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Understanding teachers' perception and management of stuttering in early childhood education

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Abstract ;

Despite the apparent challenges of stuttering, notably articulation deficiency and difficulties in lexical retrieval and conversation flow, there has been limited scholarly attention on how it is perceived and managed by teachers in the Nigerian context. Therefore, using a descriptive quantitative research design and multistage sampling techniques, 73 teachers from 9 purposively selected primary schools in Osun State, Nigeria, were randomly sampled for this study. A significant majority of the teachers (68.4%) do not see stuttering as a significant barrier to learning. However, 23.4% expressed an opposing view, suggesting that stuttering constitutes a barrier to learning to some extent. Additionally, 35.8% of the respondents admitted that engaging with students who stutter can be frustrating, 11% believed that children who stutter are less intelligent than their peers, and 10.9% noted that unmanaged cases can significantly affect the emotional well-being and academic achievement of students who stutter. Unfortunately, 53.3% of the respondents rarely or never had access to professional development opportunities related to stuttering management, and 61.6% had never or rarely collaborated with speech-language pathologists or other professionals to support students who stutter. Despite their limitations, respondents used controlled speech, confidence-building activities, and alternative communication methods to support students who stutter. In all, this study contributes to existing research on stuttering awareness and highlights the importance of timely support and effective interdisciplinary measures in managing the condition and its associated effects on early childhood education and, ultimately, the adult life of stutters.

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1. *Introduction*

Stuttering is a sensitive topic in early childhood education, due to its significant impact on children's academic achievement, social interactions, and self-esteem (Randy et al., 2024; Seth, Katelyn & Bridget, 2023). While its exact cause is still unknown, there is a consensus among scholars and stakeholders that it is a language and neurodevelopmental disorder, affecting millions of people globally and roughly 150,000 children and 600,000 adults in Nigeria (Bloodstein & Ratner, 2008; Akintunde, 2005; Yairi & Ambrose, 1992; Miller & Watson, 1992).

It is defined by the International Classification of Diseases (2010) as distortion in the pace of speech, in which the affected person is fully aware of what to say, but is uncontrollably incapable to say it due to an in-voluntary or repetitive lengthening or shortening of a sound. Carolina and Michael (2020) clarified that stuttering is not limited to repetition of sounds and syllables but also includes porous interjections as in "Te-te-t-temitope", "s-mall small" or "ki - - - ck". The interruption in the flow of communication or stopping by the repetition or extension of a word or a sound, and the complications in lexical retrieval associated with stuttering is habitually worsened by psychological, neurological and physiological factors.

On account of the growing consciousness of this disturbing fact and to stem the wave of negative perceptions of stutters, October 22 is set aside as the International Stuttering Awareness Day but despite the global recognition and support for the condition, Nigerian teachers' perception of the reality and their responses to it remain poorly understood. Akintunde (2005), the president of Stuttering Association of Nigeria, reported that stutterers in Africa in general and Nigeria in particular are stereotypically exposed to mockery and derisive statements because of their disfluency, stressing that the implications of this negativity extend beyond the speech or message that they struggle to pass across and has weighty consequence on their social exchanges and education, especially in unreceptive environments where prejudices and myths against stammering thrive.

Notably, he argued further that a considerable number of children affected with stuttering in Nigeria are likely to become chronic stammers later in life except they get speech and language therapy during the pre-school years. This is an essential pointer to the importance of early childhood education in the life of stuttering children and underlines why it is important to understand teachers' perception of the condition and ponder on the efficacy of their responses or draw attention to their unresponsiveness due to the huge implications of their actions and inaction on the social adaptiveness of the affected children later in life. The present study is premised on the above background and is etched on the fact that teachers' understanding of the dynamics and manifestations of stuttering is crucial for creating inclusive classrooms.

Literature review

The definite root of stuttering or speech disfluency remains unknown and

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controversial, but the contributing factors mainly include cognitive abilities, sex of the child, and environmental influences. In addition to this, a study by Prasse and Kikano (2008) reported that more than 80 percent of stuttering cases are classified as developmental problems. From language perspective, Harris (1983) described the condition as a speech impairment characterised by a failure to correctly sequence sounds, syllables, or words at the appropriate time. For clarity, Ashurst and Wasson (2011) observed that people with stuttering have distinct cognitive processing capacities from people without stuttering. The study maintained that adult stutterers reply more slowly than proficient speakers do to progressively difficult cognitive tasks.

In addition to that, Yairi and Ambrose (1999) asserted that individuals who stutter struggle with more than just making fluent speech. Blood and Seider (1981) specifically revealed that 68% of stutterers have deficiencies in their other communication abilities while St. Louis et al. (1992) found that 21.6% of 38,884 children aged 6 to 18 who stuttered had articulation difficulties, although the general population has a lower frequency of articulation impairments. Beitchman et al. (1986) followed in that line of thought and revealed that less than 6% of 5-year-old children who do not stutter had articulation difficulties.

From another perspective, Craig et al., (2002) provided strong evidence that boys are more likely to acquire persistent stuttering and that girls who stutter have a better probability than boys of experiencing natural recovery with or without therapy. Furthermore, Irwin (2006) noted that stress and nervousness are not the primary causes of stuttering, but they have a significant impact on stutterers' lives and cause great anxiety. This view is anchored on environmental influences and is in agreement with Yaruss (2010) who also attested that stuttering comes with difficulty including but not limited to strain communicating in certain contexts, decreased pleasure and low self-confidence. In furtherance of this stance, Bowen (2015) also explicated that stuttering can be more severe or less severe in certain situations, such as on the phone, in public, or in front of a large audience, depending on the individual's level of self-consciousness.

It was on this note that Sheehan (1970) compared stuttering with an iceberg in his findings. The visible part or overt speech disturbances are referred to as being above the surface, whereas the unnoticed stuttering concomitants are said to be below the surface. They have a significant effect on the stutterer and include, among other things, fear, guilt, shame, and negative thinking. The combination of factors known as the "ABC's" of stuttering aids in the explanation of the psychosocial effects of stuttering on an individual, which is important information for the management of the condition. Sheehan argued further that the negative emotional reaction a person who stutters usually experiences in response to the condition is known as the affective, or (A) component. The speech disturbances characteristic of stuttering and the corresponding avoidance and escape actions are indicated by the behavioural (B) component while the Cognitive (C) component consists of unfavourable

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speech-related attitudes, beliefs, or thoughts.

Relative to this, Corcoran and Stewart (1998) discovered through qualitative interviews that suffering is another experience linked to stuttering. Four important components emerged from their study: avoidance, anxiety, shame, and helplessness. According them, persons who stutter also frequently have limitations in their life. The most common domains where these limitations were reported to start in infancy and persist into adulthood were work, education, and self-esteem.

The takeaway from the reviewed works is that while there are therapeutic options for stuttering, but there is no cure yet. Besides, the studies mainly focused on observable stuttering characteristics and curative measures, with no known study exploring the broader issue which is teachers' understanding, perception and response to stuttering, remarkably in the Nigerian context. This is the thesis of this work and the gap that the study attempts to fill.

Materials and method

For this study, a descriptive quantitative design was used. Cohen, Marion, and Morrison (2007) explained that the design is appropriate when the intention of the researcher is to provide an account of the nature of prevailing conditions and phenomena like stuttering. Ikire town, the headquarters of Irewole local government area of Osun State, Nigeria was purposively selected as the study site. The study was limited to the town because scholarly attentions are mostly on other parts of the state and also because the community has a considerable number of primary schools with good numbers of teachers who volunteered to participate in the study and offered their views on the focus of the research. Consequently, quantitative data were collected from 73 primary school teachers. The sampled teachers were drawn from 9 schools across the length and breadth of the town. Self-administered questionnaires were used as the study instrument and this allowed for face-to-face data collection. The teachers' responses are considered significant and of interest in this study because, according to Ridzuan (1991), they know well about any problems among their students. The collated data were sorted and subjected to descriptive statistical analysis to gain insights into the respondents' perception and responses to stuttering in the context of early childhood education.

Demographic information of the participants

13.6% of the total respondents are below 18 years. Those between 18-25 years, are 19.1%. The age bracket 25-30 years, also had 19.1% share. Those within 31-35 years account for 9.5%. 35-40 years, with 17.8% of the respondents, has a significant share of the demographic but those within 40 years and above have the highest representation, comprising 20.9% of the total respondents. These figures provide a clear overview of the age distribution among the respondents, with a total of 67.3% of them within the age bracket 25 and above. In addition, 36.9% of the participants identified as male while the majority, 63.1%, identified as female, highlighting a higher representation of females in the study. Also, 36% of the

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respondents are educated up High School Diploma or Higher National Diploma (HND) level. 45% have attained a Bachelor's Degree. 12% of the respondents hold a Master's Degree, 4% of the respondents, have achieved a Doctorate Degree. The remaining 5% indicated other types of educational qualifications, which may include professional certifications, associate degrees, or other forms of education not classified in the listed categories. This indicates that majority the participants are educated. Furthermore, 17.8% of the respondents have less than one year experience in early childhood education. 36% of have less than three years' experience. 19% have between four- and six-years' experience. 6-9 years and 10 years and above categories are each represented by 13.6% of the respondents. The diversity in years of experience among the respondents highlights a broad range of perspectives and is crucial for getting divergent viewpoints from the participants with mid-level experience as well as the seasoned teachers with extensive experience in early childhood education. Meanwhile, 41.0% of the respondents worked in preschool or kindergarten settings. 14% are special education teachers. 2.7% identified as Speech-Language Pathologists. 8.2% hold administrative positions in early childhood education. 15% are teaching assistants. 19.1% indicated other job roles not specifically listed. The variety of job roles among the respondents reflects a comprehensive range of positions within early childhood education and guarantees unique perspectives and experiences which enriches the overall findings of this study. Surprisingly, only 3% of the respondents indicated that they have received training on children with special needs. The majority, 97%, reported that they have not received any training on working with children with special needs. This highlights a gap in specialized training among a large portion of the study population and suggests a need for increased training and professional development opportunities to better equip educators in meeting the needs of all children.

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Data presentation

Table 1: Responses on the prevailing perceptions and attitudes of educators towards children who stutter in early childhood education settings

S/N	Variables	Strongly Disagree	Dis-agree	Un-decided	Agree	Strongly Agree
1.	Children who stutter are less intelligent than their peers	35.6%	43.8%	9.6%	8.0%	3.0%
2.	Children who stutter will outgrow it naturally	12.3%	31.5%	23.2%	25.0%	8.0%
3.	It is frustrating to communicate with a child who stutters	15.0%	30.1%	19.1%	29.0%	6.8%
4.	I feel comfortable supporting children who stutter in my classroom	10.9%	19.1%	8.2%	41.0%	21.1%
5.	Do you believe stuttering is a barrier to learning	35.6%	32.8%	8.2%	18.0%	5.4%

Table 2: Responses on the strategies employed in the management of stuttering in educational context

S/N	Variables	Never	Rarely	Sometimes	Often	Always
1.	I observe children in my classroom for signs of stuttering	12.3%	23.2%	34.2%	14.0%	16.3%
2.	I feel comfortable discussing stuttering concerns with parent/ guardians	10.9%	26.0%	30.1%	10.9%	22.1%
3	I use specific strategies in my classroom to support children who stutter	10.9%	16.4%	19.1%	16.4%	37.2%
4.	I have access to professional development opportunities related to stuttering in young children	34.2%	19.1%	30.1%	4.1%	12.5%
5.	How often do you collaborate with speech-language pathologist or other professional to support children who stutter	31.5%	30.1%	19.1%	15.0%	4.3%

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Table 3: Responses on the strategies used by educators when working with children who stutter

S/N	Variables	Never	Rare -ly	Sometimes	Often	Always
1.	I slow down my own speech rate when speaking to a child who stutter	5.4%	6.8%	42.4%	15.0 %	30.4%
2	I allow children who stutter have extra time to complete their thoughts before calling on another student	2.7%	8.2%	31.5%	19.1 %	38.5%
3.	I rephrase or paraphrase what a child who stutter is trying to say (only if they seem frustrated)	4.1%	16.4%	28.7%	28.7 %	22.1%
4	I provide opportunities for children who stutter to participate in small group activities	4.1%	12.3%	28.7%	20.5 %	34.4%
5	I address any teasing or bulling behaviour directed towards a child who stutter	10.9%	6.8%	17.8%	20.5 %	44.0%
6.	I create a classroom environment where all students feel comfortable making mistake	10.9%	10.9%	15.0%	12.3 %	50.9%
7	I provide alternatives communication methods (eg pictures, symbols) for children who stutter	10.2%	20.5%	14.5%	14.5 %	40.3%

Discussion of Findings

The above data indicates beyond reasonable doubt that the respondents have varied perceptions of stuttering and its overall impact on early childhood education. A significant majority of them, 68.4% do not see stuttering as a significant barrier to learning. However, 23.4% view stuttering as a barrier to learning. In fact, 35.8% disturbingly admitted that engaging stutters was frustrating while 33% expressed optimism that children who stutters would outgrow it naturally but 43.8% believed otherwise. A fraction of the participants, 11% held the belief that children who stutter are less intelligent than their peers. These findings align with previous research that suggests that while stuttering can have social and emotional impacts, it is often not seen as a direct impediment to learning and academic performance (Brundage, Bothe, & Evans, 2007). It also suggests that a number of individuals within the educational community may not fully recognize the potential academic challenges associated with stuttering. Notwithstanding, the 23.4% of respondents who view stuttering as a barrier to learning and the 11% who held the belief that children who stutter are less intelligent than their peers justify every expressed concern regarding the condition and its impact on educational outcomes. This group's perspective echoes the findings of earlier studies by Blood, et at.

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(2003), which highlighted that stuttering can lead to negative experiences in the classroom, including participation anxiety and avoidance behaviours. Such challenges can, in truth, be frustrating and hinder academic achievement and peer interactions.

The study also considered the strategies commonly employed in the management of stuttering to gain insights into the sampled teachers' responses to the condition. Observing children for signs of stuttering, which the surveyed teachers reported to the tune of 64.5% is crucial as it can lead to timely intervention and effective management. This is known to improve speech outcomes in children who stutter (Yairi & Ambrose, 2013). However, the variability in their responses suggests that some teachers still need to do better and be more alerted to the plight of stutters. The data also echoes findings from prior research that highlights the challenges teachers face in initiating conversations about speech disorders with parents (Boyle et al., 2011). The reluctance of some of the participants to discuss stuttering condition or status with parents and guardians may not be unconnected to emotionl responses by some parents to such a matter and reactions which could be counterproductive (Langevin et al., 2010). Aside this, the fact that a significant proportion of the respondents often or always use specific strategies to support children who stutter is encouraging and is consistent with literature emphasizing the effectiveness of tailored intervention strategies in managing stuttering (Blomgren, 2013).

Regrettably, the data further indicates limited access to professional development opportunities, with 53.3% of respondents never or rarely had access to stuttering related training(s). This is concerning as continuous professional development is crucial for staying updated with the latest evidence-based practices in stuttering intervention (Manning & DiLollo, 2017). More so, limited access to professional development can hinder effective practice and outcomes for children with speech disorders (Brandel & Frome, 2011). In the same view, collaboration with speech-language pathologists (SLPs) or other professionals is infrequent, with 61.6% of respondents rarely or never collaborating in this capacity. This lack of collaboration can impede comprehensive care for children who stutter, as multidisciplinary approaches are known to be more effective (Carolina & Michael, 2020). As a matter of fact, previous studies rightly highlight the benefits of collaborative practices in improving speech outcomes and providing holistic support to children who stutter (Cook & Boteler, 2016).

Furthermore, when asked about their coping strategies and specific measures towards the management of stuttering, the respondents explicitly revealed that they sometimes (42.4%) or always (30.4%) slow down their speech rate when interacting with children who stutter. This fluency shaping therapy or

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controlled speech is a widely recognized strategy for enhanced clarity and it helps create a more supportive communication environment (Guitar, 2014; Onslow, 2003). In addition to this, a substantial proportion of the surveyed teachers always (38.5%) and often (19.1%) allow extra time for children who stutter to complete their thoughts and this also allows them to express themselves without feeling rushed or interrupted (Tichenor & Yaruss, 2019; Yaruss & Reardon-Reeves, 2017).

Rephrasing or paraphrasing what a child who stutters is trying to say, particularly if they seem frustrated, is practiced by respondents sometimes (28.7%) and often (28.7%). This strategy is consistent with the literature that suggests supportive communication techniques, such as rephrasing, can help reduce frustration, encourage children to continue speaking and is essential for building confidence in communication (Manning & DiLollo, 2017). As well, a significant number of the respondents sometimes (28.7%) or always (34.4%) provide opportunities for children who stutter to participate in small group activities, thereby providing a less intimidating environment and more opportunities for meaningful communication (Bloodstein & Bernstein, 2008). Again, this is equally essential for building social skills and reducing the fear of speaking in larger groups, according to Yairi and Seery (2015).

Impressively, some of the surveyed teachers also indicated commitment to addressing negative behaviour against stutters. A substantial percentage of them always (44.0%) and often (23.5%) address teasing or bullying directed towards children who stutter. This measure is said to be essential for creating a safe and supportive learning environment (Lourdes, 2023; Blood & Blood, 2004; Hugh-Jones & Smith, 1999). Apart from the reported strategies, a considerable segment of the respondents always (50.9%) creates a classroom environment where students feel comfortable making mistakes, thereby fostering a positive classroom atmosphere to encourage learning and reduce anxiety and promotes self-confidence (Murphy et al., 2007; Dweck, 2006). Lastly, studies have shown that the use of alternative communication methods can be beneficial for children who stutter (Baxter et al., 2012) but this practice appears less common among the respondents. Only 40.3% of them always provide alternative communication methods, such as pictures or symbols.

Conclusion and recommendations

The study examined some selected teachers' perception and management of stuttering in early childhood education in the Nigerian context, focusing on Ikire, the headquarters of Irewole local government area of Osun State. Data were sourced from 73 teachers drawn from 9 public and private schools spread across the community. While majority of the

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respondents do not perceive stuttering as a significant barrier to learning, the opposing comments and concerns expressed by nearly a quarter of them are serious issues to ponder on. To be precise, 68.4% of the participants do not consider stuttering as a formidable barrier to learning but 23.4% responded otherwise with 35.8% stating further that engaging stutters was frustrating while 11% were of the view that children who stutter are less intelligent than their peers. Even though there were encouraging trends in the use of specific strategies to support children who stutter, significant gaps remain in observation practices, comfort in discussing stuttering concerns with parents, access to professional development, and collaboration with Speech and language pathologists.

Succinctly stated, 64.5% of the surveyed teachers observed their students for possible signs of stuttering to allow for timely intervention and effective management. But this is nothing to rejoice about since 53.3% of the teachers never or rarely had access to stuttering related training(s). In fact, 61.6% of them rarely or never collaborated in this capacity or had the pleasure of working with a speech therapist. To a large extent, the observed deficiency of such collaboration and access to professional development regarding learning differences like stuttering undermines stuttering intervention efforts in the context of early childhood education. By the same token, the study identified a range of supportive strategies and practices employed by the sampled teachers to assist children who stutter in their classrooms. The varied use of techniques such as controlled speech, allowing extra time, rephrasing or paraphrasing, confidence building through in-group participation, addressing bullying and the use of alternative communication methods all reflect a strong commitment to supporting stuttering students. This is impressive and aligns with Yaruss and Reardon-Reeves' (2017) suggestion that effective intervention requires a holistic approach.

In view of the above findings, the study infers that stuttering is a significant issue in early childhood education, impacting children's academic achievement and social interactions. Consequently, it recommends comprehensive training programs for teachers and improved access to resources tailored to educators and parents to bridge the identified gap and ensure that children who stutter receive appropriate support. The highlight of the study is that effective collaboration between teachers, parents and speech and language pathologists is essential for developing and implementing comprehensive stuttering intervention plans (Gerlach & Subramanian, 2016). By understanding and addressing the diverse issues unearthed by this study, more effective and inclusive educational strategies can be developed, ultimately enhancing teachers' capacities (Reitzes & Reitzes, 2012) and learning outcomes for children who stutter.

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Future research should focus on evaluating the identified interventions and management strategies to determine their suitability and where necessary, improve the strategies, to ensure comprehensive support for children who stutter.

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