

Teachers' and School Psychologists' Roles in Post-Diagnostic Educational Planning for Learners with Intellectual Disability in Calabar Metropolis, Nigeria

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Abstract: This study examined the roles of teachers and school psychologists in post-diagnostic educational planning for learners with intellectual disability in Calabar Metropolis, Cross River State, Nigeria. It aimed to investigate how diagnostic information is translated into educational plans, how professional roles are enacted and coordinated, and the extent to which these processes influence the quality of individualized educational support. A descriptive survey design was adopted, involving 202 teachers and 68 school psychologists selected through a multi-stage sampling technique. Data were collected using a validated and reliable Questionnaire on Post-Diagnostic Planning (Cronbach's alpha = 0.81). Analyses included independent-samples t-tests, Pearson correlations, one-way ANOVA, Tukey HSD post hoc tests, and multiple regression, all conducted at the 0.05 significance level. Findings revealed no significant difference between teachers' and psychologists' roles in planning ($t = -1.02$, $p = 0.309$), but collaboration between teachers and psychologists positively correlated with planning effectiveness ($r = 0.61$, $p < 0.001$). Professional qualification significantly influenced teachers' effectiveness ($F = 6.84$, $p = 0.002$), while years of experience significantly enhanced psychologists' effectiveness ($F = 5.91$, $p = 0.004$). Moreover, institutional support significantly predicted planning quality ($\beta = 0.48$, $t = 8.21$, $p < 0.001$). The study concludes that effective post-diagnostic educational planning depends on human factors (experience and qualifications), organizational support, and interprofessional collaboration. These findings highlight the need for capacity-building programs, structured collaborative practices, and supportive institutional policies to enhance educational outcomes for learners with intellectual disabilities.

Keywords: Teachers, school psychologists, post-diagnostic planning, intellectual disability, collaboration, institutional support.

INTRODUCTION

Across Nigeria, the push toward inclusive and equitable education has intensified, and disability-rights instruments and education policies increasingly emphasize access, participation, and learning outcomes for all learners, including those with intellectual disability (ID). Nigeria's policy architecture

now explicitly affirms disability inclusion in education through national policy instruments and legal protections (inclusive education and special needs education policy frameworks, and anti-discrimination legislation) [1]. Yet, translating these commitments into everyday school practice remains uneven across states and school systems, particularly for learners whose needs are complex and lifelong, such as learners with ID, because inclusion requires not only placement but also structured, individualized supports and coordinated professional roles [2].

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Intellectual disability is widely conceptualized as a developmental condition characterized by significant limitations in intellectual functioning and adaptive behavior, originating during the developmental period (American Association on Intellectual and Developmental Disabilities [3]). In school settings, this means learners may experience persistent difficulties with academic learning, communication, social participation, self-care, and independent functioning, which, in turn, affect access to the curriculum, classroom engagement, assessment participation, and transition planning. Because ID is defined not only by cognitive test performance but also by adaptive functioning in real-life contexts, educational planning must move beyond “labeling” to a support-oriented, functional understanding of the learner’s strengths and needs [3].

Post-diagnostic educational planning refers to the structured decisions and actions taken after a learner has been identified/diagnosed (medically, clinically, or psychoeducationally) as having ID, to ensure that schooling is appropriate, responsive, and enabling. It typically involves: (a) interpreting diagnostic/assessment outcomes in school-relevant terms; (b) setting measurable learning and functional goals; (c) adapting curriculum and instruction; (d) deploying supports and services (e.g., behavioral, communication, assistive, counseling, family support); (e) monitoring progress; and (f) reviewing and revising plans over time. In many systems, these steps are expressed through individualized planning processes, such as an Individualized Education Plan (IEP) or a related learner support plan, which depend heavily on teacher expertise and multidisciplinary collaboration [4].

In contemporary inclusive education systems, the effective education of learners with intellectual disability depends not only on identification and placement but also on the clarity and coordination of professional roles involved in post-diagnostic educational planning. Among the key professionals in this process are teachers and school psychologists, whose responsibilities are central to translating diagnostic outcomes into meaningful educational interventions. However, the effectiveness of this process is often influenced by how clearly these roles are defined and how well they are coordinated within the school system [5]. Teachers are the primary implementers of educational programs and are directly responsible for classroom instruction and learner engagement. Their roles in post-diagnostic planning include adapting instructional strategies, modifying curriculum content,

setting individualized learning goals, managing behavior, and monitoring learners’ academic and functional progress. In addition, teachers are expected to maintain communication with parents and other stakeholders to ensure that learners receive consistent support across different environments [6].

School psychologists, on the other hand, provide specialized expertise that complements teachers’ work. Their responsibilities typically include conducting psychoeducational assessments, interpreting diagnostic findings, recommending appropriate intervention strategies, and offering consultation to teachers on learning and behavioral challenges. They also play important roles in counseling, facilitating communication among stakeholders, and supporting the development and review of individualized education plans [7, 8]. Despite these distinct roles, there is significant overlap between teachers and school psychologists, particularly in collaborative activities such as intervention planning, monitoring learner progress, and decision-making regarding support strategies. This overlap underscores the importance of multidisciplinary collaboration, which has been widely recognized as essential for effective inclusive education [9, 10].

However, in many educational contexts, including Nigeria, the absence of clearly defined role boundaries often leads to role ambiguity, which may result in duplication of efforts, gaps in service delivery, or ineffective coordination of interventions. When responsibilities are not clearly delineated, the process of translating diagnoses into actionable educational plans can become fragmented, thereby reducing the overall effectiveness of support for learners with intellectual disability [11, 12]. In urban educational settings such as Calabar Metropolis, where schools serve diverse learner populations and may face constraints, including limited specialist personnel and high workloads, the issue of role delineation becomes even more critical. Ensuring that teachers and school psychologists understand and perform their respective roles effectively, while working collaboratively, is essential for strengthening the diagnosis-to-intervention pathway [13].

It is important to note that teachers and school psychologists (or other psychology professionals supporting schools) play pivotal roles in our society today. Teachers are the daily implementers of curriculum, instruction, classroom management, and progress monitoring. They translate assessment information into instructional decisions, differentiate teaching, design functional learning activities, and

coordinate with families and other professionals. School psychologists, in turn, are positioned to contribute specialist expertise in assessment interpretation, learning/behavioral consultation, intervention design, mental health support, and systems-level collaboration functions that become crucial for learners with ID whose support needs span cognition, behavior, adaptive skills, and social participation [14].

In Calabar Metropolis, Cross River State, an urban educational hub with a mix of public and private schools, strengthening post-diagnostic educational planning for learners with ID is particularly important. Urban centers often attract referral cases, concentrate specialized schools/services, and enroll learners with diverse needs, yet they can still face shortages of trained personnel, limited interdisciplinary coordination, weak implementation support, and inconsistent individualized planning practices. Nationally, reviews of intellectual disability research and services highlight persistent gaps in evidence, service structures, and coordinated supports that can surface most clearly at the point where a diagnosis should become an actionable educational plan [15].

Calabar Metropolis (Calabar Municipal/Calabar South axis) is a significant educational center in Cross River State, with diverse schooling options and growing public attention to inclusive education initiatives. While state-level developments (such as trainings and inclusion-related activities) may signal momentum, consistent implementation at the school level typically depends on human capacity, collaboration structures, and practical tools for individualized planning. In such settings, learners with ID may be enrolled in special schools, integrated units, or inclusive classrooms. Regardless of placement type, the critical question remains: after identification/diagnosis, what structured educational plan is created, who contributes to it, and how is it implemented and monitored? The answer depends substantially on teacher practice and the availability/effectiveness of psychology-informed support systems within schools.

A major challenge for improving post-diagnostic planning is that intellectual disability remains under-researched and under-resourced in many contexts in Nigeria. A scoping review of empirical literature on people with ID in Nigeria highlights the limited body of research and major knowledge and practice gaps, underscoring the need for context-specific studies to inform service design and professional practice [15]. This study aligns with that need by focusing not only on

identification but on what happens after diagnosis, where educational benefit is either realized through planning or lost through inaction.

It is disheartening to state that despite stronger national attention to inclusive education and disability rights, many learners with intellectual disability in Nigerian schools continue to experience limited access to structured, individualized learning supports. While laws and policies emphasize non-discrimination and inclusive participation, the everyday realities of school practice often reveal gaps between policy intent and implementation, especially in the specialized processes required for learners with ID [1].

A central practical breakdown occurs at the post-diagnostic stage. Identification or clinical/psychoeducational diagnosis should function as a turning point that triggers individualized educational planning, targeted supports, and systematic monitoring. Instead, in many school contexts, diagnostic reports may not be translated into classroom strategies; teachers may not have the training or time to adapt curriculum meaningfully; schools may lack multidisciplinary planning routines; and specialist psychological services may be absent or loosely connected to school decision-making [2].

Consequently, learners with ID may be physically present in school but educationally underserved, receiving instruction mismatched to their functioning level, minimal functional-skills programming, inconsistent behavior supports, and weak progress monitoring. Within Calabar Metropolis of Cross River State, these risks can be amplified by structural realities common in many Nigerian urban school systems: high enrolment pressure, limited specialist staffing, uneven teacher preparation for special needs education, and variability in the consistent use of individualized planning tools. Although Cross River State has seen inclusion-related activities and awareness efforts, such initiatives do not automatically translate into clear role enactment and coordinated post-diagnostic planning in individual schools. This produces several interrelated problems that justify the present study; Teachers may be expected to implement individualized supports without clear guidance on how to interpret diagnostic information, set functional goals, or monitor progress, especially where formal IEP-like structures are weak or inconsistently applied [4].

Where school psychologists (or equivalent psychology support personnel) are limited, their

contributions to assessment interpretation, behavioral consultation, intervention planning, and family–school collaboration may be underutilized, leaving a gap between diagnostic conclusions and educational action [14]. When post-diagnostic planning is weak, learners with ID face heightened risk of poor academic progress, limited adaptive skill development, behavioral challenges that are misunderstood or punished rather than supported, social exclusion, dropout, and reduced transition opportunities.

Accordingly, the problem this study addresses is the apparent gap between diagnosis/identification of intellectual disability and the quality of educational planning that follows, with particular concern about how effectively teachers and school psychologists in Calabar Metropolis perform (and coordinate) their roles in creating, implementing, and reviewing post-diagnostic educational plans for learners with ID. The study is therefore positioned to generate evidence on role performance, collaboration patterns, and practical constraints, evidence needed to strengthen post-diagnostic planning and improve educational experiences and outcomes for learners with intellectual disability in Cross River State and comparable Nigerian contexts.

Purpose of the Study

The main purpose of this study is to examine Teachers' and School Psychologists' Roles in Post-Diagnostic Educational Planning for Learners with Intellectual Disability in Calabar Metropolis of Cross River State, Nigeria. Specifically, the study sought to investigate how diagnostic information is translated into educational plans, how professional roles are enacted and coordinated, and how these processes influence the quality of individualized educational support provided to learners with intellectual disability (ID).

Therefore, this study aims to;

1. Examine the specific roles teachers play in post-diagnostic educational planning for learners with ID.
2. Determine the roles school psychologists play in supporting post-diagnostic planning.
3. Investigate the level of collaboration between teachers and school psychologists in developing and implementing individualized educational plans.

4. Identify challenges affecting effective post-diagnostic educational planning in Calabar Metropolis.
5. Determine whether professional training, experience, and institutional support significantly influence role performance.

Research Questions

The study was guided by the following research questions:

1. What roles do teachers perform in post-diagnostic educational planning for learners with intellectual disability in Calabar Metropolis?
2. What roles do school psychologists perform in post-diagnostic educational planning for learners with intellectual disability?
3. To what extent do teachers and school psychologists collaborate in the implementation of individualized educational plans?
4. What challenges hinder effective post-diagnostic educational planning in schools within Calabar Metropolis?
5. Do professional qualifications and years of experience influence teachers' and school psychologists' effectiveness in post-diagnostic educational planning?

Research Hypotheses

The following null hypotheses will be tested at the 0.05 level of significance:

H₀₁: There is no significant difference between the roles performed by teachers and those performed by school psychologists in post-diagnostic educational planning for learners with intellectual disability.

H₀₂: There is no significant relationship between teacher–school psychologist collaboration and the effectiveness of post-diagnostic educational planning.

H₀₃: Professional qualification does not significantly influence teachers' effectiveness in post-diagnostic educational planning.

H₀₄: Years of professional experience do not significantly influence school psychologists' effectiveness in post-diagnostic educational planning.

H₀₅: Institutional support does not significantly predict the quality of post-diagnostic educational planning in schools in Calabar Metropolis.

Conceptual Framework of the Study

This study is anchored on an integrated conceptual framework that draws from Ecological Systems Theory, Multidisciplinary Collaboration Theory, and the Individualized Education Plan (IEP) Framework. These theoretical perspectives collectively provide a comprehensive explanation of how post-diagnostic educational planning for learners with intellectual disability (ID) is shaped by professional roles, collaborative practices, and systemic conditions within school environments.

The framework is particularly relevant to the context of Calabar Metropolis, Cross River State, where the effectiveness of post-diagnostic planning depends not only on the presence of diagnosis but also on how teachers and school psychologists interpret, implement, and coordinate educational interventions within existing institutional structures.

Ecological Systems Theory by Bronfenbrenner, [16]

The study is grounded in Bronfenbrenner's Ecological Systems Theory (1979). The theory posits that human development is influenced by interactions within multiple environmental systems ranging from immediate settings to broader societal contexts. This theory provides a useful lens for understanding how learners with intellectual disabilities are influenced by layered educational and social environments.

At the microsystem level, the learner interacts directly with teachers, peers, and school psychologists. These actors play a critical role in implementing post-diagnostic educational plans through classroom instruction, behavioral support, and individualized interventions. The effectiveness of these interactions directly affects the learner's academic engagement and adaptive functioning.

The mesosystem involves the interconnections between home and school, particularly the collaboration between teachers, school psychologists, and parents. Effective post-diagnostic planning requires consistent communication and shared understanding among these stakeholders to ensure continuity of support across settings.

At the exosystem level, institutional structures such as school policies, availability of trained personnel, administrative support, and access to psychological services influence how educational plans are developed and implemented. For instance, the limited availability of school psychologists in Nigerian schools may constrain the translation of diagnostic reports into practical interventions [17].

The macrosystem encompasses broader cultural beliefs, national education policies, and societal attitudes toward disability. In Nigeria, although inclusive education policies and disability rights legislation exist, implementation gaps often limit their impact on classroom practices. Thus, Ecological Systems Theory underscores that post-diagnostic educational planning is not an isolated activity but a process influenced by multiple interacting systems. This perspective is essential for understanding the contextual challenges faced in Calabar Metropolis.

Multidisciplinary Collaboration Theory by Friend and Cook [18]

Post-diagnostic educational planning for learners with intellectual disability requires the integration of expertise from multiple professionals. Multidisciplinary Collaboration Theory emphasizes shared responsibility, joint decision-making, and coordinated service delivery among professionals working with learners with special needs.

Within this framework, teachers and school psychologists are central actors: Teachers are responsible for implementing instructional strategies, adapting curriculum, managing classroom behavior, and monitoring learner progress. They serve as the primary agents translating diagnostic information into daily teaching practices. School psychologists contribute specialized knowledge in assessment interpretation, behavioral analysis, intervention design, and mental health support. They also play a consultative role, guiding teachers in addressing complex learning and behavioral needs.

Effective collaboration between these professionals ensures that diagnostic findings are transformed into functional, context-specific educational plans. However, when collaboration is weak or absent, diagnostic reports may remain underutilized, resulting in poor educational outcomes for learners with ID. Research indicates that collaborative practices enhance the quality of individualized interventions, improve learner

outcomes, and promote inclusive education (Idol, Nevin, & Paolucci-Whitcomb, 2000). Therefore, this study conceptualizes multidisciplinary collaboration as a mediating variable that influences the relationship between professional roles and the quality of post-diagnostic planning.

Individualized Education Plan (IEP) Framework

The Individualized Education Plan (IEP) Framework provides a structured approach to translating diagnostic information into actionable educational strategies. It is widely recognized as a best practice in special education for supporting learners with disabilities [19].

The IEP framework involves several key components;

1. **Assessment Interpretation:** Understanding diagnostic results in educational terms.
2. **Goal Setting:** Developing measurable academic and functional objectives.
3. **Instructional Adaptation:** Modifying curriculum and teaching methods.
4. **Service Provision:** Identifying necessary supports (e.g., behavioral, communication, counseling).
5. **Implementation:** Executing planned interventions in the classroom.
6. **Monitoring and Evaluation:** Tracking learner progress and adjusting plans accordingly.

In the context of this study, the IEP framework is not limited to formal documentation but includes any structured approach to individualized planning used within schools. This is particularly important in Nigerian settings where formal IEP systems may be inconsistently applied. Teachers and school

psychologists play complementary roles within this framework. Teachers are primarily responsible for implementation and monitoring, while school psychologists contribute to assessment, planning, and consultation. The effectiveness of the IEP process depends on the clarity of roles, level of collaboration, and availability of resources.

Moderators: School resources, Training, Policy implementation, Individualized Education Plan (IEP) Structure

This study examines the factors influencing the effectiveness of post-diagnostic educational planning for students with intellectual disabilities. The model presented integrates several theoretical constructs, measured variables, and moderators that shape the process and its outcomes.

Theoretical Constructs

1. **Teachers' Role in Post-Diagnostic Educational Planning:** This construct encompasses variables related to teachers' expertise and attitudes towards inclusive education. It also encompasses their active involvement in the post-diagnostic process, particularly in implementing individualized interventions and strategies tailored to students' needs.
2. **School Psychologists' Role in Post-Diagnostic Educational Planning:** This construct refers to the pivotal role of school psychologists in assessment, diagnosis, and collaboration with teachers to develop post-diagnostic plans. School psychologists also contribute to the structure of the Individualized Education Plan (IEP) and facilitate the overall planning process to meet students' needs.
3. **Institutional Support:** The level of institutional support within the educational setting plays a

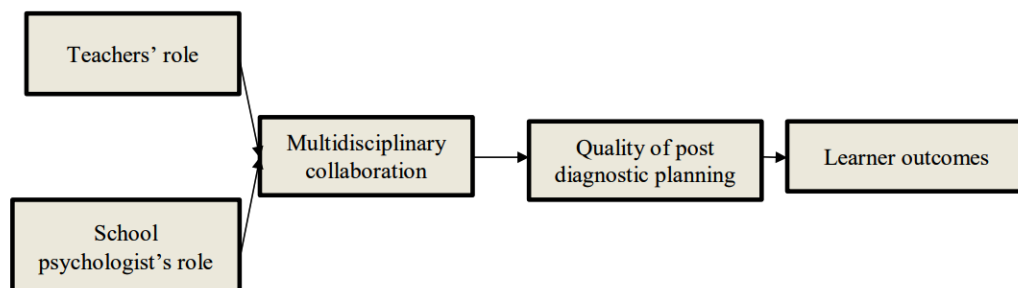


Figure 1: Shows the integrated conceptual model of the study.

significant role in shaping the effectiveness of post-diagnostic planning. This includes access to professional development, the availability of special education resources, and administrative support for inclusive practices.

Measured Variables

The study uses several key variables to measure the effectiveness of post-diagnostic educational planning:

Teachers' and School Psychologists' Perceptions: Self-reported data collected from teachers and school psychologists about their roles and involvement in post-diagnostic educational planning. This variable captures their perceptions of the collaborative process and the resources available to them.

Student Outcomes: These variables measure the academic, social, and emotional outcomes of students participating in post-diagnostic educational planning processes. Outcomes are evaluated based on the perceived improvements in students' academic performance and overall development.

Collaboration Between Teachers and School Psychologists: The effectiveness of collaboration between teachers and school psychologists in implementing post-diagnostic educational planning. This variable examines how well these two professionals work together to provide tailored interventions for students. It is measured by questionnaire items.

Moderators

Moderators are external factors that influence the relationship between the theoretical constructs and the measured variables. These factors can enhance or limit the effectiveness of post-diagnostic educational planning:

1. **School Resources:** This moderator includes the financial and material resources available to the school, such as special education tools, access to support staff, and technology that can support post-diagnostic planning.
2. **Training:** Ongoing professional development and training for both teachers and school psychologists, focusing on inclusive education practices and effective post-diagnostic intervention strategies.

3. **Policy Implementation:** The role of national and local policies in either supporting or hindering the implementation of post-diagnostic educational planning. This includes policies that mandate inclusion and support for students with disabilities.

4. **Individualized Education Plan (IEP) Structure:** The design and clarity of the IEP structure as it applies to students with intellectual disabilities. A well-structured IEP is crucial to the effectiveness of post-diagnostic planning, as it provides clear, actionable goals for both teachers and students.

Linking the Theoretical Constructs and Measured Variables

The relationships among these constructs, variables, and moderators are depicted in the model. Teachers' and school psychologists' roles influence collaboration and, ultimately, student outcomes. Institutional support enhances these roles and facilitates collaboration, thereby improving student outcomes. Moderators, such as school resources, training, policy implementation, and the IEP structure, interact with the theoretical constructs to either amplify or restrict their effectiveness. These moderators play a critical role in shaping the implementation process and influencing the overall success of post-diagnostic educational planning. This research framework aims to offer a comprehensive understanding of the key factors and variables that impact the effectiveness of post-diagnostic educational planning. The integrated model provides a clear, systematic approach to investigating the roles of teachers, school psychologists, and institutional support, while accounting for external factors and policies.

The framework also proposes that effective post-diagnostic educational planning for learners with intellectual disability is achieved when teachers and school psychologists clearly define their roles within a collaborative system, supported by functional IEP processes and enabling ecological conditions. Where any of these components is weak (e.g., lack of collaboration, absence of psychological services, or poor planning structures), the quality of educational planning and consequently learner outcomes are negatively affected. This implies that strong professional role performance, combined with effective collaboration, leads to high-quality planning, whereas weak collaboration or inadequate systemic support results in poor translation of the diagnosis into educational practice.

LITERATURE REVIEW

A study by Ugboha, Nwokocha, and Abdullahi [20] considered the place of psychology in inclusive education in Nigeria: issues and challenges. The study employed a survey research design. A sample of 150 secondary school students from 20 public schools in Jos city was selected using a simple random sampling technique from a target population of 2000 students. The primary aim of the study is to examine the place of psychology in inclusive education in Nigeria. An instrument titled "Psychology in Inclusive Education, Issues and Challenges (PIEIC)" was used to collect data. The collected data were analyzed using frequency and percentage calculations. The study identified some issues in inclusive education, including societal attitudes, funding, teachers' preparation, and effective parental involvement. Also, the benefits of inclusive education are socialization, friendship, and employment opportunities. Furthermore, the identified challenges included administrative bottlenecks, inadequate funding, manpower development, and societal attitudes. Recommendations include the provision of enabling laws and employment, and the provision of adequate funding.

A study by Odo *et al.* [21] stated that interprofessional collaboration strengthens the translation of diagnostic findings into actionable teaching strategies. In Nigerian primary and secondary schools, joint planning sessions, shared IEP meetings, and continuous feedback loops between teachers and psychologists were found to improve both fidelity and relevance of interventions for learners with intellectual disabilities.

Salvia and Ysseldyke [22] found that schools with clearly defined special education policies and dedicated planning time had more effective IEP development processes and better learner outcomes. Florian and Black-Hawkins [23] reported that institutional structures such as dedicated resource allocation, professional development systems, and formalized collaborative meeting schedules were strong predictors of planning quality and inclusive practice success.

Again, Odo *et al.* [21] found that teacher effectiveness in inclusive settings improved with higher academic qualifications, as advanced training increased pedagogical knowledge and confidence in handling diverse learner needs. These studies suggest that postgraduate and professional development

programs equip teachers with the skills needed for complex post-diagnostic planning tasks, such as interpreting psychological reports, adapting curriculum content, and monitoring learner progress.

Odo *et al.* [21] also observed that professional experience enhanced psychologists' confidence, problem-solving, and consultation skills, which are essential for supporting inclusive education in Nigeria.

Truscott *et al.* [24], in a study of school psychologists in the United States, found that years of professional practice were significantly associated with greater competence in assessment interpretation and instructional consultation, particularly in multidisciplinary IEP teams. Similarly, Hosp and Reschly [25] stated that experienced educational diagnosticians demonstrated higher fidelity in intervention planning and more effective communication with classroom teachers.

Akinwumi *et al.* [26] investigated regular teachers' knowledge and perceptions of children with ID, as well as their level of acceptance in the regular classroom. Two hundred (200) teachers in public primary schools in Calabar Municipal were randomly selected for the study. A descriptive research design was adopted. "Teachers' Knowledge, Perception and Acceptability of Teachers towards Children with Intellectual Disability (TKPATCID)" was used as the data collection instrument. Data were analyzed using descriptive statistics, including frequency counts, simple percentages, standard deviations, and mean scores. Findings showed that regular teachers' knowledge of children with ID is very low. The majority of the regular teachers have negative perceptions of children with ID. Similarly, the majority of the respondents were of the opinion that children with ID should not be accepted alongside their non-disabled counterparts in the classroom. It was therefore recommended, among others, that awareness of the nature of ID be created. The government should organize in-service training for regular education teachers to equip them with relevant, up-to-date knowledge of children with ID.

A major recent contribution is the work of Hornby and Kauffman [27], who argue that inclusive education for learners with intellectual disability cannot be effective if it relies solely on placement. Their analysis emphasizes that students with ID often require carefully structured supports that address social, vocational, and life-skill development in addition to academic learning. This is highly relevant to the present study because it

suggests that post-diagnostic educational planning must be intentional, functional, and individualized. For learners with ID, the educational implications of diagnosis should therefore include tailored goal-setting, curriculum adaptation, and support planning rather than generic inclusion practices.

Recent evidence also highlights the central role of teachers' professional capacity in determining whether individualized planning becomes meaningful classroom practice. In a large meta-analysis of 342 studies involving more than 155,000 participants, Donath *et al.* [28] found that professional development in inclusive education had a large effect on teachers' knowledge, a moderate effect on teachers' skills, and smaller but positive effects on teachers' beliefs and student behavior. These findings are important for the current study because they suggest that where teachers are trained to understand inclusion, assessment data, and differentiated instruction, they are better positioned to translate diagnostic reports into workable educational strategies. In other words, weak post-diagnostic planning in schools may reflect not only structural deficits but also gaps in teacher preparation [28].

Relatedly, current research continues to show that teachers' beliefs, efficacy, and competence strongly shape inclusive practice. A recent synthesis of teachers' beliefs about inclusive education found that differences in teachers' cognitive appraisals, emotions, and self-efficacy help explain why inclusive policy often does not translate uniformly into practice. This matters for learners with ID because teaching such learners often requires greater confidence in differentiation, behavior support, functional assessment, and progress monitoring than many mainstream teachers possess. Thus, even where schools claim to be inclusive, the absence of teacher confidence and specialized instructional competence can weaken post-diagnostic educational planning and implementation [29].

Recent international literature also points to the importance of ongoing school-based interventions for students with intellectual disability, not just a one-time diagnosis or referral. A 2026 scoping review of school-based interventions for primary and secondary students with ID found that most interventions focused on assistive or instructional approaches and primarily targeted academic outcomes. However, the review also noted that the field still uses explicit theoretical frameworks sparingly and reports implementation processes unevenly. For the present study, this suggests two things: first, that effective intervention

after diagnosis is possible; and second, that implementation quality and systematic planning remain persistent concerns. This reinforces the need to investigate how teachers and school psychologists in Calabar Metropolis actually contribute to planning, implementing, and reviewing support for learners with ID [30].

Another important development in the recent literature is the stronger emphasis on multidisciplinary and interprofessional collaboration. A 2025 scoping review on collaboration between educational psychological services and schools found that interprofessional collaboration is widely regarded as the preferred approach for supporting learners with special educational needs, yet organizational barriers were the most frequently reported challenge. The review also found that relatively few studies examined direct student outcomes, even though collaboration is often assumed to improve educational support. This finding is highly relevant to the present study because it supports the argument that the issue is not only whether teachers and school psychologists exist within a school system, but whether they collaborate effectively enough to shape actionable post-diagnostic plans [10].

The growing literature on school psychologists' roles in inclusive education further strengthens this argument. For example, Carvalho *et al.* [31] showed that school psychologists can no longer be viewed only as assessors or counselors; in inclusive systems, they are increasingly expected to act as agents of systems change, supporting schools through consultation, training, multi-tiered intervention planning, and collaborative supervision. In their Portugal-based study, 327 psychologists participated in a training initiative designed to strengthen inclusive and multi-tiered school responses. The significance of this study lies in its clear demonstration that psychologists' roles are most effective when they go beyond diagnosis to support implementation, teamwork, and data-informed intervention. This closely aligns with your focus on the post-diagnostic stage, where diagnosis should lead to planning rather than end with labeling [32].

Within African contexts, recent reviews show that inclusive education remains constrained by systemic barriers that directly affect learners with developmental and intellectual disabilities. A 2022 review on education for children and adolescents with disabilities in sub-Saharan Africa emphasized that successful inclusion in low- and middle-income settings requires early

diagnosis, timely intervention, assistive supports, and policy-backed school responses. More recently, a review of inclusive strategies for children with developmental disabilities in sub-Saharan Africa noted recurring barriers such as stigma, inaccessible environments, limited trained personnel, and insufficient materials for inclusive teaching. These findings are directly relevant to the present study because they show that post-diagnostic educational planning is shaped not only by individual professional effort but also by broader systems of support, resources, and attitudes [33].

There is also recent evidence that family perspectives remain underrepresented in individualized planning and inclusive education research. A scoping review of parent perspectives on inclusive education for students with intellectual disability found that parents' experiences and perceptions are critical to understanding how inclusion actually works for learners with ID. This has implications for post-diagnostic educational planning, since parents often possess crucial information about adaptive functioning, daily living skills, behavior, and home-based supports. Where school planning excludes parental input, plans may become overly academic, less functional, and less responsive to the learner's real-life needs. This indirectly reinforces the importance of collaborative planning processes involving teachers, school psychologists, and families [34].

In Nigeria, recent literature continues to show a significant gap between inclusive education policy and its actual implementation in schools. A 2025 evaluation of inclusive education policy implementation in Nigeria reported that, despite the existence of the Disability Act and the revised National Policy on Inclusive Education, implementation remains inconsistent across states, with persistent challenges in school accessibility, teacher preparedness, and learner-support systems. Similarly, the 2021 ActionAid, Education International, and Light for the World Nigeria workforce study found that national commitments had not translated sufficiently into state-level action, that only a limited number of states had adopted inclusive-education policies, and that one of the biggest barriers to delivery was the shortage of teachers trained for inclusive education. This body of evidence is especially important for your study because it supports the view that learners with disabilities may be formally recognized in policy while still lacking the coordinated post-diagnostic support required in actual schools [35].

The Nigerian evidence also suggests that the educational workforce remains a decisive factor in whether diagnosis becomes educational action. The ActionAid Nigeria summary reported severe teacher shortages and weak disability inclusion across state education planning structures, implying that individualized planning may be difficult to implement consistently in high-pressure school systems. This is directly relevant to Calabar Metropolis, where urban schooling may lead to both increased enrolment and more complex learner needs. In such settings, teachers may be overburdened, while school-psychology support may be scarce or loosely connected to everyday instructional decision-making. Your draft already identifies this as a central local concern: a possible gap between the identification of intellectual disability and the quality of educational planning that follows in schools in Calabar Metropolis [12].

Another recent strand of Nigerian literature has focused on teachers' attitudes and preparedness for inclusion. Available studies continue to suggest that teachers' perceptions of disability, their knowledge of inclusive methods, and their preparedness to implement individualized strategies affect how well learners with special needs are supported in school. Although much of this work is broader than intellectual disability specifically, it still matters for the present study because intellectual disability often demands more structured adaptation, behavioral support, and functional goal-setting than other categories of need. Thus, weak teacher preparedness may be especially damaging at the post-diagnostic stage, when learners require individualized planning rather than generalized goodwill toward inclusion.

Taken together, the recent literature shows four consistent patterns. First, learners with intellectual disability require individualized and functionally oriented educational responses after diagnosis, not just access to school placement. Second, teachers remain the principal implementers of post-diagnostic plans, but their effectiveness depends greatly on training, efficacy, and support. Third, school psychologists are most valuable when they contribute not only to assessment but also to consultation, intervention design, systems support, and collaboration. Fourth, policy environments such as Nigeria's may endorse inclusion in principle while still lacking the personnel, structures, and routines required to make post-diagnostic planning effective in practice. These

patterns strongly justify the present study, especially given the limited context-specific evidence on how teachers and school psychologists in Calabar Metropolis actually perform and coordinate these roles [27].

Appraisal of the Literature Reviewed

The literature reviewed in this study provides both conceptual and empirical insights into the roles of teachers and school psychologists in post-diagnostic educational planning for learners with intellectual disability. Several strengths and limitations emerged from the appraisal of the existing body of knowledge. The literature clearly identifies the diverse roles teachers and school psychologists perform in inclusive and special education contexts. International studies [22] and Nigerian studies [9, 28] consistently highlight that effective post-diagnostic planning requires both pedagogical expertise and psychological consultation. These works provide robust frameworks for understanding collaboration, assessment interpretation, and individualized educational planning.

Both local and foreign studies underscore the importance of professional experience, qualifications, and institutional support as predictors of effectiveness. For instance, Truscott *et al.* [8] and Hosp & Reschly [25] demonstrate that experienced professionals are more competent in assessment interpretation and IEP implementation. Similarly, Ugboha and Nwokocha [11] and Akinwumi *et al.* [26] show that supportive institutional structures significantly enhance post-diagnostic planning outcomes. These studies strengthen the theoretical underpinnings of the current research by linking professional capacity and organizational support to planning effectiveness.

The literature provides evidence that collaboration between teachers and school psychologists improves the quality of individualized educational plans. The studies emphasize structured meetings, resource allocation, and interprofessional communication as critical mechanisms for effective post-diagnostic planning. This aligns with the study's focus on collaborative processes within Calabar Metropolis schools.

Although Nigerian studies exist, there is a scarcity of empirical research specifically examining the interplay between teachers' and psychologists' roles in post-diagnostic planning for learners with intellectual disability. Many studies focus on broader inclusive education practices or general special education

support without isolating post-diagnostic planning. Several foreign studies, while methodologically rigorous, are conducted in contexts with abundant resources and strong policy frameworks (e.g., U.S. and European schools), which may not reflect the realities of Nigerian schools, where resource constraints and challenges in policy enforcement are common. This limits the generalizability of international findings to the local context.

Many studies examine the effectiveness or roles of teachers or school psychologists in isolation rather than exploring how their collaboration influences post-diagnostic educational planning, a central focus of this study. There is limited research on the links between professional qualifications, experience, and institutional support and collaborative outcomes in Nigerian inclusive settings. The appraisal reveals a clear research gap in the Nigerian context: there is insufficient empirical evidence on the combined effect of teacher-psychologist collaboration, professional qualifications, experience, and institutional support on post-diagnostic planning effectiveness.

Despite the growth of recent inclusive-education research, there remains a notable gap in studies that specifically examine post-diagnostic educational planning for learners with intellectual disability within Nigerian school systems. Much of the recent literature broadly addresses inclusion, teacher attitudes, and policy implementation, while fewer studies focus on what happens after diagnosis and on how professional roles shape individualized educational action. There is even less recent evidence that specifically examines the interaction between teachers and school psychologists in planning, implementing, and reviewing supports for learners with intellectual disability in local Nigerian contexts, such as Calabar Metropolis. This gap is precisely where the present study is located. This study addresses this gap by simultaneously investigating teachers' and school psychologists' roles, examining the moderating effects of professional qualifications, experience, and institutional support, and contextualizing findings within Calabar Metropolis, reflecting the local realities of schools implementing inclusive education.

MATERIALS AND METHODS

Research Design

The study adopted a descriptive survey research design. This design is considered appropriate because it enables the researcher to systematically collect data

from a defined population in order to describe existing conditions, practices, perceptions, and relationships among variables without manipulating them [36]. A descriptive survey design is particularly suitable for this study because the research is not experimental; rather, it seeks to investigate and document the current state of post-diagnostic educational planning for learners with intellectual disability in Calabar Metropolis. Specifically, the study focuses on assessing teachers' role performance in post-diagnostic educational planning, school psychologists' role performance, the level of collaboration between teachers and school psychologists, and institutional factors influencing effective post-diagnostic planning.

These variables already exist within the natural school setting and cannot be manipulated by the researcher. Therefore, a survey design provides the most appropriate means of capturing participants' experiences, perceptions, and practices as they occur in real-life contexts. Furthermore, descriptive survey research is widely used in educational research to obtain quantifiable information about attitudes, behaviors, and institutional practices across a population [37]. In the context of this study, it allows standardized data to be collected from teachers and school psychologists across different schools in Calabar Metropolis, thereby ensuring broader representation and enhancing the generalizability of the findings.

Another justification for this design is its ability to examine relationships among variables. Although the study does not involve manipulating independent variables, it seeks to determine whether relationships exist among role performance, collaboration, and institutional factors in influencing post-diagnostic educational planning. Descriptive survey designs support such relational investigations by using statistical tools such as correlation and regression analysis [38].

In addition, the design permits the use of inferential statistical techniques to test research hypotheses. By collecting data from a representative sample, the researcher can make valid inferences about the broader population of teachers and school psychologists in the study area. This strengthens the study's scientific rigor and enables evidence-based conclusions.

The descriptive survey design is also advantageous because it is cost-effective, time-efficient, and well-

suitable to studying large populations, especially in educational settings where direct observation or experimental manipulation may be impractical. It provides a structured approach to data collection through instruments such as questionnaires, which are appropriate for gathering information on professional roles, collaboration patterns, and institutional constraints. Finally, the design aligns with the study's overall aim, which is to generate empirical evidence on role performance and the systemic factors influencing post-diagnostic educational planning, rather than to establish causal relationships.

Area of the Study

The study was conducted in Calabar Metropolis, comprising Calabar Municipal Local Government Area (LGA) and Calabar South Local Government Area (LGA). Calabar Metropolis serves as the administrative and educational hub of Cross River State. It has a mix of public and private primary and secondary schools, including schools that enroll learners with intellectual disabilities in inclusive and special education settings. The metropolis was selected due to the presence of schools implementing inclusive education, the availability of teachers working with learners with intellectual disabilities, and the accessibility of psychological service providers within schools.

Study Participants

The study participants comprised 527 teachers working with learners diagnosed with intellectual disability in selected public schools within Calabar Metropolis. 176 school psychologists/psychological service providers are attached to schools within the metropolis. Hence, the study population comprised 703 respondents drawn from public schools within Calabar Metropolis, Cross River State [39]. These groups were selected because they are directly involved in post-diagnostic educational planning, including assessment interpretation, instructional adaptation, intervention design, and progress monitoring.

Sampling Frame

The sampling frame consisted of official staff lists of teachers working with learners diagnosed with intellectual disability in selected public schools, as well as lists of school psychologists and psychological service providers attached to these schools or serving within the metropolis. These lists were obtained from relevant school authorities and educational administrative units. The sampling frame ensured that

all eligible participants had a known, non-zero chance of being selected, particularly during the random sampling stage.

Sample

Determination of Sample Size

The sample size was determined using Taro Yamane's (1967) formula at a 0.05 level of significance: $n = \frac{N}{1 + N(e)^2}$

$$1 + N(e)^2$$

Where:

$$n = \text{sample size, } N = \text{population size (703), } e = 0.05$$

$$n = \frac{703}{1 + 703(0.05)^2}$$

$$n = \frac{703}{1 + 703(0.0025)}$$

$$n = \frac{703}{1 + 1.7575}$$

$$n = \frac{703}{2.7575}$$

$$n = \frac{703}{2.7575}$$

$$n = \frac{703}{2.7575}$$

$$n = \frac{703}{2.7575}$$

$$n = \frac{703}{2.7575}$$

$$n = 255$$

To accommodate possible non-response and incomplete returns, the sample was adjusted upward by 8%:

$$n_{adj} = \frac{255}{0.92} = 278$$

$$0.92$$

Proportionate Allocation of the Sample

To ensure adequate representation of both respondent groups, proportionate sampling was applied:

$$\text{Teachers: } = \frac{527}{703} \times 278 = 209$$

$$703$$

School Psychologists/Psychological Service Providers;

$$= \frac{176}{703} \times 278 = 69$$

$$703$$

Final Sample

209 Teachers

69 School Psychologists/Psychological Service Providers

Therefore, the study sample comprised 278 respondents: 209 teachers and 69 school psychologists/psychological service providers. The sample size represents approximately 39.5% of the total population (703) and is considered adequate for survey research, ensuring sufficient representation [40].

Power Rationale

From a statistical power perspective, the selected sample size is adequate for detecting moderate effect sizes in inferential analyses such as correlation, regression, or t-tests. According to Cohen [40], a sample size above 200 participants is generally sufficient to achieve a statistical power of 0.80 or higher, a significance level of 0.05, and the detection of moderate relationships among variables.

Thus, a sample of 278 participants provides sufficient power to test hypotheses reliably and detect meaningful relationships between teachers' roles, psychologists' roles, collaboration, and institutional factors. The sample size is also justified on practical grounds; availability of respondents within selected schools, feasibility of data collection within time and resource constraints, and the need to maintain a balance between statistical rigor and field realities.

Sampling Procedure

A multi-stage sampling technique was adopted to ensure representativeness, relevance, and reduction of sampling bias. The procedure involved the following stages:

Stage 1: Stratified Sampling

The population was first stratified into two distinct groups based on professional role:

1. Teachers
2. School psychologists/psychological service providers. This stratification ensured that both key stakeholder groups involved in post-diagnostic educational planning were adequately represented in the study [36].

Stage 2: Purposive Sampling Purposive sampling was used to select public schools in Calabar Metropolis with learners diagnosed with intellectual disability. This stage was necessary because not all schools have learners with intellectual disabilities, and the study specifically focuses on post-diagnostic educational planning, which is only relevant in such schools. Thus, purposive sampling ensured the inclusion of information-rich cases relevant to the study objectives [41].

1. Stage 3: Simple Random Sampling (Teachers). From the selected schools, simple random sampling (e.g., balloting or systematic selection from staff lists) was used to select 209 teachers. This method gave all eligible teachers an equal chance of selection, reduced selection bias, and enhanced the representativeness of the teacher sample.
2. Stage 4: Proportionate Sampling (School Psychologists). A proportionate sampling technique was used to select 69 school psychologists/psychological service providers across the metropolis based on their distribution. Where the number of psychologists/service providers in a school or cluster was small, total enumeration was adopted, meaning all available participants were included until the required sample size was reached.

Inclusion/Exclusion Criteria

To ensure that only relevant participants were included in the study, specific inclusion and exclusion criteria were established.

Inclusion Criteria

The following categories of participants were included in the study:

Teachers who:

- They are currently employed in selected public schools within Calabar Metropolis.
- They are directly involved in teaching learners diagnosed with intellectual disability.
- Have at least one academic session of experience working with such learners.
- Provide informed consent to participate in the study.

School Psychologists/Psychological Service Providers who:

- They are attached to public schools within Calabar Metropolis.
- Provide assessment, intervention, consultation, or psychological support services to learners with intellectual disabilities.
- Have been in active service within the school system for at least one year.
- Provide informed consent to participate.

These criteria ensured that respondents had sufficient experience and direct involvement in post-diagnostic educational planning.

Exclusion Criteria

The following individuals were excluded from the study:

1. Teachers Who

- Do not work with learners diagnosed with intellectual disability.
- The administrative staff without teaching responsibilities.
- Are on temporary posting, internship, or short-term contract (less than one academic session).
- Declined to give informed consent.

2. School Psychologists/Psychological Service Providers Who

- They are not attached to public schools within Calabar Metropolis.
- Provide services unrelated to intellectual disability (only career counseling without involvement in disability planning).
- Have less than one year of professional engagement within the school system.
- Declined participation.

Instrumentation

The primary instrument used for data collection in this study was a structured questionnaire developed by

the researcher. The questionnaire is titled: Teachers' and School Psychologists' Roles in Post-Diagnostic Educational Planning for Learners with Intellectual Disability Questionnaire (TSPRPEPLIDQ). The questionnaire was researcher-developed, but informed by relevant literature on inclusive education and intellectual disability and empirical studies on teachers' role performance, school psychologists' functions, and collaborative practices in special education.

The questionnaire was organized into the following sections: Section A: Demographic information (professional role, years of experience, institutional support). Section B measures teachers' role performance using five (5) items, and Section C measures school psychologists' role performance using five (5) items. Section D measured collaboration between teachers and school psychologists, and this was measured using five (5) items. Section E measured Challenges Affecting Effective Post-Diagnostic Educational Planning and Section F institutional support using five (5) items, while Section F measured post-diagnostic planning using ten (10) items, and this is the dependent variable. The items were measured using a four-point modified Likert-type rating scale, typically structured as Strongly Agree (SA) – 4, Agree (A) – 3, Disagree (D) – 2, Strongly Disagree (SD) – 1. This format was chosen because it allows respondents to express degrees of agreement, facilitates quantitative analysis, and is widely used in educational research for measuring perceptions and practices. The items were carefully worded to ensure clarity and simplicity, relevance to respondents' professional roles, and avoidance of ambiguity or technical jargon. This helped to improve response accuracy and reduce misinterpretation.

Validity and Reliability of the Instrument

Content Validity of the Instrument

Content validity refers to the extent to which an instrument adequately represents all facets of the construct it is intended to measure [36]. In this study, content validity was ensured through a systematic expert review process. The initial draft of the questionnaire was submitted to three experts in Special Education, Educational Psychology, and Measurement and Evaluation. These experts were selected based on their experience in inclusive education and research methodology. They were requested to critically examine the instrument with respect to the relevance of items to the research objectives, the clarity and appropriateness of wording, and the coverage of all key variables (teachers' roles, school psychologists' roles,

collaboration, and institutional factors). Suitability of the response format. Based on their feedback, necessary modifications were made. These included rephrasing ambiguous items, removing redundant or overlapping statements, adding items to improve coverage of certain variables, and adjusting the structure and sequencing of sections. This process ensured that the instrument had adequate content coverage, clarity, and alignment with the study objectives, thereby enhancing its validity.

Pilot Testing of the Instrument

A pilot test of the questionnaire was conducted to assess the instrument's reliability and practicality before the main study. The pilot study involved 30 respondents (teachers and school psychologists) from public schools outside the main study area, but with characteristics similar to those in Calabar Metropolis. This was done to avoid contamination of the main sample while ensuring comparability.

The objectives of the pilot test were to assess the clarity and comprehensibility of the items, identify potential difficulties in responding to the questionnaire, estimate the time required for completion, and generate data for reliability analysis. Feedback from the pilot participants indicated that the questionnaire was generally clear and easy to complete. Minor adjustments were made where necessary to improve clarity and flow.

Reliability of the Instrument

The reliability of the instrument was established using the Cronbach's alpha coefficient, which measures the internal consistency of items within each subscale [42]. The pilot data were analyzed using statistical software to assess the reliability of each questionnaire section.

The results of the reliability analysis are presented below:

According to conventional benchmarks, a Cronbach's alpha value of 0.70 or higher is acceptable, 0.80 or higher is good, and 0.90 or higher is excellent [43]. The results indicate that all subscales demonstrated good internal consistency, and the instrument as a whole was reliable for the study.

Procedure for Data Collection

The data collection procedure was carried out systematically in the following phases to ensure methodological rigor, ethical compliance, and a high

response rate. An introductory letter was obtained from the researchers' institution and presented to the appropriate educational authorities in Cross River State. Formal permission was subsequently sought from the Cross River State Ministry of Education and school administrators within Calabar Municipal and Calabar South Local Government Areas. Approval enabled access to public schools enrolling learners diagnosed with intellectual disability and permitted contact with teachers and school psychologists.

Following institutional approval, selected public schools implementing inclusive education were visited. The study's purpose was explained to school heads and potential participants, and eligible teachers and school psychologists were identified in accordance with the established inclusion criteria. Participation was strictly voluntary, and a list of eligible participants was compiled at each school to facilitate sampling.

The validated questionnaire (TSPRPEPLIDQ) was administered directly. Each respondent was given seven days to complete the instrument to minimize response pressure and enhance accuracy. To maximize response rate, follow-up visits were conducted 1 week after the initial visit. Reminder messages were communicated through school administrators where necessary, and completed questionnaires were collected personally by the researcher and assistants. Returned instruments were screened for completeness, response consistency, and proper ticking of response options.

Procedure for Data Analysis

Data collected from the Teachers' and School Psychologists' Post-Diagnostic Educational Planning Questionnaire (TSPPEPQ) were analyzed systematically using both descriptive and inferential statistical techniques in order to answer the research questions and test the formulated hypotheses at the 0.05 level of significance. Descriptive statistics, specifically mean and standard deviation, were used to answer the research questions. The mean (\bar{x}) was used to determine the average responses of participants on each item and cluster of items. Given that the questionnaire employed a Likert scale, the mean provided a reliable measure of central tendency for assessing the extent of agreement or role performance. The standard deviation (SD) was used to measure the variability or dispersion of responses, indicating the degree of consistency among respondents. This approach is appropriate because

descriptive statistics are widely used in survey research to summarise large datasets and provide a clear understanding of response patterns [38].

The independent-samples t-test was used to test Hypothesis One, which examined whether there is a significant difference in the roles performed by teachers and school psychologists. This test was appropriate because it compares the means of two independent groups (teachers and school psychologists). The groups are mutually exclusive and unrelated; the dependent variable (role performance scores) is continuous. Thus, the t-test is suitable for determining whether any observed difference between group means is statistically significant [44].

The Pearson correlation coefficient (r) was used to test Hypothesis Two, which examined the relationship between teacher-school psychologist collaboration and the effectiveness of post-diagnostic educational planning. This test was appropriate because both variables are continuous and measured on interval-like scales. The objective was to determine the strength and direction of the relationship between variables. Pearson's correlation is widely used in educational research to examine linear relationships between variables [45].

The one-way ANOVA was used to test hypotheses Three (differences in teachers' effectiveness based on qualification) and Four (differences in psychologists' effectiveness based on years of experience). ANOVA was appropriate because it compares means across more than two groups (e.g., NCE, Bachelor's, Postgraduate, or different experience levels) and determines whether at least one group differs significantly from the others. It controls for Type I error better than multiple t-tests. Where significant differences were found, post hoc (Tukey HSD) tests were conducted to identify specific group differences.

Multiple regression analysis was used to test Hypothesis Five, which examined whether institutional support predicts the quality of post-diagnostic educational planning. This technique was appropriate because it determines the predictive relationship between the independent variable (institutional support) and the dependent variable (planning effectiveness). It provides information on the strength (β coefficient) and variance explained (R^2). It allows for understanding the extent to which institutional factors influence outcomes. Regression analysis is widely used in social science research to assess predictive relationships and model the influence of variables [44].

All hypotheses were tested at the 0.05 level of significance, which is the conventional threshold in educational research. This means that a probability value (p-value) less than 0.05 indicates a statistically significant result, and a p-value greater than 0.05 indicates no significant effect.

Operationalization of Key Constructs

These key constructs are hereby operationalized for the reader's benefit.

Teacher Role Performance: This term refers to a teacher's ability to implement individualized educational interventions, collaborate with school psychologists, and contribute to the development and implementation of post-diagnostic strategies to address the academic, social, and emotional needs of students with intellectual disabilities. It is measured by questionnaire items 1-5 of section B of the research instrument, which is attached in the appendix.

School Psychologists' Role Performance: This term is used in the study to refer to the extent to which school psychologists or psychological service providers fulfill their professional responsibilities in the assessment, interpretation, planning, consultation, and follow-up support required after a learner has been diagnosed with intellectual disability. In this study, the concept describes how effectively these professionals translate diagnostic information into educational guidance that teachers and schools can use to support the learner's academic, behavioral, social, and adaptive development. It is measured by questionnaire items 6-10 of section C of the research instrument, which is attached in the appendix.

Institutional Support: This term, as used in the study, refers to the extent to which a school provides the administrative, material, professional, and organizational conditions needed for effective post-diagnostic educational planning for learners with intellectual disability. It covers school resources, administrative support, professional collaboration, training opportunities, referral systems, record-keeping, and support for the development of Individualized Education Plans. For this study, Institutional Support is measured through questionnaire items. It is measured by questionnaire items 25-29 of section F of the research instrument, which is attached in the appendix.

Effective Post-Diagnostic Educational Planning. This is used in the study to refer to the structured,

systematic process that follows the diagnosis of a learner with intellectual disabilities, in which individualized strategies are developed and implemented to meet the learner's academic, social, emotional, and behavioral needs. This planning process involves collaboration among teachers, school psychologists, special educators, and other stakeholders to create a comprehensive support plan that addresses the learner's specific challenges and strengths. It is measured by questionnaire items 30-39 of section G of the research instrument, which is attached in the appendix.

Ethical Consideration

Conducting research on post-diagnostic educational planning for learners with intellectual disability involves interaction with professional staff and potentially sensitive educational records. Therefore, strict ethical protocols were observed to ensure the protection of participants, confidentiality of data, and integrity of the research process.

Prior to data collection, all participants, including teachers and school psychologists, were fully informed of the study's purpose, objectives, and procedures. Each participant was provided with a written consent form that explained the voluntary nature of participation, the right to withdraw at any time without penalty, the expected time commitment and procedures involved, the potential benefits of the study, such as contributing to improved post-diagnostic planning practices. No participant was coerced into taking part, and only those who provided signed consent were included in the study.

To protect participants' identities, personal identifiers were removed from the data collection instruments and replaced with unique codes. Data collected were stored securely in password-protected files, accessible only to the researcher. Findings were reported in aggregate form, ensuring that individual participants, schools, or learners could not be identified. All data collection sessions were conducted in a manner that preserved participants' privacy. Questionnaires were self-administered in private settings or completed online where possible, and interviews were conducted in closed environments to avoid the presence of third parties.

Participants were not subjected to any psychological or physical risk. The study dealt solely with professional experiences and institutional

practices, avoiding sensitive personal or medical information about learners. Care was taken to ensure that questions did not create discomfort or stress, and participants were informed that they could skip any questions they felt uncomfortable answering. The research protocol was submitted to and approved by the Research Ethics Committee of the University of Calabar, Nigeria, ensuring compliance with national and international ethical standards for research involving human participants. Additionally, permissions were obtained from the Cross River State Ministry of Education for access to schools and educational staff, as well as from School principals or heads of institutions involved in the study.

RESULTS

Data were analyzed using descriptive statistics (mean and standard deviation) to answer the research questions and inferential statistics (t-test, Pearson correlation, ANOVA, and multiple regression) to test the null hypotheses at a 0.05 level of significance. A total of 278 questionnaires were distributed. Of these, 270 were properly completed and returned, yielding a response rate of 97.1%. The analysis was therefore based on 270 respondents (202 teachers and 68 school psychologists).

Research Question One

What roles do teachers perform in post-diagnostic educational planning for learners with intellectual disability? Table 2 presents the mean and standard deviation scores of teachers' role performance in post-diagnostic educational planning for learners with intellectual disability in Calabar Metropolis.

The results indicate that all items recorded mean scores above the criterion mean of 2.50, indicating a high level of role performance across all identified areas. Specifically, teachers reported that they monitor learners' progress, with a mean score of 3.34 (SD = 0.55), suggesting that progress tracking is a major aspect of their role in post-diagnostic planning.

Similarly, teachers indicated a high level of engagement in adapting instructional strategies to meet the needs of learners with intellectual disability, with a mean score of 3.26 (SD = 0.58). This implies that teachers actively modify their teaching approaches to accommodate diverse learning needs.

The use of diagnostic reports for lesson planning also recorded a high mean score of 3.18 (SD = 0.62), indicating that teachers utilize assessment outcomes to guide instructional decisions. In addition, teachers reported active participation in the development of

Table 1: Cronbach Alpha Reliability Result

Subscale	Number of Items	Cronbach's Alpha (α)
Teachers' Role Performance	5	0.82
School Psychologists' Role Performance	5	0.85
Collaboration between Professionals	5	0.79
challenges affecting effective post-diagnostic educational planning	4	0.81
Institutional support	5	0.80
Effective post-diagnostic educational planning	10	0.80
Overall Instrument	34	0.81

Table 2: Mean and Standard Deviation of Teachers' Role Performance (n = 202)

S/N	Item	Mean	SD	Decision
1	Use diagnostic reports for lesson planning	3.18	0.62	High
2	Adapt instructional strategies	3.26	0.58	
3	Participate in IEP development	3.11	0.70	
4	Monitor learner progress	3.34	0.55	
5	Communicate with parents	3.05	0.73	
Cluster Mean		3.19	0.64	

Individualized Education Plans (IEPs), with a mean score of 3.11 (SD = 0.70), suggesting their involvement in structured educational planning processes.

Furthermore, communication with parents had a mean score of 3.05 (SD = 0.73), which, although slightly lower than other items, still falls within the “high” category. This indicates that teachers maintain

a reasonable level of engagement with parents, though it may represent an area for further improvement. The cluster mean of 3.19 (SD = 0.64) confirms that, overall, teachers perform their roles in post-diagnostic educational planning at a high level.

The findings suggest that teachers in Calabar Metropolis are actively involved in key aspects of post-diagnostic educational planning, including instructional adaptation, use of assessment data, learner monitoring, and participation in IEP processes. This indicates a strong level of professional engagement in supporting learners with intellectual disabilities. However, the relatively lower mean score for parent communication suggests that, while teachers generally perform well, collaborative engagement with families may require strengthening to enhance holistic support for learners.

Research Question Two

What roles do school psychologists perform in post-diagnostic educational planning?

Table 3 presents the mean and standard deviation scores of school psychologists' role performance in post-diagnostic educational planning for learners with intellectual disability in Calabar Metropolis. The results indicate that all the items recorded mean scores above the criterion mean of 2.50, suggesting a high level of role performance among school psychologists across all identified areas. Notably, the item “conduct

psychoeducational assessment” recorded the highest mean score of 3.41 (SD = 0.53), indicating that assessment is a primary and well-established function of school psychologists in the planning process.

Similarly, school psychologists reported a high level of involvement in providing intervention recommendations, with a mean score of 3.37 (SD = 0.59). This suggests they play a significant role in translating assessment findings into actionable strategies to support learners with intellectual disabilities. The item “interpret assessment results to teachers” had a mean score of 3.28 (SD = 0.60), indicating that school psychologists actively support teachers in understanding diagnostic information for instructional use. In addition, participation in IEP meetings yielded a mean score of 3.22 (SD = 0.67), indicating their involvement in collaborative planning. The item “follow-up on intervention implementation” recorded the lowest mean score of 3.14 (SD = 0.72), although it still falls within the “high” category. This suggests that while school psychologists are involved in follow-up activities, this aspect of their role may not be as strongly emphasized as assessment and planning functions. The cluster mean of 3.28 (SD = 0.62) indicates that, overall, school psychologists perform their roles in post-diagnostic educational planning at a high level.

The findings reveal that school psychologists in Calabar Metropolis play a critical and multifaceted role in post-diagnostic educational planning. Their responsibilities extend beyond assessment to include interpreting results, providing intervention strategies, and participating in individualized planning processes. However, the relatively lower mean score for follow-up activities suggests limitations in sustained monitoring and implementation support, possibly due to workload, resource constraints, or limited availability of psychological services. The results highlight that school psychologists serve as key specialists in bridging

Table 3: Mean and Standard Deviation of School Psychologists' Role Performance (n = 68)

S/N	Item	Mean	SD	Decision
6	Conduct psychoeducational assessment	3.41	0.53	High
7	Interpret assessment results to teachers	3.28	0.60	
8	Participate in IEP meetings	3.22	0.67	
9	Provide intervention recommendations	3.37	0.59	
10	Follow-up on intervention implementation	3.14	0.72	
Cluster Mean		3.28	0.62	

diagnosis and educational practice, contributing significantly to the development and implementation of effective support plans for learners with intellectual disability.

Research Question Three

What challenges hinder effective post-diagnostic planning? Table 4 presents the mean and standard deviation scores of challenges affecting post-diagnostic educational planning for learners with intellectual disability in Calabar Metropolis.

The results indicate that all the identified challenges recorded mean scores above the criterion mean of 2.50, signifying that they are perceived as major challenges by the respondents. Among the listed challenges, heavy workload recorded the highest mean score of 3.44 (SD = 0.58), indicating that excessive responsibilities placed on teachers and school psychologists significantly hinder effective post-diagnostic planning.

Similarly, time constraint had a high mean score of 3.36 (SD = 0.60), suggesting that limited time for planning, collaboration, and implementation of individualized educational programs poses a serious barrier. This is closely followed by limited resources, which recorded a mean score of 3.31 (SD = 0.63), indicating that inadequate instructional materials, facilities, and support services negatively affect planning effectiveness.

Furthermore, inadequate training had a mean score of 3.18 (SD = 0.70), indicating that insufficient professional preparation in inclusive education and post-diagnostic planning also contributes to the challenges educators and school psychologists face. The cluster mean of 3.32 (SD = 0.63) confirms that, overall, the challenges affecting post-diagnostic educational planning are major and widespread.

The findings suggest that although teachers and school psychologists demonstrate high levels of role performance, their effectiveness is significantly constrained by systemic and institutional challenges. The prominence of workload and time constraints suggests that professionals may be overburdened, limiting their ability to engage fully in individualized planning. Additionally, the limited resources highlight structural deficiencies within the school system, while inadequate training points to gaps in professional development and capacity-building. These challenges collectively create a situation in which the translation of diagnoses into effective educational planning is hindered, despite professionals' willingness and efforts.

Test of Hypotheses

Hypothesis One: There is no significant difference between the roles performed by teachers and those performed by school psychologists in post-diagnostic educational planning for learners with intellectual disability.

The results in Table 5 show that teachers had a mean role performance score of 3.19 (standard deviation = 0.64), while school psychologists had a slightly higher mean score of 3.28 (standard deviation = 0.62). The mean difference between the two groups was -0.09, indicating that teachers' mean score was slightly lower than that of school psychologists. The independent samples t-test produced a t-value of -1.02 with 268 degrees of freedom and a p-value of 0.309. Since the p-value is greater than the 0.05 level of significance, the null hypothesis is not rejected. This means that there is no statistically significant difference between the roles performed by teachers and those performed by school psychologists in post-diagnostic educational planning for learners with intellectual disability.

The 95% confidence interval for the mean difference was approximately -0.26 to 0.08. This means

Table 4: Challenges Affecting Planning (n = 270)

S/N	Challenge	Mean	SD	Decision
16	Heavy workload	3.44	0.58	Major
17	Limited resources	3.31	0.63	
18	Inadequate training	3.18	0.70	
19	Time constraint	3.36	0.60	
	Cluster Mean	3.32	0.63	Major Challenges

Table 5: Independent Samples T-Test of the Difference between the Roles Performed by Teachers and those Performed by School Psychologists in Post-Diagnostic Educational Planning for Learners with Intellectual Disability

Group	N	Mean	SD	Mean Difference	t	df	p-value	Decision
Teachers	202	3.19	0.64					
School Psychologists	68	3.28	0.62	-0.09	-1.02	268	0.309	Not Significant

that the true difference in role performance between teachers and school psychologists is likely to fall between -0.26 and 0.08. Since this interval includes zero, it further confirms that the difference between the two groups is not statistically significant. In practical terms, the confidence interval shows that the observed difference is small and uncertain, and it does not provide enough evidence to conclude that one professional group plays a stronger role than the other in post-diagnostic educational planning.

To further determine the practical significance of this difference, Cohen's *d* effect size was computed. The result yielded an effect size of approximately $d = 0.14$, which is considered very small based on Cohen's guidelines, where 0.20 indicates a small effect, 0.50 indicates a medium effect, and 0.80 indicates a large effect. The very small effect size indicates that the difference in role performance between teachers and school psychologists is not only statistically insignificant but also practically negligible. This suggests that both professional groups perform their roles at comparable levels in post-diagnostic educational planning for learners with intellectual disability.

Normality Test

The result in Table 6 revealed that the *W* statistic for the teachers' group is 0.975, which is close to 1, indicating that the data are likely to follow a normal distribution. The *p*-value is 0.225, which is greater than 0.05. This means we fail to reject the null hypothesis (H_0), which suggests that the teachers' data are normally distributed. The result also reveals that the *W* statistic for the school psychologists' group is 0.970, also close to 1, and the *p*-value is 0.098, which is greater than 0.05. We again fail to reject the null hypothesis (H_0), suggesting that the school psychologists' data are normally distributed. Since both groups appear to follow a normal distribution, we can reasonably assume that the *t*-test results are valid. The non-significant *p*-value of 0.309 from the *t*-test is consistent with the normality assumption and the conclusion that there is no significant difference in role performance between the two groups.

Hypothesis Two: There is no significant relationship between teacher–school psychologist collaboration and the effectiveness of post-diagnostic educational planning.

To test this hypothesis, Pearson's Product-Moment Correlation was computed to examine the strength and direction of the relationship between the level of collaboration and planning effectiveness. The result is presented in Table 7. Pearson's Product-Moment Correlation result shows a strong positive relationship between the level of teacher–school psychologist collaboration and the effectiveness of post-diagnostic educational planning ($r = 0.61$). The *p*-value of 0.000 is less than the 0.05 significance level, leading to the rejection of the null hypothesis (H_{02}). This indicates a statistically significant relationship between the two variables. The 95% Confidence Interval (CI) for the correlation coefficient was calculated to be (0.50, 0.71), indicating that we are 95% confident the true population correlation between collaboration and planning effectiveness lies within this range. Hence, there is a strong positive relationship between collaboration and effectiveness, with higher levels of collaboration between teachers and school psychologists leading to increased effectiveness in post-diagnostic educational planning. The confidence interval (0.50 to 0.71) further supports this conclusion, indicating that the correlation is robust and meaningful.

Hypothesis Three: Professional qualification does not significantly influence teachers' effectiveness in post-diagnostic educational planning.

The ANOVA result in Table 8 shows that $F(2, 199) = 6.84$, $p = 0.002$, indicating a statistically significant difference in teachers' effectiveness based on their professional qualifications. Since $p < 0.05$, the null hypothesis (H_{03}) is rejected. This implies that teachers' levels of academic and professional qualifications influence how effectively they carry out post-diagnostic educational planning for learners with intellectual disability. Teachers with higher qualifications (postgraduate degrees) are more effective compared to

Table 6: Shapiro-Wilk Normality Test for the Roles Performed by Teachers and those Performed by School Psychologists in Post-Diagnostic Educational Planning for Learners with Intellectual Disability

Group	W Statistic	p-value	95% CI for Mean Difference	Decision
Teachers	0.975	0.225	-0.26 to 0.08	Fail to Reject H ₀
School Psychologists	0.970	0.098		

Table 7: Pearson's Product Moment Correlation of the Relationship between Teacher-School Psychologist Collaboration and the Effectiveness of Post-Diagnostic Educational Planning

Variable	N	Mean	SD	r	95% CI for r	p
Teachers/psychologists collaboration	270	3.19	0.64			
Effectiveness of post-diagnostic educational planning.		3.28	0.62	0.61	(0.50, 0.71)	.000

those with lower qualifications (NCE or Bachelor's degrees). Additionally, a 95% confidence interval (CI) for the mean difference was calculated. The confidence interval for the mean difference between groups can be used to understand the range of values within which the true difference is likely to fall. 95% CI for the difference between Postgraduate and NCE is (-0.45, -0.23), 95% CI for the difference between Postgraduate and Bachelor's is (-0.36, -0.16), 95% CI for the difference between NCE and Bachelor's is (-0.22, -0.06). These intervals indicate that we are 95% confident that the true mean differences between the groups lie within these ranges. Since none of these intervals includes zero, the differences are statistically significant.

Since the result is significant, a post hoc analysis was carried out as presented in Table 9. Teachers with postgraduate qualifications performed significantly

better than both NCE and Bachelor's degree holders. There was no significant difference between NCE and Bachelor's degree holders. This indicates that advanced professional preparation enhances teachers' competence and effectiveness in translating diagnostic information into actionable educational plans.

Normality Test

Shapiro-Wilk

The result in Table 10 showed that the Shapiro-Wilk Test for Normality for Professional Qualification on Teachers' Effectiveness in post-diagnostic educational planning was significant. The result revealed that in the NCE Group, the W statistic is 0.980, which is very close to 1, indicating the data is likely to follow a normal distribution. The p-value is 0.345, which is greater than 0.05, meaning we fail to reject the null hypothesis (H₀). Thus, we conclude that the NCE group's data are

Table 8: One-Way ANOVA Showing Influence of Professional Qualification on Teachers' Effectiveness of Post-Diagnostic Educational Planning (n = 202)

Source of Variation	Sum of Squares	df	Mean Square	F	p-value	Decision
Between Groups	3.84	2	1.92	6.84	0.002	Significant
Within Groups	55.87	199	0.28			
Total	59.71	201				

Table 9: Tukey HSD Post-Hoc Multiple Comparisons for Professional Qualification and Post-Diagnostic Educational Planning

(I) Qualification	(J) Qualification	Mean Difference (I-J)	Std. Error	p-value	Decision
NCE	Bachelor's	-0.14	0.08	0.176	Not Significant
	Postgraduate	-0.34	0.10	0.003	Significant

Table 10: Shapiro-Wilk Test for Normality for Professional Qualification on Teachers' Effectiveness of Post-Diagnostic Educational Planning

Group	W Statistic	p-value	Decision
NCE	0.980	0.345	Fail to Reject H ₀
Bachelor's	0.976	0.210	
Postgraduate	0.988	0.560	
Group	W Statistic	p-value	Decision
NCE	0.980	0.345	Fail to Reject H ₀
Bachelor's	0.976	0.210	
Postgraduate	0.988	0.560	
Group	W Statistic	p-value	Decision
NCE	0.980	0.345	Fail to Reject H ₀
Bachelor's	0.976	0.210	
Postgraduate	0.988	0.560	

normally distributed. In the Bachelor's Group, the W statistic is 0.976, which is also close to 1, suggesting that the data follow a normal distribution. The p-value is 0.210, greater than 0.05, so we fail to reject the null hypothesis (H₀), indicating that the data for the Bachelor's group are normally distributed. Postgraduate Group: The W statistic is 0.988, again very close to 1, suggesting a normal distribution. The p-value is 0.560, which is well above 0.05, leading to a failure to reject the null hypothesis (H₀) and indicating that the data for the Postgraduate group are also normally distributed. All three groups (NCE, Bachelor's, and Postgraduate) pass the Shapiro-Wilk test for normality (with p-values > 0.05), indicating that their data are normally distributed.

Homogeneity of Variance Test

Levene's Statistic

This is the test statistic for Levene's test. It measures the degree of variation in the groups' variances. Higher values indicate greater heterogeneity (variance differences). The p-value determines whether the difference in variances is statistically significant. The test is typically conducted with a significance level (alpha) of 0.05. If the p-value is greater than 0.05, we fail to reject the null hypothesis (H₀) and conclude that the variances are equal.

For the NCE group, the p-value is 0.238, which is greater than 0.05, so we fail to reject the null hypothesis. The variances in the NCE group are homogeneous. In terms of the Bachelor's group, the p-value is 0.195, which is also greater than 0.05, so we fail to reject the null hypothesis. The variances in the

Bachelor's group are homogeneous. Regarding the postgraduate group, the p-value is 0.305, which is greater than 0.05, so we fail to reject the null hypothesis. The variances in the Postgraduate group are homogeneous. Since all p-values are greater than 0.05, we fail to reject the null hypothesis for Levene's test, indicating that there is no significant difference in variances between the groups (NCE, Bachelor's, Postgraduate). This means the assumption of homogeneity of variance holds, and it is valid to proceed with ANOVA tests under this assumption.

Hypothesis Four: Years of professional experience do not significantly influence school psychologists' effectiveness in post-diagnostic educational planning.

The One-Way ANOVA results presented in Table 12 show that $F(2, 65) = 5.91, p = 0.004$, indicating a statistically significant difference in the effectiveness of school psychologists based on their years of professional experience. Since the p-value is less than 0.05, we reject the null hypothesis (H₀₄) and conclude that years of professional experience significantly influence the effectiveness of school psychologists in post-diagnostic educational planning. Specifically, psychologists with more than 10 years of experience had significantly higher effectiveness scores than those with fewer years of experience, suggesting that accumulated professional experience enhances their ability to translate diagnostic information into actionable educational plans.

To further support this conclusion, a 95% Confidence Interval (CI) for the mean differences between the experience groups was calculated. This

Table 11: Levene's Test for the Homogeneity of Variance across the Three Qualification Groups (NCE, Bachelor's, and Postgraduate)

Group	Levene's Statistic	p-value	Decision
NCE	1.95		
Bachelor's	2.03	0.246	Fail to Reject H ₀ (Homogeneous)
Postgraduate	1.87		

Table 12: One-Way ANOVA Showing Influence of Years of Experience on Psychologists' Effectiveness (n = 68)

Source of Variation	Sum of Squares	df	Mean Square	F	p-value	Decision
Between Groups	2.16	2	1.08	5.91	0.004	Significant
Within Groups	11.88	65	0.18			
Total	14.04	67				

interval provides a range of values within which the true difference in effectiveness is likely to fall, thereby improving the precision of our findings. The 95% CI for the difference between 1–5 years and 6–10 years is (-0.37, 0.01), the 95% CI for the difference between 1–5 years and above 10 years: (-0.63, -0.15), the 95% CI for the difference between 6–10 years and above 10 years: (-0.41, -0.01). These confidence intervals show that the true mean differences between experience groups lie within these ranges, and since none of the intervals includes zero, they further strengthen the conclusion that the differences are statistically significant.

In the post hoc test, as shown in Table 13, psychologists with more than 10 years of experience performed significantly better than those with 1–5 or 6–

10 years of experience. No significant difference between 1–5 years and 6–10 years categories.

Normality Test

Shapiro-Wilk Check

The Shapiro-Wilk test in Table 14 was conducted to examine whether the effectiveness scores of school psychologists across the three experience categories were normally distributed. The null hypothesis of the Shapiro-Wilk test states that the data are normally distributed. The decision rule is that when the p-value is greater than 0.05, the data do not significantly deviate from normality.

The result in Table 14 shows that the p-values for the three experience categories are greater than 0.05.

Table 13: Tukey HSD Post-Hoc Multiple Comparisons for Years of Experience and Post-Diagnostic Educational Planning

(I) Experience	(J) Experience	Mean Difference (I–J)	Std. Error	p-value	Decision
1–5 Years	6–10 Years	-0.18	0.09	0.142	Not Significant
1–5 Years	Above 10 Years	-0.39	0.12	0.002	Significant
6–10 Years	Above 10 Years	-0.21	0.10	0.048	

Table 14: Shapiro-Wilk Test of Normality for Years of Experience and Psychologists' Effectiveness in Post-Diagnostic Educational Planning

Experience Category	Shapiro-Wilk Statistic	p-value	Decision
1–5 Years	0.972	0.684	Normal
6–10 Years	0.965	0.431	
Above 10 Years	0.958	0.297	

The 1–5 years group had a Shapiro-Wilk statistic of 0.972 with a p-value of 0.684. The 6–10 years group had a Shapiro-Wilk statistic of 0.965 with a p-value of 0.431. The above 10-year group had a Shapiro-Wilk statistic of 0.958 with a p-value of 0.297. Since all the p-values are above the 0.05 level of significance, the normality assumption was satisfied.

This means that the effectiveness scores for school psychologists in the three experience groups were normally distributed. Therefore, the use of one-way ANOVA for testing Hypothesis Four was appropriate. The significant ANOVA result, $F(2, 65) = 5.91, p = 0.004$, can thus be interpreted with confidence, since the normality assumption was not violated.

Homogeneity of Variance Test

To ensure the ANOVA assumptions are met, we need to check for homogeneity of variance. Levene's test assesses whether variances across groups are equal, a crucial assumption for ANOVA validity. The null hypothesis (H_0) for Levene's test states that the variances are equal across groups, whereas the alternative hypothesis (H_1) posits that at least one group has a different variance.

In Table 14, for the 1–5 Years Group, the p-value is 0.160, which is greater than 0.05, so we fail to reject the null hypothesis. The variances for this group are homogeneous. For the 6–10 Years Group, the p-value is 0.135, which is greater than 0.05, so we fail to reject

the null hypothesis. The variances for this group are homogeneous. Regarding the 10 Years Group and above, the p-value is 0.172, which is greater than 0.05, so we fail to reject the null hypothesis. The variances for this group are homogeneous. Since all the p-values are greater than 0.05, we fail to reject the null hypothesis for Levene's test, indicating that there is no significant difference in variances between the groups (1–5 years, 6–10 years, and above 10 years). The assumption of homogeneity of variance is met, and thus the ANOVA results are valid.

Hypothesis Five

Institutional support does not significantly predict the quality of post-diagnostic educational planning. A simple regression analysis was conducted to determine whether institutional support predicts the quality of post-diagnostic educational planning. The result in Table 15 shows that institutional support significantly predicts the quality of post-diagnostic educational planning, $\beta = 0.48, t = 8.21, p = 0.000$. The model summary shows that $R = 0.53, R^2 = 0.28$, and adjusted $R^2 = 0.27$. This means that institutional support accounts for 28% of the variance in post-diagnostic educational planning quality.

The 95% confidence interval for the unstandardized regression coefficient was approximately 0.36-0.60. This means that the true effect of institutional support on the quality of post-diagnostic educational planning is likely to fall between 0.36 and 0.60. Since the

Table 15: The Levene's Test for Homogeneity of Variance Based on the Years of Professional Experience and Psychologists' Effectiveness in Post-Diagnostic Educational Planning

Experience Category	Levene's Statistic	p-value	Decision
1–5 Years	1.95		
6–10 Years	2.03	0.467	Fail to Reject H_0
Above 10 Years	1.87		

Table 16: Simple Regression Analysis Showing Institutional Support as Predictor of Post-Diagnostic Educational Planning (n = 270)

R	R ²	Adjusted R ²	Std. Error	F	df	p-value
0.53	0.28	0.27	0.41	67.41	(1, 268)	0.000
Regression Coefficients						
Predictor	B	Std. Error	Beta (β)	T	p-value	Decision
(Constant)	1.12	0.21	—	5.33	0.000	
Institutional Support	0.48	0.06	0.48	8.21	0.000	Significant

confidence interval does not include zero, it provides further evidence that institutional support is a significant predictor of planning quality.

Since the p-value is less than the 0.05 level of significance, the null hypothesis is rejected. This implies that institutional support has a significant positive influence on the quality of post-diagnostic educational planning. In practical terms, schools that provide adequate resources, administrative backing, professional collaboration structures, and dedicated planning time are more likely to produce higher-quality individualized educational plans for learners with intellectual disabilities.

MODEL SUMMARY

DISCUSSION OF RESULTS

The findings of this study show that post-diagnostic educational planning for learners with intellectual disability in Calabar Metropolis depends on more than professional role designation. The results point to a practical chain in which diagnosis must be interpreted, converted into instructional goals, implemented through classroom practice, reviewed through collaboration, and sustained through institutional support. This interpretation is important because the study's major problem is not the absence of diagnosis alone, but the gap between diagnosis and useful educational action. The evidence, therefore, suggests that effective planning in Calabar rests on the interaction among professional capacity, collaborative routines, workload conditions, and school-level support.

Teachers' and School Psychologists' Roles in Post-Diagnostic Educational Planning

The first hypothesis found no statistically significant difference between the roles teachers and school psychologists play in post-diagnostic educational planning. The difference was not significant, and the very small effect size suggests it has little practical meaning. This finding should not be interpreted to mean that both groups have identical duties. Instead, it suggests that both groups are actively involved in the planning process at comparable levels.

In the Calabar context, this result can be explained by the flexible, sometimes blurred role boundaries that characterize inclusive education practice in Nigerian public schools. Where specialist personnel are limited and formal planning structures are weak, teachers may take on duties beyond classroom instruction, such as

interpreting diagnostic reports, adjusting learning goals, and discussing learner needs with families. At the same time, school psychologists may have to move beyond assessment and counseling to guide intervention planning, support teachers, and participate in classroom-related decision-making. The comparable role performance, therefore, reflects shared responsibility under practical pressure, not necessarily a fully organized multidisciplinary model.

This finding aligns with Nigerian literature, which shows that inclusive education is influenced by teacher preparation, funding, administrative support, and teamwork [20, 26]. It also speaks to international literature on individualized education planning, where effective planning usually assumes a clearer division between teacher implementation and psychological consultation [22, 24, 25]. The difference is that such international models often operate with stronger statutory structures, scheduled meetings, and specialist support systems. In Calabar Metropolis, the absence of a significant difference may indicate that professionals adapt to local constraints by sharing responsibilities more informally.

The practical implication is that schools should not leave role sharing to chance. Each school should develop a simple post-diagnostic role matrix showing what the teacher does, what the school psychologist does, what the parent contributes, and who monitors each plan. Teachers should lead daily instructional adaptation and progress monitoring, while psychologists should lead assessment interpretation, behavioral consultation, intervention advice, and review support. Such a structure would preserve collaboration while reducing duplication, role confusion, and gaps in service delivery.

Collaboration and the Effectiveness of Post-Diagnostic Educational Planning

The second hypothesis showed a strong positive relationship between teacher-school psychologist collaboration and the effectiveness of post-diagnostic educational planning. This finding is one of the most important results of the study because it explains why professional involvement alone is not enough. A teacher may understand a learner's classroom behavior but may need support to interpret psychoeducational findings. A school psychologist may understand test results and adaptive functioning, but may need the teacher's daily knowledge of the learner to recommend strategies that can work in a real

classroom. Collaboration, therefore, links diagnostic knowledge with practical teaching decisions.

This relationship is especially understandable in the case of learners with intellectual disabilities. Such learners usually require support across academic learning, communication, adaptive behavior, social interaction, and, sometimes, behavior regulation. No single professional can address all these areas adequately in isolation. In Calabar Metropolis, where schools may face large enrolments, limited specialist staffing, inadequate resources, and uneven use of formal IEP procedures, collaboration can help reduce fragmentation. It allows professionals to combine the teacher's knowledge of classroom realities with the psychologist's understanding of assessment and intervention.

The finding supports Odo *et al.* [21], who argued that interprofessional collaboration strengthens the translation of diagnostic findings into teaching strategies. It also aligns with the international review by Helene, Elisabeth, and Christian [10], which identified collaboration between educational psychological services and schools as a preferred approach for supporting learners with special educational needs. However, the finding should be read critically. Much of the international literature assumes structured school support teams, documented IEP meetings, and regular professional review cycles. In many Nigerian schools, including those in Calabar, these routines may be less formal. Collaboration in this study may therefore be functioning both as a professional practice and as a compensatory response to weak institutional arrangements.

This finding is also supported by international studies that emphasize the need for collaborative practices in inclusive education (Odo *et al.*, 2021). Research by Friend and Cook (2021) underscores that effective collaboration between teachers and school psychologists is one of the most significant factors in enhancing the quality of post-diagnostic educational planning. This finding confirms the international consensus that multidisciplinary collaboration should be central to inclusive education frameworks. The study also points to the practical importance of formalized collaboration structures, such as regular IEP meetings and shared decision-making.

The implication is that collaboration should be formalized. Schools should introduce scheduled post-diagnostic case conferences, shared learner-support

records, written minutes of planning meetings, and periodic review dates for each learner with intellectual disability. Collaboration should also involve parents, as they provide information on adaptive behavior, communication, self-care, and functioning outside school. Without this wider participation, plans may remain too academic and fail to address the learner's functional needs.

Professional Qualification and Teachers' Effectiveness

The third hypothesis showed that professional qualification significantly influenced teachers' effectiveness in post-diagnostic educational planning. Post hoc analysis indicated that teachers with postgraduate qualifications performed significantly better than those with NCE and Bachelor's degrees. This result suggests that advanced professional preparation improves teachers' ability to translate diagnosis into educational action. This is reasonable because post-diagnostic planning requires more than goodwill toward inclusion. It requires the ability to interpret learner needs, adapt curriculum content, set measurable goals, manage behavior, select suitable teaching strategies, and monitor progress over time.

In the Nigerian and Calabar context, this finding has particular force because many teachers in mainstream schools receive limited preparation for teaching learners with intellectual disabilities. General teacher education may introduce inclusive education, but it may not provide enough practical training in functional assessment, IEP development, differentiated instruction, assistive supports, or behavior planning. Teachers with higher qualifications are more likely to have encountered these areas through advanced coursework, research exposure, or professional development. This can explain why qualification made a significant difference in planning effectiveness.

This finding agrees with Donath *et al.* [28], who found that professional development in inclusive education improves teachers' knowledge and skills. It also aligns with Odo *et al.* [21], who found that higher academic qualifications were associated with stronger teacher effectiveness in inclusive settings. However, international evidence on professional development must be applied carefully to Calabar. Training alone will not improve planning if teachers return to overcrowded classrooms, lack adapted materials, and receive no time for collaboration. Qualification improves capacity, but institutional conditions determine whether that capacity can be used.

Again, in both Calabar and internationally, studies have shown that professional development and experience are key to enhancing educators' and psychologists' capabilities to design and implement effective interventions. A study by Odo *et al.* (2021) found that teachers with specialized qualifications were more confident and effective in adapting instructional materials for students with intellectual disabilities.

The practical implication is that teacher training should become more targeted. Short general workshops on inclusion are not enough. Teachers need practical modules on interpreting diagnostic reports, writing measurable IEP goals, adapting curriculum for learners with intellectual disability, documenting progress, communicating with parents, and using low-cost instructional materials. Schools and education authorities in Cross River State should also encourage mentoring arrangements in which teachers with stronger special education preparation support less experienced colleagues.

Years of Experience and the Effectiveness of School Psychologists

The fourth hypothesis showed that years of professional experience significantly influenced school psychologists' effectiveness in post-diagnostic educational planning. Psychologists with more than 10 years of experience performed significantly better than those with fewer years. This finding corrects the null statement by showing that experience does, in fact, matter. The result suggests that professional effectiveness in post-diagnostic planning grows through repeated exposure to assessment interpretation, teacher consultation, parent communication, behavioral issues, and school-based problem solving.

This result can be explained by the nature of psychological work in schools. A newly qualified psychologist may possess technical knowledge of assessment, but experienced psychologists often learn to write reports useful to teachers, explain findings in ordinary educational language, recommend interventions that match available resources, and negotiate school routines. In Calabar Metropolis, this practical knowledge is especially important because psychologists may work with schools that have limited materials, no fully developed IEP system, and varying levels of teacher readiness for inclusion. Experience, therefore, helps psychologists convert assessment findings into recommendations that schools can realistically implement.

The finding supports Truscott *et al.* [24] and Hosp and Reschly [25], who linked experience with stronger competence in assessment interpretation, consultation, and intervention planning. It also agrees with Nigerian evidence that experience improves psychologists' confidence and problem-solving in inclusive education [20, 21]. A critical reading, however, is needed. Experience improves practice when professionals continue to learn and reflect. Years of service alone may also reproduce outdated routines if there is no supervision, peer review, or continuing professional development. Therefore, the advantage seen among more experienced psychologists should be treated as evidence for structured mentoring, not as a reason to neglect ongoing training. Similarly, the results in Calabar highlight the importance of continuous training and experience in enhancing professionals' ability to support learners effectively. This is echoed in studies from developed countries, which show that teacher preparation programs emphasize specialized training in special education to improve educational outcomes for students with disabilities (Florian & Black Hawkins, 2022).

The practical implication is that school psychology services should use experienced psychologists as mentors for early-career colleagues. Regular case-review meetings should be introduced to allow psychologists to discuss diagnostic interpretations, intervention recommendations, ethical issues, and follow-up challenges. Reports should also be written in a form that teachers can use directly, with clear educational implications, classroom strategies, behavioral supports, and review timelines.

Challenges Affecting Post-Diagnostic Educational Planning

The study found that heavy workload, time constraints, limited resources, and inadequate training were major challenges affecting post-diagnostic educational planning. Heavy workload recorded the highest mean score, followed by time constraint, limited resources, and inadequate training. These findings help explain an important tension in the results. Teachers and psychologists reported high levels of role performance, but they also reported serious barriers that can weaken the quality and consistency of planning. This means that professional willingness may exist, but the working environment does not always support sustained, careful, individualized planning.

In Calabar Metropolis, these challenges are understandable. Urban public schools may enroll

learners with diverse needs while operating with limited specialist personnel, limited teaching aids, and pressure on classroom teachers. A teacher who handles many learners may find it difficult to prepare individualized goals, adapt lessons, document progress, and attend planning meetings. A psychologist serving many schools or learners may complete assessment and recommendation tasks, but struggle to follow up consistently. This may explain why follow-up on intervention implementation recorded the lowest mean among psychologists' role items, even though it still fell into the high category.

The international literature often presents individualized planning as a structured process supported by planning time, administrative routines, documentation systems, and specialist services [22, 23]. The Calabar findings show that such assumptions do not always match the realities of Nigerian schools. When planning time, materials, and specialist access are limited, individualized planning may depend too heavily on teachers' and psychologists' personal effort. This creates the risk that learners with intellectual disabilities will receive plans that are written or discussed, but not consistently implemented, monitored, and revised.

The practical implication is that education authorities and school leaders should treat workload and time as planning resources. Schools should allocate protected time for post-diagnostic meetings, reduce unnecessary administrative tasks for teachers handling learners with intellectual disability, and create resource banks of adapted worksheets, behavior support tools, and progress-monitoring templates. Training should be practical and repeated, not limited to one-off sensitization programs.

Institutional Support and Quality of Post-Diagnostic Planning

The fifth hypothesis showed that institutional support significantly predicted the quality of post-diagnostic educational planning. Institutional support accounted for 28 percent of the variance in planning effectiveness, with a significant beta coefficient of 0.48. This is a strong practical finding because it shows that planning quality does not depend only on individual competence. It depends substantially on whether the school provides administrative backing, resources, time, policy direction, documentation systems, and support for collaboration.

This result is important for the Nigerian context because an inclusive education policy can remain ineffective if schools lack implementation structures. A teacher may have knowledge, and a psychologist may provide recommendations, but planning will remain weak if the school does not create time for meetings, keep learner records, provide teaching materials, support follow-up, or hold staff responsible for reviewing learner progress. In Calabar Metropolis, the predictive role of institutional support suggests that the diagnosis-to-intervention pathway is a school-system issue, not merely an individual professional issue.

Internationally, studies have consistently shown that schools with robust support systems, including resource allocation and professional development opportunities, are more effective in implementing individualized education plans (Salvia & Ysseldyke, 2022). In the Nigerian context, this is even more critical, as institutional support is often underfunded and inadequately structured, leading to inconsistencies in the application of inclusive practices (ActionAid, 2021). The findings from Calabar underscore the need for systemic reform to provide adequate resources and support for teachers and school psychologists.

The finding agrees with Salvia and Ysseldyke [22], who found that clearly defined special education policies and dedicated planning time strengthen IEP development. It also aligns with Florian and Black-Hawkins [23], who emphasized the importance of resource allocation, professional development, and formalized collaborative meeting schedules. However, the Nigerian evidence gives this relationship a sharper practical meaning. In better-resourced international settings, institutional support may refine an already functioning system. In Calabar and comparable Nigerian settings, institutional support may determine whether post-diagnostic planning happens in any consistent form at all.

Generally, the findings indicate that the quality of post-diagnostic educational planning in Calabar Metropolis depends on the connection between human capacity and institutional structure. Teachers and school psychologists both contribute meaningfully, but collaboration determines how well their contributions are joined. Teacher qualifications and psychologist experience improve professional effectiveness, but workload, limited time, inadequate training, and weak resources reduce consistency. Institutional support gives the process the structure it needs. The study therefore shows that diagnosis can only improve the

education of learners with intellectual disability when schools convert it into organized, collaborative, and reviewable educational action.

The findings from Calabar Metropolis contribute to a growing body of evidence that supports the need for a more coordinated, collaborative, and resource-supported approach to post-diagnostic educational planning for learners with intellectual disabilities. While these findings align with global trends, they also highlight specific challenges in the Nigerian context, including inadequate resources, heavy workloads, and insufficient professional preparation. These barriers hinder the effectiveness of even the most well-intentioned professionals, making it essential to advocate for stronger institutional support and policies that can bridge the gap between diagnosis and actionable educational interventions.

Implications for Diagnosis-to-Intervention Pathways

The findings show that diagnosis must not end as a professional label or assessment report. It must lead directly to planned classroom action. Teachers reported high involvement in using diagnostic reports for lesson planning, adapting instruction, participating in IEP development, and monitoring learner progress, while school psychologists reported high involvement in assessment, interpreting results, making intervention recommendations, and participating in IEP meetings. This means that both groups already occupy important positions in the movement from diagnosis to educational support. However, the lower scores for teachers' communication with parents and psychologists' follow-up on implementation suggest that the pathway weakens after the initial planning stage. In practical terms, learners may receive assessment and recommendations, but the sustained review of whether those recommendations work in daily classroom practice may remain insufficient.

The strong positive relationship between teacher-psychologist collaboration and planning effectiveness also shows that the pathway from diagnosis to intervention depends heavily on professional coordination. A diagnosis becomes useful only when psychologists explain its educational meaning, teachers convert it into instructional strategies, and both groups review learner progress together. The correlation coefficient, $r = 0.61$, indicates that collaboration is strongly associated with effective post-diagnostic planning. This implies that schools should establish regular case conferences, joint interpretation

sessions, shared IEP reviews, and structured feedback systems. Without such routines, diagnostic reports may remain technically sound but educationally weak because they do not consistently shape teaching, behavior support, adaptive-skills training, and progress monitoring.

The results further imply that diagnosis-to-intervention pathways should include clear stages. First, the school psychologist should conduct and interpret the assessment in terms that teachers can use. Second, teachers and psychologists should jointly set measurable goals in the areas of academics, behavior, social skills, and adaptive skills. Third, teachers should implement differentiated strategies in the classroom. Fourth, psychologists should support implementation through consultation and follow-up. Fifth, progress should be reviewed at fixed intervals with teachers, psychologists, parents, and school leaders involved. This sequence will help prevent the common problem in inclusive education where learners receive a diagnosis but do not receive a coherent educational response.

Implications for School Practices

For school practices, the findings indicate that inclusive education requires more than goodwill from teachers and psychologists. It requires organized routines, time allocation, professional support, and school-level accountability. Although both teachers and school psychologists demonstrated high role performance, the study also identified major challenges, including heavy workload, time constraints, limited resources, and inadequate training. Heavy workload had the highest challenge score, followed by time constraint and limited resources. This suggests that staff may be willing to support learners with intellectual disabilities, but the school system may not provide them with enough time, materials, or personnel to do the work properly.

Schools should therefore treat post-diagnostic planning as part of normal school administration, not as an occasional activity done only when a serious problem arises. Head teachers and principals should provide scheduled planning time for teachers and psychologists to discuss learners with intellectual disabilities. They should also reduce unnecessary administrative burdens on teachers who handle learners with higher support needs. Where schools have limited psychologists, they should create a referral and consultation timetable so that

psychological support reaches classroom teachers regularly, rather than only during initial assessment.

The finding that professional qualification significantly influenced teachers' effectiveness also has direct implications for staff development. Teachers with postgraduate qualifications performed significantly better than those with NCE and Bachelor's qualifications. This does not mean that only postgraduate teachers can support learners with intellectual disabilities. It means that advanced preparation gives teachers stronger competence in interpreting assessment information, adapting curriculum, writing measurable goals, and monitoring progress. Schools should therefore organize continuous training in IEP development, differentiated instruction, functional curriculum planning, behavior support, and parent communication.

The finding that years of experience significantly influenced psychologists' effectiveness also shows that schools should not assign psychological service providers only to testing duties. Experienced psychologists bring practical judgment to assessment interpretation, consultation, and intervention planning. Schools should use them as mentors for less experienced staff, facilitators of case review meetings, and trainers for teachers. Since psychologists' follow-up on intervention implementation had the lowest score among their role items, school practice should deliberately strengthen monitoring. A practical approach would be to require brief monthly progress reviews for learners with intellectual disabilities, especially after a new intervention plan has been introduced.

Parent engagement also needs attention. Teachers scored lowest on communication with parents, although the score was still high. This implies that family collaboration exists, but may not be strong enough. For learners with intellectual disability, parents can provide important information about adaptive functioning, behavior at home, communication habits, self-care skills, and social adjustment. Schools should therefore invite parents into IEP meetings, send simplified progress updates, and create home-school support plans. This will help ensure that interventions do not remain limited to classroom activities but also support the learner's wider development.

Implications for Educational Policy

At the policy level, the findings show that inclusive education policy should move from broad commitment

to practical implementation standards. The result that institutional support significantly predicted the quality of post-diagnostic planning is especially important. Institutional support had a significant predictive effect ($\beta = 0.48$) and explained 28 percent of the variance in planning effectiveness. This means that the quality of post-diagnostic planning does not depend only on individual teachers and psychologists. It also depends on whether schools receive administrative backing, resources, planning time, and structured procedures.

Educational policy should therefore require every school that enrolls learners with intellectual disabilities to operate a formal post-diagnostic planning system. Such a system should include assessment interpretation, IEP development, intervention implementation, progress monitoring, parent participation, and periodic review. Policy should also specify who does what. Teachers should be responsible for classroom implementation, instructional adaptation, and progress records. School psychologists should be responsible for assessment interpretation, intervention recommendations, consultation, and support for review. School leaders should provide time, resources, supervision, and reporting structures.

The findings also support the need for a stronger workforce policy. Heavy workload and limited time were major barriers, suggesting that inclusive education cannot succeed without sufficiently trained personnel. Government and education authorities should recruit more school psychologists, special educators, counselors, and support staff. They should also establish manageable teacher-to-learner ratios in classrooms that include learners with intellectual disabilities. Without such staffing policies, teachers and psychologists may continue to report high commitment while still struggling to provide sustained individualized support.

Policy should also make professional development compulsory and continuous. Since teachers' qualifications and psychologists' experience significantly influence effectiveness, education authorities should provide funded training in special needs education, psychoeducational assessment interpretation, IEP writing, inclusive pedagogy, assistive technology, behavioral intervention, and family collaboration. This training should not be limited to one-off workshops. It should include follow-up mentoring, school-based supervision, and practical assessment of whether teachers and psychologists can apply what they have learned.

Finally, the findings call for stronger monitoring and accountability. Education authorities should not only ask whether schools admit learners with intellectual disabilities. They should also check whether those learners have individualized plans, whether the plans are reviewed, whether parents are involved, whether teachers receive support, and whether interventions lead to measurable progress. This will shift policy attention from access alone to meaningful educational support. In this sense, the study shows that inclusive education policy in Calabar and similar Nigerian settings should focus more directly on the full pathway from diagnosis to intervention, from intervention to review, and from review to improved learner outcomes.

CONCLUSION

This study examined the roles of teachers and school psychologists in post-diagnostic educational planning for learners with intellectual disability in Calabar Metropolis, Cross River State, Nigeria. The study specifically investigated role performance, collaboration, professional qualification, years of experience, and institutional support as determinants of planning effectiveness.

The findings revealed that although there was no significant difference in the roles performed by teachers and school psychologists, collaboration between the two significantly enhanced the effectiveness of post-diagnostic educational planning. This indicates that effective planning is not dependent on isolated professional efforts but rather on coordinated interdisciplinary engagement.

The study further established that professional qualification significantly influenced teachers' effectiveness, with postgraduate-trained teachers demonstrating greater competence in post-diagnostic planning. Similarly, years of professional experience significantly enhanced school psychologists' effectiveness, particularly among those with more than ten years of practice. These findings suggest that both academic preparation and practical exposure contribute substantially to professional competence.

Moreover, institutional support emerged as a significant predictor of planning quality, accounting for a notable proportion of variance in effectiveness. This underscores the importance of structured administrative backing, availability of resources, and formal collaborative mechanisms in ensuring that diagnostic findings are translated into meaningful educational interventions.

LIMITATIONS OF THE STUDY

This study has some limitations that should guide the interpretation of its findings. The study adopted a descriptive survey design, which relied mainly on self-reported responses from teachers, school psychologists, or psychological service providers. As a result, the findings reflect what the respondents perceived, remembered, and reported about their professional roles and practices. Such responses may be affected by social desirability bias, personal interpretation, or the desire to present school practices in a favorable manner. For this reason, the actual practice of post-diagnostic educational planning may differ in some respects from the practices reported by the respondents.

The study also covered only public schools in Calabar Metropolis, Cross River State. This geographical and institutional focus helped to make the study manageable, but it limits the extent to which the findings can be applied to other educational settings. Private schools, rural schools, and schools in other parts of Nigeria may operate under different conditions. They may also differ in staffing patterns, resource availability, administrative support, access to psychological services, and implementation of educational policies. Therefore, the findings should be interpreted mainly in relation to public schools in Calabar Metropolis.

Another limitation concerns the range of participants included in the study. The research focused on teachers, school psychologists, and other psychological service providers because of their direct professional involvement in post-diagnostic educational planning. However, it did not include parents, school administrators, special educators, policymakers, or learners with special educational needs. These groups could have offered valuable perspectives on the diagnosis-to-intervention process, particularly regarding decision-making, home support, school leadership, policy direction, and the practical challenges that affect intervention planning.

The study examined key factors, including professional role performance, multidisciplinary collaboration, and institutional support. However, other factors that may influence post-diagnostic educational planning were outside the coverage of the research. These may include cultural beliefs about disability, funding arrangements, policy enforcement, school leadership style, parental cooperation, workload

pressure, and the availability of specialized learning materials. Excluding these factors means the study does not account for all conditions that may shape post-diagnostic planning practices.

The sample of school psychologists or psychological service providers was also smaller than that of teachers. Although the number of psychological service providers was adequate for the statistical procedures used in the study, the smaller subgroup may reduce the depth of comparison between the two professional groups. This limitation should be considered when interpreting differences in role performance, collaboration, and institutional support between teachers and psychological service providers.

The use of a structured questionnaire also limited the type of data collected. Questionnaires allow researchers to gather data from many respondents in an organized and efficient way, but they do not always capture the detailed nature of professional practice. Interviews, classroom observations, document review, or case studies could have provided richer insights into how teachers and psychological service providers actually interpret assessment results, collaborate, prepare intervention plans, and monitor learners after diagnosis.

Finally, the study used a cross-sectional design, meaning that data were collected at a single point in time. This approach does not show how professional practices, institutional support, collaboration patterns, or policy implementation may change over time. For this reason, the findings should not be read as evidence of long-term trends. Future studies could address these limitations by using mixed-method research designs, covering a wider geographical area, including private and rural schools, and involving a broader range of stakeholders in the diagnosis-to-intervention process.

Further Research Direction

Based on the limitations of this study and the findings, the following suggestions are made for further research: Firstly, future studies should adopt a mixed-methods approach by combining quantitative and qualitative methods, such as interviews, focus group discussions, and classroom observations. This will provide deeper insights into how teachers and school psychologists actually implement post-diagnostic educational planning in real classroom settings, beyond self-reported data.

Secondly, similar studies should be conducted in private schools and other states in Nigeria to allow for broader generalization and comparison. This will help to determine whether the patterns observed in Calabar Metropolis are consistent across different educational contexts or influenced by regional and institutional differences. Thirdly, future research should include a broader range of stakeholders, including parents, school administrators, special educators, and policymakers. Including these groups will provide a more comprehensive understanding of the diagnosis-to-intervention pathway and the factors influencing effective post-diagnostic planning.

Additionally, longitudinal studies are recommended to examine how post-diagnostic educational planning evolves over time. Such studies would help to assess the long-term impact of collaboration, institutional support, and professional development on learners' outcomes. Further research should also explore the effectiveness of specific intervention strategies used in post-diagnostic planning for learners with intellectual disabilities. This will help identify best practices that can be adopted across schools.

Moreover, studies could investigate the impact of training programs and professional development initiatives on teachers' and school psychologists' competence in inclusive education. Experimental or quasi-experimental designs could be used to assess the effectiveness of such programs. Finally, future research should examine the role of policy implementation and funding mechanisms in supporting inclusive education. This will provide evidence on how policy frameworks can be strengthened to improve the diagnosis-to-intervention process.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

1. Schools should institutionalize structured collaborative mechanisms such as Regular interdisciplinary case conferences, Joint IEP development meetings, and scheduled consultation sessions. Collaboration should be formally integrated into school timetables rather than treated as optional.
2. Educational authorities should encourage teachers to pursue postgraduate training in special and inclusive education, provide

incentives such as scholarships and study leave, organize continuous professional development workshops on post-diagnostic planning, and advance professional preparation to improve competence in translating diagnostic data into effective instructional strategies.

3. Mentorship programs should be established to pair experienced psychologists with less experienced colleagues. This will accelerate skill acquisition in assessment interpretation, intervention design, and collaborative consultation.

4. The Ministry of Education should develop clear guidelines for post-diagnostic educational planning, monitor compliance with inclusive education policies, and ensure that schools meet minimum standards for professional and institutional support.

CONFLICTING INTERESTS

The authors hereby declare that there is absolutely no conflicting interest. The publishers can proceed with the publication of the paper.

APPENDIX A

Questionnaire

Teachers’ and School Psychologists’ Roles in Post-Diagnostic Educational Planning for Learners with Intellectual Disability Questionnaire (Tsprpeplidq)

Instructions

Dear Respondent,

This questionnaire is designed to collect information on the roles of teachers and school psychologists in post-diagnostic educational planning for learners with intellectual disability. Kindly respond honestly to all items. Your responses will be treated with strict confidentiality and used strictly for academic purposes.

Please tick () the option that best represents your opinion.

SA = Strongly Agree | A = Agree | D = Disagree | SD = Strongly Disagree.

Section A: Demographic Information

1. Professional Role: Teacher , School Psychologist/Service Provider
2. Gender: Male , Female
3. Years of Experience: 1–5 years 6–10 years 10 years above
4. Highest Educational Qualification: NCE B.Ed/B.Sc Post graduate

S/NO	Section B: Teachers’ Role Performance in Post-Diagnostic Educational Planning. Teachers play the following roles in post-diagnostic educational planning;	SA	A	D	SD
1	Use diagnostic reports for lesson planning				
2	Adapt instructional strategies				
3	Participate in IEP development				
4	Monitor learner progress				
5	Communicate with parents				
	Section C: School Psychologists’ Role Performance. School psychologists play the following roles;				
6	Conduct psychoeducational assessment				
7	Interpret assessment results to teachers				

8	Participate in IEP meetings				
9	Provide intervention recommendations				
10	Follow-up on intervention implementation				
	Section D: Collaboration Between Teachers and School Psychologists				
11	Teachers and school psychologists regularly communicate about learners' progress				
12	Joint planning meetings are held for learners with intellectual disability				
13	Teachers and psychologists share responsibility for intervention planning.				
14	There is effective teamwork in implementing educational plans.				
15	Feedback from psychologists is used to improve classroom practices.				
	SECTION E: Challenges Affecting Effective Post-Diagnostic Educational Planning. The following challenges affecting educational planning;				
16	Heavy workload				
17	Limited resources				
18	Inadequate training				
19	Time constraint				
	SECTION D: Collaboration Between Professionals				
20	Teachers and school psychologists regularly communicate about learners.				
21	Joint planning meetings are held for learners with intellectual disability				
22	Teachers and psychologists share responsibility for intervention planning				
23	There is effective teamwork in implementing educational plans				
24	Feedback from psychologists is used to improve teaching practices.				
	SECTION F: Institutional Support				
25	The school provides adequate resources for learners with ID				
26	The school provides training on inclusive education				
27	There are enough specialists to support learners with ID				
28	School administration supports individualized planning				
29	Policies guiding special education are effectively implemented				
	SECTION G: Effective Post-Diagnostic Educational Planning.				
30	Educational plans are tailored to learners' individual needs				
31	Learning goals for learners with ID are clearly defined				
32	Appropriate instructional strategies are used consistently				
33	Progress of learners is regularly monitored and evaluated				
34	Support services are effectively integrated into teaching				
35	Behavioural interventions are properly implemented				
36	Collaboration improves the effectiveness of educational planning				
37	Educational plans are regularly reviewed and updated				
38	Learners show improvement in academic and adaptive skills				
39	Post-diagnostic planning meets learners' educational needs				

REFERENCES

- [1] Federal Republic of Nigeria Official Gazette. Discrimination against Persons with Disabilities (Prohibition) Act, 2018. Nigeria: Federal Republic of Nigeria Official Gazette 2019.
- [2] Peter J, Praise DE, Olanrewaju BM, Olanrewaju YG, Bamidele FM. Bridging policy and practice: Evaluating inclusive education for children with disabilities in Nasarawa State, Nigeria. *Afr Educ Res J* 2025; 13(3): 352-61.
- [3] American Association on Intellectual and Developmental Disabilities (AAIDD). Defining Criteria for Intellectual Disability. Washington (DC): AAIDD 2026.
- [4] Oyeyinka O, Samson A, Oyeyinka OO, Samson OA. Teachers' knowledge, perception and attitude towards the implementation of individualized educational plan in building an inclusive culture in Nigeria. *Int J Child Dev Disord* 2024; 5(1): 6-12.
- [5] Friend M, Cook L. *Interactions: Collaboration skills for school professionals*. 8th ed. London: Pearson 2017.
- [6] Donath JL, Lüke T, Götz T. Does professional development support inclusive education? *Educ Psychol Rev* 2023.
- [7] Carvalho M, Cunha RS, Azevedo H, Cruz J, Alves D, Martins C, *et al.* School psychologists' training to support inclusive education. *Sch Psychol Int* 2024; 45(6): 593-615. <https://doi.org/10.1177/01430343241236487>
- [8] Truscott SD, *et al.* School psychologists' roles in consultation and intervention 2018. (Note for Author: Check this reference again and if the reference is correct complete the author name(s). *et al.* must be after six author name if the authors are more than six).
- [9] Odo, *et al.* Interprofessional collaboration in inclusive education in Nigeria 2022. (Note for Author: Check this reference again and if the reference is correct complete the author name(s). *et al.* must be after six author name if the authors are more than six).
- [10] Helene H, Elisabeth H, Christian B. Characteristics of interprofessional collaboration between educational psychological services and schools: A scoping review. *Educ Res Rev* 2025; 48: 100707. <https://doi.org/10.1016/j.edurev.2025.100707>
- [11] Ugboha C, Nwokocha I, Abdullahi A. Psychology in inclusive education: Issues and challenges in Nigeria 2019.
- [12] ActionAid, Education International, Light for the World. The bedrock of inclusion: Why investing in the education workforce is critical to the delivery of SDG4 (Nigeria report) 2021.
- [13] Samia P, Oyieke K, Kigen B, Wamithi S. Education for children and adolescents living with disabilities in sub-Saharan Africa: The gaps and opportunities. *Front Public Health* 2022; 10: 979351. <https://doi.org/10.3389/fpubh.2022.979351>
- [14] Honess A, Gorman IN, VanVoorhis R, Fayette R, Williams H. Provision of inclusive education and the role of school psychologists across national boundaries: Existing facilitators and barriers and possible ways forward. In: Hatzichristou C, Nastasi BK, Jimerson SR, editors. *Handbook of School Psychology in the Global Context*. Cham: Springer 2024. https://doi.org/10.1007/978-3-031-69541-4_7
- [15] Sango PN, Deveau R. A scoping review of empirical literature on people with intellectual disability in Nigeria. *Disabilities* 2022; 2(3): 474-87. <https://doi.org/10.3390/disabilities2030034>
- [16] Bronfenbrenner U. *The ecology of human development: Experiments by nature and design*. Cambridge (MA): Harvard University Press; 1979. <https://doi.org/10.4159/9780674028845>
- [17] Henderson M, Phillips MT, Boud P, Dawson, Mahoney B. Conditions that enable effective feedback. *High Educ Res Dev* 2019; 38(7): 1401-16. <https://doi.org/10.1080/07294360.2019.1657807>
- [18] Friend M, Cook L. *Interactions: Collaboration skills for school professionals*. 8th ed. London: Pearson 2017.
- [19] Hallahan DP, Kauffman JM, Pullen PC. *Exceptional learners: An introduction to special education*. 14th ed. London: Pearson 2019. <https://doi.org/10.1093/acrefore/9780190264093.013.926>
- [20] Ugboha GO, Nwokocha J, Abdullahi HM. The place of psychology in inclusive education in Nigeria: Issues and challenges. *Rima Int J Educ* 2022; 1(2): 101-12. <https://doi.org/10.52291/ijse.2021.36.1>
- [21] Odo VO, Onah EN, Ujoatuonu IV, Okafor AE, Chukwu AN, Nwufu JI, *et al.* Attitude of primary school teachers towards inclusive education in Nigeria: Contributions of personality and work experience. *Int J Spec Educ* 2021; 36(1): 5-12.
- [22] Salvia J, Ysseldyke JE. *Assessment in special and inclusive education*. 12th ed. Boston: Cengage Learning 2017.
- [23] Florian L, Black-Hawkins K. *Exploring inclusive pedagogy*. London: Routledge 2019.
- [24] Truscott DM, Smith K, Johnson L. Professional experience and effectiveness of school psychologists in IEP development. *J Sch Psychol* 2020; 80(2): 45-59.
- [25] Hosp JL, Reschly DJ. *Assessment and intervention in school psychology: Evidence-based approaches*. Cham: Springer 2019.
- [26] Akinwumi AS, Philip AO, Ayorinde AO, Ajah MO, Emmanuel A, Sade OJ, *et al.* Perception and acceptability of regular education teachers towards inclusion of children with intellectual disability in Calabar, Cross River State, Nigeria. *J Intellect Disabil Diagn Treat* 2024; 12(2): 47-55. <https://doi.org/10.6000/2292-2598.2024.12.02.1>
- [27] Hornby G, Kauffman JM. Inclusive education, intellectual disabilities and the demise of full inclusion. *J Intell* 2024; 12(2): 20. <https://doi.org/10.3390/jintelligence12020020>
- [28] Donath JL, Lüke T, Graf E. Does professional development effectively support the implementation of inclusive education? A meta-analysis. *Educ Psychol Rev* 2023; 35: 30. <https://doi.org/10.1007/s10648-023-09752-2>
- [29] Dignath C, Rimm-Kaufman S, van Ewijk R, Kunter M. Teachers' beliefs about inclusive education and insights on what contributes to those beliefs: A meta-analytical study. *Educ Psychol Rev* 2022; 34: 2609-60. <https://doi.org/10.1007/s10648-022-09695-0>
- [30] Lucija B, Marta T, Ida H, Marcus A, Xandee P, Elin J, *et al.* School-based interventions for primary and secondary school students with intellectual disability: A scoping review. *Int J Educ Res* 2026; 137: 102960. <https://doi.org/10.1016/j.ijer.2026.102960>
- [31] Carvalho L, Martinez-Maldonado R, Tsai YS, Markauskaite L, De Laat M. How can we design for learning in an AI world? *Comput Educ Artif Intell* 2024; 6: 100187.
- [32] Marisa C, Rosário S, Helena A, Joana C, Diana A, Cristina M, *et al.* School psychologists' training to support inclusive education in Portugal: Trainers' perspectives of opportunities, challenges, and improvements. *Sch Psychol Int* 2024; 45(6): 593-615. <https://doi.org/10.1177/01430343241236487>
- [33] Samia S, Oyieke J, Kigen E, Wamithi G. Inclusive education in sub-Saharan Africa 2022.
- [34] Shurr J, Minuk A, Holmqvist M, Östlund D, Ghaith N, Reed B. Parent perspectives on inclusive education for students with intellectual disability: A scoping review of the literature. *Int J Dev Disabil* 2021; 69(5): 633-43. <https://doi.org/10.1080/20473869.2021.2003612>
- [35] James P, Esor PD, Olanrewaju BM, Olanrewaju YG, Bamidele FM. Bridging policy and practice: Evaluating

- inclusive education for children with disabilities in Nasarawa State, Nigeria. *Afr Educ Res J* 2025; 13(3): 352-61.
- [36] Creswell JW, Creswell JD. *Research design: Qualitative, quantitative, and mixed methods approach*. 5th ed. Thousand Oaks (CA): Sage Publications 2018. <https://doi.org/10.4324/9781315456539>
- [37] Fraenkel JR, Wallen NE, Hyun HH. *How to design and evaluate research in education*. 10th ed. New York: McGraw-Hill 2019.
- [38] Cohen L, Manion L, Morrison K. *Research methods in education*. 8th ed. London: Routledge 2018.
- [39] Cross River State Ministry of Education. *Statistical records of teachers and psychological service providers in public schools in Calabar Metropolis*. Calabar: Government Press 2025.
- [40] Cohen J. A power primer. *Psychol Bull.* 1992; 112(1): 155-59. <https://doi.org/10.1037/0033-2909.112.1.155>
- [41] Patton MQ. *Qualitative research & evaluation methods*. 4th ed. Thousand Oaks (CA): Sage Publications 2015.
- [42] Cronbach LJ. Coefficient alpha and the internal structure of tests. *Psychometrika.* 1951; 16(3): 297-334. <https://doi.org/10.1007/BF02310555>
- [43] Nunnally JC, Bernstein IH. *Psychometric theory*. 3rd ed. New York: McGraw-Hill; 1994.
- [44] Field A. *Discovering statistics using IBM SPSS statistics*. 5th ed. Thousand Oaks (CA): Sage Publications 2018.
- [45] Pallant J. *SPSS survival manual*. 7th ed. New York: McGraw-Hill Education 2020. <https://doi.org/10.4324/9781003117452>