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PHYSICAL CONDITION AND FUNCTIONALITY ASSESSMENT OF ENVIRONMENTAL INFRASTRUCTURE OF PUBLIC PRIMARY SCHOOL INFRASTRUCTURE IN PORT HARCOURT METROPOLIS

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ABSTRACT

This study examines the physical condition and functionality of environmental infrastructure in public primary schools within Port Harcourt Metropolis. Recognizing the crucial role that educational infrastructure plays in creating a conducive learning environment, the research adopts a descriptive survey research method which gives room for the collection of quantitative data. The assessment comprises many components of environmental infrastructure, including sports fields, access roads, drainage systems, waste disposal facilities, and parking spaces. Environmental infrastructure condition of the PPS was measured with a 5 point Likert Scale of 'Good (Needs No Repair), Fairly Good (Needs Minor Repair), Uncertain, Bad (Needs Major Repair) and Very Bad (Needs replacement)'. To measure functionality, a 5-point Likert scale ranging from 'Strongly Disagree' to 'Strongly Agree' is applied, offering a detailed insight into respondents' perspectives. In order to provide strategic changes and focused funding for an improved educational experience and a generally supportive learning environment in the Port Harcourt Metropolis, the findings attempt to provide light on the existing condition of environmental infrastructure in public primary schools.

Keywords: Infrastructure Assessment, Public Primary Schools, Physical Condition, Functionality, Environmental Infrastructure, Port Harcourt Metropolis

1. INTRODUCTION

The significance of primary school infrastructure in social development is significant. In 2019, UNESCO emphasized the crucial correlation between the growth of education and global economic development. In 2020, the World Bank Group highlighted that education has a crucial role in driving economic growth, reducing poverty, promoting social awareness, and fostering shared values across communities. It emphasized the significance of education in improving productivity, stimulating innovation, promoting technological progress, and increasing personal earnings. It projected that a nation's Gross Domestic Product (GDP) would grow by 3% per year as education levels rise. There is an inherent connection between infrastructure and education since all these beneficial educational results are made possible by its capability.

According to scholarly viewpoints, such as Ozturk (2008) and the World Bank Group (2020), sustainable economic development relies on significant expenditures in educational infrastructure. The distribution and development of elementary school infrastructure in rural as well as urban areas play a crucial role in human development, promoting growth that benefits the disadvantaged and contributing to the overall advancement of the nation.

Several researchers (Owoeye & Yara, 2011; Usen, 2016; Turupere, 2016) have verified that well-equipped primary school facilities, approved by competent authorities, have a substantial impact on children's educational experiences. According to Inobeme and Ayanwole (2009), the establishment and fair allocation of fundamental educational facilities have a significant impact on the learning environment for students and the working conditions for educators.

This study examines the environmental infrastructure, including sports fields, access roads, drainage systems, waste disposal facilities, and parking spaces, in public primary schools situated within Port Harcourt Metropolis. Recognizing the present condition and functionality of these important components is crucial for strategizing improvements and targeted investments. Enhancing these elements would not only enhance the educational quality but also create a favorable and stimulating learning atmosphere for the entire school community. Understanding the link between these environmental variables and the entire educational experience is crucial for informed decision-making and transformational advances.

1.1 Aim of the Study

Aim: This study aims to assess the physical condition and functionality of environmental infrastructure in public primary schools within Port Harcourt Metropolis.

1.2 Objectives of the Study

- Assess the physical condition of various environmental infrastructure components, including sports fields, access roads, drainage systems, refuse disposal facilities, and parking spaces.
- Determine the functionality level of these environmental infrastructure components within the school premises.

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1.3 The Study Area

Port Harcourt Metropolis serves as the geographical context for this study. This encompass Port Harcourt City LGA and Obio/ Akpor LGA respectively. There are presently fifty eight (58) public primary schools in Port Harcourt City LGA and fifty five (55) in Obio/ Akpor LGA. The total population of schools is therefore one hundred and thirteen (113) public primary schools spread across the study area (Rivers State Ministry of Education, 2018). The public schools were established based on three key interests: missionary interest which gave rise to church schools, community interest which gave rise to community schools and Rivers State Government interest which gave rise to Rivers State owned schools. Today, most of the missionary schools, all community schools and state owned schools are under the control and management of the Rivers State Government. It is evident that most of these public primary schools were established over 30 years ago (Gabriel, 2013). See Fig 1 for a map showing the spatial distribution of public primary schools in the study area (Port Harcourt metropolis).

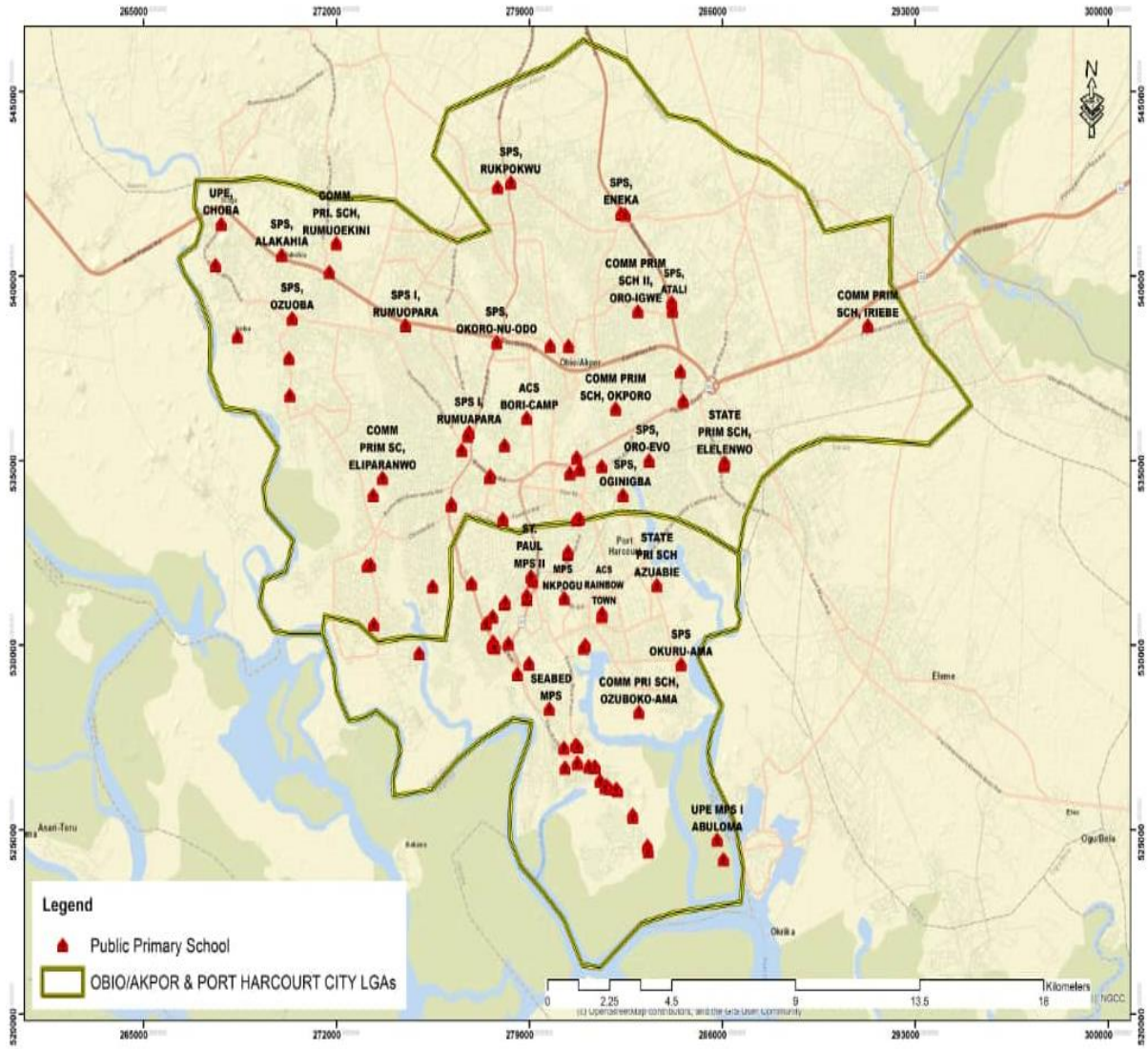

Figure 1 Map showing the Spatial Distribution of Public Primary Schools in the Study Area

Source: Rivers State Land and Survey Division, Port Harcourt 1985; Authors' Field Survey, 2022 2.0

2. LITERATURE REVIEW

2.1 Conceptual Review of Literature

Infrastructure within public primary schools is crucial for providing an atmosphere conducive to successful learning and general well-being of pupils. Research in this subject is vital to identify difficulties and suggest solutions for boosting the quality of educational infrastructure. Existing research highlights the value of well-maintained school settings in generating a good learning experience and maintaining the safety and health of students.

Numerous studies emphasize the influence of school infrastructure on educational results. Positive relationships have been observed between well-maintained physical infrastructure and enhanced student performance, attendance, and general happiness. Conversely, neglect of environmental infrastructure has been related to a drop in academic outcomes, student motivation, and teacher morale.

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2.1.1 Public Primary School Infrastructure

Different authors have categorized school infrastructure differently. In whole, school infrastructure include buildings (classrooms, office rooms, libraries, laboratories, cafeteria, assembly hall), building fixtures (water supply, electricity supply, health and sanitation facilities), furnishings and equipment (tables, chairs, computers, black board or marker boards, textbooks etc), and finally the environment which is related to the exterior facilities such as space for physical education (playgrounds), landscaping and paving, waste disposal among others (Nurul Syakima, Sapri & Mohd, 2011; Ajayi & Yusuf, 2010; Nwakpa, 2011; Town and Country Planning Department of Selangor, 2010; Obateru, 2005).

2.1.2 Environmental Infrastructure in Public Primary Schools

Environmental infrastructure in public primary schools encompasses a spectrum of elements, both physical and functional, that collectively contribute to fostering a safe, healthy, and conducive learning environment. This infrastructure spans across buildings, classrooms, utilities (such as electricity, water supply, sanitation), outdoor spaces (like sports fields, access roads, drainage systems), and essential facilities (including play areas, cloakrooms, and security buildings) (Ikiriko, 2022). Specific to this study, environmental infrastructure will look at five key components of a public primary school which includes including sports fields, access roads, drainage systems, waste disposal facilities, and parking spaces.

2.1.3 Physical Condition of Environmental Infrastructure

The physical condition of environmental infrastructure encompasses the observable state or status of the tangible components within a school environment. Assessing the physical condition involves evaluating the state of sports fields, access roads, drainage systems, waste disposal facilities, and parking spaces. It aims to identify any visible signs of wear, damage, or deficiencies that might impact the usability, safety, or suitability of these components for supporting a conducive learning atmosphere.

Understanding the physical condition is crucial for identifying maintenance needs, addressing safety concerns, and planning for necessary renovations or replacements (Ikiriko, 2022).

A good condition of school buildings and components support the enhancement in teaching and learning progress in the school (Earthman, 2002; McKoy, Vincent & Makarewicz, 2008). School infrastructure condition in literature was evaluated by its performance to provide quality and satisfaction among the school community (Nurul Sapri & Mohd, 2011).

2.1.4 Functionality of Environmental Infrastructure

Wiktionary (2021) defined functionality as the ability to perform a task or function; that set of functions that something is able or equipped to perform. In the United States trademark law, functionality means the tendency of a product design to serve a function other than identification of the product, preventing that design from being protected as a trademark. In this wise, the public primary schools infrastructure functionality means that the component infrastructure (school building, furniture, basic amenities and environmental infrastructure) is performing the purpose for its provision. It is availability and the usability of the infrastructure that determines its functionality; functionality is simply availability plus usability (Ikiriko, 2022). In the context of this paper, the functionality of environmental infrastructure refers to how effectively and efficiently the tangible elements within a school environment operate and serve their intended purposes. Assessing the functionality of the environmental infrastructure involves evaluating the operational status of utilities, the usability of facilities, and the overall effectiveness of the school's physical environment. A functional environmental infrastructure contributes to a positive learning atmosphere, supports educational activities, and enhances the overall well-being of students and staff.

3. METHOD OF THE STUDY

In this section, the research design, population, sampling and sampling size, instrumentation and data collection, and method of data analysis were discussed.

This study is a real life situation that can be addressed with single or multiple options to get the best result and so belongs to the pragmatism philosophical paradigm. It is a kind of study that involves field visitation and questionnaire administration and collation of data. The approach for the study was the descriptive survey research method which gives room for the collection of quantitative data (Creswell, 2012).

Mugenda and Mugenda (2003) describe 'population' as the entire group of individuals' or objects having similar observable characteristics. The population to which this study is generalized is the total number of public primary schools in the study area. The study population comprises fifty eight (58) public primary schools in Port Harcourt City LGA and fifty five (55) in Obio/ Akpor LGA. The total population of schools is therefore one hundred and thirteen (113) public primary schools spread across the study area (See Table 3.1).

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Table: 3.1: List of Public Primary Schools in the Study Area

Wards	Serial Code	Name of Schools in Port Harcourt City LGA	Wards	Serial Code	Name of Schools in Obio/ Akpor LGA
Ward 1	PH1	Model Primary School Orominike I	Ward 1	OB1	Community Primary School II, Oro-Igwe
	PH2	Model Primary School II Orominieke		OB2	State Primary School, Oro-Igwe
	PH3	Army Children Model Primary School I		OB3	Community Primary School, Eliozu
	PH4	Army Children Model Primary School II		OB4	Community Primary School, Elimgbu
Ward 2	PH5	State Primary School II Orogbum	Ward 2	OB5	Community Primary School, Okporo
	PH6	Model Primary School I Orogbum		OB6	Community Primary School, Iriebe
Ward 3	PH7	Ph Primary School	Ward 3	OB7	Universal Primary Education, Rumuokrushi
	PH8	Seabed Model Primary School		OB8	All Saints Primary School, Rumuokrushi
Ward 4	PH9	State School Sangana		OB9	State Primary School , Rumuokrushi
Ward 5	PH10	Universal Primary Education Model Primary School Bundu	Ward 4	OB10	State Primary School , Atali
	PH11	St. Mary State School		OB11	Community Primary School, Rumuobiakani
	PH12	Model Primary School Bernard Carr	Ward 5	OB12	Community Primary School, Elelenwo
	PH13	Pabod Model Primary School		OB13	State Primary School,Elelenwo
	PH14	Special School For The Handicapped Children	Ward 6	OB14	Community Primary School, Oro-Evo
	PH15	St. John State School		OB15	State Primary School , Oro-Evo
	PH16	State School Ibadan		OB16	State Primary School , Oginigba
	PH17	State Primary School I Churchill	Ward 7	OB17	Acs Bori-Camp
	PH18	State School II Churchill		OB18	State Primary School , Okoro-Nu-Odo
	PH19	Model Primary School III Churchill		OB19	State Primary School, Eligbolo
Ward 6	PH20	Salvation Army State School	Ward 8	OB20	Community Primary School II, Rumuomasi
	PH21	Baptist Day School		OB21	State Primary School , Rumuomasi
	PH22	Holy Trinity State School		OB22	State Primary School , Airforce Base, Rumuomasi
	PH23	St. Cyprian State School	Ward 9	OB23	State Primary School , Eliparanwo
	PH24	World Book Capital Model Primary School		OB24	Community Primary School, Eliparanwo
	PH25	Township Model Primary School I	Ward 10	OB25	Community Primary School, Rumueme

	PH26	Township Model Primary School II	Ward 11	OB26	State Primary School , Rumueme
	PH27	Township State School III	Ward 12	OB27	State Primary School I, Rumuopara
Ward 7	PH28	State Model Primary School 1 Borokiri		OB28	State Primary School I, Rumuapara
	PH29	State Primary School 1 Borokiri		OB29	State Primary School II, Rumuapara
	PH30	State Primary School II Borokiri		OB30	Community Primary School, Rumorosi
	PH31	Universal Primary Education Model Primary School I Borokiri		OB31	State Primary School , Nkpolu-Rumuigbo
	PH32	Universal Primary Education Model Primary School II Borokiri	Ward 13	OB32	State Primary School I, Olanada
Ward 8		Nil		OB33	State Primary School II, Olanada
Ward 9	PH33	St. Paul Model Primary School I		OB34	Community Primary School, Rumuokwuta
	PH34	St. Paul Model Primary School II	Ward 14	OB35	State Primary School , Eneka
Ward 10	PH35	St. Thomas Model Primary School		OB36	State Primary School III, Eneka
Ward 11	PH36	Saint Andrews Model School I, Diobu		OB37	Community Primary School II, Eneka
Ward 12	PH37	Saint Andrews Model School II, Diobu		OB38	Community Primary School, Rukpokwu
Ward 13	PH38	Saint Andrews Model School III, Diobu		OB39	State Primary School , Rukpoku
Ward 14	PH39	Saint Andrews Model School IV, Diobu	Ward 15	OB40	Community Primary School, Rumuoekini
Ward 15	PH40	Centenary Model Primary School , Rumuwoji		OB41	State Primary School/Rumuosi
Ward 16		Nil		OB42	Universal Primary Education, Choba
Ward 17	PH41	Sacred Heart State School I		OB43	State Primary School , Choba
	PH42	Sacred Heart State School II		OB44	State Primary School , Alakahia
Ward 18	PH43	State School, Rebisi	Ward 16	OB45	State Primary School , Ozuoba
	PH44	Model Primary School Nkpolu Oroworukwo		OB46	State Primary School, Rumuokparali
Ward 19	PH45	Community Primary School II Elekahia		OB47	Community Primary School, Ogbogoro
	PH46	State School Elekahia		OB48	Community Primary School, Egbelu-Ogbogoro
	PH47	Eze Iche Akarolo Model Primary School		OB49	Camps, Rumuokwachi
	PH48	Dame Alice Model Primary School	Ward 17	OB50	Model Primary School Mgbuoshimini
	PH49	Dr Christie Toby Model Primary School		OB51	Community Primary School, Rumuolumeni
	PH50	Model Primary School Nkpogu		OB52	State Primary School ,

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					Rumuolumeni
Ward 20	PH51	Community Primary School Rainbow-Amadi-Ama		OB53	Community Primary School,Rumuolumeni
	PH52	Army Children School Rainbow Town		OB54	Community Primary School, Nkpor-Rumuolumeni
	PH53	State Primary School I Amadi-Ama		OB55	Community Primary School, Nkpor-Mgbuodohia
	PH54	State Primary School II Amadi-Ama			
	PH55	Universal Primary Education Model Primary School Abuloma II			
	PH56	Universal Primary Education Model Primary School I Abuloma			
	PH57	State Primary School Okuru-Ama			
	PH58	Community Primary School, Ozuboko-Ama			

Source: Authors' Field Survey, 2022

The NPC (1991) listed a total of eighty-eight (88) communities in Obio/ Akpor LGA and twenty-five (25) communities in Port Harcourt City LGA. The target populations for the study to which questionnaires were administered were the heads of schools/or teachers who had stayed longest in the schools.

The simple random sampling technique was used to select a sample of the public primary schools for the study. A 30% out of the one hundred and thirteen (113) public primary schools in Port Harcourt City and Obio/ Akpor LGAs (RSMoE, 2022) was sampled to represent the entire number of schools in the study area. This translated to seventeen (17) schools in Obio/ Akpor LGA (out of the 55 PPS) and eighteen (18) schools in Port Harcourt City LGA (out of the 58PPS) making a total of thirty five (35) public primary schools.

Objectives 1: Assess available physical environmental infrastructure and determine its physical condition in public primary schools of the study area. To address this objective, sampling was done based on 30% of the total number of schools in the study area. Simple random sampling technique was adopted to select the sample of public primary schools for the study.

Objectives 2: Assess the level of functionality of available public primary school environmental infrastructure in the study area. To address this objective, sampling was done based on 30% of the total number of schools in the study area. Simple random sampling technique was adopted to select sample public primary schools for the study.

Data collection entails two sources: Primary and secondary.

Primary Sources

Primary data source is data directly collected by the researcher which in this study involved multiple methods of data collection which specifically were:

Administration of a total of thirty five (35) Structured Survey Questionnaires with checklist to a sample of Head teachers or longest serving teachers of existing public primary schools in the study area. The essence basically was to collect data about the schools' infrastructure and their conditions. The questionnaire was designed in accordance with the Rivers State Ministry of Education Requirement Guideline for Schools (2018) and structured as 5 Point Likert Scale to capture tangible results for the study.

Secondary Sources

This comprised data obtained from periodicals, journals, relevant text books, reports, internet, published and unpublished research works related to spatial analysis of primary schools. A list of Public Primary Schools in the study area was collected from Rivers State Universal Basic Education Board.

Process of Questionnaire Administration

All the thirty five (35) sample public primary schools were visited, a copy of the questionnaires administered to each of the Heads of schools for filling.

Physical Condition of Public Primary Schools Environmental Infrastructure

Environmental infrastructure condition of the PPS was measured with a 5 point Likert Scale of 'Good (Needs No Repair), Fairly Good (Needs Minor Repair), Uncertain, Bad (Needs Major Repair) and Very Bad (Needs replacement)'.

Level of Environmental Infrastructure Functionality of Public Primary Schools

Functionality refers to the extent to which existing public primary schools fulfill their intended purpose. Environmental infrastructure functionality was assessed using a 5-point Likert scale ranging from 'Strongly Disagree' to 'Strongly Agree.' Respondents' perceptions were gauged based on this Likert scale, allowing measurement of the level of environmental infrastructure functionality in the study area.

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Variables in the Study

Table 3.2 displays the variables of the study

Table 3.2: Variables in the Study

SN	Variables	Indicators	Measures
1	Infrastructure Condition	Environmental Infrastructure Condition **1. Environmental Infrastructure** a. Sports Field b. Access road c. Drainage d. Refuse Disposal System e. Parking Space	**Infrastructure Condition is:** Good condition Fairly Good Condition Uncertain Bad Condition Very Bad Condition
2	Infrastructure Functionality	**2.** Respondents Perception on **Environmental Infrastructure above**	**5-point Likert Scale (1-5)** Strongly Disagree Disagree Undecided Agree Strongly Agree

Source: Authors' Field Survey, 2022

4. FINDINGS OF THE STUDY

4.1 Physical Condition of Environmental Infrastructure

The available environmental infrastructure in public primary schools in the Port Harcourt metropolis encompasses a range of vital components, including sports fields, access roads, drainage systems, refuse disposal systems, and car parking spaces. These elements are essential for creating a safe, functional, and conducive environment for both learning and extracurricular activities. The presence and condition of these facilities significantly impact the overall well-being and educational experience of students, as well as the working conditions for teachers and staff. Therefore, the assessment of these environmental infrastructure components is crucial for understanding the current state of public primary schools in Port Harcourt and for identifying areas that require improvement and investment. This information will be instrumental in guiding efforts to enhance the quality of education and the overall environment within these schools.

4.1.1 Condition of Sports Field

Fig 4.1 shows that majority of the respondents (80%) rated the condition of sports field as 'Good (Needs No Repair)'. This was followed by 'Fairly Good (Needs Minor Repair)' 16.7% and 'Uncertain' (3.3%). None of the respondents rated sports field as 'Bad (Needs Major Repair) and Very Bad (Needs Replacement)'.

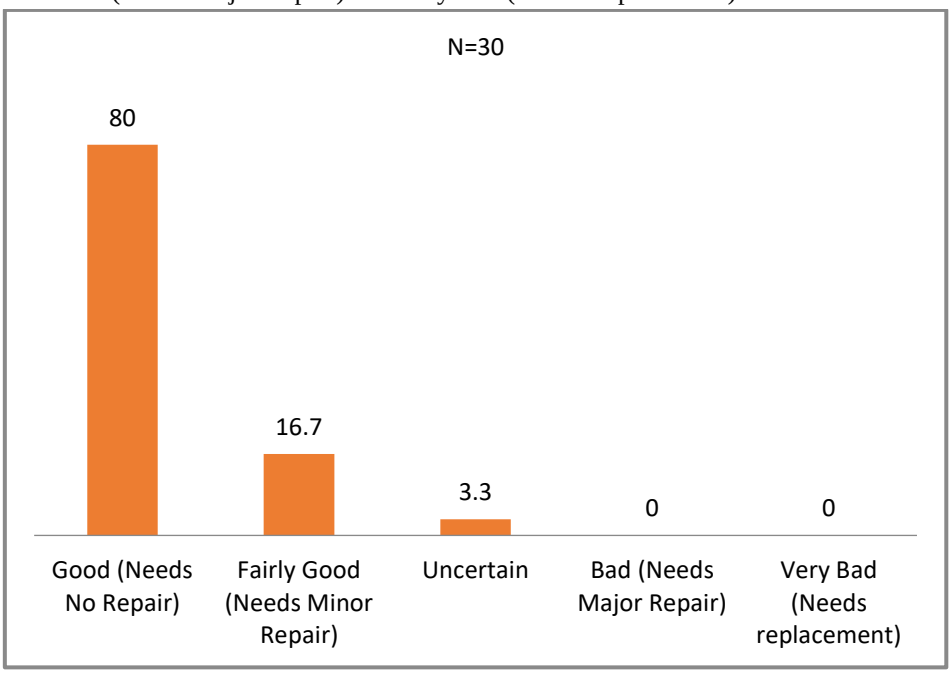

Fig 4.1: Condition of Sports Field

Source: Authors' Field Survey, 2022

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4.1.2 Condition of School Access Road

Table 4.1 shows that majority of the respondents (60%) rated the condition of access road as 'Good (Needs No Repair)'. This was followed by Fairly Good (Needs Minor Repair) with 20%, Bad (Needs Major Repair) with 14.3% and Uncertain (5.7%).

Table 4.1: Condition of Access Road

S/No.	Condition of Access Road	Frequency	Percent (%)
1	Very Bad (Need replacement)	0	0
2	Bad (Needs Major Repair)	5	14.3
3	Uncertain	2	5.7
4	Fairly Good (Needs Minor Repair)	7	20
5	Good (Needs No Repair)	21	60
	Total	**35**	**100**

Source: Authors' Field Survey, 2022

4.1.3 Condition of Drainage

Table 4.2 shows that majority of the respondents (60%) rated the condition of drainage as 'Good (Needs No Repair)'. This was followed by Fairly Good (Needs Minor Repair) with 20%, Bad (Needs Major Repair) with 11.4%, Uncertain with 5.7% and Very Bad (Need replacement) with 2.9%.

Table 4.2: Condition of Drainage

S/No.	Condition of Drainage	Frequency	Percent (%)
1	Very Bad (Need replacement)	1	2.9
2	Bad (Needs Major Repair)	4	11.4
3	Uncertain	2	5.7
4	Fairly Good (Needs Minor Repair)	7	20
5	Good (Needs No Repair)	21	60
	Total	**35**	**100**

Source: Authors' Field Survey, 2022

4.1.4 Condition of Refuse Disposal System

Table 4.3 shows that majority of the respondents (80%) rated the condition of refuse disposal system as 'Good (Needs No Repair)'. This was followed by Fairly Good (Needs Minor Repair) with 5.7%, Bad (Needs Major Repair) with 5.7%, Uncertain with 5.7% and Very Bad (Need replacement) with 2.9%.

Table 4.3: Condition of Refuse Disposal System

S/No.	Condition of Refuse Disposal System	Frequency	Percent (%)
1	Very Bad (Need replacement)	1	2.9
2	Bad (Needs Major Repair)	2	5.7
3	Uncertain	2	5.7
4	Fairly Good (Needs Minor Repair)	2	5.7
5	Good (Needs No Repair)	28	80
	Total	**35**	**100**

Source: Authors' Field Survey, 2022

4.1.5 Condition of Parking Space

Table 4.4 shows that majority of the respondents (66.7%) rated the condition of parking space as 'Good (Needs No Repair)'.

Table 4.4: Condition of Parking Space

S/No.	Condition of Parking Space	Frequency	Percent (%)
1	Very Bad (Need replacement)	0	0
2	Bad (Needs Major Repair)	0	0
3	Uncertain	3	8.6
4	Fairly Good (Needs Minor Repair)	0	0

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5	Good (Needs No Repair)	32	91.4
	Total	**35**	**100**

Source: Authors' Field Survey, 2022

4.2 Functionality of Environmental Infrastructure

4.2.1 Functionality of Sports Field

Table 4.5 shows the percentage frequencies of respondents' agreement or disagreement to the statement that 'sports field is above 100m x 100m and fully in use by pupils'. Out of thirty five (35) respondents, the table shows that 17.1% strongly disagree, 22.9% disagree, 5.7% were undecided, 34.3% agree while 20% affirm that they strongly agree.

Table 4.5: Functionality of Sports Field

S/No.	Functionality of Sports Field	Frequency	Percent (%)
1	Strongly Disagree	6	17.1
2	Disagree	8	22.9
3	Undecided	2	5.7
4	Agree	12	34.3
5	Strongly Agree	7	20
	Total	**35**	**100**

Source: Authors' Field Survey, 2022

4.2.2 Functionality of Access Road

Table 4.6 shows the percentage frequencies of respondents' agreement or disagreement to the statement that 'school is accessible by road and that access road is functional'. Out of thirty five (35) respondents, the table shows that 11.4% strongly disagree, 14.3% disagree, 11.4% were undecided, 34.3% agree while 28.6% affirm that they strongly agree.

Table 4.6: Functionality of Access Road

S/No.	Functionality of Access Road	Frequency	Percent (%)
1	Strongly Disagree	4	11.4
2	Disagree	5	14.3
3	Undecided	4	11.4
4	Agree	12	34.3
5	Strongly Agree	10	28.6
	Total	**35**	**100**

Source: Authors' Field Survey, 2022

4.2.3 Functionality of Drainage

Table 4.7 shows the percentage frequencies of respondents' agreement or disagreement to the statement that 'school has a drainage system running and functional'. Out of thirty five (35) respondents, the table shows that 14.3% strongly disagree, 22.8% disagree, 14.3% were undecided, 25.7% agree while 22.9% affirm that they strongly agree.

Table 4.7: Functionality of Drainage

S/No.	Functionality of Drainage	Frequency	Percent (%)
1	Strongly Disagree	5	14.3
2	Disagree	8	22.9
3	Undecided	5	14.3
4	Agree	9	25.7
5	Strongly Agree	8	22.8
	Total	**35**	**100**

Source: Authors' Field Survey, 2022

4.2.4 Functionality of Refuse Disposal System

Table 4.8 shows the percentage frequencies of respondents' agreement or disagreement to the statement that 'school refuse disposal system is managed by head of school and that school environment is clean'. Out of thirty five (35) respondents, the table shows that 20% strongly disagree, 17.1% disagree, 11.4% were undecided, 28.6% agree while 22.9% affirm that they strongly agree.

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Table 4.8: Functionality of Refuse Disposal System

S/No.	Functionality of Refuse Disposal System	Frequency	Percent (%)
1	Strongly Disagree	7	20
2	Disagree	6	17.1
3	Undecided	4	11.4
4	Agree	10	28.6
5	Strongly Agree	8	22.9
	Total	**35**	**100**

Source: Authors' Field Survey, 2022

4.2.5 Functionality of Parking Space

Table 4.9 shows the percentage frequencies of respondents' agreement or disagreement to the statement that 'school parking space is enough for staff and in use'. Out of thirty five (35) respondents, the table shows that 20% strongly disagree, 20% disagree, 14.3% were undecided, 22.9% agree while 22.8% affirm that they strongly agree.

Table 4.9: Functionality of Parking Space

S/No.	Functionality of Parking Space	Frequency	Percent (%)
1	Strongly Disagree	7	20
2	Disagree	7	20
3	Undecided	5	14.3
4	Agree	8	22.9
5	Strongly Agree	8	22.8
	Total	**35**	**100**

Source: Authors' Field Survey, 2022

Summary of findings

The assessment of public primary school infrastructure in Port Harcourt Metropolis gives a detailed picture of the physical state and functioning of essential environmental components. The study's findings suggest a combination of strong elements and areas needing work, delivering useful insights into the overall status of these schools.

Starting with the physical condition assessment, certain characteristics like sports fields and parking spaces appear positive. The sports fields, with an 80% rating of 'Good (Needs No Repair)' represent sturdy and appropriate spaces for extracurricular activity. Similarly, the parking spaces, assessed at 91.4% as 'Good (Needs No Repair)', indicate sufficient resources for staff members. However, the study of access roads, drainage, and waste disposal systems indicates a more diversified environment. While 60% of respondents rated access roads as 'Good (Needs No Repair)', there's awareness of the potential for improvement, with 20% describing them as needing minor repairs. Similarly, drainage and waste disposal systems, assessed at 60% and 80% respectively as 'Good', also exhibit some concerns with 20% and 17.1% suggesting the need for minor repairs or management issues.

Moving on to the functionality assessment, it's obvious that opinions vary across different environmental infrastructure components. The sports field functionality reveals mixed perspectives, with only 54.3% agreeing or strongly agreeing that it's fully utilized by pupils. Access road functioning looks more positive, with 62.9% agreeing or highly agreeing on accessibility, albeit a considerable fraction (25.7%) expressing disagreement or uncertainty. Drainage and waste disposal systems also reveal inequalities, with nearly half of the respondents citing concerns over their functionality despite favorable scores in physical condition assessment. Similarly, parking space functionality reflects concerns regarding adequacy, as 48.6% agree or strongly agree on adequacy, while 40% express dissagreement.

5. DISCUSSION OF FINDINGS

The findings from the assessment of public primary school infrastructure in Port Harcourt Metropolis bring to light a multifaceted understanding of the current state of these educational facilities. This discussion delves deeper into the implications of the findings and their significance in shaping the quality of education and the overall school environment.

5.1 Physical Condition

The positive ratings for sports fields and parking spaces denote commendable maintenance levels in these areas, fostering a conducive environment for extracurricular activities and ensuring adequate provisions for staff. However, the varied perceptions regarding access roads, drainage, and refuse disposal systems, while mostly positive, highlight underlying concerns. Even though a significant portion rates these components as 'Good', there's a noteworthy acknowledgement of minor issues or the need for management improvements.

5.2 Functionality Assessment

The functionality assessment offers nuanced insights. The sports field, despite its satisfactory physical condition, raises concerns about underutilization, indicating potential opportunities for enhanced engagement and utilization of these spaces. Access road functionality, while predominantly positive, reflects pockets of dissatisfaction or uncertainty, warranting attention to ensure seamless accessibility. Drainage and refuse disposal systems reveal disparities between their physical condition and functionality, with almost half of the respondents expressing concerns about their effective operation or management. Similarly, parking space functionality indicates divided perceptions about its adequacy, signalling potential issues despite an overall positive physical assessment.

5.3 Implications

These findings underscore the interconnectedness between physical condition and functionality in shaping the learning environment. The discrepancies between perceived functionality and rated physical condition suggest a need for comprehensive assessments beyond surface-level evaluations. While the physical conditions seem satisfactory on the surface, the functionality assessment uncovers nuances that demand immediate attention. Neglecting these functional discrepancies may impact the holistic educational experience, hindering optimal utilization of infrastructure and potentially affecting the overall school environment.

6. RECOMMENDATIONS

To address the identified concerns, a holistic approach is necessary. Remedial actions should focus on aligning perceived functionality with the actual physical condition, ensuring that infrastructure components not only appear sound but also operate optimally. This may involve targeted maintenance, improved management practices, or modifications to optimize utilization. Stakeholder collaboration, including school authorities, local authorities, and educational boards, becomes paramount in formulating and implementing strategies for comprehensive improvements aligned with the educational goals.

7. CONCLUSION

In conclusion, the findings highlight the nuanced interplay between perceived physical condition and functionality within public primary school infrastructure. Addressing the disparities identified through this assessment is crucial in optimizing the educational environment, fostering a conducive setting for learning and extracurricular activities, and ensuring that infrastructure effectively serves its intended purpose for the benefit of students, educators, and the broader school community.

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