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Parental Involvement and Effect on English Language Performance of Children with Dyslexia in Primary Schools in Mezam Division of the Northwest Region of Cameroon

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Abstract: This study examined the effect of parental involvement on English language performance of children with dyslexia in primary schools in Mezam Division, North West Region of Cameroon. Specifically, the study took into consideration the extent to which parental involvement influences English language performance of children with dyslexia and the extent to which demographic factors of parents influence English language performance of children with dyslexia. The phonological deficit theory of dyslexia was used for the study. The mixed methods approach with the sequential explanatory survey design was adopted for the study. Data were collected from a sample of 263 respondents comprising 242 children with dyslexia and 21 parents of children with dyslexia. Questionnaire and an interview guide were used to collect data. Children with dyslexia responded to the questionnaire while some of their parents were interviewed. Quantitative data were analyzed descriptively using frequency distributions, percentages, and mean scores while the. Spearman's rho correlation test was used to verify hypothesis and make inferences. Qualitative data were analyzed thematically with the aid of themes-groundings-quotations. Findings showed that parental involvement (R = 0.491*), significantly and positively influenced the language performance of children with dyslexia. The findings also showed that English language performance of children with dyslexia was highly influenced by parental socio-demographic characteristics such as level of education, income, employment status, first language spoken to the child at home and engaging in conversation with the child. It was recommended that, parents should readily to provide the necessary assistance needed by children with dyslexia to foster the language development improve English language performance.

Keywords: Home Literacy Environment, Parents Involvement, Demographic Factors, Dyslexia English Language, Performance.

INTRODUCTION

Children with dyslexia lack adequate phonological awareness, and this ultimately affects their reading and writing skills. The scope of dyslexia in this study is delimited to developmental dyslexia, which is a failure to learn to read and not due to brain injury (acquired dyslexia). Developmental dyslexia is seen as a language-based learning disability that affects 5–17% of all children (Lyon et al., 2003). It has been argued that environmental factors such as home literacy factors contribute to the development of early reading skills in children (Peterson & Pennington, 2015). Lyon et al., (2003) opine that children from less supportive home literacy environments develop serious emotional, psychological, economic setbacks and suffer from higher frequencies

of academic failure (Lyon, 2003). In the opinion of Sénéchal and LeFevre (2002), home literate environment provides the earliest important knowledge and skills for the development of phonological awareness, reading and writing skills and, children further develop the ability to read and write as a result of exposure to literacy facilities and practices such as availability of reading materials and parental involvement in a child's reading and writing activities at home. Several such as that of (Aulls & Sollars, 2003) have shown that most children who are successful in reading and writing come from families with a literacy-rich environment.

Early reading is an indispensable skill that affects the development of literacy throughout childhood (Ehri, 2005). Dyslexia is a disorder by which literacy acquisition is affected by complex genetic and environmental interactions (Ozernov-Palchik et al., 2016). Genetically, before the 1950s, dyslexia was considered as a neurological disorder caused by visual and auditory perception deficits as well as brain dysfunction in cerebral dominance. Genetic contributions to reading ability have been well researched (for example, Galaburda et al., 2006; Grigorenko, 2004; Swanson et al., 2015) but, little has been done on how environmental factors affect language development of children with dyslexia. Therefore, understanding the role that the environment may play in the neurobiological circuits of reading in children with dyslexia can provide a much-needed insight into how variables other than genetics influence emergent literacy in children. Several environmental factors have been shown to contribute to the development of early reading skills in children, including socioeconomic status and home literacy environment (Peterson & Pennington, 2015; Christopher et al., 2015). Socioeconomic status is a diverse construct that encompasses factors such as education, occupation, material wealth, and prestige. In a study carried out by Scarborough, Dobrich, and Hager (1994), parental involvement affect language development of children with dyslexia. Furthermore, studies investigating the nature of the relationship between home learning environment and reading success have reported that the home literate environment affects oral language, phonological sensitivity, and word decoding ability among preschoolers (Burgess et al., 2002). The parental role model is especially important in motivating children and influencing attitudes to reading and learning (Ngorosho, 2011).

Through activities like parent-child book reading, parental direct literacy instruction and parent-child conversations, parental involvement can positively impact children's vocabulary development, reading acquisition, letter-sound knowledge and oral language skills (De Temple & Snow, 2003; Farrant & Zubrick, 2012; Sénéchal et al., 2002). Furthermore, parent-child storybook reading is one of the most influential activities leading to child literacy and early language development (Vandermaas-Peeler et al., 2009). Shared storybook reading has an established reputation as an approach to improving both the language and reading skills of young children with lasting effects. Parental communication with children is relatable to child vocabulary development. Large body of research on the role of parental communication input in child vocabulary development had emphasized the importance of the quantity of input. Furthermore, it has been found that parental language input is positively associated with the rate of vocabulary growth in young infants (Huttenlocher et al., 2010). Therefore, this study aim to find out the extent parents of children with dyslexia support their children at home and if such support is influence by demographic factors of the parents in the Mezam Division of the North West Region of Cameroon.

Problem Statement

Reading is the foundation of all learning and a slowly building process which starts at home and gradually extends to other environments like school. Studies have revealed that children of classes three and four should be able to read at least 5 letter words, spell, construct short sentences and comprehend what they have read. But on the contrary, in our context, research says 80-95% of children at the end of class two are unable to read one word of a single story and one factor responsible for poor reading skills is dyslexia. It has been observed that children with dyslexia perform poorly in English Language In communities that inhabit Mezam Division of the North West Region of Cameroon and this situation tends to impair other aspects of their lives including their performance in other subjects. In addition to the effect had on other subjects, sometimes these children with dyslexia are being mock by their peers thus causing many of them to isolate themselves

while in school. With such a situation, even children that might need a little help to pick up in their studies may find it difficult to pick up because of the unhealthy classroom environment stemming from some of their peers. Majority of our regular schools are not that inclusive in that the regular teachers have little or no special knowledge and skills in handling children with dyslexia. At times, when they seek for help from parents at home through home, many children come back to school the following day with undone home work. This therefore made the researcher to wonder if parental active involvement at home can help in the language development of the children with dyslexia.

Objectives of the Study

The general objective of the study is to investigate the extent home literacy environment affect English language performance of children with dyslexia in Mezam Division of the North West Region of Cameroon. Specifically, the study looked at;

- The extent to which parental involvement influences English language performance of children with dyslexia.
- The extent to which demographic factors of parents influence English language performance of children with dyslexia.

Research Questions

This study is guided by the following specific questions;

- To what extent does parental involvement influences English language performance of children with dyslexia?
- To what extent do demographic factors of parents influence English language performance of children with dyslexia?

Hypotheses of the Study

Given the above objectives, the study works with the following hypothesis

Ho_1 There is no significant relationship between parental involvement and English language performance of children with dyslexia.

Ha_1 There is a significant relationship between parental involvement and English language performance of children with dyslexia.

REVIEW OF LITERATURE

Concept of dyslexia

Dyslexia is a learning difficulty, primarily affecting skills involved in accurate and fluent word reading and spelling. The main characteristics are difficulties in phonological processing, verbal memory and verbal processing speed (Rose, 2009). Lyon (1995) sees dyslexia as a specific language-based disorder of constitutional origin characterized by difficulties in single word decoding, usually reflecting insufficient phonological processing. These difficulties in single word decoding are often unexpected in relation to age and other cognitive and academic abilities; the difficulties are not the result of generalized developmental disability or sensory impairment. Dyslexia manifests with a variety of difficulties with different forms of language, often including, in addition to problems with reading, a conspicuous problem with acquiring proficiency in writing and spelling (Lyon, 1995). Dyslexia can either be acquired or developmental. For instance, individuals with phonological dyslexia, or letter-to-phoneme conversion problems, fail even when they try to sound out single letters (Marshall & Newcombe, 1973). This involves, for instance, the rule that dictates the way /a/ is pronounced in mate, which is different from the way it is pronounced in mat; and the way the pronunciation of /c/ is affected by the following letter, as in city and cell versus care, core, and cure. Furthermore, phonological dyslexia can be multi-letter, which involves the more complex rules of conversion, which apply to more than a single letter. To add, individuals with phonological dyslexia experience difficulties with long words and morphologically complex words not only when they read them, but also when they repeat or spontaneously say them (Dotan & Friedmann, 2015).

Furthermore, phonological dyslexia can equally be seen through vowel omission, substitution, transposition, and addition of vowel letters. Thus, the word "bit" can be read as "bat", "but" or even "boat". These errors occur in reading, without parallel errors in speech production, and they affect vowel letters rather than vowel phonemes. Therefore, to distinguish between the different types of phonological dyslexia and understand why a child would have difficulties reading words, one should not only ask the child to read words, but also test their single letter reading, multi-letter rule knowledge, and repetition of long words. The treatment of the different types of phonological dyslexia should be different: for conversion phonological dyslexia, treatment should focus on explicit teaching of letter- to-phoneme conversion rules (Friedmann & Coltheart, 2019). For multi-letter phonological dyslexia, treatment should focus on explicit teaching of multi-letter conversion rules. Individuals with phonological long word dyslexia, on the other hand, may benefit from breaking the target word into smaller units, such as syllables or consonant-vowel units, when reading. Phonological awareness can affect reading and writing through poor letter position and lexical pronunciations.

Another type of phonological dyslexia can occur when people ignore the lexical pronunciation of words and focus on phonemes. Individuals with surface dyslexia make regularization errors in reading aloud. This is evident in their reading of irregular words such as stomach, receipt, or comb, which include a silent letter, or a letter that is converted to a phoneme that is different from the phoneme that the grapheme-to-phoneme conversion rules dictate. This may also affect their reading of words that allow for ambiguous conversion to phonology, such as "bear" (which may be read via the grapheme-to-phoneme conversion route as "beer". Words that have ambiguous conversion typically include ambi-phonic graphemes that can be converted in two or more ways into phonemes. Such words are mainly problematic in surface dyslexia when the ambi-phonic graphemes are converted, in the specific word, into the less frequent phoneme (like the letter /i/, which is pronounced one way in kid and another way in kind) (Friedmann & Coltheart, 2019).

Home literacy environment

Children's early literacy experiences lay the foundation for their learning-to-read process prior to formal schooling. Literacy experiences include a broad range of family activities, such as exposure to literacy, parent-child storybook and picture book reading, as well as opportunities for literacy interactions between the family members. Parents can support their children if they engage in literacy-related activities with them (Lewis et al., 2014). To encourage children to explore literacy, families must have access to print resources and literacy materials. In particular it is necessary that books and children's books are available in homes. Parents' attitudes to reading activities have an impact on the home literacy environment, as they determine the extent to which parents themselves get involved in activities and encourage their children to do so. Parents who engage in many literacy activities with their children foster the development of positive attitudes to reading among children (Sonnenschein & Munsterman, 1996). From a rich literacy environment, positive effects can be expected with respect to early language skills and emergent literacy, which in turn support the development of reading competencies (Senechal & Le Fevre, 2002). This article view home environment as the immediate social environment of the child and thus refers to it as the ecology of child development. Children learn to investigate their world through the family context which provides the blueprint for learning, behaviour, and attitudes. Positive early learning experiences within the home can lead to substantial social and educational benefits that can have lasting and life changing impacts;

Demographic factors

- **Employment status**

The concept of parenthood and its features have been found to influence students' academic achievement. Researches have reported a correlation between parental employment status and child's academic achievement (Vandell & Ramanam, 1992). Parcel & Menaghan (1997) have also argued that mothers' employment status can have favourable effects on the child's outcome. According to them daughters of employed women have higher academic achievements than daughters of stay at-home mothers.

➢ **Parental level of education**

Traditionally, family status variables such as parents' level of education have been reported as predictors of children's academic achievement. Increasingly, research has suggested that, rather than having a direct association with children's academic achievement, parents' level of education is part of a larger constellation of psychological and sociological variables influencing children's school outcomes. Attaining higher levels of education as well as access to resources, such as income, time, energy, and community contacts, allow for greater parental involvement in a child's education. Thus, the influence of parents' level of education on student outcomes might best be represented as a relationship mediated by interactions among them status and process variables (Vandermaas-Peeler et al., 2009). The literature also suggests that level of education influences parents' knowledge, beliefs, values, and goals about childrearing, so that a variety of parental behaviours are indirectly related to children's school performance. For example, higher levels of education may enhance parents' tendency to become more involved in their children's education, and also enable parents to acquire and model social skills and problem-solving strategies crucial to children's school success. Thus, students whose parents have higher levels of education may have an enhanced regard for learning, more positive ability beliefs, a stronger work orientation, and they may use more effective learning strategies than children of parents with lower levels of education. Parents with higher levels of education are also more likely to believe strongly in their abilities to help their children learn (Weiss, 2011).

First language spoken at home

A first language, native language or mother/father/parent tongue (also known as arterial language or L1), is a language that a person has been exposed to from birth or within the critical period. In some countries, the term native language or mother tongue refers to the language of one's ethnic group rather than one's first language. Sometimes, the term "mother tongue" or "mother language" is used for the language that a person learned as a child (usually from their parents). Children growing up in bilingual homes can, according to this definition, have more than one mother tongue or native language. The first language of a child is part of that child's personal, social and cultural identity. Another impact of the first language is that it brings about the reflection and learning of successful social patterns of acting and speaking. It is basically responsible for differentiating the linguistic competence of acting. While some argue that there is no such thing as a "native speaker" or a "mother tongue", it is important to understand the key terms as well as what it means to be a "non-native" speaker, and the implications that can have on one's life. Research suggests that while a non-native speaker may develop fluency in a target language after about two years of immersion, it can take between five and seven years for that child to be on the same working level as their native speaking counterparts (Warren, 2005).

➢ **Parental engagement in literacy activities**

Parental involvement in the form of at-home good parenting has a significant positive effect on children's achievement and adjustment even after all other factors shaping attainment have been taken out of the equation (Desforges, 2003). Parental engagement implies enabling parents to take their place alongside educators in the schooling of their children, fitting together their knowledge of children, and teaching and learning, with teachers' knowledge. With parent engagement, possibilities are created for the structure of schooling to be flattened, power and authority to be shared by educators and parents, and the agenda being served to be mutually determined and mutually beneficial (Pushor & Ruitenberg, 2005). Parent/family engagement is not in itself a new idea. What is relatively new is the idea that it be formally enshrined in government policy and integrated systemically into school policies and practices. Weiss, Lopez and Rosenberg (2011) assert that family engagement must be a systemic, integrated and sustained approach, not an add-on or a random act. Systemic here means family engagement that is purposefully designed as a core component of educational goals such as school readiness or student achievement.

➢ **Socio-economic status of parents**

Socioeconomic status (SES) encompasses not just income but also educational attainment, financial security, and subjective perceptions of social status and social class. Research also indicates that children from low-SES households and communities develop academic skills slower than children from higher SES groups (Morgan et. al, 2009). For instance, low SES in childhood is related to poor cognitive development, language, memory, socio-emotional processing, and consequently poor income and health in adulthood. The school systems in low-SES communities are often under-resourced, negatively affecting students' academic progress and outcomes (Aikens & Barbarin, 2008).

Parental involvement

Dyslexia can be a life-long disability, and its symptoms vary from person to person, and can also vary at a different stage in a person's life, but with appropriate intervention, it can produce a significant result (Skiada et al., 2014). The most important treatment for dyslexic children is the parents' "awareness about dyslexia and its impact on their children" (Elbro & Petersen, 2004). Previous studies show that parents who are unaware of dyslexia often show negative feelings such as frustration, denial, and stress when their children do not meet their expectations (Ozonoff et al., 2002). Furthermore, these parents tend to experience anxiety and low self- esteem regarding their children's future life and academic performances. These behaviours do not only affect the children, but it also gives a negative impact on the parents' life; for instance, excessive fatigue, lack of sleep and stress. Thus parents need to be made aware of their children's conditions as early as possible so that appropriate intervention could be taken, for the wellbeing of both parties.

The most important thing for parents with dyslexic children is to give their child sufficient time while exercising patience in teaching them because they require more time and assistance. There is also need to send them for extra classes provided by special educators to learn more efficiently. Furthermore, the parents need to keep supporting and encouraging their children rather than scolding or pushing them, considering their tendency to give up easily, getting frustrated and become bored more easily. On the other hand, the process of teaching this type of children should include visual and storytelling aids to help in improving their studying abilities, as well as improve their attention spans (Yazid & Yin, 2015). In childhood education, parents are seen as partners and their children's first and most influential teachers (Menlove et al., 2013). They strongly influence their children's language development through home-based interventions (Edie et al., 2008). Parents can help facilitate language development in children by responding to their communication, giving a large amount of high quality linguistic input, and by using language support strategies (Kaiser & Roberts, 2011). Parent-child book reading is an ideal context for children's language development as it offers both contextual and social support for language development that matches children's needs (Vygotsky, 1978).

In addition, parent-child reading exposes children to vocabulary items that they do not encountered in daily life, and provides a context for parents' labelling of pictures and use of more sophisticated language. Therefore, it is especially effective in helping children to learn novel vocabulary words and more complex language structure (De Temple & Snow, 2003). Vygotsky's sociocultural theory of learning and development states that children discover the world around them through experts, such as parents and teachers (Hindman et al., 2013). As parents read with their children, they create social and contextual support for the development of language just as Vygotsky's theory suggests (Crain-Thoreson & Dale, 1999). Parent-child book reading promotes language and vocabulary development through word-object associations and expanding a child's existing vocabulary (Farrant & Zubrick, 2012). Increasing the degree of book reading in the home can enhance the language comprehension and expressive language skills of preschool-age children. One of the most prominent parent teaching/learning strategies highlighted in the sociocultural literature is scaffolding (Wood, 2002). As learning occurs in a social context, parents are often viewed as more competent learning partners. Scaffolding the learning of young children may include parents supporting and extending the learning of their children. Such support allows children to move beyond what they would be capable of doing on their own. To assist children

in reaching higher levels of learning, parents can scaffold learning through commenting, questioning, and initiating learning activities (Snow, 2006). Research reveals that when parents scaffold their children's learning during writing activities, children benefit more from the overall writing encounter (Neyman & Wood, 2009).

An important element of parent-child learning and scaffolding is working within a child's zone of proximal development. According to Vygotsky (1978), the zone of proximal development is the level at which, with appropriate adult support, a child is capable of successfully completing tasks he or she would not be capable of if they worked independently. Another prominent parental role that influences child development and learning is that of language model during conversations with children. Over time, parents adapt their language to be responsive to the age and development of their children (Landry and Smith, 2006). Thus, the language interactions between parents and their children can be viewed as a series of language lessons in which parents model the mechanics for many shared literacy experiences. Gregory and Ray (2001) called this bidirectional and reciprocal learning relationship a synergy where siblings act as adjuvant in each other's learning.

Theoretical review

The Phonological deficit theory of developmental dyslexia by Frith, (1997)

The phonological deficit theory suggests that dyslexic children have difficulties in reading and spelling due to an impairment in their phonological processing abilities (e.g. their knowledge of rhyme, alliteration, and grapheme-phoneme correspondences. It became the most prominent theory of dyslexia (in preference to visual deficit explanations) and was supported by deficits in skills such as naming speed (Denckla & Rudel, 1976) and non-word repetition (Snowling, 1987). Furthermore, Ellis (1981) showed directly that dyslexic reading problems cannot be attributed to visual difficulties (or at least not visual difficulties alone) in his experiment which compared dyslexic and control children's speed of same/different letter matching judgements. Ellis (1981) also found that dyslexic children were slower at matching pairs which required name encoding (e.g. Aa and Bb), but not visually identical pairs (e.g. AA and bb).

The phonological theory therefore postulates that dyslexics have a specific impairment in the representation, storage and/or retrieval of speech sounds. It explains dyslexics reading impairment by appealing to the fact that learning to read an alphabetic system requires learning the grapheme phoneme correspondence, i.e. the correspondence between letters and constituent sounds of speech. If these sounds are poorly represented, stored or retrieved, the learning of grapheme phoneme correspondences, the foundation of reading for alphabetic systems, will be affected accordingly (Brady & Shankweiler, 1991). Support for the phonological theory comes from evidence that dyslexic individuals perform particularly poorly on tasks requiring phonological awareness, for instance, conscious segmentation and manipulation of speech sounds. In order to better differentiate the phonological theory from the others, only the strong version of the theory has been discussed here. According to this version, that the cognitive deficit is specific to phonology. Indeed, challengers of the phonological theory do not dispute the existence of a phonological deficit and its contribution to reading retardation; rather, they uphold that the disorder is much more extended, having its roots in general sensory, motor or learning processes, and that the phonological deficit is just one aspect or consequence of the more general disorder. Although an association between reading ability and phonological skill has been generally accepted, in the past there has been some doubt over any causal relationship, or whether a common third factor is involved. A lack of reading ability could cause a decreased phonological knowledge (or vice versa) or an unrelated factor could affect both skills independently.

The phonological theory of dyslexia explains short-term memory deficits observed in dyslexia as being a result of inefficient phonological coding. Baddeley (1966) found that recall from short term memory decreased with phonologically confusable (rhyming) letters in comparison with non-rhyming letters, suggesting that phonological information is used in short term memory tasks. Shankweiler et al. (1979) found that this effect was less strong in dyslexic readers, possibly

suggesting less use of phonological coding. Furthermore, Nicolson (1981) observed that an improvement in children's memory span with age could be explained completely by the increase in processing and articulation speed. However, Hulme (1997) found that reading rate had a strong relationship with recall (similar to the relationship found by Baddeley, Thompson & Buchanan, 1975), although the relationship was different for words and non-words; fewer non-words were recalled even when reading rate was equal. Bauer and Emhert (1984) found a reduced primacy effect in dyslexic children, suggesting less efficient transfer from short- to long-term memory rather than a long-term memory deficit per se. The phonological deficit theory is illustrated in Figure 1.

Figure 1: ***Phonological deficit theory (Frith, 1997)***

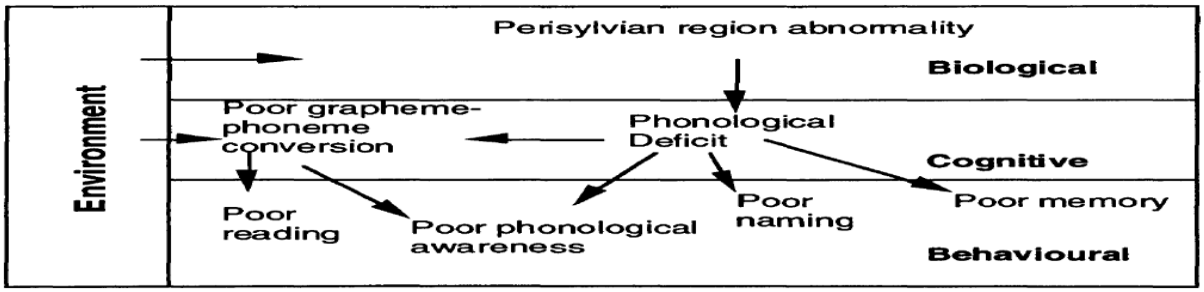


Figure 1 outlines the proposed cause of dyslexia according to the proponents of the phonological deficit theory, as illustrated by Frith (1997). An abnormality in the perisylvian region is the most probable initial cause at the biological level (Galaburda, 1989). This abnormality is then said to cause the phonological deficit (cognitive level), although the environment may protect against this. The phonological deficit leads to poor grapheme- phoneme conversion (cognitive level). This poor grapheme-phoneme conversion leads to poor reading and (together with the phonological deficit) poor phonological awareness. The phonological deficit is also said to result in poor naming skills and poor memory (behavioural level). The phonological deficit theory of dyslexia is the most widely accepted and most widely investigated theory of dyslexia. It offers neurophysiological (and also some anatomical) evidence of a phonological deficit. Furthermore, phonological deficits are found in dyslexia though they appear to predate reading difficulties. The theory is also able to account for memory difficulties shown, however it fails to explain the full range of deficits exhibited by children with dyslexia, particularly with motor skills and speeded performance. The present study viewed dyslexia from a developmental point of view that is developmental dyslexia (language difficulties that do not arise from brain injury). The phonological deficit theory gives a good account of developmental dyslexia because it looks at the deficit from a cognitive and behavioural perspective. The behavioural aspect is crucial for this study because it explains the reason why children with dyslexia perform poorly in oral language, print concepts, phonological awareness, writing and spelling, which form the major indicators of English language performance in the present study.

Methods

Research Design:

The mixed methods approach with the sequential explanatory survey design was adopted for this study. Mixed methods is an approach in which quantitative and qualitative data are collected simultaneously or one type of data either quantitative or qualitative maybe collected first followed by the other Creswell (2013). Although one type of data might be emphasized more than the other, both types are essential in the present study. In this study, the mixed methods approach permitted a quantitative examination of home literate environments and any statistical relationships with the language performance of children with dyslexia. Meanwhile, interview data from parents supplemented questionnaire data collected from the children. With these, the mixed methods design adopted was the sequential explanatory design in which data were collected in two phases. Quantitative data were first collected followed by qualitative data as follow-up to quantitative data.

Population of the Study

The target population was made up of an estimated number of 38,996 children in 662 primary schools in Mezam Division (Regional Delegation of Basic Education, 2018). Out of the 662 primary schools, 275 are public, 174 are confessional and 213 are lay private. The reason for this drop in pupils' population was largely due to an on-going armed conflict in the North West and South West Regions which resulted in the closure of many schools. Unfortunately, there was no statistical record on the number of children with dyslexia and their parents in the Mezam Division (Regional Delegation of North West Region, 2018). Therefore, the researcher only went to schools of interest, and diagnosed children with dyslexia in collaboration with their teachers. These schools constituted the accessible population of the study.

Accessible Population

The accessible population of the study consisted of nine (09) primary schools. Three (03) schools were selected from each sub division. That is from (Bamenda I, II and III Sub Divisions). From each of the sub-divisions, one (01) public, one lay private and one confessional school was selected.

Table 1: ***Distribution of accessible population***

Sub-division	School type	Name of school	Enrolment Boys	Girls	Total	No of children with dyslexia
Bamenda I	Public	Government Primary School Station	30	25	55	30
	Lay private	Saint Bridgit Bilingual School up Station	15	25	40	27
	Confessional	Saint Felix Catholic School Bamendankwe	16	14	30	20
Bamenda II	Public	Government Practicing School old Town	40	36	76	34
	Lay private	Saint Agness Nursery and Primary School Sonac Street	36	41	67	31
	Confessional	Presbyterian School Ntamulung	15	23	38	33
Bamenda III	Public	Government Practicing School Group IA	43	33	77	27
	Lay private	Maxnes Nursery and Primary School	20	19	39	25
	Confessional	All Saint Bilingual Nursery and Primary School Bayelle	23	37	60	15
Total			**238**	**253**	**482**	**242**

The statistics on table 1 show that there were a total of 482 children in the nine (09) schools of which 238 were boys and 253 were girls. Out of the 482 children, 242 of them were diagnosed with dyslexia.

Sample

The sample was made up of 263 participants comprising 242 children with dyslexia and 21 parents (mothers and fathers) of children with dyslexia. These children were selected from primary 3 and 4 classes, from 9 primary schools in the Bamenda Council area. Schools included a public school, lay private school, and confessional school from each subdivision that is Bamenda I, Bamenda II and Bamenda III subdivisions.

Sampling Techniques

This study made use of mixed sampling techniques with the use of the simple random, stratified, and purposive sampling techniques. The selection of children with dyslexia to participate in this study was purposive. In this regard, specific elements which satisfied particular criteria of this study were considered to guide the process. Extra care was taken to select only children that satisfy at least four of the requirements considered. In this regard, the following criteria were set:

- All children must be found within the age bracket of 6 to 11.
- All children must be living within a family setup, made of at least a parent and older sibling.
- All children should be regularly enrolled in either a nursery or primary school
- All children should be indigenes of the locality where they live or at least were born and have lived there until when this study was carried out
- Sampling had to be gender sensitive. The researcher made sure that both male and female participants are chosen for the study on an almost equal number, though the number may not be exactly the same.

A teacher nomination strategy in class and classroom performance records to determine children with language difficulties was also used. Kalve et al. (2006) have argued that the decision regarding identification is usually based on vague clinical (that is, teacher) judgments about the level of response. Based on the premise that teachers are very important adults in pupils' lives (Shey, 2015), two teachers were selected to make informed decisions about the children to be selected for the study. The identification of pupils with dyslexia was therefore based on the fact that both teachers nominated a particular pupil and further confirmation was made by looking at their academic records in literacy activities and their performance on the diagnostic test administered.

Instrumentation

The choice of instruments for this study was motivated by Guild (1994) who reported three different sources (instruments) for research information about psychological phenomena (a) observations and description of different psychological environments; (b) data based on tests and questionnaire instruments administered to diverse populations; and (c) direct discussions (including interviews). These elements above were considered when constructing the instruments for the study.

Identification instrument for children with dyslexia

A Reading Readiness Assessment Instrument designed by Ihenacho (1999) was used for the identification process (Appendix A). The identification of pupils with dyslexia was done through informal methods which include pupils'English language reports, portfolios, anecdotal records and teacher nominations. The Reading Readiness Diagnostic Test is made up of 6 measurement traits that are tested using a reading readiness master plan of activities. The measurement traits include the following:

Visual discrimination: It tested the following characteristics: Identification of similarities and differences in letters, numbers, geometric figures and pictures. e.g., bd, pq, un; 69, 17, 71

Auditory discriminations: It tested the identification of similarities and differences in spoken words or sound e.g. saw, see, was, beat, bite, feet.

Verbal comprehension: It tested the understanding of meanings of words, sentences, directions, e.g. if you say you are a boy what do you mean? Stand up, turn to the left and come back here, how old are you?

Recognition of letters, words and numbers: It tested the identification of letters in the alphabet, words, and numbers e.g. C, D, m, n, s, q, o, i t, boy, car, water, bang, 1, 8, 7, 80, 99.

Recognition of words in sample lessons: It tested the identification of already taught words e.g. Titi and his dog: Titi has a dog he calls coucou, he loved the dog very much that one day, he bought the dog a dress.

Drawing and copying: It tested skills in drawing, copying, geometric forms, objects, letters of the numerals.

These measurement traits were tested within a time scale of 1-5 seconds using a frequency count chart for each. A child who answered out of the stipulated 1-5seconds was judged to show signs of dyslexia (Ihenacho, 1999). Children diagnosed with dyslexia were served the questionnaire for children with dyslexia while some parents were purposively selected and subjected to an interview for parents with dyslexia.

Procedure for Data Analysis

The qualitative and quantitative methods were used in analyzing the data for the study. Before the quantitative data were analysed, a pre-designed EpiData Version 3.1 (EpiData Association, Odense Denmark, 2008) database which has an in-built consistency and validation checks was used to enter the data with both the demographic information and the test items coded with numbers. Questionnaires were also assigned with serial numbers. The reason for coding and assigning each questionnaire a serial number was to ensure that on the data base, one should easily trace the individual response of participants and ease verification in areas of uncertainty where they arose. For further consistency, data range and validation checks were also performed in SPSS version 25.0 (IBM Inc., 2017) to identify invalid codes (data cleaning) with the aid of exploratory statistics. After the data were thoroughly checked for possible errors, the quantitative data were analyzed using both the descriptive and inferential statistical tools. The descriptive statistical tools used are frequency count, percentages and multiple responses set which aimed at calculating the summary of findings for each variable where applicable. The hypothesis of the study was tested using the Spearman's Rho test which is a non-parametric test. On the other hand, the qualitative data derived from opened ended questions were analysed using the thematic analysis technique. Finally, findings were presented using frequency distribution tables and thematic tables with all inferential statistics presented at 95% level of confidence interval with alpha set at 0.05 levels, accepting 5% margin of error.

Findings

Research question one: What is the extent to which parental involvement influences English language performance of children with dyslexia?

Table 2: ***Characterisation of parental involvement for language performance***

Issues	Response options				
	Always	**Most of the times**	**Sometimes**	**Never**	**N**
My parents read books with me after school	72 (29.8%)	55 (22.7%)	78 (32.2%)	37 (15.3%)	242
My parents check my books during the weekend to see what has been taught	91 (37.6%)	50 (20.7%)	72 (29.8%)	29 (12.0%)	242
My parents encourage me to read books aloud while they listen	63 (26.0%)	54 (22.3%)	57 (23.6%)	68 (28.1%)	242
My parents teach me how to pronounce words	95 (39.3%)	43 (17.8%)	62 (25.6%)	42 (17.3%)	242
My parents teach me new words	88 (36.4%)	49 (20.2%)	54 (22.3%)	49 (20.2%)	242
My parents teach me how to write letters	89 (36.8%)	53 (21.9%)	57 (23.6%)	43 (17.8%)	242
My parents assist me to do my English assignments	86 (35.5%)	49 (20.2%)	73 (30.2%)	34 (14.0%)	242

My parents give me repetitive classes on English lessons taught in school	60 (24.8%)	55 (22.7%)	59 (24.4%)	68 (28.1%)	242
I speak like my parents when interacting with peers	35 (14.5%)	29 (12.0%)	46 (19.0%)	132 (54.5%)	242
I learn new words whenever I read books with my parents	95 (39.3%)	54 (22.3%)	50 (20.7%)	43 (17.8%)	242
Multiple response set	**774 (32.0%)**	**491 (20.3%)**	**608 (25.1%)**	**547 (22.6%)**	**2420**

As seen on the table above a 77.4% majority of the children with dyslexia indicated that their parents are involved in their studies though at varying degree while 22.6% of the children completely denied that their parents are involved in their studies. Among the children who said their parents are involved in their studies, 32.0% of the children said their parents are always involved in their studies while 20.3% of the children said most of the times and 25.1% of the children said sometimes. To be more elaborate, the findings revealed that while 37 (15.3%) children with dyslexia said that their parents do not read books with them after school, a majority 205(84.7%) of them said their parents read books with them after school while 72 (29.8%) of them said always, 55 (22.7%) said most of the times and 78 (32.2%) of them said sometimes. Findings also showed that while 29 (12.0%) of the children with dyslexia said their parents never check their books during weekends to follow up what they have been taught in school, a 213(88.0%) majority of the children said their parents do check their books with 91 (37.6%) of the children saying always, 50 (20.7%) admitted most of the times and 72 (29.8%) of them said sometimes.

Findings equally showed that while a majority 68 (28.1%) of the children with dyslexia 68 (28.1%) said their parents encourage them to read books aloud while they listen. Similarly 63 (26.0%) and 54 (22.3%) of the children said always and most of times respectively while 57 (23.6%) of the children said sometimes, and 68 (28.1%) of the children said their parents do not encourage them to read books aloud while they listen. It is also evident from the finding that while a majority 200 (82.7%) of the children with dyslexia said their parents teach them how to pronounce words 95 (39.3%) and 43 (17.8%) of the children said always and most of the times respectively while 62 (25.6%) of them said sometimes, and 42 (17.3%) of the children said their parents never do that. The findings also reveal that while a majority 193 (79.8%) of the parents teach new words to their children with dyslexia 88 (36.4%) and 49 (20.2%) of the children said always and most of the times, respectively while 54 (22.3%) of them said sometimes, and 49 (20.2%) of the children said their parents do not teach them that. As presented on the table above, while 43 (17.8%) of the children said their parents do not teach them how to write letters, a majority 199 (82.2%) of the parents teach their children how to write letters. Meanwhile, 89 (36.8%) of the children said always, 53 (21.9%) said most of the times and 57 (23.6%) said sometimes. The findings also point out that a majority 208 (86.0%) of the parents assist their children with dyslexia with their English Language assignments. Meanwhile 86 (35.5%) of the children said always, 49 (20.2%) said most of the times and 73 (30.2%) said sometimes.

The findings equally shows that a majority 174 (71.9%) of the children admitted that their parents give them revision classes on English lessons taught in schools with 60 (24.8%) of them saying always, 55 (22.7%) saying most of the times and 59 (24.4%) saying sometimes. Similarly, the findings showed that a majority 199 (82.2%) of the children said that they learn new words whenever they read books with their parents while 95 (39.3%) of them said always, 54 (22.3%) said most of the times and 50 (20.7%) said sometimes. Finally, when it comes to children speaking like their parents when interacting with peers, a majority 134 (54.5%) said never.

Table 3:*Methods/ways used by parents to help their children with dyslexia to develop language skills*

Themes	Groundings	Sampled Quotations
Employment of home teacher	10	"Pay for a home teacher". "Pay a teacher" "I pay a teacher to teach him at home". "Pay for extra classes".
Home teaching on spelling, pronunciation and reading	5	"Teach her at home on spellings, pronunciation and reading". "Assisting him on how to read".
Buying of books	3	"Buy books". "I buy books for him to read". "Buy English books".
Spelling and pronunciation	3	"Spelling and pronunciation". "Spelling drills and pronunciations".
Use of questioning	2	"Questioning".

Among the parents of children with dyslexia interviewed, the findings show that most of them employed home teachers to assist their children with dyslexia, especially in the development of their language skills while others personally taught their children with dyslexia at home on spelling, pronunciation, reading and on how to ask and answer questions. Some of the parents equally admitted to buying their children books so as to help improve their English language skills.

Table 4: *Language skill development activities that parents perform with their children with dyslexia*

Themes	Groundings	Sampled Quotations
Asking and answering of questions	7	"Questioning and answer techniques". "Questioning techniques". "Question answer". "Questioning techniques like probing".
Reading	6	"Reading". "Picture reading". "Reading and asking him to repeat".
Spelling	6	"Spelling" "Spelling drills".
Story telling	5	"Story telling".
Playing of games	3	"Play alphabet games together". "Play alphabet puzzle game". "Play games".
Singing	2	"Singing".
Pronunciation	2	"Pronunciation" "Asking him to repeat pronunciations".
Identification of names and objects	2	"Try to identify names from phone contacts". "Identifying of items on a list".
Reciting	1	"Reciting".
Organisation of letters	1	"Giving him alphabet puzzle to arrange".

Based on language skill activities that parents of children with dyslexia teach their children at home, the findings showed that teaching children how to ask and answer questions, and how to read, spell and to pronounce were some of the language skill development activities that parents of children with dyslexia engage in at home with their children. storytelling, reciting, Organisation of letters, playing games, and identification of names and objects were other Language skill activities that the parents of children with dyslexia perform with their children at home.

Table 5: ***Parents' opinions on some language skills they are able to teach their children with dyslexia***

Themes	Groundings	Sampled Quotations
Pronunciation	20	"Pronunciation".
Spelling	10	"Spelling".
Reading	9	"Reading". "Reading skills".
Speaking	7	"Speaking". "Speaking aloud".
Greetings	4	"How to greet". "Greetings (morning, afternoon and evening)". "Greetings".
Comprehension	3	"Comprehension (meaning of words in simple lessons)". "Comprehension (My child now understands the meaning of words in sample lessons".
Sentence construction	2	"Sentence construction".
Writing	2	"Writing".

Based on the language skills that parents of children with dyslexia use to teach their children at home, the findings on table 18 show that pronunciation is the most mentioned skill, followed by spelling, reading and speaking. Greetings, comprehension, sentence construction, writing and vocabulary are also among the skills that parent teach their children with dyslexia although there were least mentioned.

Table 6: ***Comparing English language performance of children by parental assistance***

Parents	Language performance		Total
	Not very bad/poor	Very bad/poor	
Offer assistance at home	113(60.4%)	74(39.6%)	187
No assistance offer at home	20(36.4%)	35 (63.3%)	55

$\chi 2$=9.94, df=1, *p*-value=0.001

Statistically, findings showed that children with dyslexia that received support from their parents were far better in their language performance than those who do not receive support from their parents (*p*-value <0.05). For instance, findings showed that for parents who offer assistance to children with dyslexia at home, 60.4% of the children were not very bad/poor in their English language performance while for parents who do not offer assistance to children with dyslexia at home, (63.3%) of the children were very poor in their language performance.

Verification of hypothesis one (Ho1): There is no significant relationship between parental involvement and the English language performance of children with dyslexia

Table 7: ***Relationship between parental involvement and language performance of children with dyslexia***

Test statistics		Parental involvement	Language performance of children with dyslexia
Spearman's rho	R-value	1.000	.491*
	P-value	.	.021
	N	242	242
*. Correlation is significant at the 0.05 level (2-tailed).			

Statistically, the findings reveal that there is a significant, positive and strong relationship between parental involvement and language performance of children with dyslexia (P<0.05). The positive sign of the relationship (R = 491*) implies that the language performance of children with dyslexia is more likely to improve when parents actively offer assistance to their children.

In other words, the language problem of children with dyslexia is more likely to be reduced when parents are actively assist their children at home. For instance, as seen on the table above, children of a majority (60.4%) of parents who offer home assistance to children with dyslexia tend not to be very bad/poor in their English language performance while for parents who do not offer assistance to children with dyslexia at home, a majority (63.3%) of the children tend to be very poor in their English language performance. Therefore, the null hypothesis that states that there no significant relationship between parental involvement and the language performance of children with dyslexia is rejected while the alternative hypothesis which states that there is significant relationship between parental involvement and the language performance of children with dyslexia is accepted.

Research question two: What is the extent to which demographic characteristics influence English language performance?

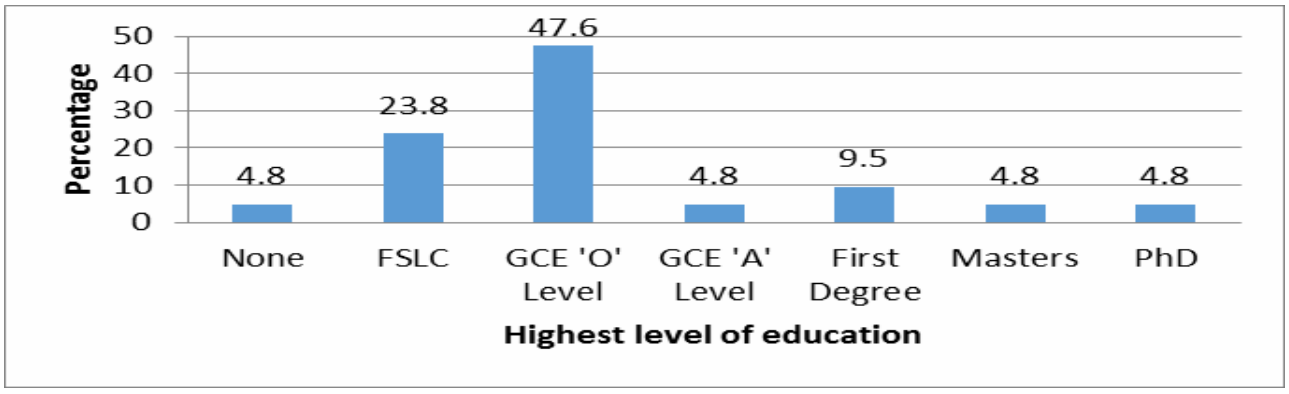
English Language performance of children with dyslexia

Table 8: ***Distribution of children with dyslexia by language performance***

Language performance	Frequency	Percentage
Not very bad	149	61.6
Very bad	93	38.4
Total	242	100

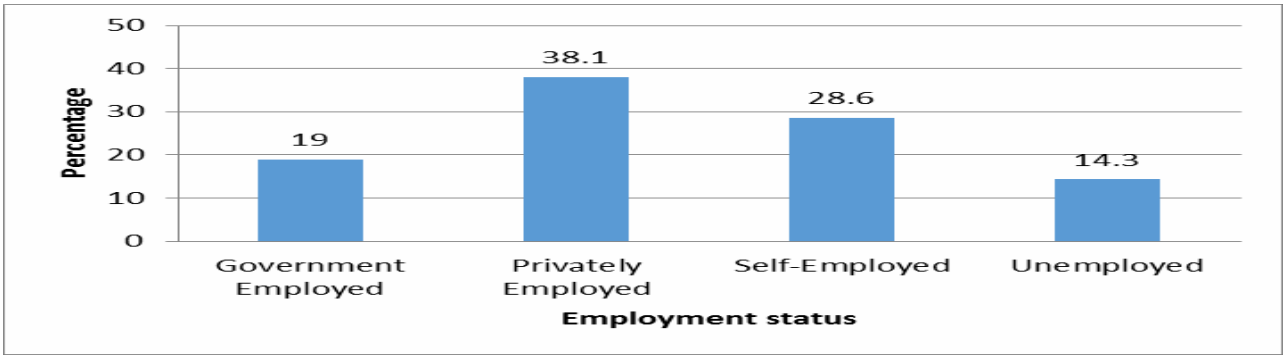
As seen on table 20 149 (61.6%) children were not very bad in their language performance meanwhile 93 (38.4%) were very bad in their language performance.

Figure 2: ***Distribution of parents by highest level of education***



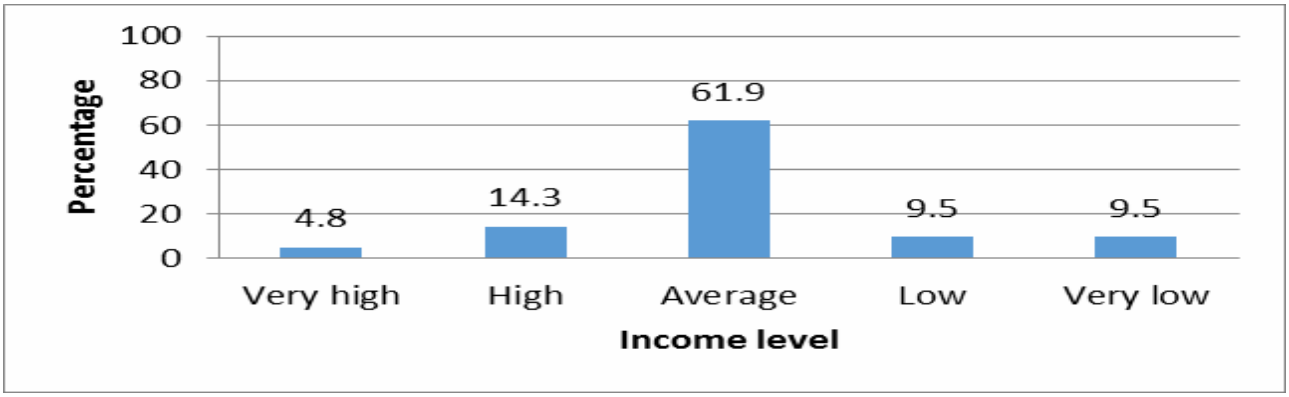
With regards to level of education, 10 (47.6%) of the parents sampled were holders of GCE O'Level, 5 (23.8%) were holders of FSCL while 2 (9.5%) of them were holders of a first degree and 1 (4.8%) of the parents of equal proportion were holders of PhD, Masters and GCE A' level.

Figure 2: ***Distribution of parents by employment status***



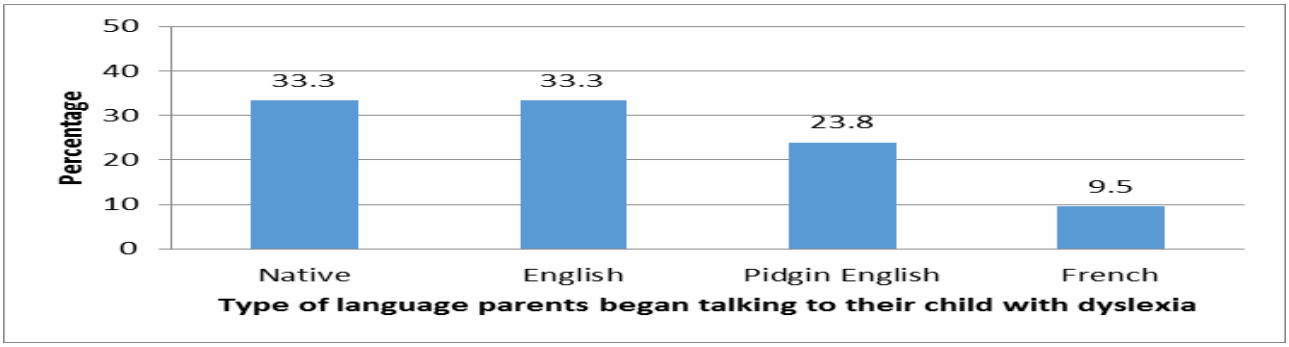
When considered by employment status, 4 (19.0%) of the parents were government employed, 8 (38.1%) privately employed, 6 (28.6%) were self- employed and 3 (14.3%) were unemployed.

Figure 3: ***Distribution of parents by income level***



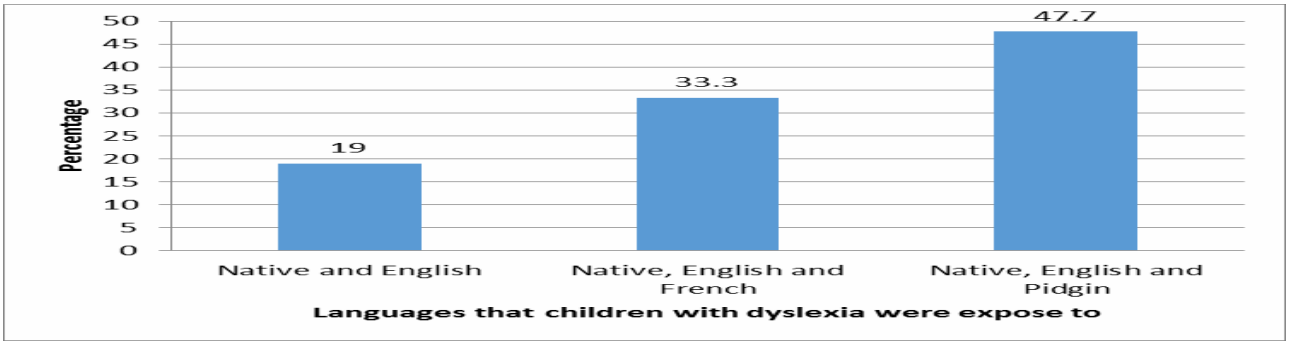
Among the 21 parents interviewed, the income level for 13 (61.9%) of them was average. The income level for 3 (14.3%) and 1 (4.8%) of them respectively was high and very high while the income level for 2 (9.5%) of the parents was low and very low.

Figure 4: ***Distribution of parents by language they first began talking with their child with Dyslexia***



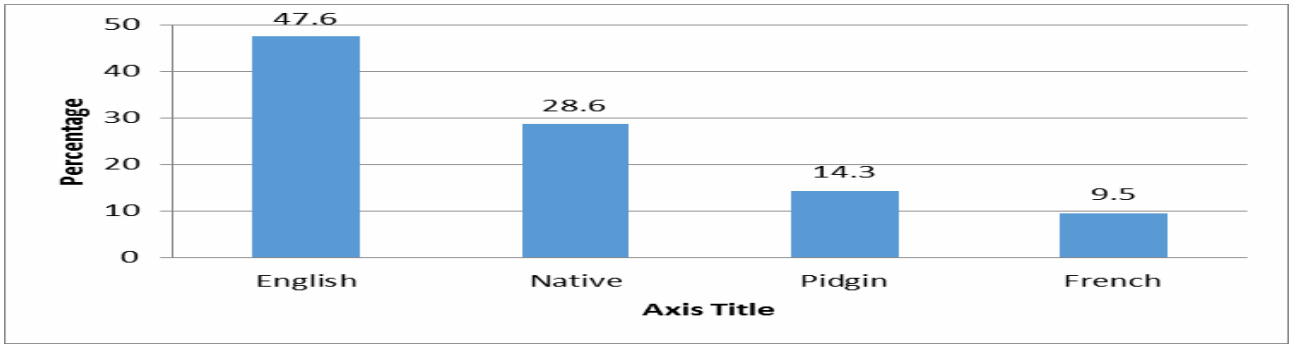
When describing the parents by the language they first began talking with their child with dyslexia, it was realised that an equal proportion of the parents 7 (33.3%) said they spoke the native and English language while 5 (23.8%) of the parents mentioned Pidgin English and 2 (9.5%) of the parents said French.

Figure 5: ***Languages that children with dyslexia are expose to***



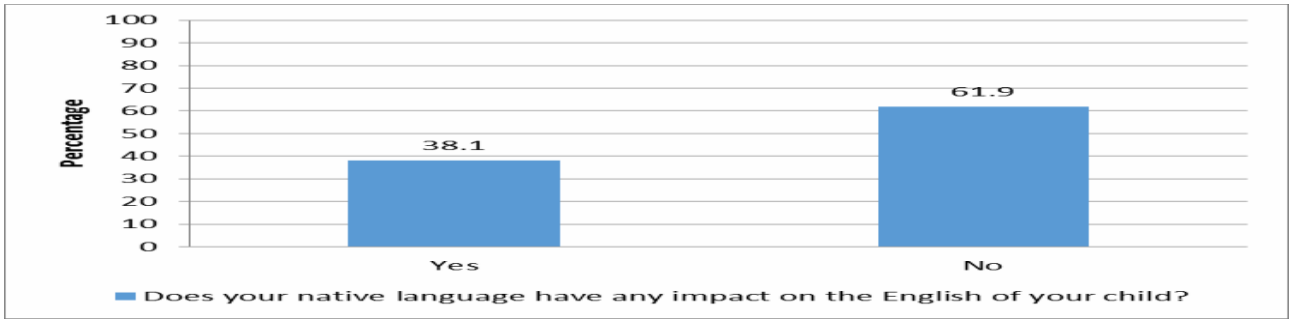
Looking at the languages that children with dyslexia were exposed to, Native, English and Pidgin are the languages that 10 (47.7%) of the parents said their child with dyslexia was exposed to while, 7 (33.3%) of the parents said their child with dyslexia was exposed to Native, English and French. 4 (19.0%) of the parents said their child with dyslexia was exposed to Native and English languages.

Figure 6: ***Distribution of parents by their child's best language***



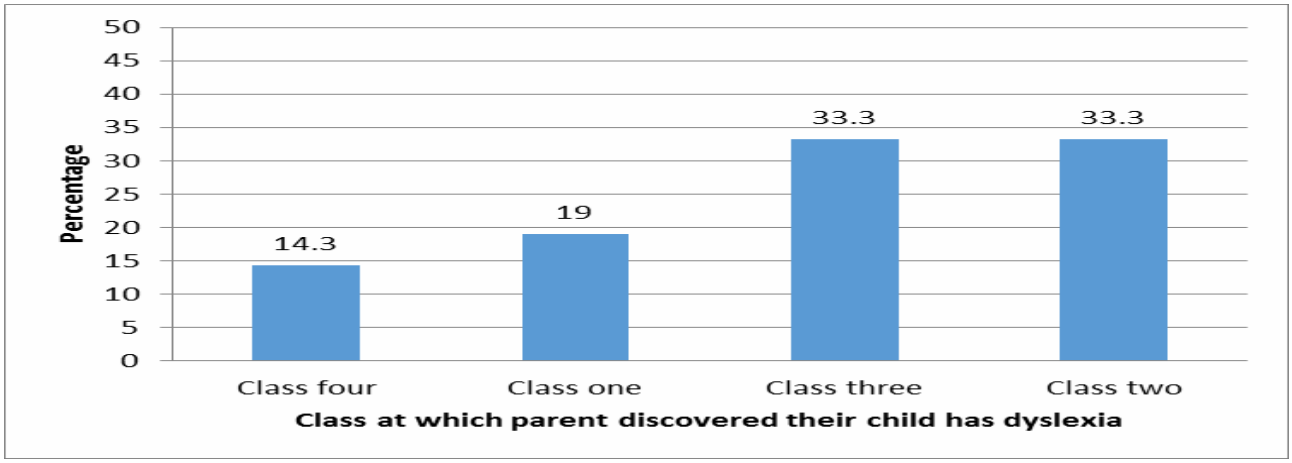
In terms of the child's best language of expression, English was ranked highest as claimed by up to 10 (47.6%) parents, followed by Native language attested by 6 (28.6%) parents, while Pidgin and French were found to be the best languages of children with dyslexia as claimed by 3 (14.3%) and 2 (9.5%) parents respectively

Figure 7: ***Showing the effect of a native language on children with dyslexia's English Language performance***



While 8 (38.1%) of the parents said their native language affected their child with dyslexia, 13 (62.9%) of them denied

Figure 8: ***Showing class at which parents discovered their child has dyslexia***



With regards to the class at which dyslexia was attested it was revealed that an equal 7 (33.3%)proportion of the parents discovered this child had dyslexia in class two and three while 4 (19.0%) of the parents discovered their child at class one and 3 (14.3%) at class four.

Table 9: ***Comparing language performance of children by key demographic characteristics of parents***

Demographic variables		**Language performance**		Total
		Bad	Not very bad	
Highest level of education	No formal education	1(100%)	0(0.0%)	1
	Primary education	3(60.0%)	2(40.0%)	5

	Secondary education	5(50.0%)	5(50.0%)	10
	High school	0(0.0%)	1(100%)	1
	University education	0(0.0%)	4(100%)	4
Income level	High and very high	0(0.0%)	4(100%)	4
	Average	5(38.4%)	8(61.6%)	13
	Low and very low	2(50.0%)	2(50.0%)	4
Employment status	Government Employed	1(25.0%)	3(75.0%)	4
	Privately Employed	4(50.0%)	4(50.0%)	8
	Self-Employed	2(33.3%)	4(67.7%)	6
	Unemployed	3(75.0%)	1(25.0%)	3
Which language did you begin talking to your child	Native	4(57.1%)	3(42.9%)	7
	English	2(28.6%)	5(71.4%)	7
	Pidgin English	3(60.0%)	2(40.0%)	5
	French	2(100%)	0(0.0%)	2
Which language is the child able to express his/herself best	English	3(30.0%)	7(70.0%)	10
	French	1(50.0%)	1(50.0%)	2
	Native	2(33.3%)	4(66.7%)	6
	Pidgin	3(100%)	0(0.0%)	3
Class at which parents discovered their child with dyslexia	Class one	1(33.3%)	2(66.7%)	3
	Class two	1(25.0%)	3(75.0%)	4
	Class three	3(42.8%)	4(57.2%)	7
	Class four	3(42.8%)	4(57.2%)	7
Engage in conversation with your child?	Engage	8(39.1%)	13(61.9%)	21
	Do not engage	0(0.0%)	0(0.0%)	0

The findings on table 9 reveal that based on the educational level of the parents, a majority of the children who were poor in English language performance were mostly children from parents who had not gone to school (100%) and those whose highest level of education was either primary (60.0%) or secondary (50.0%) school levels, while a majority of the children who were not very poor in the language performance were those whose parents' highest level of education was high school (100%) and tertiary education (100%). Based on income levels, all children from parents with very high and high income levels (100%) were not very poor in their English language performance compared to children from parents with average income levels (61.6%) and low and very low income levels (50.0%).

Based on the employment status of parents, a majority of the children whose parents were government employed (75.0%) and self-employed (67.7%) were not very poor in their language performance compared to children of parents who were privately employed (50.0%) or unemployed (100%). Findings also showed that a majority of the children who were not very poor in their language performance were those whose parents started communicating with them in English (71.4%) not Pidgin English or a native language. Similarly, children who best expressed themselves in English were not very poor in the language performance (70.0%) while all the children (100%) who best expressed themselves in pidgin were poor in their language performance. Findings also revealed that children of a majority of the parents who discovered that their children had dyslexia in class one (66.7%) and two (75.0%) were not very poor in their language performance while children of parents who discovered that their children had dyslexia in classes three and four, 42.8% and 39.1% respectively, were poor in their English language performance. Finally, for parents who engage in conversation with their children, 61.9% of them were not very poor in their language performance.

Discussion of Findings

This study found a significant, positive and strong relationship between parental involvement and the English language performance of children with dyslexia. This implies that the language

performance of children with dyslexia is more likely to improve when parents actively offer assistance to their children. In other words, the language problems of children with dyslexia are more likely to be reduced when parents are actively assisting their children at home. According to Yazid and Yin (2015) the most important thing to parents with dyslexic children is to give them sufficient time while exercising patience in teaching them because they require more time and assistance. There is also need to send them for extra classes provided by special educators to boost their learning opportunities. Furthermore, parents need to keep supporting and encouraging their children rather than scolding or punishing them, considering their inclination to easily give up, get frustrated or become bored. On the other hand, the process of teaching this type of children should include visual and storytelling aids from parents so as to help improve their study abilities, as well as improve their attention spans (Yazid & Yin, 2015). In childhood education, parents are seen as partners to as well their children's first and most influential teachers (Menlove et al., 2013).

Parental involvement was attested in the current study through activities such as parents reading books with their children after school, checking their books during weekends to see what has been taught, encouraging them to read books aloud while they listen, teaching them how to pronounce words, teaching them new words, teach them how to write letters, assisting them to do their English Language assignments, giving them repetition classes on English Language lessons taught in school. Also, some the children indicated that they speak like their parents when interacting with peers and finally, they indicated that they learn new words whenever they read books with their parents. The above findings resonate with those of Kaiser and Roberts (2011) who argued that parents can help facilitate language development in children by responding to their communication, giving a large amount of high quality linguistic input, and by using language support strategies. Parent-child book reading is an ideal context for children's language development as it offers both contextual and social support for language development that matches children's needs (Vygotsky, 1978). In addition, parent-child reading exposes children to vocabulary that they have most likely not encountered in daily life, and provides a context for parents' labelling of pictures and use of more sophisticated language.

With respect to parents demographic characteristics, majority of the children who were poor in language performance were mostly from parents who lacked educational training or had attained only primary and secondary levels of education. On the contrary, a majority of the children who performed better in language were those whose parents had attained high school and tertiary education levels. This tie with Netten et al. (2016) who suggested that the reading proficiency of children can be explained by the educational background of their parents. They noted that children of highly educated parents obtain better reading results than children of parents with lower education levels. Furthermore, based on income level, all children with dyslexia from parents with average and high levels of income were not very poor in their English language performance' compared to children from parents with low and very low income levels. This finding is in tandem with the ideas of Hartes (2011) who posited that the effects of economic status on language can be explained through the parents' decisions to allocate resources such as money, time and energy towards different factors of the child's schooling. Hartes (2011) also found a strong link between parents' investment in home learning and the development of the child's cognitive and literacy skills. Finally, children whose parents were engaged in conversation and literacy activities with them more often, were not very poor in their English language performance. This corroborates the finding of Hart & Risley (1995) who explained that children learn to talk through casual social interactions with care givers and that one of the strongest predictors of children's vocabulary is adult communication with the child. In conclusion, the study was to find out effect of parental involvement on the English performance of children with dyslexia and, the findings showed that parental involvement do have significant and positive effect on the English language performance of children with dyslexia. Also, parents level of education, income level, employment status, communication with children, appear to have significant implication on children with dyslexia performance in English. Majority of children with dyslexia who do not perform very badly in English language are mostly those whose parents are involved in rendering some academic assistance at home.

Recommendations

It was therefore recommended that parents should endeavour to assist their children with dyslexia at home such that they can develop reading and writing skills through the different reading activities the parents assist them with at home so as to improve on their performance and language literacy. In regards to demographic factors, parents who have tight working schedules and whose employment statuses do not permit them to create time to assist and teach their children with dyslexia at home, should be able to hire the services of a home teacher and provide all the necessary resources needed to teach children with dyslexia. Parents with low income levels and low levels of education should endeavour to create a conducive and friendly environment in which siblings and peers can comfortably engage in reading and writing activities with the children. Given the fact that English is the language used in interacting and teaching every other subject at school, parents should make sure it is the first language they introduce to their children from the time they are born.

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