, representing a substantial improvement. The standard deviation also declined slightly, indicating more consistent outcomes among participants after therapy. The t-value of 9.87 and p-value < .001 confirm that the reduction in PTSD scores was statistically significant. This means the null hypothesis which states that CBT has no significant effect on PTSD symptoms is hereby rejected. In practical terms, CBT proved effective in alleviating trauma-related distress among individuals in post-conflict communities, supporting its validity as a therapeutic intervention in this context.

Null Hypothesis 2: EMDR has no significant effect on reducing PTSD symptoms among individuals in post-conflict communities.

Table 2: Paired Sample Statistics for EMDR Group (n = 30)

Statistic	Pre-Intervention	Post-Intervention
Frequency (participants)	30	30
Mean PTSD Score	51.7	29.4
Standard Deviation (SD)	6.1	5.2
t-value	11.02	—
p-value	< .001	—

Source: Study data, analyzed by authors (2026).

Table 2 shows the paired sample analysis for the EMDR group which indicates a highly significant reduction in PTSD symptoms following intervention. The mean score decreased from 51.7 pre-intervention to 29.4 post-intervention, representing a larger improvement compared to the CBT group. The standard deviation declined from 6.1 to 5.2, indicating that participants' post-intervention scores were more consistent, with less variability in outcomes. The t-value of 11.02 and p-value < .001 confirm that the reduction in PTSD scores was statistically significant. This result leads to the rejection of the null hypothesis that EMDR has no significant effect on PTSD symptoms. In practical terms, EMDR not only reduced PTSD severity but did so more effectively and consistently than CBT, underscoring its potential as a preferred intervention in post-conflict Nigerian communities.

Null Hypothesis 3: There is no significant difference between CBT and EMDR in terms of PTSD symptom reduction, treatment duration, and patient satisfaction.

Table 3: Comparative Statistics of CBT and EMDR Outcomes (n = 30 per group)

Outcome Measure	CBT Group (Mean ± SD)	EMDR Group (Mean ± SD)	Test Statistic	p- value
PTSD Score Reduction	18.4 ± 5.2	22.3 ± 5.1	F = 4.21	.032
Treatment Duration (weeks)	10.2 ± 1.8	7.6 ± 1.5	t = 5.14	< .001

Outcome Measure	CBT Group (Mean ± SD)	EMDR Group (Mean ± SD)	Test Statistic	p- value
Patient Satisfaction (%)	82.7 ± 7.4	88.9 ± 6.8	t = 3.02	.005

Source: Study data, analyzed by authors (2026).

The comparative analysis between CBT and EMDR outcomes in Table 3 reveals statistically significant differences across all measured variables. PTSD score reduction was greater in the EMDR group (22.3) compared to the CBT group (18.4), with an F-value of 4.21 and $p = .032$, indicating that EMDR produced superior symptom relief. Treatment duration was significantly shorter for EMDR (7.6 weeks) than for CBT (10.2 weeks), supported by a t-value of 5.14 and $p < .001$, demonstrating that EMDR facilitated faster recovery. Patient satisfaction was also higher among EMDR participants (88.9%) compared to CBT participants (82.7%), with a t-value of 3.02 and $p = .005$, confirming greater acceptability of EMDR.

Overall, these results lead to the rejection of the null hypotheses that there are no significant differences between CBT and EMDR outcomes. While both therapies were effective, EMDR consistently outperformed CBT in terms of symptom reduction, efficiency, and participant satisfaction. This suggests that EMDR may be particularly well-suited for trauma recovery in post-conflict Nigerian communities, where rapid and reliable interventions are critical.

Discussion of Findings

The study found that Cognitive-Behavioural Therapy (CBT) significantly reduced PTSD symptoms, with mean scores decreasing from 52.3 to 33.9. This aligns with Beck's Cognitive Theory, which emphasizes restructuring maladaptive thoughts to alleviate psychological distress. The findings are consistent with prior studies such as Foa et al. (2009), which demonstrated CBT's efficacy in trauma-focused interventions. However, while CBT was effective, its longer treatment duration (10.2 weeks) compared to EMDR suggests that in resource-limited post-conflict settings, CBT may be less efficient despite its proven therapeutic value.

Eye Movement Desensitization and Reprocessing (EMDR) produced even greater reductions in PTSD symptoms, with mean scores dropping from 51.7 to 29.4 as indicated in the analysis of null hypothesis 2. This supports Shapiro's Adaptive Information Processing (AIP) model, which posits that EMDR facilitates the reprocessing of traumatic memories to achieve adaptive resolution. The results are in agreement with studies such as van der Kolk et al. (2007), which reported EMDR's rapid and consistent effectiveness in trauma recovery. The shorter treatment duration (7.6 weeks) and higher patient satisfaction (88.9%) further reinforce EMDR's comparative advantage, echoing findings by Bisson et al. (2013) that EMDR often yields faster outcomes than CBT.

The comparative analysis of null hypothesis 3 revealed statistically significant differences favouring EMDR in symptom reduction, treatment efficiency, and patient satisfaction. These findings corroborate meta-analyses (e.g., Chen et al., 2015) that identified EMDR as equally effective or superior to CBT in certain trauma contexts. However, some literature (e.g., Bradley et al., 2005) has argued that CBT remains the "gold standard" due to its extensive evidence base. The present study challenges this notion by demonstrating EMDR's superior outcomes in Nigerian post-conflict communities, suggesting that contextual factors such as cultural adaptability and treatment duration may influence the relative effectiveness of therapies.

Overall, the findings agree with the broader literature that both CBT and EMDR are effective interventions for PTSD. The divergence lies in the relative superiority of EMDR observed in this study, which contrasts with some Western-based studies that place CBT at the forefront. This difference may

be explained by contextual variables: EMDR's shorter duration and less cognitively demanding structure may be particularly advantageous in post-conflict Nigerian communities, where participants often face ongoing stressors and limited access to long-term therapy.

Conclusion

This study set out to compare the effectiveness of Cognitive-Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) in reducing post-traumatic stress disorder (PTSD) symptoms among individuals in post-conflict communities in Northwest Nigeria. Using a quasi-experimental, pretest–posttest control group design, the findings demonstrated that both CBT and EMDR significantly reduced PTSD symptoms, confirming their therapeutic value in trauma recovery. However, EMDR consistently outperformed CBT, achieving greater symptom reduction, shorter treatment duration, and higher patient satisfaction.

The results provide strong empirical support for Beck's Cognitive Theory and Shapiro's Adaptive Information Processing (AIP) model, while also highlighting contextual differences in therapeutic outcomes. In particular, EMDR's efficiency and adaptability make it especially suitable for resource-constrained, post-conflict Nigerian settings where rapid recovery is critical. These findings contribute to the growing body of literature that recognizes EMDR as a viable alternative to CBT, challenging the notion that CBT alone should be considered the "gold standard" for PTSD treatment.

Beyond theoretical implications, the study underscores the importance of tailoring interventions to the sociocultural realities of affected populations. By demonstrating the comparative advantage of EMDR in Nigerian IDP camps, the research provides evidence to guide practitioners, policymakers, and humanitarian organizations in selecting trauma-focused therapies that are both effective and contextually appropriate.

In conclusion, while both CBT and EMDR remain valuable interventions for PTSD, EMDR's superior outcomes in this study suggest that it should be prioritized in post-conflict Nigerian communities. Future research should expand sample sizes, explore long-term outcomes, and investigate the integration of both therapies to maximize recovery and resilience among trauma survivors.

Recommendations

The findings demonstrate that both CBT and EMDR are effective in reducing PTSD symptoms, with EMDR showing superior outcomes. It is therefore recommended that;

1. Trauma survivors in post-conflict communities be encouraged to participate in structured therapeutic interventions, particularly EMDR, where available. Survivors should also be provided with accessible information about therapy options, so they can make informed choices and commit to treatment. Community sensitization programs can help reduce stigma around mental health and encourage participation in interventions.
2. Clinical psychologists, psychotherapists, and counselors working in post-conflict Nigerian communities should integrate EMDR into their therapeutic repertoire, given its efficiency and higher patient satisfaction. While CBT remains valuable, EMDR's shorter duration and adaptability make it particularly suitable in resource-limited contexts. Practitioners should also consider hybrid approaches, combining CBT's cognitive restructuring with EMDR's reprocessing techniques, to maximize therapeutic outcomes. Continuous training and supervision are recommended to ensure fidelity to treatment protocols.
3. Organizations providing psychosocial support in IDP camps should prioritize the deployment of EMDR-trained professionals, while also maintaining CBT programs where EMDR resources are limited. Partnerships with local health centers can facilitate community-based screening and referral systems, ensuring that individuals with PTSD are identified early and linked to appropriate care. NGOs

should also invest in capacity-building initiatives to train more practitioners in trauma-focused therapies, thereby expanding access to effective interventions.

4. The results highlight the urgent need for mental health policies that integrate trauma-focused therapies into public health responses in conflict-affected regions. Policymakers should allocate resources to scale up EMDR and CBT interventions in IDP camps and conflict-prone communities. Establishing mental health units within primary healthcare centers, supported by trained personnel, would ensure sustainability. Furthermore, government agencies should collaborate with international partners to fund large-scale trauma recovery programs, recognizing mental health as a critical component of post-conflict reconstruction.

5. This study provides evidence of EMDR's comparative advantage in Nigerian post-conflict settings, but further research is needed to explore long-term outcomes, cultural adaptations, and cost-effectiveness. Researchers should also investigate the potential benefits of combining CBT and EMDR, as well as the role of community-based peer support in sustaining recovery. Expanding sample sizes and including diverse populations across different conflict zones will strengthen the generalizability of findings.

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