



DEVELOPMENT OF A SCHOOL-BASED PSYCHO-BEHAVIOURAL SUPPORT PROGRAM FOR ENHANCING CLASSROOM ADJUSTMENT AMONG HYPERACTIVE PUPILS IN SOUTH-EAST NIGERIA

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ABSTRACT

Hyperactivity, frequently linked to attention deficit hyperactivity disorder (ADHD), poses substantial challenges to classroom adjustment, academic performance, peer relationships, and teacher-pupil interactions in Nigerian primary schools. This study evaluated a 12-week school-based psycho-behavioural support program integrating behaviour modification techniques, teacher training in differentiated instruction, and parent counselling sessions. Employing a quasi-experimental mixed-methods design across 30 primary schools (six per state), the research involved 600 hyperactive pupils, 400 teachers, and 200 parents. Pre- and post-intervention assessments using validated tools showed that attention span increased by an average of 28%, disruptive behaviours decreased by 22%, and peer interaction scores rose notably. Teachers reported enhanced classroom management efficacy, while parents gained confidence in home reinforcement strategies. The program yielded a scalable framework, including a training manual and policy recommendations, that supports Nigeria's inclusive education agenda and Sustainable Development Goal 4. Findings highlight the feasibility and effectiveness of contextually adapted interventions in resource-constrained settings.

Keywords: hyperactivity, ADHD, psycho-behavioural support, classroom adjustment, inclusive education.

Introduction

Hyperactivity, often associated with attention deficit hyperactivity disorder (ADHD), presents significant challenges to classroom adjustment, affecting academic performance, social interactions, and teacher-pupil dynamics. Hyperactivity, frequently linked to ADHD, manifests as inattention, impulsivity, and excessive motor activity, posing major barriers to classroom functioning. In South-East Nigeria, prevalence estimates align with or exceed global rates of approximately 5–7%, with studies reporting 6.6% in rural southeastern communities and up to 7.6–23.15% in broader samples (Ambuabunos et al., 2011; Ndukuba et al., 2015; Oke et al., 2019). Nigerian research consistently shows higher teacher-reported rates than parent-reported rates, reflecting greater symptom expression in structured school environments compared with home settings (Ndukuba et al., 2015).

ADHD and hyperactivity symptoms manifest as difficulties in sustaining attention, impulsivity, and excessive motor activity, significantly impairing classroom functioning. Nigerian studies confirm prevalence rates comparable to international figures, with teacher reports often identifying higher rates than parent reports due to differing contextual demands. In southeastern rural settings,



symptoms appear more pronounced in school environments than at home, underscoring the need for school-specific supports. Co-morbid conditions such as oppositional defiant disorder and anxiety further complicate adjustment. School-based interventions for ADHD have shown promise globally and in African contexts.

Behavioural classroom management, including token economy systems and contingency strategies, effectively reduces disruptive behaviours and improves academic engagement. Teacher training programs, such as those using WHO mhGAP modules, significantly enhance educators' knowledge and attitudes toward ADHD, leading to better classroom management and reduced reliance on punitive approaches. In Nigeria, controlled trials of ADHD training for primary teachers in northern states demonstrated moderate to large effect sizes in knowledge gains and behavioural intervention skills.

The educational landscape in most areas features resource constraints, including limited teacher training in special needs education (fewer than 10% of primary teachers are trained) and a historical reliance on corporal punishment, which heightens anxiety and dropout risks (up to 12% in some areas). The National Policy on Education (Federal Republic of Nigeria, 2013) and the revised National Policy on Inclusive Education (Federal Ministry of Education, 2023) advocate for mainstreaming children with special needs; however, implementation gaps persist due to inadequate resources, cultural stigmas, and low awareness of evidence-based strategies. The Nigerian National Policy on Education (Federal Republic of Nigeria, 2013) emphasizes inclusive education, yet it lacks specific guidelines for addressing the psycho-behavioural needs of hyperactive pupils. Teachers frequently report that 15–20% of classroom disruptions stem from hyperactive behaviours, and cultural stigmas around behavioural disorders in the South-East often lead to parental denial or inadequate support, further isolating affected children. Limited funding for education has historically hovered around 7% of the national budget in recent years, despite increases in absolute figures, and insufficient teacher training in special needs education (with fewer than 10% of primary teachers in the region trained in this area) compounds these challenges.

Regional studies highlight these challenges. Ndukuba et al. (2015) found pronounced ADHD symptoms in school versus home settings among rural southeastern pupils, underscoring the need for school-specific interventions. Ambuabunos et al. (2011) reported a 7.6% prevalence in Edo State (neighbouring South-East), with higher rates in boys. Oke et al. (2019) documented a 4.7% prevalence in South-West Nigeria using combined parent–teacher reports, noting the inattentive subtype as most common. Adewuya and Ologun (2007) reported 8.7% in South-West samples. These findings relate directly to the present study by confirming elevated school-based impairment and the necessity for contextually adapted, multi-component programs in under-resourced southeastern settings.

The primary aim was to develop and evaluate this program to enhance classroom adjustment among hyperactive pupils in South-East Nigeria. Specific objectives included identifying the prevalence and characteristics of hyperactive behaviours in selected primary schools; designing a psycho-behavioural support program incorporating behaviour modification, teacher training, and parent counselling; implementing and evaluating the program's effectiveness in improving



classroom adjustment (measured by attention span, peer interactions, and academic engagement); and proposing a scalable framework for integrating the program into South-East Nigeria’s primary education system. By piloting the initiative in 30 primary schools, the research created a replicable model aligned with Sustainable Development Goal 4 for quality and inclusive education, contributing to broader national efforts in inclusive practices. Teacher-focused studies further contextualize the intervention. Lasisi et al. (2017) demonstrated that ADHD training improved knowledge and attitudes among northern Nigerian teachers, with moderate to large effect sizes. Ojionuka (2016) revealed low ADHD knowledge and reliance on punitive strategies among educators. The current study builds on these by incorporating behaviour modification, differentiated instruction, and parent involvement tailored to southeastern cultural and infrastructural realities.

This study aimed to develop and evaluate a school-based psycho-behavioural support program to enhance classroom adjustment (operationalized as attention span, reduced hyperactivity/impulsivity, improved peer interactions, and academic engagement) among hyperactive pupils. Specific objectives included identifying prevalence patterns, designing the intervention, evaluating its effectiveness, and proposing a scalable framework.

Method

The study employed a quasi-experimental mixed-methods design to develop, implement, and evaluate the psycho-behavioural support program. Participants included 600 hyperactive pupils (aged 6–11 years, Primary 1–6), 400 teachers, and 200 parents/guardians across 30 purposively selected public primary schools (six per state, stratified by urban/rural location). Informed consent/assent was obtained from parents, teachers, and pupils, with confidentiality maintained. Hyperactive pupils were identified via teacher nominations followed by screening with the Vanderbilt Assessment Scale (Teacher Informant) and Conners’ Teacher Rating Scale (reliability coefficients $\alpha > .85$ in Nigerian adaptations).

Participants and Demographics

The target sample comprised 1,200 stakeholders: 600 hyperactive pupils (aged 6–11, Primary 1–6), 400 teachers, and 200 parents/guardians. Table 1 presents the demographic profile.

Table 1: Demographic Characteristics of Participants (N = 1,200)

Characteristic	Pupils (n=600)	Teachers (n=400)	Parents (n=200)	Total %
Gender				
Male	378 (63%)	112 (28%)	68 (34%)	46.5
Female	222 (37%)	288 (72%)	132 (66%)	53.5
Age Group (Pupils)/Experience (Teachers)				
6–8 years / <5 years exp.	240 (40%)	120 (30%)	-	30.0
9–11 years / 5–10 years	360 (60%)	160 (40%)	-	43.3
>10 years exp.	-	120 (30%)	-	-
Location				
Urban	300 (50%)	200 (50%)	100 (50%)	50.0
Rural	300 (50%)	200 (50%)	100 (50%)	50.0
State Distribution				
Abia/Anambra	240 (40%)	160 (40%)	80 (40%)	40.0
Ebonyi/Enugu/Imo	360 (60%)	240 (60%)	120 (60%)	60.0



Note. Pupil identification based on Vanderbilt/Conners screening; parent socioeconomic status proxied via occupation and school location.

The intervention consisted of a 12-week psycho-behavioural program delivered in intervention schools (n=20), with 10 control schools. Components included: (1) teacher workshops on behaviour modification (e.g., token economies, positive reinforcement, differentiated instruction); (2) classroom strategies for attention support and impulsivity management; and (3) parent counselling sessions focusing on home-school consistency and psychoeducation. Pre-intervention baseline data were collected on classroom adjustment using Conners’ Teacher Rating Scale subscales (attention, hyperactivity/impulsivity, peer relations) and academic engagement observations. Post-intervention assessments repeated these measures. Quantitative data were analyzed with paired t-tests, ANOVA, and descriptive statistics in SPSS (significance at $p < .05$). Qualitative data derived from 10 focus group discussions (five with teachers, five with parents; 8–10 participants each) and 20 key informant interviews (10 principals, 10 counsellors). Sessions were audio-recorded, transcribed, and subjected to thematic analysis using NVivo software to explore implementation barriers, facilitators, and stakeholder experiences. Content fidelity checks ensured program adherence. Triangulation of quantitative and qualitative findings enhanced validity and reliability.

Results

Quantitative analyses revealed significant program effects. Pre-intervention attention span mean scores on Conners subscales were 45.2 (SD = 12.8); post-intervention scores improved to 57.9 (SD = 10.4) in the intervention group versus minimal change in controls ($t(299) = 9.87, p < .001$). Disruptive behaviours decreased by 22% overall, with hyperactivity/impulsivity scores dropping from $M = 62.4$ (SD = 14.1) to 48.7 (SD = 11.9). Peer interaction and academic engagement metrics rose by 18–25%, with stronger gains in urban settings. ANOVA indicated significant group \times time interactions ($F(1,598) = 42.36, p < .001$), confirming program efficacy. Approximately 82% of targeted pupils achieved at least 20% improvement in adjustment indicators.

Table 2

Pre- and Post-Intervention Classroom Adjustment Scores (Intervention Group, n=400 Pupils)

Measure	Pre Mean (SD)	Post Mean (SD)	Mean Change (%)	t-value (p)
Attention Span	45.2 (12.8)	57.9 (10.4)	+28.1	9.87 (<.001)
Hyperactivity/Impulsivity	62.4 (14.1)	48.7 (11.9)	-22.0	11.24 (<.001)
Peer Interactions	51.3 (13.5)	62.8 (9.8)	+22.4	8.65 (<.001)
Academic Engagement	48.7 (15.2)	61.4 (11.6)	+26.1	10.12 (<.001)

Teachers (n=300 trained) demonstrated a 28% improvement in self-reported classroom management competence.

Qualitative themes highlighted facilitators such as practical token systems and parent-teacher collaboration, alongside barriers including limited resources in rural schools and initial cultural resistance to non-punitive approaches. One teacher remarked, “The token economy turned



disruptions into opportunities for positive reinforcement—pupils now compete to stay focused.” Parents reported greater confidence in supporting their children at home, reducing denial and stigma. Urban-rural differences showed slightly larger effect sizes in semi-urban schools with better infrastructure.

Discussion

The psycho-behavioural program significantly enhanced classroom adjustment, with gains exceeding anticipated thresholds and aligning with global and Nigerian evidence on multi-component interventions (Fabiano et al., 2009; Lasisi et al., 2017; Mohammed et al., 2025). Improvements in attention and reductions in disruptiveness mirror behavioural management literature emphasizing positive reinforcement (CDC, 2024).

Findings extend southeastern research by demonstrating feasibility where symptoms are more evident in school (Ndokuba et al., 2015) and addressing gaps in teacher knowledge and punitive practices (Ojionuka, 2016). Parent involvement strengthened outcomes, consistent with family–school collaboration benefits. Urban–rural differences suggest adaptability, with slightly stronger effects in better-resourced settings. Limitations include the quasi-experimental design (potential selection bias) and short follow-up. Future research should incorporate longitudinal tracking and digital supports.

Conclusion

This study successfully developed and evaluated a culturally responsive school-based program that improved outcomes for hyperactive pupils in South-East Nigeria. The scalable framework, with training manual and policy recommendations, supports inclusive education efforts and offers practical strategies for resource-constrained contexts. Widespread adoption could reduce behavioural disruptions, enhance equity, and contribute to quality education for all. The research contributes to Nigeria’s inclusive education agenda by providing practical, culturally responsive strategies that align with national policy and global sustainability goals. Dissemination occurred through peer-reviewed publications and educational conferences, fostering wider uptake. By reducing behavioural disruptions and supporting equitable learning environments, the program helps mitigate long-term risks of academic failure and social exclusion for hyperactive pupils. Ultimately, this initiative demonstrates that targeted school-based psycho-behavioural supports can transform classroom dynamics in resource-constrained bilingual and multicultural settings like South-East Nigeria, paving the way for more inclusive and effective primary education systems.

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