Empirical Realities of Teacher-Child Interaction and Cognitive Development of Pre-Primary School Children In Ibadan, Oyo State

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Abstract

The characteristics of teacher-child interaction play a paramount role in the cognitive development of children. Despite its significance, literature abounds on how these characteristics, such as teachers' actions, words, gestures, and responsibilities, may improve or deter children's development (Grosse, 2022; Bartholo et al., 2022). Thus, this study was carried out to contribute to the body of knowledge, particularly taking into account preschools from a developing nation such as Nigeria. It sought to establish the extent and influence of teacher-child interaction on the cognitive development of pre-primary children in the Ibadan metropolis. The study employed a correlational survey design. A multi-stage approach was used for sampling and sampling. The total sample size for the study was 200, which comprised 50 pre-primary class teachers and 150 pre-primary school children. Two research questions were raised and answered. Teacher-Child Interaction Observation Schedule (TCIOS) ∝= 0.72, Child Cognitive Development Rating Scale (CCDRaS) ∝= 0.79, and Questionnaire on Teacher's Perception of Teacher-Child Interaction on Cognitive Development (QTPTCICD) ∝= 0.80 were the instruments used for the study. Data collected were analysed using descriptive statistics and Pearson Product Moment Correlation. The result of the findings revealed that the extent of teacher-child interaction and level of cognitive development was great with $(\bar{x} = 3.41$ and $\bar{x} = 3.61$, respectively, as well as the teachers' perceived influence on teacher-child interaction on cognitive development, was positive $(\bar{x} = 3.16)$. Although the finding showed no significant relationship between teacher-child interaction and cognitive development (r=0.01; p>0.05), it is recommended that teachers, however, should maintain the positive, quality interaction that characterizes preschool teaching, which may resonate with other uniqueness and educational needs of the child.

Keywords: *Teacher-child interaction; cognitive development; social behavior; pre-primary children*

INTRODUCTION

In order for children to develop holistically, it is essential that they begin developing early in life. As a result of constant interaction with others, children's identities are shaped from their earliest days. This means that the family and the childcare setting are the two most important places for young children to thrive. Given the length of time children spend in daycare centers, certain traits may have a significant impact on the development of the child. Researchers (Cruz-Aguayo et al., 2019; Yoleri, 2016, NICHD, 2006) have found high-quality teacher-child interactions in childcare to be just as important as any other features associated with quality childcare. Specifically, the years before a child reaches statutory school age (six years) are among the most critical in life span, which can influence learning.

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In this sense, interaction refers to a set of behaviors that develop and maintain closeness and contact with an adult figure who is responsible and sensitive to the needs of the kid (Kennedy and Kennedy, 2004). For Ansari and Pianta (2019), the more important component of successful early childhood education is the importance of the interactions between children and their teachers. It is possible to evaluate these interactions by looking at the organizational elements of the classroom (e.g., behavior management) and by observing the degree of social involvement (e.g., how sensitive teachers are). All other facets of classroom management are based on how well the teacher and students connect. However, the teacher is the one who has the most influence on creating an environment conducive to good engagement. Whitaker (2014) argues that it is better to create a smooth interactive class that will motivate the children to behave rather than exhibiting behaviours that would not make them concentrate in class. Teachers should engage in actions such as listening to them, engaging them in face-to-face interaction, providing warm physical contact, answering all their questions, and acknowledging accomplishments and efforts. Rather than not being responsive to their needs, lack of empathy and encouragement, more talking, less doing. Quality interaction could determine the classroom climate and culture that will enable or restrict classroom instruction and consequently affect the cognitive development of the children (Stewart, 2008).

Treboux, Crowell, and Waters (2014) posit that the development of close social bonds in childhood is essential to the cognitive development of pre-primary children, adaptive emotional regulation, and their self-concept. However, literature has shown that inability of teachers to perceive, interpret and react promptly to children's needs and attention gives room for poor interaction between the teacher and the child; this could have negative effects on the cognitive as well as social development of the child. Consequently, a less stimulated child that is unable to adequately engage in structured classroom tasks and interaction with their peers may later lead to social difficulties, poorer achievement scores, and poor cognitive development (Bulotsky-Shearer et al., 2017).

Poor cognitive development in children has been linked to unhealthy interpersonal relationships between teachers and children. In less effective teacher-child interaction classrooms, opportunities are missed to help children attain meaningful learning because they take fewer active roles and do not engage in activities long enough to explore their physical world. Nurturing relationships between children and their teachers has been found to aid the development of children's cognition by enhancing their abilities to reason, remember, give opinions, propose ideas, use language and solve problems without restrictions. However, studies have shown that the level of interaction between teachers and children in many pre-primary schools in Nigeria is minute because most teachers spend much time imparting content knowledge to children rather than building relationships that will enable them freely discover knowledge (Cadima, 2018). The study, therefore, investigated the influence of teacher-child interaction on the cognitive development of pre-primary school children in Ibadan, Oyo state. The study further sought to establish the extent of teacher-child interaction as observed in pre-primary school children in Ibadan, the level of cognitive development of pre-primary school children in Ibadan, as well as the relationship between the two variables. Previous research with similar research objectives has mostly employed the use of the Classroom Assessment Scoring System (CLASS); this study, however, adapted a self-developed Teacher-Child Interaction Observation Schedule (TCIOS) and the Child Cognitive Development Rating Scale (CCDRaS) to accommodate the peculiarity of the sample characteristics in Nigeria.

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Research Questions

The following research questions were used to guide the study:

1. What is the extent of teacher-child interaction as observed in pre-primary school children in Ibadan?
2. What is the level of cognitive development of pre-primary school children in Ibadan?
3. Is there a significant relationship between teacher-child interaction and the cognitive development of pre-primary school children in Ibadan?

LITERATURE REVIEW

Literature abounds that children's school performance is also facilitated by teachers who provide high levels of instruction support, measured through interactions, both in preschool and throughout the primary grades (Burchinal et al., 2014; Connor, 2014; Johnson et al., 2016). In a qualitative study on the experiences of overage children in pre-primary school, Olalowo (2020) submitted that the teacher-child interaction in Ibadan preschools is too formal and could be likened to a 'master-slave' relationship; with communication between teacher to the pupil being a distant interaction. This state of interaction greatly impedes on what best the teacher can cull out of the child since education, in its etymology, seeks to cull out innate tendencies in the child through the help of a More Knowledgeable Order (MKO), and in this case, the teacher.

Also, in a study conducted by Pianta, Belsky, Houts, and NICHD Early Child Care Research Network (2007) on the influence of teacher-child interaction on the cognitive development of children, the author found that a positive teacher-child interaction predicted growth in language and cognitive development. Howes and Ritchie (2009) found that teacher-child attachment predicted children's social competence and cognitive development. The authors also found that children with secure teacher-child relationships played in more complex ways with their peers. Peers were more difficult for children who were resistant, and peers who were avoidant were less likely to engage with them.

Elementary school children have also been shown to experience similar effects. The National Institute of Child Health and Human Development Early Child Care Research Network (2002) conducted a study on hundreds of first- to fifth-grade students and found that emotionally warm; sensitive teachers led to increased mathematics and reading abilities in their students. In another study by the same researchers in 2018, of 827 first-grade classrooms in 32 states, emotionally supportive teachers had children who were more likely to engage in academic activities, experience positive relations with peers, and avoid negative behaviours. According to other studies, children with close teacher-child interactions tend to perform better academically (Birch and Ladd, 1997). These children score higher on achievement tests, have a positive attitude toward school, engage in the classroom, have lower retention rates in grades, and are referred to special education more often.

RESEARCH METHOD

This study utilized a descriptive survey research design. This allows for variable characteristics to be presented without manipulation. Descriptive survey research design, according to Ary, Jacobs, and Sorensen (2010), is research that provides an accurate portrayal of the characteristics of a particular individual, situation, or group. However, to accommodate the intention of establishing the significant relationship that exists between the variables of the study, the correlational research design was integrated into this study. Creswell (2012) described correlational research as a non-experimental quantitative design in which the researcher applies correlational statistics to measure and describe the degree of relationship among variables or sets of scores. The variables of the study were existing

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variables that did not require manipulation by the researchers. The study population comprised all public pre-primary school teachers and pre-primary school children in Ibadan North and Ibadan South-West Local Government Areas, Nigeria. A multi-stage approach was adopted. A simple random sampling technique was used to select two (2) out of the five (5) local government areas in Ibadan Metropolis. Twenty-five (25) public pre-primary schools were randomly selected from each of the two selected local government areas, making a total of fifty (50). Total enumeration was used to select one teacher per school, and three (3) children were randomly selected per school to be assessed, making a total of one hundred and fifty (150) children. Altogether, two hundred participants were involved. This encompassed fifty (50) pre-primary class teachers and one hundred and fifty (150) children in the two local government areas selected.

The validated instruments used to gather the data for this study were: i. Teacher-Child Interaction Observation Schedule (TCIOS) with a reliability coefficient of $\propto$=0.72. It was designed by the researchers to observe the level of interaction among teachers in pre-primary classes. The TCIOS was initially presented to experts in the field of Teacher Education, Early Childhood Education, and Sociology of Education to determine the content validity of the instrument. Unnecessary and unclear items were later reworked and constituted the final draft. The instrument has twenty items with a 4-Likert scale format ranging from 'Very often' =4 to 'Never' = 1. Two sample items include: "Teacher is friendly with the children" and "Teacher listens to the children speak out their thoughts". ii. Child Cognitive Development Rating Scale (CCDRaS). The rating scale was designed by the researcher to rate the level of cognitive development in pre-primary children. The instrument was divided into two sections. The first section contains information about the children's language development. Two sample items include: "The child can recite a song or poem" and "The child can speak the language of the immediate environment". At the same time, the other section contains items on children's cognitive development. Two sample items include: "The child sorts out the living things from a list of items" and "The child mentions objects in the classroom and their uses". It was rated on a 5-Likert scale format ranging from 'Excellent' (5) to 'Poor' (1). The final draft of the rating scale was arrived at after subjecting the initial drafts to a validation process. To validate the instrument, 22 copies of the rating scale were administered among preschool pupils with similar sample characteristics to the participating children, but that was outside the intended sample scope. The data was analysed using an inter-rater to determine its reliability coefficient, which yielded 0.79. ($\propto$=0.79). In analysing the data, frequency count, percentage, mean and standard deviation were the descriptive statistics that were used to analyze research questions.

FINDINGS AND DISCUSSION

The population of pre-primary school children in this study was almost the same for both male and female children, with male children being slightly higher by 6.6% when the total population in both Ibadan North and Ibadan South West LGAs was considered. Table 1 shows that there are 80 male children, which account for 53.3%, and 70 female children, which account for 46.7% of the sampled population.

Table 1. Gender Distribution of Pre-primary School Children in two LGAs in Ibadan

Gender	Frequency	Percentage
Male	80	53.3
Female	70	46.7
Total	**150**	**100**

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The extent of teacher-child interaction in Ibadan pre-primary schools

Table 2. Extent of Teacher-child Interaction as observed among Pre-primary School Children in Ibadan Metropolis

S/N	Items	VO	O	R	N	Mean	Std. D
1.	Teacher is friendly with the children.	104 (69.3)	45 (30)	1 (0.7)	-	3.69	.47
2.	Teacher makes the children laugh	8 (5.3)	102 (68)	39 (26)	1 (0.7)	2.78	.54
3.	Teacher holds the children's attention.	117 (78)	31 (20.7)	2 (1.3)	-	3.77	.45
4.	Teacher guides the children's learning activities.	122 (81.3)	27 (18)	1 (0.7)	-	3.81	.41
5.	Teacher explains clearly to the children.	142 (94.7)	7 (4.7)	1 (0.7)	-	3.94	.26
6.	Teacher is patient with the children.	51 (34)	98 (65.3)	1 (0.7)	-	3.33	.48
7.	The teacher allows the children to speak/ask question.	56 (37.3)	85 (56.7)	9 (6)		3.31	.58
8.	The teacher appreciates the children's efforts in answering question.	122 (81.3)	27 (18)	1 (0.7)	-	3.81	.41
9.	The teacher listens to the children speak out their thoughts.	15 (10)	107 (71.3)	28 (18.7)	-	2.91	.53
10.	The teacher listens and follows the children's instruction.	12 (8)	70 (46.7)	67 (44.7)	1 (0.7)	2.62	.64
11.	Teacher expresses himself/herself to the children clearly.	110 (73.3)	37 (24.7)	3 (2)	-	3.71	.49
12.	Teacher is reassuring when children do not understand class activities.	24 (16)	119 (79.3)	7 (4.7)	-	3.11	.44
13.	Teacher engages the children in interaction on issues of their interest.	10 (6.7)	47 (31.3)	93 (62)	-	2.45	.62
14.	The teacher is approachable when there is a need to settle disputes among peers.	57 (38)	83 (55.3)	10 (6.7)	-	3.31	.59
15.	Teacher shows anger or impatience in the class.	16 (10.7)	8 (5.3)	125 (83.3)	1 (0.7)	2.26	.65
16.	Teacher shows care, comfort, and love to the children.	115 (76.7)	34 (22.7)	1 (0.7)	-	3.76	.44
17.	Teacher is very strict with the children.	20 (13.3)	40 (26.7)	90 (60)	-	2.53	.72
18.	Teacher shows a sad or unhappy face to misbehaving children.	26 (17.3)	74 (49.3)	50 (33.3)	-	2.84	.69
19.	Teacher is not lenient when reprimanding misbehaving children.	45 (30)	79 (52.7)	26 (17.3)	-	3.13	.67
20.	Teacher shows confidence and enthusiasm during class activities.	122 (81.3)	27 (18)	1 (0.7)	-	3.81	.41
	Weighted Average = 3.41						

V=very often, O=often, R=rarely and N=never. Numbers in parentheses are percentages of the total number of observed interactions.

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The results presented in Table 2 above show that, generally, the extent of teacher-child interaction is high (WA = 3.41). Specifically, those above the 3.41 weighted average were the following: Teacher shows confidence and enthusiasm during class activities ($\bar{x}$= 3.81); Teacher shows care, comfort, and love to the children ($\bar{x}$= 3.76); Teacher expresses himself/herself to the children clearly ($\bar{X}$= 3.71); Teacher appreciates the children efforts in answering the question ($\bar{x}$= 3.81); Teacher explains clearly to the children ($\bar{x}$= 3.94); Teacher guides the children's learning activities ($\bar{x}$ = 3.81); Teacher holds the children's attention ($\bar{x}$= 3.77); Teacher is friendly with the children ($\tilde{x}$= 3.69).

The result of this study revealed that the extent of teacher-child interaction is high. The reason for this could be for the reasons related to the recent effort of the current administration to equip teachers across public schools in the state with the necessary resources (books, learning aids, stimulating learning environment) that reduce workplace stress, the teacher, therefore, could engage in the open communication process (giving information and receiving feedback in real-time) and simultaneously considering the emotional needs of the children within the learning environment created. This suggests that the teachers are aware of the needs of the children and attend to these needs by creating an enabling environment for learning to take place. This implication of this is that learning has taken place, and as such, there should be progress in academic performance. This finding corroborates the submission of Cadima, Leal, and Burchinal (2010), who posited that evidence of positive relationships in the 'teacher-domain' is closely linked with the growth of children's academic achievement and that classroom instructional quality benefitted children with low initial self-regulation because of the interaction quality and social field, in turn, leads to even higher academic achievement and better relationships with peers Cadima, Verschueren, Leal, & Guedes (2016).

Level of Cognitive Development of Pre-primary School Children in Ibadan Metropolis

Table 3. Extent of Cognitive Development of Pre-primary School Children in Ibadan Metropolis

S/N	Language Development	1	2	3	4	5	Mean	Std. D
1.	The child can recite songs or poems.	6 (4)	17 (11.3)	33 (22)	38 (25.3)	56 (37.3)	3.81	1.174
2.	The child is able to speak the language of the immediate environment.	24 (16)	18 (12)	36 (24)	52 (34.7)	20 (13.3)	3.17	1.273
3.	The child is able to say his/her name.	19 (12.7)	8 (5.3)	9 (6)	26 (17.3)	88 (58.7)	4.04	1.418
4.	The child says the name of his/her teacher.	6 (4)	17 (11.3)	23 (15.3)	61 (40.7)	43 (28.7)	3.79	1.103
5	The child greets elders, teachers, and peers appropriately.	14 (9.3)	21 (14)	15 (10)	30 (20)	70 (46.7)	3.81	1.394
6.	The child can mention the days of the week.	8 (5.3)	24 (16)	45 (30)	45 (30)	28 (18.7)	3.41	1.124
7.	The child can recite the alphabet.	7 (4.7)	19 (12.7)	17 (11.3)	24 (16)	83 (55.3)	4.05	1.266
8.	The child is able to read two-letter words.	11 (7.3)	32 (21.3)	30 (20)	52 (21.3)	25 (16.7)	3.32	1.195
9..	The child can identify one-letter words.	7 (4.7)	14 (9.3)	25 (16.7)	63 (42)	41 (27.3)	3.78	1.092

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S/N	Language Development	1	2	3	4	5	Mean	Std. D
10.	The child can read short stories.	24 (16)	24 (16)	36 (24)	43 (28.7)	23 (15.3)	3.11	1.303
11.	The child listens and answers questions on a story read.	17 (11.3)	31 (20.7)	57 (38)	35 (23.3)	10 (6.7)	2.93	1.079
12.	The child identifies letters and mentions the objects they represent.	7 (4.7)	28 (18.7)	34 (22.7)	35 (23.3)	46 (30.7)	3.57	1.234
	Intellectual Development							
13.	The child can sort out living things from a list of items.	4 (2.7)	34 (22.7)	66 (44)	40 (26.7)	6 (4)	3.00	.851
14.	The child is able to group together non-living things from a list of items.	4 (2.7)	37 (24.7)	69 (46)	35 (23.3)	5 (3.3)	3.68	1.076
15.	The child mentioned objects in the classroom and their uses.	4 (2.7)	22 (14.7)	28 (18.7)	60 (40)	36 (24)	3.04	.897
16.	The child identifies domestic animals.	9 (6)	23 (15.3)	78 (52)	33 (22)	7 (4.7)	2.96	.866
17.	The child mentions the non-domestic animals.	9 (6)	28 (18.7)	77 (51.3)	32 (21.3)	4 (2.7)	2.17	1.197
18.	Child is able to say some characteristics of living things	55 (36.7)	47 (31.3)	23 (15.3)	17 (11.3)	8 (5.3)	3.91	1.217
19.	The child is able to identify numbers 1-20.	10 (6.7)	11 (7.3)	25 (16.7)	41 (27.3)	71 (42)	3.86	1.336
20.	The child can count numbers from 1-50.	11 (7.3)	20 (13.3)	19 (12.7)	29 (19.3)	71 (47.3)	3.25	1.123
21.	The child is able to add up one-digit numbers.	11 (7.3)	28 (18.7)	43 (28.7)	49 (32.7)	19 (12.7)	2.85	1.145
22.	Child adds up two-digit numbers.	14 (9.3)	54 (36)	38 (25.3)	29 (19.3)	15 (10)	2.81	1.266
23.	Child subtracts one- and two-digit numbers.	21 (14)	51 (34)	35 (23.3)	21 (14)	22 (14.7)	2.95	1.203
24.	Child mentioned some basic shapes.	19 (12.7)	38 (25.3)	42 (28)	34 (22.7)	17 (11.3)	3.47	1.014
25.	The child is able to name objects in the environment.	5 (3.3)	24 (16)	36 (24)	66 (44)	19 (12.7)	3.21	.909
26.	Child mentions objects that move in the air.	6 (4)	22 (14.7)	65 (43.3)	48 (32)	9 (6)	3.11	.899
27.	Child gives examples of sinking objects.	5 (3.3)	28 (18.7)	73 (48.7)	34 (22.7)	10 (6.7)	3.14	.898
28.	Child is able to say some examples of float objects.	7 (4.7)	21 (14)	75 (50)	38 (25.3)	9 (6)	3.39	.818
29.	The child mentions the	2	17	61	61	9	3.24	.857

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S/N	Language Development	1	2	3	4	5	Mean	Std. D
	means of transportation.	(1.3)	(11.3)	(40.7)	(40.7)	(6)		
30.	Child is able to give examples of things that move on land.	4 (2.7)	24 (16)	59 (39.3)	58 (38.7)	5 (3.3)	2.34	1.252
31.	Child can identify parts of the computer	43 (28.7)	57 (38)	19 (12.7)	18 (12)	13 (8.7)	1.86	1.371
32.	Child knows the simple definition of a computer	96 (64)	21 (14)	5 (3.3)	14 (9.3)	14 (9.3)	3.81	1.174
Weighted Average= 3.60								

5=Excellent 4=Good, 3=Average, 2=Below average and 1=Poor Std. D= standard deviation

The higher cognitive abilities (i.e., those above the weighted average of 3.60) were observed for the following language and mental development areas: the child can recite songs or poems ($\bar{x}$ = 3.81); the child is able to say his/her name ($\bar{x}$= 4.04), the child says the name of his/her teacher ($\bar{x}$= 3.79), the child greets elders, teachers, and peers appropriately ($\bar{x}$= 3.81), the child can recite the alphabet ($\bar{x}$=4.05), the child can identify one letter words ($\bar{x}$ = 3.78), the child identifies letters and mentions objects they represent ($\bar{x}$= 3.57), the child is able to group together non-living things from a list of items ($\bar{x}$ = 3.68), the child is able to say some characteristics of living things ($\bar{x}$= 3.91), the child mentioned some basic shapes ($\bar{x}$= 3.47), the child knows the simple definition of a computer ($\bar{x}$ = 3.81). Therefore, in response to the second research question, "what is the level of cognitive development of pre-primary school children in Ibadan?", the results showed that the level of cognitive development of pre-primary school children among the sample population in Ibadan was between average and good.

This suggests that the interaction between teachers and the children, which had responses mostly between 'often' and 'very often', provided sufficient stimulation for the children to have high cognitive development (that is, between average and good). This suggests a link between stimulated learning and children's participation in learning outcomes. This goes to show that interacting and teaching are connected, and when used by teachers, it helps children attain their full potential in academic endeavours. This finding resonated with Son and Chang (2018) in their study of childcare experiences and early school outcomes and submitted that Children in groups with higher interaction quality are more likely to have better working memories as well as show less disruptive behavior. Also, Birch and Ladd (1997) earlier established in their study that children with close teacher-child interaction tend to perform well academically, including having higher test scores on achievement tests, more positive attitude towards school, more engagement in the classroom, less retention in grades and few referrals to special education. This corroborates the finding of Dornyei and Ushioda (2013), who posited that teacher-child attachment has a positive relationship with the cognitive development of children. This showed that teachers carry full responsibility for creating an environment that fosters children's motivation, their academic performance as well as the formation of high cognitive development.

The consistent revalidation of this outcome in various regions and among learners of different groups further suggests the importance of developing a more formidable model of teacher-child interaction, especially as we experience a rapidly evolving society that compels education to be delivered more in a way that promotes less social physical interaction.

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Relationship between Teacher-child Interaction and Cognitive Development of Pre-primary school Children in two LGAs Ibadan Metropolis.

To answer this question, inferential statistics of Pearson's Product Moment Correlation was employed

Table 4. Relationship between Teacher-child Interaction and Cognitive Development of Pre-primary school Children in two LGAs Ibadan Metropolis

Variable	N	Mean	Std.	R	Sig.	Remark
teacher-child interaction	150	64.88	3.50			
				-0.011	0.90	Not significant
cognitive development	150	104.07	17.09			

Table 4 shows that there is no relationship between teacher-child interaction and cognitive development of pre-primary school children in Ibadan Metropolis (r=-0.01; P>0.05).

The finding reveals relationship was not established between teacher-child interaction and the cognitive development of pre-primary school children in Ibadan. This means that the interaction that existed between the teachers and the children did enhance their cognitive development but not to a significant end that could be reckoned with. This could be that the teachers were after helping the children learn specifics to meet up syllabus or pass examinations as this became a trend that was embraced shortly after the declining death rates caused by COVID-19 in many societies due to various preventative measures, including vaccination roll-out programs (Frimpong et al., 2022, Mennechet and Dzomo, 2020)

The teacher's interaction is mostly about rote learning and memorization, which may give high cognitive development. There are factors that could have necessitated high cognitive development without forming relationships, such as genetic factors, home environment, and home lessons. Teachers should enhance facilitating interpersonal relations; from a sociological viewpoint, it is important to keep children committed to the educational process as this would have a positive influence on their cognitive development. This finding also corroborated with Mashburn et al. (2018) study of four-year-old children and observed that only specific aspects of process quality showed an effect on social and emotional development, but no significant correlation was found between the general quality of the childcare centers and the development of social skills, nor between the quality of the instructional support (as measured with class observation instrument) and the development of social skills. Also, the findings corroborate Worley's (2007) study, which determined whether there is a link between independent variables of teacher-child attachment on the cognitive development, motivation, low-income status, and academic performance of pre-primary children. The study did not reveal a significant effect of teacher-child relationships on the academic performance of children. The study found that children who participated in the study generally had positive relationships with their teachers.

CONCLUSION

Based on the findings, it showed that though teacher-child interaction may not significantly influence the cognitive development of pre-primary school children in Ibadan Metropolis, however, when the teachers create a conducive, stimulating learning atmosphere where positive interaction exists between the teacher and the children, they generally would express good cognitive coordination.

The following recommendations were made based on this study:

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1. Teachers should create a warm, positive interaction that would stimulate the children's intellectual domain, thereby enhancing holistic development. This means that when learning is child-centered with activities that spur the children's curiosity, their cognitive development will be enhanced.
2. Pre-primary school teachers should adopt good teaching styles, such as interactive methods and play-way methods, among others, that would help in the cognitive development of the child.
3. School management should equip and stock the pre-primary children's classes with stimulating and interactive materials such as different types of toys which the children can interact with as this would enhance their domains of learning.

Pre-primary school teachers should create a warm environment for all the children in the classroom in such a way that the teacher's interactions with the children are peculiar to their needs and interest. Children should not be treated unfairly or harshly because this can make children would feel insecure, and their cognitive development is not guaranteed.

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