

MOTHERS PERCEPTION OF FACTORS INFLUENCING THE SPEECH AND LANGUAGE DEVELOPMENT OF PRESCHOOL CHILDREN

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ABSTRACT

Globally, speech and language development of children has been at the helm of research. There are several factors believed to influence this important milestone in human's life. However, the perception of people about these factors varies. This study investigated the perception of two hundred (200) mothers on factors influencing the speech and language development of preschool children in four local governments in Ibadan, Oyo state, Nigeria. Survey research design was used and data generated were analysed using frequency counts and simple percentage as well as inferential statistics involving K-related samples Chi-square. The key findings are: perception of maternal depression, maternal voice, maternal education attainment and school factors plays a considerable role in the speech development of preschool children as well as birth order has significant relationship with speech and language development of preschool children. While maternal voice was found to be the strongest factor, school factor was the weakest. This study recommends active participation of mothers in the development of their wards' speech and language development, while improvement in their health will go a long way in helping them to achieve this. Hence, women education, relating to child care, as well as fascinating school environment should be considered a top priority by relevant authority as these will help in the speech and language development of children. This study, apart from being helpful to stakeholders in the business of children development, it equally serves as a source of enlightenment and needed information to speech therapists, parents and the general reading community on the extent to which mothers' factors could influence speech and language development their wards.

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KEYWORDS: speech and language development, pre-school children, maternal voice, mothers perception

INTRODUCTION

World over, children are believed to have a great attachment to their mothers at a very early stage of life and traditionally mothers are seen to be the custodian of knowledge and development to their wards. The urban situation in which both parents go outside to fend for living might be taking a toll on the speech and language development of their children. Whereas, language is seen as a tool that presents opportunities for social understanding, learning about the world, and for sharing experiences, pleasures and needs. Children of working mothers might be getting inadequate maternal affection which might affect their emotional, speech and language developmental milestone. Some research findings have also shown that mother affection and cognition of children are intimately linked, and that maternal behaviors that demonstrate sensitivity; that is prompt and appropriate responses to their children behavioural signal, responsiveness; elaborateness, and cognitive stimulation are positively associated with children's language and cognitive skills, which make children of unavailable mothers at risk of underdeveloped speech.

Learning to talk is one of the most important observable characteristics in child developmental milestone during the early childhood. It is very

dishearten when parent observed that their kids or wards that is expected to mutter or to verbalise is having delay or problems responding to verbal cues or produce meaningful sound that could present such a child for relationships in an environment which places much emphasis on auditory-verbal interaction. Children have been known to develop the ability to speak even right before birth which started manifesting after birth, that even without explicit teaching, toddlers with functional speech apparatus move from hesitant single words to few sentences and from a small vocabulary to one that is growing by six new words a day.

Children's vocabularies vary greatly in size right from the period of preschool and this is seen as a major predictor of subsequent school success, this variability must be taken seriously and its sources understood. Some of this variability resides in the individual capacities and temperament that infants bring to the word learning task. However, environmental influences are also bound to play instrumental roles in the speech and language development of children. Acquisition of speech and language has been known to have begun long before children are of preschool age, this makes several

factors influencing the speech and language development to be of great importance.

The development of speech is crucial in learning other skills (Graves, 2011). Level of speech development has been associated with improved reading comprehension skills as well as improved oral ability and later academic success (Wise, Sevcik, Morris, Lovett, & Wolf, 2007; Walker, Greenwood, Hart, & Carta, 1994). Research focusing on vocabulary instruction development has shown that diverse reading and diversified vocabulary curricula are the key to helping children build a large vocabulary in school (Graves, 2011). These are elements typically practiced in a school environment but the acquisition of vocabulary begins long before children are of school age so the factors that influence development during early childhood are also important. It has been shown that there is a period of increased development, or a "spurt" that occurs in vocabulary around two or three years of age (Huttenlocher, Haight, Bryk, Seltzer, & Lyons, 1991).

Maternal depression is a major health concern (Hammen, 2009). Women are 70% more likely than men to experience depression at some point in their lives (Kessler, Berglund, Demler, Jin, Merikangas, Walter et al., 2005). The average age of onset for a major depressive episode is 32 years old, around the time when many women are raising children (Kessler et al., 2005). The children of depressed mothers are at risk for negative outcomes including behavioral problems (Brennan, Medlink, and Hodgins 2000), difficulties problem-solving (Nolen-Hoeksema, Wolfson, Mumme, & Guskin, 1995), and lower receptive and expressive language abilities (Brennan et al., 2000; Cox, Puckering, Pound, & Mills, 1987). Herrera, Reissland, and Shepherd (2004) found that depressed mothers differed from non-depressed mothers in their use of affective speech directed to their 6-month-old and 10-month-old infants. The ability to correctly identify and discuss emotions, thoughts, and feelings may be beneficial for a child's development. Ensor and Hughes (2008) examined maternal use of mental state words and their relation to child outcomes. Findings revealed that children whose mothers made more cognitive references demonstrated better social understanding at ages two, three, and four. Maternal depression also lead to reduced verbal interactions between mother and child which may also reduce the exposure of the child to maternal voice.

A child journey to speech and language development is believed by most researchers to be begun long before birth, as babies in the womb can distinguish their mother's voice in the last 3 months of pregnancy (Karmiloff and Karmiloff-Smith 2001). Maternal voice is a crucial one in that infants are more responsive to natural maternal voices than any other

external stimuli. Maternal voice are presumed to enhance infant attention, averts distress and fosters interpersonal bonds (Trehub & Trainor, 1998). A number of studies point to parental (especially maternal) language as an influential factor in child variability (e.g., Hart & Risley, 1995), but also recognize that children play an active role in their own experiences (Sameroff, 2010). Abundant research has demonstrated associations between maternal voice and children's development, with most studies focusing on children's early lexical development (e.g., Huttenlocher, Haight, Bryk, Seltzer & Lyons, 1991; Hart & Risley, 1995; Hoff, 2003; Pan, Rowe, Singer & Snow, 2005; Rowe, 2008; Huttenlocher, Waterfall, Vasilyeva, Vevea & Hedges, 2010;). For example, when following toddlers' vocabulary production from one to three years in low-income families, researchers found large variation in growth across children, which were related to maternal lexical input (Pan et al., 2005).

On the empirical front, studies have shown that maternal voice mediates associations between social economic status and children's language skills (e.g., Hoff, 2003; Huttenlocher et al., 2010; Rowe, 2008). That is, although social economic status predicts variation in children's vocabulary, associations attenuate when the amount and/or quality of maternal voice is controlled (Hoff, 2003; Rowe, 2008). Tamis-LeMonda, Bornstein, and Baumwell (2001) found that maternal responsiveness was associated with the achievement of language milestones during infancy and early toddlerhood, and Mistry, Biesanz, Taylor, Burchinal and Cox (2004) found that maternal sensitivity was significantly associated with expressive and comprehensive language skills at 36 months of age. Similarly, Raviv, Kessenich and Morrison (2004) found that both maternal sensitivity and cognitive stimulation were independently related to 36-month-old children's language outcomes.

Other studies have examined the effect of birth order on speech and language development include: Tomblin (1990) examined the birth order of second grade children with and without developmental language impairment in order to determine if language impaired children were more likely to be later born or earlier born. When a child is also late to talk, parents generally attribute it to the presence of a sibling doing the talking for him or her. Several researches differ on whether the first born talk faster the subsequent child. This study controlled for family size and socioeconomic status, and did not find evidence that children with language impairments were more often later born. Bornstein, Leach and Haynes (2004) found that mothers report larger receptive and expressive vocabularies in their first born. However, standardized testing and direct observation show that there was no difference in either receptive or expressive vocabulary between firstborn and second born. The researchers

hypothesize that either mothers think they know their first born children better than they actually do or they “may lack a sufficient frame of reference to be accurate reporters about their firstborn children”.

Moreover, in the study carried out by Oshima-Takane, Goodz and Derevensky (1996), Hoff-Ginsberg (1998), and Bornstein, Leach, and Haynes (2004), socio demographic parameters and socio economic background of a child have been found to be essential factors influencing speech and language development. Specifically, birth order has shown to be a reoccurring in literature (Eckstein and Kaufman, 2011, Horner, Andrade, Delva, Grogan-Kaylor and Castillo, 2012; Monfardini, 2012; Ghanizadeh, Abotorabi-Zarchi, Mohammadi, and Firoozabadi, 2012; Souhlas, 2014; Abraham, Sunil, Baburaj, Mohandas, 2014). The fact that this variable has been used in so many different studies shows how interesting and influential it is. To buttress this, Souhlas (2014) noted that in most family situations, the first-born child is typically the guinea pig for the parents. That is, at this stage with every aspect of that child's life, most parents are unaware of developmental milestones (speech development inclusive). At this stage there are tendencies for parents to think that their child's speech and language development is meeting the timeline, or the speech will improve with age; therefore, speech and language development may carries or developed late without any reactions from the parents.

The level of education attained by the mother has been shown to positively correlate with a child's vocabulary (Dollaghan, Campbell, Paradise, Feldman, Janosky, Pitcairn and Kurs-Lasky 1999). This suggests that the higher the level of education, the larger the vocabulary is with regards to the mother. High socioeconomic status is related to a higher maternal education, and thus higher maternal vocabulary (Dollaghan et al, 1999). Low social economic status is also related to an elevated rate of depression among women, especially mothers (Weissman et al., 1972). The elevated rate of depressive symptoms is correlated with parenting behaviors that negatively influence vocabulary development (Bornstien et al., 1998). Therefore, a family's level of socioeconomic status is related to maternal depressive symptoms, vocabulary, and education, which are factors that have been associated with a child's vocabulary development. Like family income, parental education is a strong influence on children's home environments. In some research on child outcomes, maternal education is a better predictor than family income. The children later have to move further to the school environment which in should also influence their speech development.

School factors involved the environment, attitude of the teachers, means and mode of communication to

the children and facilities on ground to motivate speech and language development. Good communication in school should be the basis of the most effective speech and language motivation for children. When teachers and caregivers communicate well with the children, the children learn how to communicate well with others. Early childhood educators need to be aware of the profound effect they can have on the speech behaviour of the children in their care by using appropriate words and vocabularies to improve and boost their vocabulary level. Care givers for preschool children should be able to among other things encourage the use of language. Programs should also be planned in line with speech characteristics of preschool children in order to develop the speech and language. Opportunity should be provided for the children to talk and to listen to others; also caregivers should listen to them and make use of eye contact. Poor quality care in school and day care services has repeatedly been shown to be related to lower cognitive and language development (Burchinal, 1995) and there is some agreement that high quality care can enhance them (McCartney, 1984), especially amongst children who are already at-risk for poor outcomes (Scarr & Eisenberg, 1993).

Studies from the NICHD Early Child Care Research Network and others have found that good quality caregiving is associated with better cognitive and language development and also with more advanced social skills (Cost, Quality & Child Outcome Study, 1995; NICHD 1999). Quality of care is not the overriding factor for all children, though. For instance, behavioural problems of children of middle class families who started day care in the first year of life were not predicted by its quality, (Deater-Deckard, Pinkerton & Scarr, 1996) while Burchinal found that in the USA, quality may be more relevant for AfricanAmerican than European-American children (Burchinal et al., 1997).

Given the aforementioned, the perceptions of mothers on what influence the speech and language development varies, among which are; maternal depression, maternal voice, maternal educational qualification, birth order and school environment. The question is: do these factors determine the perceptions of mothers about the speech and language development of their wards in the case of Nigeria, Oyo State, and Ibadan specifically? Answer to this question will not only shed lights on ways of enhancing children speech and language development but will fill a contextual empirical gaps. Hence, the objective of this study is to examine the relationship between maternal characteristics (maternal depression, maternal voice, maternal educational qualification, birth order and school environment) and their wards' speech and language development.

STATEMENT OF THE PROBLEM

Speech and language development is seen as the rock in which a child's overall development is based, particularly the psychological, educational and social development. Mothers are most of the time faced with the apprehension of their children speech development. Every mother will want their child to talk to them and derive joy in hearing the sound of speech being made by their children. However, several factors can influence this important milestone development in children and inadequate information on the development of speech by mothers can make them to be more apprehensive and at a loss on what they as mothers can do and avoid to actually influence the speech development of their children.

Also, the situation in which the mother has to work outside the home and have to endure the stress of motherhood and work might not be helpful in giving the mothers adequate time to help in the speech development of their children.

With the aforementioned challenges, it requires the mothers to be well equipped on the factors that can influence their child's speech and language development. It is in lieu of this that the study tends to look into the mothers perception of factors influencing the speech and language development of preschool children.

RESEARCH HYPOTHESES

The null hypothesis this study seeks to test, given the objective, are:

H01: There is no significant relationship between maternal depression and speech and language development of preschool children

H02: There is no significant relationship between birth order and speech and language development of preschool children

H03: There is no significant relationship between maternal voice and speech and language development of preschool children

H04: There is no significant relationship between education attainment and speech and language development of preschool children

H05: There is no significant relationship between school factors and speech and language development of preschool children

SIGNIFICANCE OF THE STUDY

Speech and language development is an important milestone in children development and the perception of mothers on what these factors are will help in influencing the speech development of the children. Therefore, the results of this study will improve the knowledge of mothers on the exact factors that can influence their child's speech development so as to put more efforts on the positive influenced factors and to avoid the negative influenced factors.

The speech development is very crucial in children developmental years as this can greatly determine the overall development. This study would therefore provide empirically proven information on factors that can influence the speech development of preschool children, thus enlightening mothers and teachers of preschool children on the appropriate training and instruction techniques that can help the speech development of preschool children. It also helps to the necessary authority in planning the educational programme in line with the speech characteristics of the preschool children, thus improving the speech development of pre-school children. The entire reading community and researchers are not left out. This is because this study serves sources of needed information on the importance of mothers' factors in influencing speech and language development of the children, while serving as intellectual data bank for future research work.

Finally, few studies have examined (as previously indicated) the relationship between mothers' factors and speech development of children but none focus on the scope of this study. Focusing on preschool children in Nigeria and Oyo State, Ibadan Metropolis specifically makes this study to fill the gaps in empirical literature.

SCOPE OF THE STUDY

This study was delimited to the mothers' perception of factors influencing the speech and language development of pre-school children in four local government of Ibadan metropolis, Oyo State, Nigeria. It also investigated the perception of 200 mothers that has two children or more in the four local governments in Ibadan.

MATERIALS AND METHODS

Sample and Sampling

Participants of this study consist of randomly selected 200 mothers within the ages of 25-40 years. The demographic questionnaire includes questions about mothers' occupation status, educational qualification, marital status and age of the mother. Structured questionnaire, which consist of items measuring maternal depression, perceived school factors, maternal voice, was used. Selected mothers were those within the age of 25 to 40 years, who have more than one child and also have a preschool age children were purposively selected for the study. Participants were drawn from 5 randomly selected local governments in Ibadan metropolis, Oyo state and they consists two groups of professionals and full house wife mothers. The participants also cut across three different tribes residing in the metropolis.

RESEARCH DESIGN AND METHOD OF DATA ANALYSIS

Descriptive survey research design was used for the study because the study investigated the relationship between factors like maternal depression, maternal voice, school factors, birth order, and educational qualification and speech and language development of preschool children. Questionnaire used for the study consist of section A and B. Section A consists of 4 items to find out demographic information from the respondents, section B consist 29 items to elicit information from the respondents about their perceptions on factors influencing speech and language development of preschool children. The questionnaire was designed on a four-point likert scale of “Very much like me”, “somewhat like me”, “Unlike me” and “Very unlike me”.

Data generated were analysed using descriptive statistics involving frequency counts and simple percentage as well as inferential statistics involving K-related samples Chi-square. The justification for this method is that it is similar to the repeated measures analysis of variance (ANOVA), but does not require the normality assumption. This assumption is appropriate since significant heterogeneity is expected across cross-sectional observations (respondents). The K-related samples Chi-square compares the mean ranks between the related groups of items and indicates how they differed. The pre-analysis diagnosis test involved Guttman Split-Half which was used to test for the internal consistency of the instrument used in data collection. All analyses were performed at 5% level of significance.

DATA ANALYSIS AND DISCUSSION OF RESULTS

Demographic Characteristics of Respondents

The demographic distribution of respondents indicated in Table 1 shows that about half (50.4%) of the respondents were within the age range of between 31 and 40, while the majority of them (44.6%) were first degree holders. In terms of number of children, 60.4% (representing 84 respondents) has only one child, while the remaining 39.6% has two children. This implies that the respondents are still young mothers. The occupation distribution shows that higher proportions of the respondents (25.9) are students. This is followed by those that are civil servants, traders and fashion designers representing 15.8%, 12.9% and 10.8% of respondents respectively.

Table 1. Demographic Characteristics of Respondents

Age				
Age Range	Frequency	Percent	Valid Percent	Cumulative Percent
25-30	33	23.7	23.7	23.7
31-40	70	50.4	50.4	74.1
41-45	36	25.9	25.9	100
Total	139	100	100	
Education Qualification				
Education Level	Frequency	Percent	Valid Percent	Cumulative Percent
SSCE	36	25.9	25.9	25.9
NCE	23	16.5	16.5	42.4
BEd/BSc	62	44.6	44.6	87.1
MEd/MSc	18	12.9	12.9	100
Total	139	100	100	
Number of Children				
	Frequency	Percent	Valid Percent	Cumulative Percent
One	84	60.4	60.4	60.4
Two	55	39.6	39.6	100
Total	139	100	100	
Occupation				
	Frequency	Percent	Valid Percent	Cumulative Percent
accountant	5	3.6	3.6	3.6
Banking	5	3.6	3.6	7.2
broadcaster	5	3.6	3.6	10.8
civil servant	22	15.8	15.8	26.6
fashion designer	15	10.8	10.8	37.4
housewife	4	2.9	2.9	40.3
Nursing	10	7.2	7.2	47.5
provision	5	3.6	3.6	51.1
Student	36	25.9	25.9	77
Teaching	14	10.1	10.1	87.1
Trader	18	12.9	12.9	100
Total	139	100	100	

Source: Field survey

Pre-Analysis Diagnoses

Overall, a cursory look at the Guttman Split-Half Coefficients in Table A1 to A5 shows that all the scales are of a positive internal consistency. However, there is heterogeneity across scales regarding this. While school factors scale, with correlation coefficient of 0.88, has the highest internal consistency, maternal depression scale, with correlation coefficient of 0.28, has the least.

Maternal Characteristics and Speech and Language Development

Null Hypothesis 1: There is no significant relationship between maternal depression and speech and language development of preschool children.

The result in the Table 2 shows that there is significant relationship between maternal depression and language development of preschool children (Chi-square =89.182, Asymp. Sig.=0.000). Hence, the null hypothesis is rejected since asymptotic significance is less than 0.05 chosen level of significance.

Table 2. Maternal depression and speech and language development of preschool children

Ranks	
	Mean Rank
Sleeping disturbance affect my interaction with my children	4.02
Loss of interest in daily activities will make me not to be able to interact well with my children	3.66
Spending less time with my child at an early age affects his/her speech and language development	4.74
The presence of irritable behaviour in my child constitute to my feeling of depression	3.42
Reduction in my feeding as a mother affect my interaction with my child	3.6
I believed that the inability to tune to my baby might affect his speech and language development	5.05
I experienced mood disorder when nursing my baby, and I feel this affect the speech and language development	3.52
Test Statistics ^a	
N	139
Chi-Square	89.182
Df	6
Asymp. Sig.	0.000
a. Friedman Test	

Source: Field Survey

Null Hypothesis 2: *There is no significant relationship between birth order and speech and language development of preschool children*

The null hypothesis of no significant relationship between birth order and language development of preschool children is also rejected at 5% level (Chi-square =145.353, Asymp. Sig.=0.000) (Table 3). Hence, there is a significance relationship between birth order and language development of preschool children.

Table 3. Birth order and speech and language development of preschool children

Ranks	
	Mean Rank
My first child develop speech faster than subsequent children	3.38
My First born child is good in conversational skills than subsequent children	3.12
I create more time to my first child than the subsequent children and I believe this may be the cause of the delay speech and language	2.14
So much attention was showered on my first child by family members than the subsequent children and this help in developing speech and language faster	3.15
My first born perform better on verbal activities than the subsequent children	3.21
Test Statistics ^a	
N	139
Chi-Square	145.353
Df	4
Asymp. Sig.	.000
a. Friedman Test	

Source: Field Survey

Null Hypothesis 3: *There is no significant relationship between maternal voice and speech and language development of preschool children*

The null hypothesis of no significant relationship between maternal voice and language development of preschool children is also rejected at 5% level (Chi-square =305.894, Asymp. Sig.=0.000) (Table 4). Hence, there is a significance relationship between maternal voice and language development of preschool children.

Table 4. Maternal voice and speech and language development of preschool children

Ranks	
	Mean Rank
I realized my child respond more to my voice than that of other people	4.69
I feel talking more to my child help in his speech and language development	4.82
Lack of interactive routine with my child reduced his ability to respond to friendly approaches thereby affecting his level of speech and language development as a pre-schooler	2.84
I found my baby difficult to care for and this really affect my interaction with him thereby lack maternal voice	2.48
My child always show interest in my voice anytime I talk and this encourage me to talk more to him and this I think helps with his speech and language development	4.59
Preference of infants to their mother's voice is an important factor in helping their speech and language development as a pre-schooler	4.03
Children speech and language development will be better if mothers are responsive, sensitive, attentive, and provided good stimulation during interactions	4.54
Test Statistics ^a	
N	136
Chi-Square	305.894
Df	6
Asymp. Sig.	.000
a. Friedman Test	

Source: Field Survey

Null Hypothesis 4: *There is no significant relationship between education attainment and speech and language development of preschool children*

The result in the Table 5 shows that there is significant relationship between education attainment and language development of preschool children (Chi-square =70.190, Asymp. Sig.=0.000). Hence, the null hypothesis is rejected since asymptotic significance is less than 0.05 chosen level of significance.

Table 5. Education attainment and speech and language development of preschool children

Ranks	
	Mean Rank
I believe my educational qualification helps in developing my child speech and language	2.86
I am always able to use so many vocabularies to communicate to my children and I believe in help to enhance their speech and language development	2.67
The level of education of the mother might have an influence on the intelligence of the child thereby also influencing the rate at which speech and language will be developed	2.50
Because of the my level of education, I have to work outside the home and this reduced the time I spend with my child thereby slowing down the progress of his speech development	1.98
Test Statistics^a	
N	139
Chi-Square	70.190
Df	3
Asymp. Sig.	.000
a. Friedman Test	

Source: Field Survey

Null Hypothesis 5: *There is no significant relationship between school factors and speech and language development of preschool children*

The null hypothesis of no significant relationship between school factors and language development of preschool children is also rejected at 5% level (Chi-square =22.684, Asymp. Sig.=0.000) (Table 6). Hence, there is a significance relationship between school factors and language development of preschool children.

Table 6. School factors and speech and language development of preschool children

Ranks	
	Mean Rank
The school my child attends has the facilities to help in enhancing the level of his speech development	3.47
So much emphasis is placed on verbal interaction in my child's school	3.42
My child's classroom participation encourages his of speech and language development	3.58
The absence of interactive play in my child school can lead to delay in speech and language development	3.21
My child's school has a warm and supportive environment which improves speech development	3.73
In my child's school, the teachers respond frequently to children's vocalization	3.60
Test Statistics^a	
N	139
Chi-Square	22.684
Df	5
Asymp. Sig.	.000
a. Friedman Test	

Source: Field Survey

On the aggregate, maternal voice was perceived to have greatest influence (Chi-square =305.894) on children speech and language development, while the school factors was the least factor (Chi-square =22.684). This implies that speech and language development is basically “home thing” and less of school factors. In other words, parents have a lot to do in children speech and language development than school can achieve. Hence, the responsibility of aiding preschool children speech and language development should not be left to school alone but parents should be active participants.

DISCUSSION

The study investigated the relationship between maternal depression, maternal voice, school factors, birth order, and educational qualification and speech and language development of preschool children. The major findings are presented subsequently.

On maternal depression and development of speech and language of preschool children, there is significant relationship. It is worthy to note the variations in the mean rank of the questionnaire items. This implies that though overall maternal depression matters but it varies across the questionnaire items and the presence of irritable behaviour in the child constituting to feeling of depression among mothers seems to be the weakest. In other words, irritable behaviour of children may not really matter to the mothers as other items such as inability to tune to baby and spending less time with baby will do in affecting children speech development. This can be related to the work of Kessler et al (2005) which put 32 years as an average age of onset for a major depressive episode for mothers, which in turn fall at the age many women are raising children. Also, Nolen-Hoeksema, Wolfson, Mumme, & Guskin, (1995) reported that children of depressed mothers are at risk of lower receptive and expressive language abilities.

On birth order and speech and language development of preschool children, there is no significant relationship. This means whether first child or subsequent children, there is no difference in the way speech and language is being developed. However, while discrimination in the creation of more time for one child over the other is weakest among the potential factors in delay speech and language, the parents strongly perceived that their first child develop speech faster than subsequent children. Whereas, the study of Bornstein et al (2004) reported that mothers perceive larger receptive and expressive vocabularies in their first borns despite no difference on standardized testing of receptive and expressive vocabulary between firstborn and second born.

Considering the relationship between maternal voice and speech and language development of preschool children, there is significant relationship. The results

of the study shows that there is a strong perception that child respond more to mother's voice than that of other people. Meanwhile, lack of interactive routine with children was perceived to have less effect on speech and language development. In a similar study, Hoff (2003) Huttenlocher et al., (2010) and Rowe (2008) shows that maternal voice mediates associations between social economic status and children's language skills. Tamis-LeMonda et al. (2001) found that maternal responsiveness was associated with the achievement of language milestones during infancy and early toddlerhood, while Mistry et al. (2004) found that maternal sensitivity was significantly associated with expressive and comprehensive language skills at 36 months of age. Similarly, Raviv et al. (2004) found that both maternal sensitivity and cognitive stimulation were independently related to 36-month-old children's language outcomes.

The findings of the study also show that there is significant relationship between education attainment of mothers and level of speech and language development of preschool children. However, level of education that reduces time spend with children was perceived to be the less causing factor of speech delay, rather mothers perceived their educational qualification to help in developing their child speech and language. This means that level of education that gives rooms for child care is beneficial to speech and language development of children.

There is also significant relationship between school factors and speech and language development of preschool children. However, while child's school warm and supportive environment was perceived to have greatest influence on speech development, absence of interactive play was perceived to be the least factor among the school factors that may cause delayed speech development. Studies carried out by Early Child Care Research Network and NICHD, in 1995 and 1999 respectively reported that good quality caregiving is associated with better cognitive and language development and also with more advanced social skills.

LIMITATION OF THE STUDY

The findings of the study provide perceptiveness into the perception of mothers on the factors influencing speech and language development of pre-school children. The study however is limited in the scope and sample. The study only focused on maternal depression, school factors, birth order, maternal voice, and maternal education attainment. This makes the result obtained not generalise beyond the particular factors studied.

Another limitation is the number of respondents which is just 200 and may not be enough to get the overall perception of the factors influencing the

speech and language development of pre-school children.

Despite these limitations, it is believed that what was concluded upon based on the findings of this study were convincing enough and can serve as a basis for further studies based on the factors influencing the speech and language development of pre-school children.

CONCLUSION

This study investigates the relationship between maternal depression, birth order, maternal voice, maternal education attainment and school factors and speech and language development of preschool children. Descriptive statistics involving frequency counts and simple percentage as well as inferential statistics involving K-related samples Chi-square were used to analyse the data generated. The key findings are that the five factors considered have significant relationship with the speech and language development of preschool children.

The policy lesson from this study is that mothers play a very vital role in the development of speech and language of their children. These include their health status, educational status and the socioeconomic status.

RECOMMENDATION

It is important that the health status of mothers should be given a top priority in the nation's health sector as this will influence their relationship with their developing children. Signs and symptoms of depression should be known by all for quick notification and adequate treatment.

Also female education should be seen as being important because the young females will later become mothers and their education attainment will actually have an impact not only on the speech and language development of children but also on the emotional and cognitive abilities as well.

Mothers should also try as much as possible to be speaking to their children, reading aloud to children even at a very tender age as this will help the child build confidence in his or her vocabulary development.

School environment should be warm and receptive to children, classroom atmosphere should be speech stimulating enough for children; there should be toys, teaching should be interactive and play based as this will help the children to develop speech and language. Teachers should be homely patient and attentive to children's needs.

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APPENDIX

Table A1. Maternal Depression Scale Reliability Test

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.005
		N of Items	4 ^a
	Part 2	Value	.502
		N of Items	3 ^b
Total N of Items			7
Correlation Between Forms			.163
Spearman-Brown Coefficient	Equal Length		.281
	Unequal Length		.283
Guttman Split-Half Coefficient			.281
a. The items are: Loss of interest in daily activities will make me not to be able to interact well with my children, Spending less time with my child at an early age affects his/her speech and language development, The presence of irritable behaviour in my child constitute to my feeling of depression, Reduction in my feeding as a mother affect my interaction with my child.			
b. The items are: Reduction in my feeding as a mother affect my interaction with my child, I believed that the inability to tune to my baby might affect his speech and language development, I experienced mood disorder when nursing my baby, and I feel this affect the speech and language development, Sleeping disturbance affect my interaction with my children.			

Table A2. Birth Order Scale Reliability Test

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.594
		N of Items	3 ^a
	Part 2	Value	.603
		N of Items	2 ^b
	Total N of Items		5
Correlation Between Forms			.431
Spearman-Brown Coefficient	Equal Length		.602
	Unequal Length		.609
Guttman Split-Half Coefficient			.579
a. The items are: My first child develop speech faster than subsequent children , My First born child is good in conversational skills than subsequent children, I create more time to my first child than the subsequent children and I believe this may be the cause of the delay speech and language.			
b. The items are: I create more time to my first child than the subsequent children and I believe this may be the cause of the delay speech and language. So much attention was showered on my first child by family members than the subsequent children and this help in developing speech and language faster, My first born perform better on verbal activities than the subsequent children.			

Table A4. Educational Qualification Scale Reliability Test

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.199
		N of Items	2 ^a
	Part 2	Value	-.785 ^b
		N of Items	2 ^c
	Total N of Items		4
Correlation Between Forms			.192
Spearman-Brown Coefficient	Equal Length		.322
	Unequal Length		.322
Guttman Split-Half Coefficient			.321
a. The items are: I believe my educational qualification helps in developing my child speech and language , I am always able to use so many vocabularies to communicate to my children and I believe in help to enhance their speech and language development.			
b. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.			
c. The items are: The level of education of the mother might have an influence on the intelligence of the child thereby also influencing the rate at which speech and language will be developed , Because of the my level of education, I have to work outside the home and this reduced the time I spend with my child thereby slowing down the progress of his speech development.			

Table A5. School Factors Scale Reliability Test

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.592
		N of Items	3 ^a
	Part 2	Value	.777
		N of Items	3 ^b
	Total N of Items		6
Correlation Between Forms			.788
Spearman-Brown Coefficient	Equal Length		.881
	Unequal Length		.881
Guttman Split-Half Coefficient			.879
a. The items are: The school my child attends has the facilities to help in enhancing the level of his speech development, So much emphasis is placed on verbal interaction in my child's school , My child's classroom participation encourages his of speech and language development.			
b. The items are: The absence of interactive play in my child school can lead to delay in speech and language development, My child's school has a warm and supportive environment which improves speech development, In my child's school, the teachers respond frequently to childrens' vocalization.			

Table A3. Maternal Voice Scale Reliability Test

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	-.242 ^a
		N of Items	4 ^b
	Part 2	Value	.299
		N of Items	3 ^c
	Total N of Items		7
Correlation Between Forms			.324
Spearman-Brown Coefficient	Equal Length		.490
	Unequal Length		.493
Guttman Split-Half Coefficient			.490
a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.			
b. The items are: I realized my child respond more to my voice than that of other people, I feel talking more to my child help in his speech and language development, Lack of interactive routine with my child reduced his ability to respond to friendly approaches thereby affecting his level of speech and language development as a pre-schooler, I found my baby difficult to care for and this really affect my interaction with him thereby lack maternal voice.			
c. The items are: I found my baby difficult to care for and this really affect my interaction with him thereby lack maternal voice, My child always show interest in my voice anytime I talk and this encourage me to talk more to him and this I think helps with his speech and language development, Preference of infants to their mother's voice is an important factor in helping their speech and language development as a preschooler. Children speech and language development will be better if mothers are responsive, sensitive, attentive, and provided good stimulation during interactions.			