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# School Feeding Program in Nigeria: Special Schools Experience

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## ABSTRACT

School feeding is a world bank initiative aimed at social safety, provision of health benefits to encourage school enrollment, attendance, reduction of absenteeism, increased cognitive development, and improved food security at the household level. School feeding is a program implemented in Nigeria, as in most developing countries. It is designed to cater to all categories of learners. A typical group of vulnerable learners in society who need to be fed through the school feeding initiative are students with special needs. These students exhibit diverse disabilities and require support. The study aims to investigate school feeding programs among students with special needs in Kwara State, Nigeria. Five purposes were formulated, from where three research questions were raised and two hypotheses were tested at a 0.05 level of significance. Relevant literature was reviewed. Qualitative and quantitative data were collected from students and teachers in special schools. 10 special education teachers were engaged in focus group discussion, while 40 teachers and 60 students responded to the 15-item questionnaire. The results revealed that school feeding is being practiced in special schools. The program has improved school enrollment and attendance in school and the students are healthier and are performing very well due to improved cognitive development. The government at all levels should ensure the continued financing of the school feeding program.

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## 1. INTRODUCTION

School feeding programs have been a significant reaction to recent food and economic crises, and they operate in some form in almost every country on the planet. School feeding is a multi-sectoral intervention that has an impact on education, health, and nutrition, as well as the potential for long-term benefits (Firman & Nandiyanto, 2023). The United Nations' Millennium Development Goal 2 on education calls for an increase in primary school enrollment and a reduction in the gender gap in primary school enrollment. Teacher training, the elimination of school fees, and gender-based campaigns to require student enrollment are just a few of the program and policy choices available to attain this goal (see http://www.undp.org/content/undp/en/home/librarypage/mdg/the-millennium-development-goals-report-2012/ as on 3/29/2013).

Other international initiatives to address the problem of student dropout include but are not limited to, conditional financial transfers to poor families, free school uniforms, exercise books, and pencils, as seen in India and Bangladesh (Jomaa *et al.,* 2011). Despite the efforts of the international community and governments in developing countries where student attendance in schools is low and poor, many children are still reported to be out of school in these countries. In low-income countries, just 59 percent of pupils enrolled in elementary schools completed primary educatio. More than one million school-aged children are anticipated to be out of school, with two-thirds of them being girls living in rural communities in developing countries most vulnerable regions (Jomaa *et al.,* 2011). Many factors contribute to the fact that the majority of school-aged children are still out of school, including poverty, hunger, and malnutrition (Jomaa *et al.,* 2011).

To a hungry youngster attending school, the School Feeding Program is less significant than having enough food to eat. Children attend school because they know they will get at least one nutritious meal each day. This increases enrollment and encourages consistent attendance, both of which help to improve overall performance. As a result, the World Food Program aided needy children by implementing a School Feeding Program in several countries, as well as schools whose catchment regions include pockets of poverty, such as schools for the Most Vulnerable Children. (MVC) The School Feeding Program (SFP) has been in existence since the late 1800s in Japan. With the help of the World Food Program, it was expanded all over the world (WFP).

In 2001, the World Food Program (WFP) provided school meals to 15 million students in 57 countries. WFP served 15.6 million children in 69 countries in 2002, and the increased trend continued in 2004, with WFP serving 16.6 million children in 72 countries. In Nigeria, the issue of school feeding is not entirely new. School feeding has three purposes: it serves as a social safety net, it is a requirement for improving learning and educational outcomes, and it improves the nutrition and health status of schoolchildren (Aliyar *et al.,* 2015). School feeding programs encourage students to attend school by offering nutritious meals in exchange for attendance.

SFP may improve learning and cognitive development in impoverished children by boosting attention spans and nutrition. These programs are appealing because they have the potential to promote school participation, learning, and cognitive results (Azubuike & Mbah, 2019). Furthermore, the school feeding program (SFP) aims to reduce short-term hunger, improve children's nutrition and cognition, and transfer cash to families. Schools in high- and upper-middle-income countries provide food to all students, whereas schools in low- and middle-income countries provide minimal or no food to students (Yendaw & Dayour, 2015). When a community is struck by hunger, children are the ones who suffer the most, as they lose their

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desire to play and learn in favor of searching for food (Warlina *et al.,* 2021; Maulana *et al.,* 2021). 100 million out of 300 million children in the globe are chronically hungry and do not attend elementary school. In Nigeria, however, the National Home-Grown School Feeding Program (NHGSFP) is a feeding program that costs N70 per day and aims to enhance the health and educational outcomes of public primary school students. It provides youngsters with nutritious mid-day lunches every school day using agricultural products grown locally by smallholder farmers. The program connects local farmers to the education sector by enabling their access to the school feeding market and helps caterers and cooks in the food service industry earn more money (Gelli *et al.,* 2016; Kamilah & Nandiyanto, 2023). Hunger, illness, frequent absenteeism, and a lack of school requirements, among other things, have been identified as causes of low enrollment and high dropout rates in schools.

Analysts have seen consistent positive effects of school feeding in its various modalities on energy intake, micronutrient status, school enrollment, and attendance of children participating in SFPs compared to non-participants in regions where the school feeding program is operating well (Kristiansson *et al.,* 2016). According to studies, providing food on time increases the engagement of schoolchildren. Pupils stated that the school feeding program helps them enroll, attend, and participate in primary schools in Taylor and Ogbuogu's (2016) investigations.

The take-home rations (THRs) increased school attendance for both boys and girls. However, the findings further showed that girls' enrolment rate within schools increased by 3.2 percent, which was driven by the increase in the number of newly enrolled girls compared with boys. Moreover, most of the studies conducted on the Home-Grown School Feeding Program were done outside Nigeria and other parts of the country. There has been little or no study focusing on special schools' experiences with school feeding in Nigeria. Special Schools are academic environments meant for children who are gifted and talented. It is the concern of the researcher to critically investigate the experience of special school students in the school feeding program. It is against this background that this study sought to examine the investigation School feeding program in Nigeria: Special schools experience in Kwara State.

Gregory's theory of perception, which exploited the flow of ontogenetic time, is one of the most supported constructivist explanations of perception. Gregory devised systems to explain impressions and the causes of human perception's complexity and universality. One of the most significant advantages of his approach is that it considers our personal history when discussing the process of perception, and that he understood that operating with sensory data does not always mean perceiving, but that perceiving always means integrating feelings into a broader context of our beliefs and opinions. It also entails the active participation of higher cognitive functions that are involved in the construction process. Based on previous experiences, the brain must predict what an individual sees (Rinaldhi & Nandiyanto, 2022). This theory is appropriate for this study because, based on the experiences of students who received meals as part of a school feeding program, they will be required to integrate their emotions and express their views.

School feeding is simply the provision of food to children through schools. Different countries have one or a combination of the two feeding modalities in place for various objectives. However, they can be grouped into two broad categories: in-school meals and take-home rations where families are given food if their children attend school. Historically, in-school meals have been the most popular modality of school feeding interventions. School feeding can be in turn grouped into two common categories: a program that provides meals and a program that provides high-energy biscuits or snacks to generate greater impacts on

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school enrolment, and retention rates, and reduce gender or social gaps (Akanbi, 2013). Uduku, (2015) contended that there are `indications of a significant swing in thinking about school feeding and many elements of this new thinking are being promoted keenly under the rubric of "home-grown school feeding".

To improve the nutritional status of school children, the Federal Government of Nigeria launched the Home-Grown School Feeding and Health Program in September 2005 under the coordination of the Federal Ministry of Education. The program aimed to provide pupils with adequate meals during the school day. The scheme, officially known as Home Grown School Feeding Program insisted on buying the foodstuffs from the local farmers. It, therefore, reduced the rate of malnutrition while it also provided the local farmers the opportunity to sell their produce to participating schools. According to the Federal Government's directive, Federal, State, and Local Governments were to fund the program with the State and Local Governments providing the bulk.

School feeding is defined as the provision of food to school children. Programs can be classified into two main groups based on their modalities: in-school feeding, where children are fed in school; and take-home rations, where families are given food if their children attend school. In-school feeding can, in turn, be divided into two common categories: programs that provide meals, and programs that provide high-energy biscuits or snack. In-school feeding is what is presently implemented in Nigeria.

School feeding programs have been implemented in both developed and developing countries. Throughout the developing world, these programs are implemented in collaboration with large organizations with national governments, bilateral arrangements, and NGOs. The primary assumption of SFPs is that education and learning depend on good nutrition. Although this assertion has been debated, with many asserting that it is unlikely that school feeding improves nutritional status (except via attention in class) since the critical time for nutrition is during pregnancy and the first two years of life, this is not the subject matter of this study.

However, in designing and implementing a school feeding program, several options are available, depending on the primary and secondary objectives of the program. SFPs can range from simple snack provision (usually fortified biscuits) to provision of breakfast or lunch. Often, these programs operate in conjunction with other health and nutrition initiatives to increase their success and impact. Several objectives may be formulated for SFPs, including increasing enrolment and attendance, decreasing gender disparity, alleviating short-term hunger, thereby increasing learning capacity, and improving nutritional status, thereby increasing learning capacity as well as improving micronutrient status, etc. (Rana *et al.*, 2018).

To reduce poverty and hunger and to bring about sustainable development in Nigeria, the Government of Nigeria (with support from the Dutch Government) commenced the NSFP in 2005 as an initiative of the United Nations Children's Education Fund (UNICEF) and the New Partnership for Africa's Development (NEPAD) (Uwameiye & Salami, 2013). The NSFP was inspired by the recognition of the impact of home-grown school feeding (HGSF) by the international development community that HGSF constituted an essential entry point to reducing poverty and hunger in Africa.

Earlier in 2003 NEPAD and the UN Millennium Task Force on Hunger had advocated for the implementation of school feeding programs that linked school feeding with agricultural development through the purchase of locally produced foods. The central aim of the HGSF program is the adequate nutrition of school-going children, which is achieved by supplementing their diet with a complete meal that is adequate in energy, protein, vitamins, and minerals. The reason NEPAD gives for focusing on school-going children is to improve

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nutritional status in formative years. Since primary education is compulsory in most African countries, children can be more easily reached by going to schools, so schools can be used as efficient distribution centers. They also argue that school feeding will enhance enrolment and attendance, with attendant improvements in literacy (particularly for girls), an important component of poverty. The concept and objective of the school feeding program in Nigeria is to provide children in public primary schools in the poorest areas with one hot, nutritious meal per day, using locally grown foodstuffs. Local is defined in the following order of priority: the local community, the district, and, lastly, the national level.

The researchers' interaction with the teachers, principals, and heads of some special schools in Kwara State indicated that some of the special schools are not participating in the school feeding program. It was gathered that the majority of the schools for special needs are not involved in the school feeding program but others, especially federal school for special needs believed they are not sure if part of the sponsorship they get from the federal include the feeding program and as such could not tell whether they also enjoy the school feeding or not. It was concluded that the majority of the schools for special needs are not involved in the school feeding program.

According to the World Health Organization and the World Bank "approximately 93 million children in the world – 1 in 20 children aged 14 or younger – have a moderate or severe disability of some kind. Most of them live in the undeveloped world, are not enrolled in school, and have very poor access to the most basic health and nutrition opportunities. In low- and middle-income countries, children with disabilities are more likely to be out of school than any other group of children". Girls with disabilities are particularly disadvantaged and most likely to be excluded from education (Hidayatullah *et al.*, 2022). Due to poor data and a lack of knowledge about their needs, school health, and nutrition programs are challenged to respond effectively. However, lack of visibility is not the only barrier to children with disabilities receiving school health and nutrition.

Structural challenges do exist for children and adults with disabilities to access health and education services, most noticeably, inadequate infrastructure (Apriyanti, 2023). The ratification of the International Convention on the Rights of Persons with Disabilities has had a significant impact in most countries. It has brought up several new challenges for public policies to be inclusive of children with disabilities in existing and new programs. Such a challenge can be summarized in one insight: it is now clear that the development and sustainability goals of the world cannot be achieved without the full and effective inclusion of the most vulnerable children, many of whom are children with disabilities. The case of school feeding in Nigeria is not new.

The objectives for the school meals are mainly three; School feeding as a social safety net; as a requirement to advance learning and educational outcomes; and to boost the nutrition and or health status of the school children (Aliyar *et al.,* 2015). School feeding programs attract children to school by providing nutritious meals in exchange for school participation. If children are malnourished, SFP may also boost learning and cognitive development by improving attention spans and nutrition. The attraction of these programs is their potential to improve school participation, learning, and cognitive outcomes (Azubuike & Mbah, 2019). Besides, school feeding program (SFPs) intends to alleviate short-term hunger, improve the nutrition and cognition of children and transfer income to families.

Food aid has its origins in the disposal of surplus food in the post-World War II period. Food was distributed to parts of the world that still suffered from post-war shortages. Since then, the provision of food aid to improve food security has grown. A debate has developed globally as to whether feeding schemes at school make any difference at all. One view is that there is

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little evidence to suggest that school feeding programs have a positive impact on nutrition for participating children. In some instances, parents may provide less food at home, and the school simply replaces a home meal rather than complementing the home diet. However, there is some evidence that providing breakfast rather than lunch may address this problem. However, there are also the arguments that in impoverished settings even small attempts are worthwhile.

The other argument against school feeding is that children are only better able to learn with school feeding if the educational inputs are improved. The benefits in our view of providing food in impoverished communities outweigh the criticisms. One of the key advantages of school feeding programs is that school attendance rates can improve (especially for girls) as parents motivate their children to attend school. The problems of school quality are especially severe for learners from impoverished and poor backgrounds. School feeding programs can:

(i) Alleviate hunger and increase the attention and concentration in learners and therefore improve learning.
(ii) Motivate parents to send their children to school regularly and therefore reduce absenteeism and dropouts.
(iii) Address micronutrient deficiencies like iron and iodine in school children. Improvements in nutrition can have an impact on cognition.
(iv) Increase community involvement in schools especially where parents prepare and serve the meals (each of these is dealt with further in **Table 1**).

**Table 1.** the positive impact that feeding schemes can make in schools.

| **Address short-term hunger andimprove cognition** | **Increase enrolments and improveattendance** |
|---|---|
| 1. Long distances that children walk to school can impact nutrition<br>2. Providing breakfast to disadvantaged learners can improve test scores<br>3. School feeding programs canimprove short-term memory and increase problem-solving skills | 1. Children in poor health start school latein life or not at all<br>2. Malnourished children complete fewer years at school than better-nourished children<br>3. School feeding programs are associated with increased school enrolment, regular attendance, lowerrepetition, and dropout rates |
| **Address micronutrient deficiencies and improve learning** | **Promote community participation** |
| 1. Iron deficiency causes children to be listless, attentive, and uninterested<br>2. Addressing iron deficiencies can improve IQ scores | 1. Increase contact and communicationbetween parents and teachers<br>2. Raise the value of education in thecommunity<br>3. Community ownership can influencethe success of the project |

There are seven steps to develop school feeding programs that improve education. Agree on a policy and objectives that focus on how school feeding can improve education. Agree on what problems the feeding program needs to address, who the program will serve, and which models are feasible. The following questions may be useful in developing a policy:

(i) Why do children come to school hungry?
(ii) Are long distances between home and school a factor in hunger at school?
(iii) Does hunger affect the children's capacity to perform at school?
(iv) What infrastructure is available for school feeding programs?
(v) What human resources are available and used?

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Develop targeting criteria to reach high-risk children. Targeting is necessary to ensure that children who lack resources benefit from the school feeding program. Targeting is especially necessary when there is a shortage of resources. The program can be targeted by geographic area using a poverty map. Another approach that is used is economic targeting. Her household income is used as a measure to identify children. However, measuring household income is not that straightforward. In some countries, gender has been used to target programs.

Analyze and identify alternative financing options for school feeding programs. These programs are expensive. Besides the costs of the food itself, the costs associated with logistics, food management, and control should also be considered. Other costs are associated with food losses either to spoilage or theft. Further issues related to the financing of feeding schemes are summarized in **Table 2**.

**Table 2.** School feeding program.

| Point | Note |
|---|---|
| Food Aid | • An important source of support for school feeding programs<br>• Management and distribution of food require trained staff |
| Private Sector | • The private sector can include street vendors and local restaurants<br>• This approach can overcome the many difficulties of onsitepreparation<br>• Quality control can be a challenge |
| Food Selection | • Certain foods are expensive e.g., milk<br>• The perishability of foods needs to be considered |
| Community Support | • Parents can take responsibility for some of the costs<br>• Links with parent associations can be strengthened |
| Sustainability | • Continued support is required to provide food for schoolchildren<br>• Food programs can provide long-term impacts on behavior Change |

Develop appropriate guidelines for the ratio composition and time of school meals. Analyze the nutrition and health needs of the children at the school and find out the community's ability to participate.

Identify potential bottlenecks in implementation. Once feeding programs are in place, altering them can meet resistance. Blended foods and cereal flours can be prepared faster than whole grains.

Develop monitoring systems that look at program processes. Monitor the functioning and effectiveness of the school feeding program. Ask questions like:

(i) How many children are reached?
(ii) How many meals are served?
(iii) How much is spent on the various elements of the program?

Find opportunities to integrate interventions. Integrate feeding schemes with other school-based health interventions for example, treating children for parasites can improve their appetites and the nutritional benefit of the food.

In both programming and research, the relationship between nutrition and disability has been largely ignored. Given that over one billion people are undernourished and that over one billion people live with a handicap, there is a substantial knowledge and policy gap (Manosa *et al.,* 2011). Malnutrition is a global problem that is linked to significant causes of death and disability, either directly or indirectly. Deafness, for example, is frequently caused

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by malaria, typhoid, and meningitis, all of which are common in many developing countries. Other illnesses, such as food-borne or waterborne diarrhea, frequently leave people disabled. Malnutrition and disability significantly limit life possibilities in impoverished nations. Both are important equality and human rights issues and global development priorities. Despite this, the two problems are rarely discussed together. Even though research and experience have largely proven the links between nutritional status, cognition, school participation, and academic achievement, the nutritional needs of children with disabilities are rarely considered in the design of school feeding programs, according to Inclusive School Feeding Programs. Inclusive School Nutrition programs are designed to improve the educational access, retention, and learning outcomes of children with disabilities.

Many obstacles prohibit children with impairments from benefiting from nutrition outreach programs. Some are structural: persons with disabilities face numerous challenges to accessing health and social services; little available data makes them invisible as a population group; and, consequently, most education and health initiatives are not disability inclusive. Regular health and education personnel are often unprepared to communicate effectively with children with disabilities, and health and nutrition education programs often cannot consider their learning needs. Other barriers could be more "systemic" (related to the functional characteristics of programs and responsible institutions) and might take various forms: Dining halls and other important premises such as washrooms and toilets are often not accessible to those with mobility impairments. Because of a lack of experience with persons with disabilities, some teachers as well as other school personnel and health staff are unaware of the codes of interaction that are needed to work effectively and comfortably with children with disabilities.

Some children might require assistance in feeding. School personnel responsible for preparing meals may not have the skills or awareness of the specific needs of children with disabilities in terms of hygiene, eating, or swallowing. Special dietary restrictions might be required. Even when nutrition topics are systematically included in school curricula and health topics associated with nutrition are included in cross-curricular activities, curricular adaptations, or teaching resources to make these contents accessible and affable to children with disabilities are barely accessible. Discrimination is often present due to stigma. For instance, children without disabilities could be given priority by school personnel based on the belief that their safety and well-being are of greater value than those of children with disabilities. Some children might be ostracized and face negative attitudes in the same way they face physical barriers.

Fostering inclusion will always require overcoming these obstacles and confronting long-standing taboos created by prejudice. Over the years, the term "inclusive education" has been used to refer to "including children with disabilities," for example, children who have visual impairments, hearing limitations, reduced mobility, or experience difficulties learning in "regular" classrooms. Inclusive education is an important strategy for the most vulnerable groups, for example, "children who don't speak the common classroom language or belong to a different religion or caste, and children who may be at risk of dropping out because they are sick, hungry, or not excelling academically" (Inclusive School Health and Nutrition Program). Within the Focusing Resources on Effective School Health (FRESH) framework, inclusion means having proactive policies and plans to ensure learning for all children, particularly those who are at risk of being left out or excluded from school. The question of whether school feeding programs and services are prepared to be inclusive of children with disabilities mandates that all these children will be included and accounted for.

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There are two main ways of delivering school feeding programs to children with disabilities: Through regular school feeding in mainstream education. Including special education institutions in school feeding. There is often disagreement over whether children with disabilities are more effectively reached through "special education" or regular, universal programs. The alternative approach is to make educational resources more accessible to all persons, with and without disabilities. While a significant percentage of children remain in specialized institutions, growing consensus indicates that including children with disabilities in the mainstreaming sector is both cost-effective and socially effective and leads to overall improvements in educational outcomes. However, in most cases, this debate is futile because both strategies are valid and necessary. Furthermore, they can easily be combined. The combination of "mainstreaming" disability in all nutrition projects and having disability-specific interventions available is called the "twin-track" approach.

Implementing inclusive school feeding programs is not necessarily complex. As described in Partnership for Child Development, three principals were identified that need to be addressed.

(i) Include children with disabilities in the planning process: Improved consultation will help to make this group visible and increase the likelihood that programs are sensitive to their needs.

(ii) Ensure that accessibility is guaranteed throughout the delivery plan: Addressing issues of physical access to the places where feeding services are delivered and providing nutritional information and education in a way that is accommodated to the children's needs and functional styles is essential: Accessibility to the physical environment: the school compound, dining hall, washrooms, and toilets. Accessibility to nutrition information and education: Providing access to nutrition information and communication is crucial for children with disabilities to decrease their risk of infections and improve their health and nutrition-related decisions. Materials and campaigns, including printed materials, media-based campaigns, and digital content offered over the Internet, must be designed to effectively reach children with different types of disabilities and consider their diverse functional characteristics. Training: pre-and in-service training is needed to improve the knowledge of staff to appropriately respond to the needs of children with disabilities.

(iii) Promote family and community awareness and participation: Engaging families and community organizations such as local disability organizations, churches, special education centers, and rehabilitation programs are of great support to the effective and sustainable implementation of inclusive school feeding programs. Such an approach will have mutual benefits for school programs and school health and nutrition teams, as well as parent organizations, which often have little information and awareness about school feeding programs and other available resources.

Many studies on nutrition have shown that undernutrition in children stunts their growth and mental development, hence, the relationship between nutrition and academic performance (Kasmana *et al.*, 2021). Although food has classically been perceived as a means of providing energy and building materials to the body, research over the years has provided exciting evidence for the influence of dietary factors on mental function. Not only are children motivated to get into school but also there is a significant impact on their nutritional status and development, cognitive capabilities, and academic performance. Literature has shown that the development and learning potential of the beneficiaries depend on the quality and nutrient components of food (Berliana *et al.*, 2016). Nutritional and health status are powerful influences on a child's learning and how a child performs in school Children who lack certain

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nutrients in their diet do not have the same potential for learning as healthy and well-nourished children. Children with cognitive and sensory impairments naturally perform less and are more likely to repeat grades. The irregular school attendance of malnourished and unhealthy children is one of the key factors for poor performance (Uduku, 2015).

Yunusa (2014) noted that students in School Feeding Programs have the potential for improving their performance because it enabled them to attend school regularly and studied more effectively. He found that in a study carried out in Jamaica, children in Grade 2 scored higher in Arithmetic when they started being fed at school. However, the impact of the School Feeding Program on the academic performance of pupils has been embraced with mixed feelings. It was observed that although SFPs motivate parents to enroll their children in school, their impact on academic performance is mixed and depends on various factors within the context in which the program is set.

Uduku (2015) opined that SFPs would best improve the performance of pupils when coupled with adequate learning materials, physical facilities, and teacher motivation. Challenges associated with school feeding programs Social Support Programs (SSPs) like School feeding are crucial if universal education is to be achieved. Although developing countries are working towards the improvement of primary school conditions through interventions like SFP, dropout rates are significant and lead to low levels of primary school completion. The major purpose of this study is to investigate school feeding programs in Nigeria: Special schools experience in Kwara State.

Specifically, the study sought to determine the existence of school feeding programs in special schools, examine the experience of special schools in school feeding programs, examine the pupil's participation in school feeding programs in special schools, and find out if there is any significant relationship between school feeding program and the experience in special schools as well as ascertain if there is any significant relationship between pupils' participation in the school feeding program and the experience in special schools in Kwara State.

The following questions were raised to guide the study.

(i) Does a school feeding program exist in special schools in Kwara State?
(ii) What is the experience of special schools in the school feeding program in Kwara State?
(iii) What is the pupil's participation in the school feeding program in special schools in Kwara State?

The following hypotheses were formulated and tested at a 0.05 level of significance.

(i) HO1: There is no significant relationship between pupil's participation in school feeding programs and experience in special schools in Kwara State
(ii) HO2: There is no significant relationship between school feeding programs and the experience in special schools in Kwara State.

## 2. METHODS

The study used a mixed methods research design. Explanatory/Confirmatory mixed method was adopted. Specifically, the study adopts QUAN + QUAL mixed design (Quantitative driven simultaneous design). While the core component is quantitative, the supplemental component is quantitative. The descriptive survey research design was used for the quantitative aspect of the study. The population of the study for quantitative data comprised 40 special education teachers and 60 special education students. For the qualitative aspect of the study, 10 special education teachers were used. For the quantitative data, no sampling was conducted because the population of the study was sizeable and manageable to cover. Therefore, the study was a census study where all the special education teachers and students

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participated in the study. However, for the qualitative aspect of the study, a random sampling technique was used in selecting 10 teachers from the total number of special education teachers.

A structured questionnaire tagged Questionnaire on Experience of Teachers and Students with Special Needs During School Feeding Program (QETSSNDSFP) designed by the researchers and duly validated was used for data collection. The instrument has Cronbach's alpha reliability of 0.88. The instrument had 15 items. The researchers and two-research assistants administered 100 copies of the questionnaire, and all were retrieved making a 100% return rate, which was used for the analysis. The data collected to answer the research questions were analyzed using mean and standard deviation, while Linear Regression was used to test the hypotheses formulated at a 0.05 level of significance The decision value was fixed at 2.50.

## 3. RESULTS AND DISCUSSION

### 3.1. Demographics

Of the 100 surveys distributed to special education teachers and students with special needs, a total of 40 were returned from special education teachers and 60 returned from students with special needs, representing an overall return rate of 100 percent.

### 3.2. Research Question 1: Does a School Feeding Program Exist in Special Schools in Kwara State?

**Table 3** reveals a calculated grand mean of 2.22 and a standard deviation of 0.83, which shows that special education teachers and students disagreed with all the constructs in Table 3. All the 5 item constructs have standard deviations ranging from 0.77 to 1.02. This means that the responses of the respondents are not widespread as they are close to their respective mean scores. This means that special education teachers and students perceived that school feeding programs do not exist in special schools in Kwara State.

**Table 3.** Mean and standard deviation of responses on the existence of school feeding programs in special schools.

| S/N | Items | Mean | SD | Remark |
|---|---|---|---|---|
| 1. | School feeding programs are frequently carried out in special schools in Kwara State | 2.33 | 0.80 | Disagreed |
| 2. | The aims and objectives of the school feeding program have been achieved in special schools in Kwara State | 2.46 | 0.77 | Disagreed |
| 3. | Special schools in Kwara State are granted full access to the special feeding program | 2.11 | 0.78 | Disagreed |
| 4. | There is adequate supervision of the school feeding program in special schools by the government | 2.32 | 1.02 | Disagreed |
| 5. | The government has adequately funded the school feeding program in special schools | 1.89 | 0.80 | Disagreed |
| | **Grand Mean and Stand Deviation** | **2.22** | **0.83** | **Disagreed** |

### 3.3. Research Question 2: What is the Experience of Special Schools in School Feeding Programs in Kwara State?

**Table 4** reveals a calculated grand mean of 2.16 and a standard deviation of 0.85, which shows that special education teachers and students disagreed with all the constructs in Table 4. All the 5 item constructs have standard deviations ranging from 0.70 to 1.09. This means that the responses of the respondents are not widespread as they are close to their respective

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mean scores. This means that special education teachers and students have negative experiences with special school feeding programs in Kwara State.

### 3.4. Research Question 3: What is the Pupil's Participation in School Feeding Programs in Special Schools in Kwara State?

**Table 5** reveals a calculated grand mean of 2.21 and a standard deviation of 0.99, which shows that special education teachers and students disagreed with all the constructs in Table 5. All the 5 item constructs have standard deviations ranging from 0.91 to 1.06. This means that the responses of the respondents are not widespread as they are close to their respective mean scores. This means that pupils do not participate in school feeding programs in special schools feeding in Kwara State.

**Table 4**. Mean and standard deviation of responses on the experience of special schools in the school feeding program.

| S/N | Items | Mean | SD | Remark |
|---|---|---|---|---|
| 1. | Special schools are provided with the same healthy meals likes other schools in the Kwara State | 2.30 | 0.81 | Disagreed |
| 2. | The foodstuffs provided during the program are always adequate for distribution to the pupils | 2.06 | 0.76 | Disagreed |
| 3. | The school feeding program is a burden for teachers in the special schools | 2.00 | 0.70 | Disagreed |
| 4. | Pupils are always happy to come to school during the school feeding program | 2.19 | 0.88 | Disagreed |
| 5. | Parents are always motivated to allow their wards to participate in the school feeding program | 2.27 | 1.09 | Disagreed |
| | **Grand Mean and Stand Deviation** | **2.16** | **0.85** | **Disagreed** |

**Table 5.** Mean and standard deviation of responses on pupil participation in school feeding programs in special schools.

| S/N | Items | Mean | SD | Remark |
|---|---|---|---|---|
| 1. | Pupils are happy to participate in school feeding program because they enjoy the food, they eat | 2.24 | 0.91 | Disagreed |
| 2. | Pupils like to participate in the school feeding program because they do not have to worry about hunger | 2.11 | 0.96 | Disagreed |
| 3. | Pupils enjoy participating in the school feeding program because of the care shown by their teachers | 2.28 | 1.06 | Disagreed |
| 4. | Pupils look forward to participating in the school feeding program because they are assured balanced diet and feel nourished | 2.42 | 1.00 | Disagreed |
| 5. | Pupils like to participate in the school feeding program because it allows them to concentrate in the class | 2.02 | 1.01 | Disagreed |
| | **Grand Mean and Stand Deviation** | **2.21** | **0.99** | **Disagreed** |

### 3.5. HO1: There is no Significant Relationship Between Pupil's Participation in School Feeding Programs and Experience in Special Schools in Kwara State

From the regression analysis result shown in **Table 6**, it was found that in the model summary table, the R-value is 0.033, the R square is 0.001, and adjusted R square is 0.001. The value of R indicates a strong relationship between the observed and predicted values of the variables. In other words, the R-value depicts that pupils' participation accounted for a

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3.3% increment in the experience of special schools. This implies that the proportion of variation in the dependent variable is explained by the regression model. Hence, the value of R-square (0.01%) indicated that the model properly fits the data. More so, the value of adjusted R (0.01%) showed that the value of R square closely reflected the goodness of fit of the model in the population. Table 'coefficients' shows the model coefficient (that is, the intercept and the slope). From **Table 7**, the results show that "pupils' participation" (t-value = 0.325, p-value = 0.746) has no significant relationship with the experience of special schools at a 5% level.

**Table 6.** Summary of regression analysis of pupils' participation in school feeding program and experience in special schools.

| Model | N | R | R Square | Adjusted R Square |
|---|---|---|---|---|
| 1 | 100 | 0.033 | 0.001 | 0.001 |

a. Predictor (constant): Pupils' Participation
b. Dependent Variable: Experience of special schools

**Table 7.** Test of significance.

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.288 | 0.233 | | 9.830 | 0.000 |
| | Pupils' Participation | 0.034 | 0.105 | 0.033 | 0.325 | 0.746 |

Note: Dependent Variable: Experience of special schools

### 3.6. HO2: There is no Significant Relationship Between the School Feeding Program and the Experience in Special Schools in Kwara State

From the regression analysis result shown in **Table 8**, it was found that in the model summary table, the R-value is 0.246, the R-square is 0.060, and the adjusted R-square is 0.051. The value of R indicates a stronger relationship between the observed and predicted values of the variables. In other words, the R-value depicts that the existence of school feeding accounted for a 24.6% increment in the experience of special schools. This implies that the proportion of variation in the dependent variable is explained by the regression model. Hence, the value of R-square (0.60%) indicated that the model properly fits the data. More so, the value of adjusted R (0.51%) showed that the value of R square closely reflected the goodness of fit of the model in the population. Table 'coefficients' shows the model coefficient (that is, the intercept and the slope). From the table, the results reveal that the "existence of school feeding" (t-value = 2.510, p-value = 0.014) has a significant relationship with the experience of special schools at a 5% level (see **Table 9**).

**Table 8.** Summary of regression analysis of the relationship between the existence of school feeding programs and the experience in special schools.

| Model | N | R | R Square | Adjusted R Square |
|---|---|---|---|---|
| 1 | 100 | 0.246 | 0.060 | 0.051 |

a. Predictor (constant): Existence of a school feeding program
b. Dependent Variable: Experience of special schools

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**Table 9.** Test of significance.

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | **B** | **Std. Error** | **Beta** | **T** | **Sig.** |
| 1 | (Constant) | 2.829 | 0.247 | | 11.47 | 0.000 |
| | Existence of School Feeding | 0.280 | 0.112 | 0.246 | 2.510 | 0.014 |

Note: Dependent Variable: Experience of special schools

### 3.7. Result of Oral Interview Conducted for Qualitative Data

The following oral interview:

(i) Researcher: Good morning, Sir/Ma. I want to start by appreciating you for the audience to have this interview. As mentioned in our letter of request to your school, the purpose of this interview is purely academic, and all information supplied will be treated with the utmost confidentiality. The topic of the research work is "school feeding program in Nigeria: special schools experience in Kwara State." Thank you, can the interview commence?

(ii) Respondent: As soon as you are ready.

(iii) Researcher: Does your school carry out a school feeding program?

(iv) Respondents: The majority of the respondents said No, they don't carry out the school feeding program

(v) Researcher: Do you participate in the school feeding programs? If yes, why?

(vi) Respondents: We are not involved in the school feeding program

(vii) Researcher: How many members of students participate in the school feeding program

(viii) Respondents: We are not involved in school to school feeding program

(ix) Researcher: How do you feel concerning the school feeding program?

(x) Respondents: No reaction as they are not involved in school to the school feeding program

(xi) Researcher: Do you like the type and quality of the food the pupils eat during the program?

(xii) Respondents: The food they eat is good, some respondents stated the government feed and take care of the special school while other special schools are being taken care of by the community where it is situated.

(xiii) Researcher: What are the challenges you face during the school feeding program

(xiv) Respondents: Well, the only challenge is inadequate funds. The schools need more support from the government and individual philanthropy who would be willing to support the growth of special schools.

(xv) Researcher: What is the parent's attitude toward the school feeding program?

(xvi) Respondents: Based on the system of taking care of the pupils at the moment, the parents are happy with it, more so that they are not paying anything.

(xvii) Researcher: What do you think the government can do to make the school feeding program better?

(xviii) Respondents: Government should continue to visit the special schools in the state, though they have been visiting the government-owned special schools others that are owned by the community should be visited often too as such visits will make the government aware of the basic needs and challenges facing the special schools. Also,

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the respondents are grateful to the government but as prices of things in the market are skyrocketing, the special schools need more support in terms of funding.

### 3.8. Discussion of Findings

The study investigated school feeding programs in Nigeria: special schools experience in Kwara State. The study found that special education teachers and students perceived that school feeding programs do not exist in special schools in Kwara State. This negates the objectives of the school feeding program as stated by Aliyar *et al.* (2015), a requirement to advance learning and educational outcomes; and to boost the nutrition and or health status of the school children. The findings that school feeding programs do not exist in special schools in Kwara State may be because some school personnel responsible for preparing meals may not have the skills or awareness of the specific needs of children with disabilities in terms of hygiene, eating, or swallowing. Some children might require assistance in feeding or the presence of discrimination due to stigma are some factors that may be responsible for the non-existence of school feeding programs in special schools.

The finding, therefore, negates the assertion of Uduku (2015) who opined that school feeding programs would best improve the performance of pupils in special schools when coupled with adequate learning materials, physical facilities, and teacher motivation. The finding revealed that special schools in Kwara State may not achieve some level of success as indicated by Azubuike & Mbah, (2019) who stated that if children are malnourished, school feeding program boost learning and cognitive development by improving attention spans and nutrition. The attraction of this program is its potential to improve school participation, learning, and cognitive outcomes.

The study also found that special schools in Kwara State have negative experiences with special school feeding programs. This means that most of the special schools in Kwara State do not have a positive experience with the school-to-school feeding program provided by the government. This may be a result of their noninvolvement in the school-to-school feeding program. Special schools should be involved in school feeding programs (SFPs) and the intention should be to alleviate short-term hunger, improve the nutrition and cognition of children and transfer income to families.

There have been consistently positive effects of school feeding in its various modalities on energy intake, micronutrient status, school enrollment, and attendance of children participating in SFPs compared to non-participants in regions where the school feeding program is operating well (Machmud *et al.*, 2016). According to Taylor and Ogbuogu (2016), providing food promptly increases the engagement of school children. Pupils stated that the school feeding program helps them enroll, attend, and participate in primary schools. This is an indication that good positive experience of school feeding programs in special schools especially in Kwara State is highly important to bring about more enrolment, and participation, and improve the nutrition and cognition of children with special needs.

In addition, the study found that pupils do not participate in school feeding programs in special schools in Kwara State. This means that most of the special schools in Kwara State do not have the opportunity to participate in school-to-school feeding programs. This may be because of the feeding schemes adopted by the government which has failed to address the problem of hunger in special schools. The study also found that pupils' participation has no significant relationship with experience in special schools.

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## 4. CONCLUSION

The study investigated school feeding programs in Nigeria: special schools experience in Kwara State. This is a matter of concern, as presently, school feeding programs in special schools are considered an extremely important approach for boosting effective learning and cognitive development by improving attention spans and nutrition. This study concludes that, despite the increased awareness of the school-to-school feeding program provided by the federal government, it was observed that school feeding programs do not exist in special schools, the same way special schools have negative experiences of special school feeding programs in Kwara State. It was also concluded that pupils do not participate in school feeding programs in special schools in Kwara State.

Based on the findings of the study, the following recommendation were made:

(i) Government should extend the school feeding program to special schools in Kwara State, Nigeria as the program can boost effective learning, increase enrolment and improve cognitive development, attention spans, and nutrition

(ii) Government should continually visit the special schools in Kwara State because it will determine the basic needs of the schools and identify schools that are participating in school feeding programs and those that are not.

(iii) Government should also increase the funding of the special schools as one of the challenges identified was inadequate funding.

## 5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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