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TEACHERS' PERSPECTIVES ON EARLY CHILDHOOD EDUCATION CURRICULUM IN 21ST CENTURY

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Abstract

Teachers' are critical stakeholders in early childhood education (ECE). Their perspectives on early childhood education curriculum (ECEC) are vital for effective teaching and learning experience in schools. The curriculum provides an implementation plan and guide for teachers to ensure holistic growth and development of young children. It is developed and structured to facilitate cognitive, affective, emotional, social, psychomotor, and physical development in children (aged, 0-8 years) to meet 21st century needs of the society. Positive perspectives boost effective teaching and learning, while the reverse is the case with negative perspectives. Yet, little is known of ECE teachers' perspectives on the curriculum, and what influences it. This study will contribute to evidence base and provide better insights to these perspectives and relationships. The study examined 120 teachers' knowledge and perspectives on ECEC using ECEC knowledge and perspectives (ECEC-KP) questionnaire. All the participants are volunteers who worked in ECE schools in Nsukka zone of Enugu State, Nigeria. Data were analyzed using descriptive statistics, and correlation and regression analysis. Results showed that teachers have good knowledge ($\bar{x} = 0.65$) of ECEC and negative perspectives ($\bar{x} = 0.47$) on the curriculum. Age and knowledge of ECEC were the significant predicators of teachers' perspectives on ECEC at $p < 0.05$. Therefore, concerted efforts and investments are to be made on continuous education and training of teachers on early childhood education curriculum.

Keywords: Teachers' Perspectives; Early Childhood Education; Curriculum; 21st Century.

INTRODUCTION

Teachers are critical stakeholders in early childhood education (ECE), and their perspectives on early childhood education curriculum (ECEC) is an important factor that shape teaching and learning experiences in school (Boylan et al., 2018; Ozola, 2017). Teachers implement the curriculum and facilitate teaching and learning both within and outside the classroom to achieve ECE goals and objectives (Gessiou & Mart, 2023). According to Eastern College (2023), a teacher "plans, organizes and facilitates activities for children to stimulate and nurture their physical, emotional and mental development, and provide structured and unstructured play opportunities and activities". Teachers inspire, encourage, and promote children's learning, and also nurture their sense of belonging and becoming (Petit Early Learning Journey, 2023). They also provide a rich learning environment for children (Dowdell et al., 2011), providing them opportunities for seeing, hearing, touching, smelling, and tasting, allowing them to pursue their curiosities and discover their passions (Jansson & Lerstrup, 2021). As such, teachers' zeal in the implementation of the curriculum reflects their opinion, confidence, and biases on the effectiveness of the curriculum. Little wonder, Hawthorne (1992) as cited in Edwards (2011) warned that "teachers close their doors and proceed to create within their classrooms an amalgam of

teaching that carries their individual signature regardless of what the curriculum mandate is, in the district or state."

Early childhood education curriculum provides the work plan and implementation guide for teachers to ensure holistic growth and development of young children. It is a systematic learning plan that follows a specific educational philosophy, consisting of what the children are to learn, how they will learn them, and how they are to be taught and appraised (Nigerian Educational Research and Development Council [NERDC], 2014). It demonstrates the activities and practices that meet the developmental expectations and standards for children, to continuously build on their knowledge and skills (Brightwheel, 2023). The curriculum is developed and structured to facilitate the development of cognitive, affective, emotional, social, psychomotor, and physical skills needed to meet the needs of the society (Gray Group International [GGI], 2023). ECEC in Nigeria was first introduced in 1994 and reviewed in 2004, to guarantee excellent care and support for young children towards achieving the Millennium Development Goals (MDGs) as well as address emerging global concerns such as globalization, information, and communication technology (ICT), HIV/AIDS, and gender (NERDC, 2014). Societal needs are dynamic, and so also should ECEC be, in Nigeria. Skills that were indispensable in 20th century may not necessarily be important in 21st century, and ECEC should reflect these changes. These will ensure holistic growth and development of children. The major revisions in Nigeria's ECEC included:

- Adoption of two age cohorts: 0-3 and 3-5 years, instead of the old three age cohorts: 0-2, 2-3, and 3-6 years.
- Adoption of the thematic approach in content presentation, instead of the old unit approach. The new approach is more robust and allows for elastic inclusion of contemporary issues. There are eight themes, and they include: (i) physical development; (ii) affective/psychosocial development; (iii) cognitive development; (iv) food and nutrition; (v) health; (vi) water and environmental sanitation; (vii) safety measures; and (viii) protection issues.
- For each age group, there are eight themes that are identified; and topics under each theme are specified.
- Each topic has performance objectives, activities and evaluation guide prescribed separately for teachers/caregivers and child. Also, there are contents and caring/learning materials listed for each topic (NERDC, 2014).

Although curriculum concept is defined in various ways depending on the viewpoints and/or beliefs of educators (Wiles & Bondi, 2007), curriculum is developed for the purposes of establishing quality educational systems that sustain the overall development of students and social and cultural values (Ornstein & Hunkins, 2012). This underpins the effectiveness of a curriculum.

As such, an effective curriculum has the capacity to achieve set goals and objectives (File 2012a). In order for ECEC to be effective, the perspectives of teachers on the curriculum are paramount. Perspectives refers to viewpoints, perceptions, beliefs, and opinions on an issue. It is describing a particular way of thinking about something especially one that is influenced by beliefs or experiences (Collins Dictionary, 2024; Ramilo et al., 2022). In this light, the perceptions of teachers on the contents of the curriculum can determine the effectiveness of teaching-learning process in a positive or negative way (Kyriakides, 1997).

Bantwini (2010) also noted that teachers' perceptions of the curriculum is largely reflected in teaching and learning, which influence their decisions on instruction.

In this sense, getting feedback regarding teachers' perspectives of ECEC could give some clues on how the curriculum is perceived and implemented in the classroom (Gultekin, 2017). A positive perspective of the curriculum is a morale boost and an incentive to excellent delivery of the curriculum. However, negative perspectives hinder excellent curriculum delivery, which undermine the realization of ECE objectives. Also, teachers' perceptions of the curriculum could interfere with the desirability or otherwise of ECE, resulting in either increase or decrease in children enrollment (Bas & Senturk, 2020).

Already, "research has shown that children who attend ECE perform better in academy and have greater earning potential as they grow over the years," (United Nations International Children Emergency Fund [UNICEF], 2022). This is important for Nigeria, a lower- middle-income country, where in 2019, only about 35.6% of early children were enrolled in ECE (UNICEF, 2022), compared to more than 60% in United States of America (Cui & Natzke, 2021).

Studies on teachers' perspectives have focused mainly on early childhood education practices and implementation of early childhood education curriculum (Bas & Senturk, 2020; Birbili & Myrovali, 2020; Marble et al., 2000; Okewole et al., 2015). Also, some studies have been done on teachers' perspectives of various methods of curriculum implementation (Ozola, 2017; Ramilo et al., 2022; Selenius & Falth, 2023). A couple other studies have been carried out on teachers' perspectives of growth mindset as it relates to developing agency in children (Boylan et al., 2018), as well as how teachers' beliefs mediate planned curriculum (Kyridis et al., 2015).

Similarly, Evangelou (1996), and Sofou and Tsafos (2010) have examined ECE teachers' relationship to official curriculum documents. What seems to be missing in literature is a deeper understanding of ECE teachers' perspectives on effectiveness of early childhood education curriculum in the 21st century. There is also a research gap regarding teachers' knowledge of the curriculum, and how their knowledge of the curriculum, in interaction with their age, level of education, and teaching experience shape their perspectives on early childhood education curriculum.

It is acknowledged that better understanding of teachers' perspectives on the curriculum enriches teaching-learning experiences in ECE, increases children enrollment, and ensures their holistic growth and development (Jansson & Lerstrup, 2021; Ramilo et al., 2022). This study therefore contributes to the evidence base by establishing ECE teachers' perspectives on effectiveness of early childhood education curriculum in Nigeria in 21st century. The following three research questions were addressed:

1. What is teachers' knowledge of ECE curriculum?
2. What are teachers' perspectives on effectiveness of ECE curriculum in 21st century? And
3. What factors affect teachers' perspectives of the curriculum?

Origin and Promoters of Early Childhood Education

European educationists such as John Amos Comenius (1590-1690), J. J. Rousseau (1782-1788), and Johann Heinrich Pestalozzi (1748-1827) were among the earliest promoters of early childhood education (Obiweluozor, 2018). However, formal pre-school education originated from the ideas and practices of Robert Robert Owen (1771-1858) who first establish an infant school in New Lanark, Scotland in 1818 (Gumel, 2018). Later, Samuel Wilderspin (1791-1866) established an infant school in 1820, followed by Theresea Brunsvik (1775-1861) in Hungary in 1828, and earlier by Johann Heinrich Pestalozzi (1746-1827) in Switzerland in 1774 (Gabriel, 2015).

It was the infant school established by Friedrich Froebel (1782-1852), the pupil of Johann Heinrich Pestalozzi, in Germany in 1837 that was the first to be widely adopted in Europe and abroad, followed by that of Maria Montessori (1870-1952) in Italy in 1907 (Elkind, 2020; Gabriel, 2015). The wide adoption and acceptance of infant education was necessitated by the industrial revolution in Europe that led to women being employed as factory workers.

Friedrich Froebel's infant school was first called "Play and Activity Institute for young children" but was renamed in 1840 to "the kindergarten" (German word for garden), i.e. garden for children. It was from then that many schools were named kindergarten. In 1851, the first infant garden was established in Hampstead, England by one of Friedrich Froebel's pupils (Gabriel, 2015).

In America, the first kindergarten was established by Margarethe Meyer Schurz (1833-1876) in 1856 in Water Town, Wisconsin, while Elizabeth Peabody (1804-1894) established the first English speaking kindergarten in Boston, Massachusetts, America in 1859 (New World Encyclopedia, n.d). However, early childhood education became more recognized as the first and important step in educational process only after the World War II (WWII) (1939-1945) (Gabriel, 2015).

In America, the importance of ECE was emphasized through the launch of the Head Start Program in the 1960s for low-income children, which made parents see education as a race, and that the earlier you start, the earlier and better you finish. As a result, middle-income parents wanted their children to have a heard start as well, and kindergarten programme that was designed to be a half-day affair for 40% of US states became a largely full-day affair for all states.

Early Childhood Education in Nigeria

Early childhood education in Nigeria was championed by individuals and private organizations and is known as Early Childcare and Development Education (ECCDE). It involves the care, training, and education of early children from birth, 0-8 years, in educational institutions, to ensure their holistic growth and development (Ajayi, 2008). It describes the educational programmes of children in their preschool years that lay the foundation for primary education at age 6. These programmes include the crèche, the nursery and the kindergarten, with each of them having a structured curriculum, specially trained teachers, facilities and equipment (Gabriel, 2015).

Prior to the country's independence in 1960, a couple of ECE initiatives and institutions were established. For instance, according to Fafunwa (1974) and Taiwo (1980) in Gabriel (2015), there were infant classes/schools in the 1887 Ordinance of the formal western Nigeria. The Ordinance provided grants for infant classes one to three, which were part of 8 years elementary school education, the others being two junior and four

senior primary classes. However, the 1930 Memorandum on Education restructured the elementary school education to six years and eliminated the infant classes. Also, the third schedule of the Eastern Nigeria Region Education Law of 1956 provided for nursery education in its education system (Eastern Region Gazette, 1956). 1n 1945 the United African Company (UAC) established a nursery school in Alinso Okanu Rivers State (Gabriel, 2012). The impact of this school was limited as it served only the children of the staff of the company. Furthermore, the Corona Women Society (CWS) established Corona School, Ikoyi Day Nursery in 1955 in Lagos (Gabriel, 2011).

After Nigeria's independence in 1960, several efforts were made to deepen nursery education in the country. Such efforts included the establishment of a nursery school along Bernard Carr Street, Port Harcourt, Rivers State by the Young Women Christian Association (YWCA) in 1961; and those of Gladys Aduke Vaughan in 1962 and Helen Aina Eso in 1966, both in Ibandan (Babatunde & Babatunde, 2010; Gabriel, 2011). The first government effort at nursery education was the National Policy on Education (NPE) 1977 that restructured the country's education system and recognized ECCDE for children aged 3-5 years, as part of the system (FGN, 1977).

Furthermore, in the 1980s, the Nigeria Educational Research and Development Council (NERDC) expanded the scope of the ECCDE to include children from 0-2 years (FGN, 1981). As a result, an ECCDE unit was established in NERDC, and five pilot Early Child Care (ECC) centres were established across the country from 1987-1990 in: Oyo, Oyo State, Owo in Ondo State, Ogun in Osun State, Yamaltu/Deba in Bauchi State and Calabar Municipal in Cross River State (Maduewesi, 2005a). More ten ECC centres were established in the next phase from 1991-1995 across ten states in Nigeria such that there were now 1,272 ECC centres and children enrollment of 145,469, and by 1999 the country then had 7,379 ECC centres with an enrollment of 400,000 children (Maduewesi, 2005b).

Going forward, ECCDE (ECE) become an integral part of Nigeria's education system, as evident in the country's Universal Basic Education Programme (UBEP) of 1999, Universal Basic Education (UBE) Act of 2004 and the reviewed NPE Act of 2004. This commitment stems from global concerns for ECCDE in which the country is a signatory to (Gabriel, 2015). Some of them include:

- The 1986 accord between Nigeria and UNICEF in collaboration with Bernard Van Leer Foundation of the Netherlands, and;
- The 1990 World Declaration of Education for All (EFA) at Jomtien, Thialand. The EFA conceived ECCDE as a fundamental right of every human being throughout the world.

The objectives of ECCDE as contained in its national policy on education are as follows:

(a) Effect a smooth transition from the home to the school.

(b) Prepare the child for the primary level of education.

(c) Provide adequate care and supervision for the children while their parent are at work (on the farms, in the markets, offices, etc.);

(d) Inculcate social norms.

(e) Inculcate in the child the spirit of enquiry and creativity through the exploration of nature, the environment, art, music, and playing with toys, etc;

(f) Develop a sense of co-operation and team-spirit.

(g) Learn good habits, especially good health habits; and

(h) Teach the rudiments of numbers, letters, colours, shape, forms, etc through play.

The policy guidelines for the implementation of the Early Childhood and Care Development Education include to:

a. Establish pre-primary sections in existing public schools and encourage both community and private efforts in the provision of pre-primary education.

b. Make provision in teacher education programmes for specialization in early childhood pre-primary education.

c. Ensure that the medium of instruction is principally the mother tongue or the language of the immediate community, and to this will: (i) develop the orthography of many more nigerian languages, and (ii) produce textbooks in nigerian languages.

d. Ensure that the main method of teaching at this level shall be through play and that the curriculum of teacher education is oriented to achieve this, regulate and control the operation of pre-primary education. The teacher-pupil ratio shall be 1:25.

e. Set and monitor the standards for early childhood centres in the country; and

f. Ensure full participation of government, communities and teacher associations in the running and maintenance of early childhood education facilities (fgn, 1981, 1998, 2004).

The contents of the policy are detailed and planned because it is the stated goal of the Nigerian government that its education system should be comparable to all others in the world.

METHOD

Research Design

Descriptive research design was used in the study. This involved primary data obtained using teachers' knowledge and perspective of CECE (ECEC-KP) questionnaire. Factual information was derived from the teachers on their knowledge and perspectives on effectiveness of early childhood education curriculum in the 21st century.

Sampling Procedure and Participants

There are 120 participants in the study as contained in their demographic characteristics in Table 1. These participants are ECE teachers who volunteered to participate in the study from three (5) public and seven (10) private ECE schools purposively selected in Nsukka, Enugu State. Nsukka is one of the biggest zones in the state, where the first indigenous university in Nigeria (University of Nigeria) is located and has relatively bigger ECE schools.

Table 1: Demographic characteristics of the sample (n=120)

Demographic variable	Frequency	Percentage	Mean	SD
Gender				
Male Female	8 112	6.7% 93.3%	-	-
Age Group				
20 – 30 years old 31 – 40 years old 41 – 60 years old	34 72 14	28.3% 60% 11.7%	**38**	6.88
Educational Level				
Post-secondary non-degree institutions Degree institutions Postgraduate studies	65 38 17	54.2% 31.6% 14.2%		
Years of Teaching Experience				
0 – 4 years 5 – 10 years > 10 years	86 26 8	71.6% 21.7% 6.7%	**3**	5.42

The schools were purposively chosen based on the availability of two age categories (0-3 and 3-5 years) and large enrollment of children in them.

Prior to conducting the study methods, the researchers sought formal approval from the administrator, headmistress/headmaster or director of each school. Upon approval, ECE teachers were informed of the objectives of the study, after which, they volunteered to participate, and each participant was given a copy of the consent form.

It was agreed upon confidentiality that no name of the teachers or schools would be made mentioned in the study. The high number of females in the sample could be an indication of the dominance of females as preschool teachers in Nigeria. The studies of Grigoropoulos (2019, 2023) had shown female dominance as preschool teachers is factual in Greece.

Data Collection

The researchers distributed two questionnaires to the 120 participants in the study. The first questionnaire is a background/demographic questionnaire which contained questions on gender, age, educational level and years of teaching experience in early childhood education.

The second questionnaire is the knowledge and perspectives of ECEC (ECEC-KP) questionnaire. It is a 16-item scale, distributed across 2 clusters: knowledge of ECEC (ECEC-k) cluster and perspectives on ECEC (ECEC-p) cluster. Each of the clusters have 8 items (questions).

A three-option (Yes/No/Indifferent) response format was used in both clusters. This was chosen to mitigate the limitations of the dichotomous format (Yes/No) as it enables the discovery of areas in which the teachers have more or least knowledge and information, and also areas in which they commit the greatest number of errors (Giannopoulou et al., 2017; Grigoropoulos, 2023).

A “Yes” response receives 1 point, and 0 point for a “No” response, the “Indifferent” response was not used in the calculation. The total possible score range for each item and cluster was 0 to 120, and while the mean possible score range was 0 to 1. In this study, the items in the ECEC-KP scale were internally consistent, following Pallant (2001) report that Alpha Cronbach values within 0.60-0.80 are acceptable.

The value of Cronbach's alpha coefficient for the ECEC-KP scale was 0.74, while it was 0.70 for ECEC-k cluster, and 0.72 for ECEC-p cluster. These results mean that the items are consistent with other items in the scale, i.e. they measure the same concept or construct.

The alpha coefficient for ECEC-KP was the highest, possible because it had the highest number of questions (i.e. 16-items) compared to the clusters' 8-items each. According to Grigoropoulos (2023), more questions on the same construct could improve the inter-relatedness between items.

Further to this, the scores of each of the clusters showed significant correlations with the total ECEC-KP scale score, and also, there was convergent validity among the three clusters as the correlation between them was significant (Table 2). Convergent validity, also called congruent validity, exists when tests having the same or similar constructs are highly correlated.

Table 2: Pearson correlation matrix for study variables

	A	B	C
A. ECEC-KP scale	1.000	0.684***	0.722***
B. ECEC-k cluster		1.000	0.356**
C. ECEC-p cluster			1.000

Data Analysis

Descriptive statistics were used to summarize objectives on teachers': knowledge, and perspectives of ECEC, respectively. The mean scores of the items in the clusters provided measurements for these objectives.

For cluster one, the benchmarks for the mean scores were as follows: (a) $\bar{x} < 0.40$ (Poor Knowledge); (b) $0.40 \leq \bar{x} \leq 0.49$ (Fair Knowledge); (c) $0.50 \leq \bar{x} \leq 0.69$ (Good Knowledge); and (d) $0.70 \leq \bar{x} \leq 1.00$ (Excellent Knowledge).

For cluster two, the benchmarks were: (a) $\bar{x} < 0.50$ (Negative Perspectives); and (b) $\bar{x} \geq 0.50$ (Positive Perspective). Correlation and regression analysis were used to estimate the predicators of teachers' perspectives on early childhood education curriculum at probability level of 0.05.

RESULTS

The data gathering process to determine the results led to the research answering the three research questions of the study, namely: what is teachers' knowledge of ECE curriculum? What are teachers' perspectives on effectiveness of ECE curriculum in 21st century? And what factors affect teachers' perspectives on ECE curriculum?

Participants' Knowledge of Early Childhood Education Curriculum

The mean scores of the participants showing their knowledge of the curriculum of early childhood education are reported in Table 3. The mean score of the participants was 0.65. Themes in the curriculum $(\bar{x} = 0.88)$; and evaluation guides in the curriculum $(\bar{x} = 0.80)$ were the structures with the highest mean values. The structures that received the lowest mean values were topics in the curriculum $(\bar{x} = 0.40)$; and content in the curriculum $(\bar{x} = 0.42)$.

Table 3: Participants' knowledge of ECE curriculum (n=120)

Structures of the Curriculum	Mean ($\bar{x}$)	SD	Decision
Age categories (0-3 & 3-5 years) of the curriculum	0.76	0.22	Excellent
Themes in the curriculum	0.88	1.32	Excellent
Topics in the curriculum	0.40	0.86	Poor
Performance objectives in the curriculum	0.64	2.04	Good
Activities in the curriculum	0.78	1.27	Excellent
Contents in the curriculum	0.42	0.72	Fair
Caring/learning materials in the curriculum	0.48	0.72	Fair
Evaluation guides in the curriculum	0.80	0.18	Excellent
Cluster	**0.65**	**0.52**	**Good**

Note: Poor knowledge ($\bar{x} < 0.40$), Fair knowledge ($0.40 \leq \bar{x} \leq 0.49$), Good knowledge ($0.50 \leq \bar{x} \leq 0.69$), Excellent knowledge ($\bar{x} \geq 0.70$). Results based on data from the responses of participants.

Participants' Perspectives on Effectiveness of Early Childhood Education Curriculum

The descriptive statistics showing the mean scores of the participants on their perspectives on relevance of early childhood education curriculum to 21st century needs are presented in Table 4. Their mean score was 0.47. The age categories of the curriculum ($\bar{x} = 0.60$); and the evaluation guides in the curriculum ($\bar{x} = 0.58$) had the highest mean scores. Items with the least mean scores were the activities in the curriculum ($\bar{x} = 0.28$) and topics in the curriculum ($\bar{x} = 0.36$).

Table 4: Mean scores of participants' perspectives on effectiveness of ECEC (n=120)

	Mean ($\bar{x}$)	SD	Decision
Age categories of the curriculum	0.60	0.61	Positive
Themes in the curriculum	0.53	1.04	Positive
Topics in the curriculum	0.36	1.32	Negative
Performance objectives of the curriculum	0.52	0.87	Positive
Content in the curriculum	0.42	2.16	Negative
Activities in the curriculum	0.28	1.22	Negative
Caring/learning materials in the curriculum	0.51	0.72	Positive
Evaluation guides in the curriculum	0.58	1.04	Positive
Cluster	**0.47**	**1.21**	**Negative**

Note: Negative perspectives ($\bar{x} < 0.50$), Positive perspectives ($\bar{x} \geq 0.50$). Results based on data from the responses of participants.

Determinants of Participants' Perspectives on Early Childhood Education Curriculum

Firstly, the correlation analysis was used to measure the degree of the relationships between age, level of education, years of teaching experience, ECEC-k, and ECEC-p. The results are shown in Table 5. The relationships between ECEC-p and age (r = -0.744, p=0.000); teaching experience and ECEC-k (r = -0.721, p=0.000); and ECEC-p and teaching experience (r = 0.680, p=0.000) had the highest significant correlation coefficients. The least insignificant correlations were in relationships between ECEC-P and age (r = 0.256, p=0.303); and age and level of education (r = 0.324, p=0.149).

Table 5: Pearson correlation matrix for ECEC-P, age, level of education and teaching experience

	1.	2.	3.	4.	5.
1. ECEC-p	1	-0.744***	0.256	0.680***	0.503*
2. Age		1	0.324	0.562**	0.344
3. Level of education			1	-0.301	-0.487
4. Teaching experience				1	-0.721***
5. ECEC-k					1

Notes: ***, **, * - correlation is significant at 0.01, 0.05 and 0.10 levels, respectively (2-tailed). Results based on data from the responses of participants.

Then, multiple linear regression analysis was used to examine the association between the predator variables (age, level of education, teaching experience and ECEC-k) and the predicted variable (ECEC-KP). The results are presented in Table 6. The assumptions of regression analysis were tested, and were not violated (Koutsoyiannis, 1977; Tabachnick & Fidell, 2001). Visual inspections of data plots showed that the variables had normal distributions. The assumptions of no multicollinearity and no autocorrelation (independence of errors) were checked using Collinearity diagnostic and Durbin-Watson tests. Each of the variance inflation factors (VIFs) were near one, suggesting lack of multicollinearity, while the value of the Durbin-Watson test was 1.623, implying that the assumption of no autocorrelation was satisfied (Tabachnick & Fidell, 2001). The analysis showed that the demographic variables included in the model accounted for about 41% of the variance in ECEC-P (F_v – 5.045, $p<0.05$). Further results showed that ECEC-k (b = 0.846, t = 3.203, p = 0.001) and age (b = 0.234, t = 2.741, p = 0.012) were the significant predicators of teachers' perspectives of ECEC at probability level of 0.05. Both factors had positive effects. Level of education (b = -0.582, t = -2.033, p = 0.064) and teaching experience (b = 1.033, t = 0.943, p = 0.265) were not significant predicators in the model.

Table 6: Linear regression of variables predicting ECEC-P

Variables	B	SE(b)	t-value	P
*Age	0.234	0.087	2.741	0.012
Level of education	-0.582	0.286	-2.033	0.064
Teaching experience	1.033	1.098	0.943	0.265
*k-ECEC	0.846	3.780	3.203	0.001
R^2		0.407		
F		5.045		

Note: * - Significant variables. Results based on data from the responses of participants.

CONCLUSION AND DISCUSSION

This study aimed to explore teachers' perspectives on effectiveness of early childhood education curriculum in 21st century in Nigeria, using ECEC-KP questionnaire to answer the following research questions: what is the participants' knowledge of early childhood education curriculum, what is their perspective on effectiveness of the curriculum, and what relationship does their perspectives on the curriculum have with their age, level of education, teaching experience and knowledge of the curriculum? Previous studies on these are limited (Bas & Senturk, 2020; Birbili & Myrovali, 2020; Boylan et al., 2018; Marble et al., 2000; Okewole et al., 2015; Ramilo et al., 2022; Selenius & Falth, 2023). A better understand of these is important for evidence-based

policies that will deepen effective teaching and learning experiences, and holistic growth and development of early children in early childhood education schools (File, 2012a, 2012b).

The results of this study highlighted gaps participants had in knowledge of ECEC, as well as their perspectives on effectiveness of ECEC in 21st century. Even though the participants had good knowledge of the curriculum, large gaps still existed in their knowledge of the curriculum. A mean score of 0.65, implies that 35% of the participants had less knowledge of the curriculum. Also, their perspectives on the curriculum were negative, implying that the participants did not have confidence on the effectiveness of the curriculum (i.e. the ability of the curriculum to achieve set goals and objectives). Their mean score on perspectives was 0.47. This means that majority of them (53%) had negative opinions about the curriculum. Giving these findings, there is room for increasing ECE teachers' knowledge of the curriculum and developing increased positive perspectives on the curriculum. A positive perspective on the curriculum implies confidence on the ability of the curriculum to achieve its intended objectives. As such, ECE teachers will be passionate in implementing the curriculum to ensure that 21st century skills are inculcated in young children in their cognitive, affective, emotional, social, psychomotor, and physical domains. Strong knowledge of the structure and contents of the curriculum, and positive perspectives on the curriculum are boosts to the morale of ECE teachers in the use of the curriculum in teaching young children. Teachers are critical stakeholders in ECE in Nigeria, as they not only teach and educate young children, but also, nurture, care, provide, protect, and shape their destinies and life. As such, it is pertinent for them to have right perspectives and perceptions on the curriculum. Thus, basic knowledge of the structure and contents of the curriculum, will increase ECE teachers' understanding of the curriculum and strengthen their positive perceptions on it. Contrariwise, limited knowledge of the curriculum and negative perspectives on it, might result to loss of confidence in the curriculum by ECE teachers and poor use and implementation of the curriculum. Awareness creation and sensitization of ECE teachers on the ECE curriculum will help educate the teachers on the letters and spirit of the curriculum, and casts light in areas of misunderstanding and disbelief. This is important for effective early childhood education in 21st century.

Also, this study's results show age and knowledge of ECEC (k-ECEC) were the significant factors in teachers' perspectives on ECEC. Increased age was associated with increased positive perspectives on ECEC. The role of teachers' age concerning their perspectives on ECEC is bound to be controversial, as it is in other studies where age is an explanatory variable. For instance, Grigoropoulos (2023) associated older teachers with increased knowledge about attention-deficit hyperactive disorder (ADHD), while Hosseinnia et al. (2020) found the opposite. A probable reason for this controversy, is that age even though an important factor in knowledge acquisition and shaping of perspectives, the relationship is not continuously positive. As such, we could argue in this study that older participants may feel more confident and convinced on effectiveness of ECEC. Given their experience with previous curricula, older participants may consider the curriculum's structures such as age categories, themes, topics, performance objectives, content, activities, caring/learning materials and evaluation guides according to their experience about what is typical and appropriate for early children to learn and develop. Thus, their perspectives on ECEC might be influenced by their overall experience (age) with early childhood education curricula

and their effectiveness. In this same light, increase in k-ECEC was associated with increase in positive perspective of the curriculum. This is expected given that perspectives, which is all about perceptions and viewpoints is driven primarily by beliefs and information (knowledge) (Kyriakides, 1997; Ramilo et al., 2022). It is difficult to belief or have good opinion of what you do not have information or knowledge of. As such, we will equally argue that participants with more knowledge of ECEC feel more confident and convinced on the curriculum's effectiveness. Deep knowledge of the structure, themes, and overall contents of the curriculum builds trust and loyalty in the curriculum to achieve its goals and objectives.

Furthermore, the study failed to find an association with level of education and years of teaching experience, respectively. The fact that level of education and years of teaching experience did not affect teachers' perspectives of ECEC could be indicative of the necessity for teachers to participate in education and training programmes regarding the curriculum of early childhood education. Our findings are at variance with previous research which highlights the important roles professional learning play in shaping knowledge and perspectives of curriculum and curriculum interpretation (McLachlan et al., 2013). Teachers need highly professional opportunities and trainings to deepen their knowledge and perspectives of the curriculum (Birbili & Myrovali, 2020), and improving their level of education and years of teaching experience are great platforms to attaining these professional opportunities and trainings. The implementation of the education and training programmes on ECEC could improve teachers' knowledge about the structure, themes, topics, performance objectives, content, activities, caring/learning materials, and evaluation guides of the curriculum, and subsequently their beliefs, attitude and perspectives on it. As such, a significant implication of this study is that early childhood education teachers would benefit from continuous education, trainings, and seminars on the letters and spirits of early childhood education curriculum. This will deepen their knowledge and conviction on the curriculum and inspire in them positive perspectives of the curriculum.

LIMITATIONS

This study was limited using convenience sample of early childhood education teachers in the eastern part of Nigeria. Results cannot be generalized to other geographical locations in Nigeria. Self-report questionnaire was used in the study. This type of questionnaires is easy to administer and analyze, however, the likelihood for responses to be consistent with socially accepted norms and constructs may be high. These limitations notwithstanding, this study contributes to the evidence base by examining teachers' perspectives on early childhood education curriculum in Nigeria in 21st century.

Declarations

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