

An Exploration of Language Developmental Delays in Gaborone Central Private Preschools: The Teacher's Perspective

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Abstract : Early identification of the causes of language developmental delays (LDD) is critical for effective intervention and educational planning. The study aimed to explore teachers' perspectives on the primary causes of LDD among children attending private preschools in Gaborone Central, Botswana. Guided by Bruner's (1976) Social Interactionist Theory, it employed a qualitative research design and a case study approach. The target population for the study was preschool teachers currently employed at Gaborone Central. A sample of twelve teachers was selected from the population through purposive sampling method. Qualitative data was collected through interviews and focus group discussions. Thematic analysis was used to identify patterns of meaning within the data collected.

The findings revealed four major factors associated with language developmental delays: excessive use of electronic devices, limited social interaction, minimal parental engagement, and health-related or developmental disorders. The study underscores the significant influence of environmental and relational factors on early language development, with excessive exposure to digital devices emerging as the most frequently cited cause. The findings further emphasise the need for early screening and diagnostic systems, enhanced parental education, and integrated support mechanisms within Botswana's private early childhood education sector. This study contributes to the growing body of contextually grounded research on LDD in sub-Saharan African private preschool sector.

Keywords : Botswana, early childhood education, Gaborone Central, language developmental delays, parental involvement, preschool learners, preschool teachers, private preschools, social interaction theory.

Résumé : L'identification précoce des causes des retards de développement du langage (RDL) est cruciale pour une intervention efficace et une planification éducative adaptée. Cette étude visait à explorer le point de vue des enseignants sur les principales causes de RDL chez les enfants fréquentant des écoles maternelles privées dans le centre de Gaborone, au Botswana. S'appuyant sur la théorie de l'interactionnisme social de Bruner (1976), l'étude a adopté une méthodologie de recherche qualitative fondée sur l'approche par étude de cas. La population cible était constituée d'enseignants du préscolaire en poste dans le centre de Gaborone. Un échantillon de douze enseignants a été sélectionné par la méthode d'échantillonnage raisonné. Les données qualitatives ont été recueillies au moyen d'entretiens et de discussions de groupe (focus groups). Une analyse thématique a permis d'identifier les schémas de signification au sein des données collectées.

Les résultats ont mis en évidence quatre facteurs majeurs associés aux retards de développement du langage : l'utilisation excessive d'appareils électroniques, des interactions sociales limitées, une implication parentale minimale et des troubles de santé ou du développement. L'étude souligne l'influence significative des facteurs environnementaux et relationnels sur le développement précoce du langage, l'exposition excessive aux appareils numériques apparaissant comme la cause la plus fréquemment citée. Les conclusions insistent également sur la nécessité de mettre en place des systèmes de dépistage et de diagnostic précoces, de renforcer l'éducation des parents et d'instaurer des mécanismes de soutien intégrés au sein du secteur privé de l'éducation de la petite enfance au Botswana. Cette étude enrichit le corpus croissant de recherches ancrées dans le contexte local

concernant les RDL dans le secteur des écoles maternelles privées en Afrique subsaharienne.

Mots-clés : Botswana, éducation de la petite enfance, centre de Gaborone, retards de développement du langage, implication parentale, élèves du préscolaire, enseignants du préscolaire, écoles maternelles privées, théorie de l'interaction sociale.

Introduction

Early language development is a critical process that lays the groundwork for cognitive, social and emotional development. Impacts of language delay or disorder go beyond communication, with profound implications for a child's ability to connect with others, manage emotions, and perform academically (Kumari, 2017; Rice, 2020). Language developmental delays (LDD) is generally defined as a lack of age-appropriate vocabulary, sentence structure or language use skills expected at a child's developmental stage (Paul & Norbury, 2012). When we study LDD, it is important to know what a “typical” child at a particular stage can do, and precisely how many words we would typically expect them to speak and understand in order to ensure that teachers, doctors, speech and language therapists, as well as policy makers are properly informed (Alcock, 2020).

At a global level, the World Health Organization (2022) estimates that at least 15% of children have LDD, with higher rates among those living in low-income families and disadvantaged neighborhoods. In Africa, the challenges of LDD are exacerbated by multilingualism, socio-economic inequality and a lack of access to expert services (Oketch, 2019). In Botswana, it is estimated that at least 15% of 3-6-year-old children are affected by some form of language developmental delays, with private preschools in urban areas becoming a more prominent site for these issues, yet under-researched (UNICEF, 2022; Phirinyane et al., 2022).

Much of the empirical work on LDD etiology uses quantitative approaches that point to statistical associations between causes and LDD but do not shed light on how these causes are perceived and addressed in classroom settings (Creswell & Poth, 2018). Therefore, there is a need for context-specific, qualitative studies on how early childhood teachers perceive, recognize and make sense of the causes of LDD among their learners. While the individual causes explored here are already established in the international literature, there is lack of previous literature on preschool teachers working in Botswana's private, multilingual, urban preschool sector; a setting that differs from the public and rural contexts that dominate existing sub-Saharan African LDD research. This research seeks to fill this gap. Actually, this article is an extract from a larger qualitative case study on LDD and their psychosocial impact in Gaborone Central Private Preschools and it focuses on the first research objective: to determine the causes of language developmental delays in early childhood, according to the perceptions of skilled preschool teachers. In particular, the article is informed by the following sub-objectives:

- i. To explore the role of environmental and social factors in language developmental delays in early childhood;

- ii. To explore the influences of parenting and technology use in language development delays; and
- iii. To examine the effects of health status and developmental issues on LDD among young learners.

1. Problem Statement

While the importance of language developmental delays (LDD) is increasingly acknowledged, as a public health problem, there is limited, contextually-based, qualitative research related to the etiology of LDDs in the private preschool sector in Botswana. This article is informed by Bruner's (1976) Social Interactionist Theory, which holds that language development is a social process, and is influenced by the nature and amount of the interaction between the child and those who know better. Bruner provides a theoretical perspective through which to understand the environmental, social and biological factors contributing to LDDs. Early childhood is a critical period for language acquisition, and early identification of LDD is essential for timely intervention.

While private preschools in Gaborone Central are often perceived to be well-resourced, there is a lack of empirical qualitative data regarding the causes of LDD as well as specific challenges teachers face in identifying and supporting children with LDD. Although in the past statistical links have been established between environmental and biological risk factors and LDD, literature shows that little work has been conducted on the perceptions, detection and responses of preschool teachers to these factors in urban Botswana (Creswell & Poth, 2018). This is a concern as the number of children identified with LDDs in Gaborone Central private preschools is growing while literature shows that this sector is poorly studied and poorly resourced for diagnosis and intervention (UNICEF, 2022; Phirinyane et al., 2022).

The problem is that without understanding the teachers' perspectives on LDD etiology and their level of competency, educational authorities and school administrators cannot effectively address the gaps in early childhood special education. If these frontline experiences remain unexplored, children with LDD in Gaborone Central private preschools risk delayed diagnosis and prolonged academic and social difficulties. This study addresses a distinct gap in the literature by shifting the focus from Western clinical models to the localized, lived experiences of teachers in Botswana's private early childhood education sector.

1.1 Significance of the Study

The study has several significant contributions to the body of knowledge on early childhood education, language development and education policy in Botswana and Sub-Saharan Africa at large. First, it fills an important void in contextually-informed qualitative research by foregrounding the voices of preschool teachers, who are frequently absent from the research literature on language development delays. Second, the study is embedded in private preschools in Gaborone Central, thus offering empirical evidence from an area that is growing and yet under-represented in literature. Third, the findings of this study will have direct practical implications, as knowledge of teachers' perceptions of the causes of LDD

can be used to design interventions that promote teacher training, early identification processes, and family involvement strategies sensitive to the local context. Fourth, this study's use of Bruner's (1976) Social Interactionist Theory in an African multilingual preschool context adds to the debate of the universality of and cultural differences in frameworks of language development. Lastly, the study provides a base for further evidence-based advocacy to justify increased speech-language therapy services, national checklists of screenings, and caregiver education programs in the early childhood education system of Botswana.

2. Literature review

Language acquisition is a complex, multifaceted process, and delays in this developmental trajectory can significantly impact a child's cognitive, social, and academic trajectory. To comprehensively understand the etiology of language developmental delays, it is essential to examine the interplay of various intrinsic and extrinsic factors. This section reviews the relevant literature on the causes of language developmental delays. It begins by outlining the theoretical framework adopted in this study, specifically Bruner's (1976) Social Interactionist Theory, which provides a lens for understanding these multidimensional influences. Thereafter, the review discusses the broader environmental and social causes of language delays, including socioeconomic factors and linguistic environment. Subsequently, it narrows its focus to examine the dual role of parental involvement and the contemporary issue of digital device overuse. Finally, the section concludes by exploring intrinsic health-related causes and specific developmental disorders that manifest in language delays.

2.1. Theoretical Framework: Bruner's Social Interactionist Theory

This study draws on Bruner's (1976) Social Interactionist Theory of language development, which posits that language acquisition is a social endeavor. Far from emerging spontaneously from within, language emerges as a dynamic and scaffolded process between the child and a more knowledgeable other (parents, care givers, teachers and peers). A key part of this theory is that of scaffolding, where adults offer support within the child's zone of proximal development (ZPD) and gradually remove it as the child becomes more proficient (Mimeau et al., 2015).

With regard to this study, Bruner's theory offers an explanatory framework for how deficits in the environment, lack of social interaction, parental support and passive media use, interfere with the scaffolding process in language development. Lacking responsive language interaction, children miss the social means to learn language meanings, structures and functions. Crucially, the theory also highlights the role of context and culture in language development - a critical factor in Botswana's multilingual preschool classrooms (Bruner, 1983).

2.2. Environmental and Social Causes of Language Development Delays

Empirical evidence consistently suggests that social and environmental factors play a key role in LDDs during early childhood stage. Several studies in Sub-Saharan African settings confirm that children growing up in resource-constrained or language-impooverished environments, characterized by a lack of adequate verbal interaction, responsive caregiving, and narrative exposure, face a heightened vulnerability to language development delays (e.g., Alcock et al., 2020; Pascoe et al., 2015; Walker et al., 2011; Githinji et al., 2019; Osuji et al., 2020). These sources vary in the strength of evidence they offer for this specific claim: Githinji et al. (2019) and Osuji et al. (2020) directly evidence environmental risk factors for LDD in African contexts, whereas Alcock et al. (2020) primarily validates a communicative-development assessment tool and Walker et al. (2011) addresses inequality in early childhood development more broadly rather than language delay.

Githinji et al. (2019) in Kenya reported that at least 19.5% of preschool age children had language development delays; with high parental illiteracy, social isolation and poor health being the major correlates. In Nigeria, Osuji et al. (2020) noted that poor family communication and parenting practices were significantly related to delayed receptive and expressive language in early childhood. These results support the theoretical assertion that language development depends on the social environment in which children grow up.

In Botswana, Phirinyane et al. (2022) examined the effects of alcohol exposure on language delays in a sample of 666 mother-child pairs and found that mother's alcohol consumption during pregnancy was associated with language development delays in the early childhood years.

Additionally, Lekoko, Garegae, and Mosothwane (2020) underlined the detrimental effects of linguistic mismatch between the home and preschool environment on language delays, especially for children coming from non-Setswana speaking backgrounds entering Tswana-medium preschools.

2.3. Parental Involvement and Digital Device Overuse

Parental engagement in early language support is well known to be protective against LDDs. Research from Morocco and Rwanda (Benjelloun et al., 2021; Nsabimana, 2019) shows that planned parental involvement, such as interactive reading, storytelling, and child-initiated play, leads to better expressive vocabulary and comprehension of narratives in children. In contrast, low parental involvement, defined as lack of awareness of milestones, denial of a delay or assignment of care to an unresponsive caregiver, has been shown to be strongly associated with language deficits (Osuji et al., 2020).

A growing focus in recent research is on the impact of technology on verbal discourse. Van der Merwe et al. (2019) found that passive media use limits children's participation in reciprocal, interactive conversation, a key factor in language learning. Electronic devices lack the interactive feedback, emotional support and context-sensitive language modelling

that Bruner's theory emphasizes as essential for language development. In Botswana, the trend towards using digital devices as a childcare resource has resulted in lower verbal engagement in early years (Mokgosi, 2021).

2.4. Health-Related Causes and Developmental Disorders

Beyond environmental factors, biological and health-related variables constitute a significant dimension of LDD etiology. Hearing impairments, autism spectrum disorder (ASD), prenatal substance exposure, and chronic illness have all been documented as disrupting the neurological and sensory processes underlying language acquisition (Phirinyane et al., 2022; Van der Merwe et al., 2019). In Botswana, fewer than 20 registered speech-language therapists serve the entire country, the majority of them concentrated in Gaborone and Francistown, severely limiting access to diagnostic and therapeutic services (Botswana Health Professions Council, 2021). What remains absent from the literature, however, is a contextually grounded, qualitative account of how preschool teachers in Gaborone's private sector perceive, identify, and make sense of these causes in their everyday classroom practices. This study seeks to address that gap.

3. Research methodology

3.1. Research Paradigm

This study is anchored in the interpretivist paradigm. Interpretivism posits that reality is subjective and socially constructed, emphasizing the importance of understanding human behavior through the lens of those being studied (Cohen et al., 2018). Given that this research seeks to explore language developmental delays from the perspective of preschool teachers, an interpretivist approach was highly appropriate. It allowed the researchers to delve into the teachers' subjective realities, perceptions, and lived experiences, rather than attempting to measure or quantify these variables objectively.

3.1. Research Design

A qualitative research design was adopted for this study. This method was considered most suitable due to the exploratory nature of the research questions and the study's emphasis on gaining a deep, contextualized understanding of the phenomenon. A qualitative research design is often used to uncover meaning, context and process rather than the means of measurement of variables or the generalization of findings to a larger population (Creswell & Poth, 2018). Unlike quantitative designs that seek to predict causal relationships, the qualitative design facilitated an in-depth exploration of how preschool teachers in Gaborone Central perceive, identify, and experience language developmental delays in their classrooms. This method is consistent with the interpretivist approach in the philosophical paradigm that posits that social realities are created by the subjective experiences and interpretations of people (Yin, 2018).

3.3. The Case Study Approach

Within the broader qualitative research design, a case study approach was utilized. A case

study is an empirical inquiry that investigates a contemporary phenomenon (language developmental delays) within its real-life context (private preschools in Gaborone Central), especially when the boundaries between the phenomenon and context are not entirely evident (Yin, 2018). The “case” was bounded by geographical location (Gaborone Central) and institutional type (private preschools). This approach was advantageous as it allowed for the collection of rich, thick descriptive data, enabling the researchers to capture the complexities of the teachers' daily experiences and the specific contextual factors influencing their perspectives.

3.4. Population and Sampling Strategy

The target population for this study comprised preschool teachers currently working in private preschools within Gaborone Central. To select participants, purposive sampling was employed. This non-probability sampling technique is widely used in qualitative research to identify and select individuals who are particularly knowledgeable about or experienced with the phenomenon of interest (Patton, 2015). Twelve teachers were selected from four private preschools in the Gaborone Central region, which have been given the pseudonyms Kabelo Preschool (KP), Lenao Preschool (LP), Segwapa Preschool (SP) and Ralena'a Preschool (RP). Three teachers were selected to provide representation across the private preschool sector. Inclusion criteria required that participants be fully qualified preschool teachers with a minimum of five years teaching experience, ensuring they had adequate exposure to observe and identify language developmental delays (Palinkas et al., 2019). Participants' teaching experiences span from 4 to 15 years, with more than half having over ten years of experience. They were given pseudonymous codes (e.g., KP-Kag, LP-Tam) to protect their identities. This sample size and geographic scope, while consistent with the depth-oriented aims of a purposive, saturation-focused qualitative case study (Patton, 2015), is relatively small and limits the statistical generalizability of the findings. The results are therefore best understood as analytically transferable to similarly structured private, urban preschool settings, rather than as statistically representative of preschool teachers in Botswana more broadly.

3.5. Data Collection

We used one-on-one semi-structured interviews and focus group discussions (FGDs) for data collection. All the 12 participants took part in individual, semi-structured interviews lasting 30-45 minutes in a private space in the preschools. The interviews were recorded with prior consent and notes were taken for nonverbal gestures and other observations. Two FGDs with four teachers per FGD, each lasting 60 minutes, were also conducted to gain insight into collective experiences and peer reflection (Hughes & Sharrock, 2017). Both instruments were guided by a pre-determined interview guide, developed in accordance with the objectives and research questions of the study. The semi-structured format was chosen because it provides a flexible guide (interview protocol) while allowing the interviewer to probe deeper into participants' responses, clarify ambiguities, and explore unanticipated but relevant themes (Brinkmann & Kvale, 2015).

3.6. Data Analysis

The data collected was thematically analyzed following the six-phase model of Braun and Clarke (2006). It was analyzed in the qualitative data analysis software *ATLAS.ti*. The analysis involved: familiarization with the data through iterative reading of the narrative accounts; inductively coding the data based on participants' responses; searching for themes by grouping related codes; reviewing the themes for coherence and exclusivity; defining and naming the themes; and preparation of the report through narrative writing supported by quotes (Braun & Clarke, 2019). Cross-checking results across interviews and FGDs strengthened the validity of the analysis (Patton, 2015). Transcription utilized an intelligent verbatim strategy to ensure meaning and clarity. Coding was initially conducted manually and subsequently checked in *ATLAS.ti*. To ensure consistency, a second coder independently coded a 20% subsample of the transcripts, and any discrepancies were resolved through discussion until consensus was achieved. Data saturation was reached after the tenth interview, as no new codes or themes were identified in the subsequent transcripts and focus group data. The remaining interviews and two FGDs were kept confirming this point of saturation and capture any divergent perspectives.

3.7. Ethical Considerations

The study adhered strictly to ethical research principles. The data collection process was approved by the University of Botswana and a research permit was issued by the Ministry of Basic Education and Child Welfare. Participation was entirely voluntary, and participants were informed of their right to withdraw from the study at any time without penalty. Informed consent was obtained in writing prior to the interviews. Participants and schools were anonymized by using pseudonyms in all reporting and transcripts. Data was securely stored on password-protected computers accessible only to the researcher and supervisors.

4. Findings, discussion and analysis

Four key themes of language developmental delays among preschool children in Gaborone Central Private Preschools emerged from the interview and focus group discussion data. These are discussed below according to their prevalence, in line with empirical evidence and interpreted in terms of Bruner's (1976) Social Interactionist Theory.

4.1. Over-Reliance on Electronic Devices

The highest reported cause of language delay (6, or 50% of the participants) was the over-reliance of children on electronic devices - such as tablets, smart phones and television - instead of engaging in meaningful verbal communication with others. Educators reported children who were engaged in prolonged screen time came to preschool with minimal conversational skills and restricted language ability. Teacher SP-THA expressed this concern:

The majority of the kids that have a speech problem are always on screens at home. Parents say that it's the only way to get quiet. But, such children come to school without knowing how to have a conversation. They just repeat the dialogues from

cartoons.

This is consistent with Van der Merwe et al. (2019), who found in South Africa that passive media use limits children's opportunities for the "dialogic" language interactions and interactions that are necessary for expressive language development. Digital media do not provide scaffolded feedback, emotional support and context-specific language modelling, identified as key scaffolding mechanisms by Bruner (1976). Teacher RP-KAG agreed:

Parents believe that it is enough to provide their children with learning apps and videos, but it's not sufficient. You still need to talk to the child and for the child to talk to you. Tap-tap is no substitute for talking.

A more serious aspect of the discussion surfaced in the story of LP-BOI about a child who had been interacting so much with digital devices that he did not respond to his name:

He has his own tablet and likes to play games. She thought it was normal. He was used to communicate only through the screen and the child did not answer his name.

This story raises questions about the use of digital devices as parental substitutes, which displaces language interactions that typically occur during conversations, and which are critical for children to develop social and pragmatic language skills. Teacher RP-TSH observed that these children begin preschool with rote-learned content but lack the generative ability to navigate language, socially or creatively - what Bruner (1976) would call failure to internalize language as a means to make meaning.

This finding corroborates Mokgosi (2021), who found over-exposure to digital devices as an emerging risk for language delay among urban families in Botswana. They also emphasize the need for media literacy programs for parents and screen time guidelines in early childhood education policy in this country.

4.2. Lack of Social Interaction

At least five teachers cited lack of social interaction (with siblings, peers and adults) as a major cause for language delays. Such isolation was found in children with few siblings, being raised alone, or adults in their homes engaging in little interaction with the child.

A typical comment by a teacher (KP-LES) who has eight years of teaching experience was:

I have noticed that most of the children that have language delay are mostly the children who don't have siblings and/or spend most of their time playing with their gadgets rather than with other children. There was one boy in my class who doesn't talk and his mother told me that he doesn't have any other siblings and doesn't play with other children much.

This discovery is in line with Bruner's Social Interactionist Theory that suggests language development is social. Children do not learn language simply by being exposed to it, but

through responsive interactions with those who are linguistically more advanced (Bruner, 1976, cited in Mimeau et al., 2015). In the absence of such interaction, the scaffolding needed for language to develop is missing, and language learning is delayed. The wisdom of LP-TAM took this to its logical extension and recognized that children who are early to school and late to leave, and who play alone during their unstructured play time, miss out on important opportunities for incidental language practice with their peers.

SP-GOS gave a particularly sensitive account of a child from a family that had replaced verbal with gestural interaction:

Well, one girl this year would cry when you talk with her. Not because she didn't know, but because she was not used to knowing what to say. Her mother later said that they mostly gesture at home and she watches a lot of TV. She was not used to being directly addressed.

This example describes how verbal neglect (even though unintentional in this case) can suppress the child's speaking self-esteem and a learned fear of talking. The quality of adult-child interactions is as important as the quantity (Bruner, 1976). Githinji et al. (2019) also found that low social engagement in urban preschools is a predictor of slow language development, especially in the expressive domain. The teachers' testimonies confirm that language delays do not necessarily reflect cognitive deficits, but can reflect an absence of relational settings in which language is learned.

4.3. Inadequate Parental Involvement

At least four participants pointed to lack of parental engagement as a cause of language delays, noting how parents are unaware, in denial, over-dependent on domestic workers, and not carrying out recommended treatments. Teacher LP-TAM observed:

Typically, when we invite parents for a language meeting, they are taken aback or defensive. 'I have a child who talks to me at home,' they say, but the child is usually talking only at home, not at school. More parents don't understand speaking to a child doesn't mean simply speaking at them, but speaking with them.

This quote illustrates the misconception of many parents that talking to their child is the same as stimulating their language. Bruner's analysis highlights the difference between directive (commanding) and dialogic (turn taking, expanding, questioning and responsive) language. It is the latter that is true language scaffolding.

LP-BOI highlighted how denial has negative effects on the timing of early intervention:

Parents often put up resistance. They think that when we start asking questions about 'why hasn't your child spoken by a year?' that we think they're to blame. I had one child in my class who could not even speak three words but the mother would continue to argue he's a shy child; he will be ok. And it cost us nearly a year.

This is especially problematic during the neurological sensitive period of early childhood. Similarly, Osuji et al. (2020) found that in Nigeria, denial and poor awareness of milestones

were barriers to early detection of LDDs. LP-DIN also identified families who employed child-care workers who offered little verbal interaction, supporting the finding from Githinji et al. (2019) that parent literacy and responsiveness are key mediating factors in language development. Similarly, SP-ONT observed that while schools offered strategies for parents to support language development, parents did not follow through with them. This suggests that to translate knowledge into action, parents need support from school staff, such as workshops and channels to sustain communication.

4.3. Medical Issues and Developmental Disorders

At least three participants identified the influence of health-related issues in causing language development delays, including hearing impairment, autism spectrum disorder (ASD) and chronic illness. These narratives were interesting for the way they highlighted the diagnostic delays further complicating the child's development.

Teacher RP-GOI described a child who had initially been mistaken for being noncompliant due to a hearing impairment:

I have a child who didn't respond to his name. I thought he was being naughty, but after a couple of months his parents actually proved that he had hearing problems. Obviously, he wasn't speaking, he just couldn't hear.

This example highlights a potential problem in diagnosis: in the absence of regular audiological screening, hearing loss can remain undiagnosed in preschool, compounding potential language delays. SP-GOS spoke of a child with ASD, detailing the difficulties posed by a learner whose social communicative behavior did not correspond to social norms. KP-LES described a child with a developmental co-ordination disorder (speech) that was initially misidentified as shyness, and whose speech therapy was delayed by over a year because the parents were reluctant to have their child assessed.

LP-TAM described another aspect: the role of chronic illness and medication on language participation:

Another boy was absent from school a lot of the time and had recurrent seizures. He was sleepy because of his medication, so he couldn't join in class. He definitely had language delays.

These findings echo Phirinyane et al.'s (2022) report of a strong link between language delays and prenatal alcohol exposure in Botswana, and the wider research that stresses the physical health - cognitive-linguistic development nexus. More importantly, they also point to the factors (stigma, lack of specialists, parental denial, and families' financial challenges), that contribute to a delay in diagnosis and intervention for children with health-related LDDs in the urban private preschool sector in Botswana.

4.4. Summary of Research Findings

Table 1 shows a summary of causes reported by participants and the number of times they were mentioned.

Table 1: Summary of the Causes of LDD in Early Childhood as Perceived by Preschool Teachers in Gaborone Central, Botswana

Causes of Language Development Delay	Frequency (N)
Over-Reliance on Electronic Devices	6
Lack of Social Interaction	5
Inadequate Parental Involvement	4
Health-Related Issues and Developmental Disorders	3

Source: Interview and Focus Group Discussion Data (2024)

Note: The frequencies in Table 1 do not sum up to 100% because each participant could identify more than one cause of language developmental delay. They reflect the proportion of the 12 participants who cited each cause, not mutually exclusive categories. This multiple-response format is intentional and consistent with the qualitative research design, which sought to capture the full range of causes perceived by teachers rather than rank a single dominant cause per participant.

The findings show that environmental and relational factors are the most common causes of LDD from the viewpoint of teachers, with excessive use of digital devices being the most commonly mentioned. This is an important finding as it implies that language delays in the private preschool sector in Gaborone are potentially avoidable through early intervention at home. At the same time, the fact that health-related factors are also present, albeit at lower levels, suggests the need for developmental screening that can help to distinguish between socially-induced delays and those related to neurological or biological factors.

5. Discussion and analysis

The results of this study are generally in line with empirical research on the causes of LDD, but also offer context-specific insights from the private preschool sector in Botswana. The dominance of environmental and social factors contributing to LDD confirms Bruner's (1976) assertion about the social nature of language acquisition. Each of the four causes to wit: overuse of digital devices, lack of social interaction, lack of parental involvement and medical factors - impairs the quality or quantity of responsive verbal interaction that underpins language development. This refutes deficit narratives that individualize the problem to the child, instead of emphasizing relational and systemic factors that limit opportunities for language-rich interactions.

Over-reliance on electronic devices as the most commonly reported cause of LDD is a recent

shift in urban childcare practices in Botswana. The rise of childcare devices such as tablets and smartphones results in increasing passive media consumption at the cost of active language interactions. This adds to the existing literature (Van der Merwe et al., 2019; Mokgosi, 2021) by incorporating the perspectives of practitioners. However, it is not a relationship to be understood as merely causal. The teachers' reports are based on correlation and lived experience, not measured screen-time exposure, and the direction of influence could be bidirectional: children who are already struggling to communicate might be handed a device more readily by carers trying to manage frustration, making heavy device use as much a result of early language difficulty as a cause of it. The data clearly supported the mechanism associated with screen-based engagement is fundamentally non-dialogic, offering no turn-taking, contingent response, or joint attention, and it is this absence of reciprocal exchange, rather than screen exposure in itself, that undermines the scaffolding Bruner's theory identifies as essential. The issue is more about what digital devices replace in a child's daily routine than the devices themselves.

The findings are contextualised within Botswana and socio-cultural environment, an aspect that the interviews addressed only indirectly. Many of the children described by teachers are growing up navigating Setswana, English, and in some households a third home or heritage language, often before formal schooling begins. In this study teachers tend to frame code-switching and mixed language output as a system of delay. However, the international literature on bilingual and multilingual acquisition warns against this view: children raised in multilingual environments frequently exhibit slower vocabulary growth in individual languages, while their overall linguistic development adheres to a standard timeline (Van der Merwe et al., 2019). In the absence of teacher training focused on multilingual development, ordinary features of learning several languages at once risk being misread as language delay, which could partly explain why environmental and social causes were reported so much more frequently than clinical ones. A more culturally responsive screening approach would assess a child's language development across all the languages they are exposed to at home, rather than against English or Setswana milestones alone, before concluding that a delay is present.

The relatively rare occurrence of health-related causes should not be dismissed. It could be a reflection of teachers' lack of clinical expertise in recognizing neurological causes of LDDs. Developmental neuroscience shows how early biological and psychosocial experiences affect brain development (Walker et al., 2011). The 'rarity' of health-related causes in LDD data is likely an artifact of the educational system's blind spots. Teachers see the shadows on the wall, but without clinical training, they often cannot identify the objects casting them. Therefore assuming these causes are actually rare can lead to children receiving the wrong support, or worse, missing life-saving medical diagnoses. The diagnostic confusion and referral delay we observed among teachers suggests that health-related causes may be more prevalent than teachers are able to identify - a possibility given the pressing need for speech-language therapists in Botswana (Botswana Health Professions Council, 2021).

The second most common cause of language development delay is limited social

interaction, which is similar to some previous studies conducted in sub-Saharan Africa. Findings mirror the findings of Githinji et al. (2019), which indicated that social isolation and low verbal engagement in the preschool environment were strong predictors of delayed expressive language; especially for only children and those with weak peer interactions, respectively. Osuji et al. (2020) also noted

that the non-existence of dialogic family communication in Nigerian families played a significant part in delayed receptive as well as expressive language. The similarities and differences highlight the importance of Bruner's (1976) idea of the Language Acquisition Support System (LASS), which discusses language acquisition as being primarily dependent on a structured, responsive social exchange. These exchanges become absent for various reasons, including single-child families, less adult-child interaction, relying too heavily on passive entertainment, and early language acquisition scaffolding is broken. This study builds on this line of enquiry by showing how these dynamics unfold in particular in the private preschool context of urban Botswana.

The literature on the insufficient role of parents is well established, as are the present findings, which add valuable nuance to this body of knowledge. A five-year follow-up study in Morocco by Benjelloun et al (2021) found that in the context of planned parental engagement (which involved elements of both dialogic reading and child-initiated storytelling), expressive vocabulary and narrative comprehension were strongly correlated. In contrast, the parents in this study were perceived by the participants as saying that speaking to the child was the same as speaking with the child, which Bruner's theory associates with a key distinction. There is a fundamental difference between directive speech (commanding, narrating) and dialogic speech (turn taking, questioning, expanding), and it is the latter that creates the scaffolded interactional environment to which children need to acquire language (Mimeau et al., 2015).

Furthermore, the present study corroborates the work of Osuji et al. (2020) in Nigeria, which demonstrated that parental denial and limited awareness of developmental milestones substantially delayed both referral and intervention. Taken together, these findings suggest that parental education programs must transcend basic awareness campaigns. Rather, they must empower parents to actively modify their interaction styles, a shift that necessitates sustained, culturally grounded, and context-specific family engagement initiatives.

Conclusion

This research confirms that language development delays among private preschool learners in Gaborone Central stem primarily from environmental and social factors specifically, an inadequacy of social interaction and scaffolding.

Through in-depth interviews, experienced preschool teachers identified four primary drivers of LDD: exposure to digital devices, social isolation, inadequate parental support, and medical complications. The research findings have significant implications for early childhood education in Botswana. They indicate that the key drivers of LDD in Gaborone Central private preschools are not primarily biomedical in nature - they are, to a large extent,

the result of environmental and social factors that are both discernible and modifiable. But this potential can only be realized through a reframing of LDD as an issue that should be tackled at multiple levels: family, school and national.

This study reinforces the centrality of Bruner's Social Interactionist Theory in understanding how disruptions to verbal interaction, whether through digital displacement, diminished parental contact, or limited peer engagement, contribute to developmental delays. Furthermore, it enriches the qualitative literature on LDD in sub-Saharan Africa by amplifying the perspectives of frontline educators, a demographic frequently overlooked in existing research.

Recommendations

For Educators

Early childhood educators should be trained in the early signs of language delay, including those associated with hearing loss and ASD, and classroom language simulation activities such as dialogic reading and peer conversation.

For Parents and Caregivers

Preschools should offer bilingual (Setswana and English) parent education classes that raise awareness of language milestones, the benefits of dialogic interaction over television viewing, and language-stimulation activities for parents to do at home.

For School Administrators

Private preschools should adopt and implement regular language screening protocols and referral processes to speech-language therapists, normalizing early identification.

For Policymakers

The Ministry of Basic Education should provide a national early language screening protocol in the ECCE Policy and expand resources for speech-language therapy services in urban private preschools. In practice, this means building a mandatory language-development module into pre-service and in-service training for early childhood educators, ensuring that screening instruments are applied uniformly and their outcomes are analysed by educators knowledgeable in standard multilingual growth and the indicators necessitating referral. Screening protocols should be piloted first in Gaborone Central's private preschools, given the concentration of concern identified in this study, before phased national roll-out, and should be paired with a clear, funded referral pathway to speech-language therapists so that identification does not outpace the system's capacity to respond. Without this training and referral infrastructure in place, a screening mandate risks generating demand for specialist services that the current health workforce (Botswana Health Professions Council, 2021) is not yet resourced to meet.

For Future Research

Future research should include qualitative teacher input, child assessment and parental surveys. Comparative and longitudinal designs; comparing public and private preschools, would provide empirical evidence for policy interventions in Botswana. The current research depended exclusively on educators' viewpoints; hence, future studies can investigate these perspectives with direct evaluations of child language and interviewing parents and carers to determine the alignment between teacher-perceived causes of LDD and independently assessed results. Furthermore, the future studies can look at designs such as systematic evaluation of children's linguistic growth in all languages utilised at home, instead of solely focusing on English or Setswana, to more accurately differentiate actual delays from typical multilingual learning behaviours.

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