IMPACTS OF BREAKFAST ON SCHOOL CHLDREN'S ACADEMIC PERFORMANCE AS PERCEIVED BY PRIMARY SCHOOL TEACHERS IN IBADAN SOUTH-WEST LOCAL GOVERNMENT AREA OF OYO STATE

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Abstract

The study examined perceptions of school teachers on the impacts breakfast has on pupils' academic performances. The descriptive design was used in the study, while the sample included Two-hundred Basic School teachers randomly selected from five private and five public schools in lbadan South-west Local Government Area of lbadan. The instrument was a self-designed scale tagged "Impact of Breakfast on Pupils' Academic Performances Scale, with a fifteen question items. The scale was given both face and content validity and the reliability co-efficient was 0,92. Results of the two null hypotheses revealed that while there is no significant difference in the perceptions of male and female teachers on the impact breakfast has on pupils' academic performances (1 07 < 1 96), a significant difference exists in the perceptions of public and private school teachers on the impacts of breakfast on pupils' academic performances (31. 78 >196). Based on the findings, it was recommended that the government at the center should establish a School Meal Programme across the nation, to act as leverage for children of all socio-economic status.

Keywords: Academic Performance, Breakfast, Secondary School Teachers
School Children

Introduction

Nutrition plays vital role in children development and is very critical to their healthy development, It 1s very important for all-round growth and development and in fact, when this is lacking in required quantity and quality in a child, such a child experiences stunted growth physically and this eventually affects other areas of development-cognitive, emotional and social. According to DiFrancesco (2011), the human brain is a remarkable organ and represents 2% of adult body weight. The brain has limited capacity to store energy and therefore relies on energy and nutrients from the food human beings eat to help it develop and function. According to her, research on cognitive performance on school children suggests that an adequate diet more specifically, a diet including breakfast improves brain function.

Breakfast was defined as any eating occasion between 05.00 and 08.59 hours (Snow, 2022). Breakfast refers to the meal eaten in the early part of the day. It is described as the first meal of the day that breaks the fast that had been on for over twelve to fourteen hours (Wayon, Haines & Crawley, 1997). Quite often, this meal is skipped by children because of parents' eagerness to rush out of the house early or sometimes due to poverty and inability to provide three-square meal for children. In such situation, parents believe the most important meal for the child is the supper, which he eats before sleeping. Thus, Marika (2003) noted that without a breakfast meal, there is the possibility of low blood glucose levels (hypoglycaemia) and low metabolic rate, irritability and fatigue. This is why some developed countries

embrace what is called School Meal Programme, where every child is given a ration in the school on daily basis. Also, the quality of breakfast is important as the nutritional status of a child can be affected as well as the physical and mental growth, health and general well-being of the child (Onyechi & Ugwunnadi, 2009).

Breakfast has been labelled the most important meal of the day (Ranmpersaud, Pereira, Girad, Adams, & Metzi, 2005). Also, breakfast consumption is associated with other healthy lifestyle factors. Children who do not consume breakfast are more likely to be less physically active and have a lower cardio respiratory fitness level (Sandercock, Voss & Dye, 2010). Moreover, there is evidence that breakfast positively affects learning in children in terms of behavior, cognitive, and school performance (Hoyland, Dye & Lawlon, 2009). Recent studies (Just, & Wansink, 2009; Klemman, Hall, Green, Korzec-Ramirez, Patton, Pagano, & Murphy, 2002) have demonstrated that breakfast affects students' thinking skills, behaviour, and health, all factors that impact academic performance. Breakfast consumption is also associated with positive outcomes for diet quality, micronutrient intake, weight status and lifestyle factors (Adolphus, Lawton & Dye, 2013).

Breakfast has also been identified as the most important meal of the day, as some referred to it as the fast from a long night sleep with empty stomach. Breakfast is essential for providing nutrition for developmental growth physically and psychologically, and it is a significant source of nutrition during puberty and has great impact on psychological and cognitive capabilities (Snow, 2022). Academic performance on the other hand refers to the outcome of the teaching-learning process in the classroom. It is the end result of test or examination given after some instructions have been given to learners. Academic performances of a learner can be affected by myriads of factors - the home, the society, the government, the learner himself and the home from where he is raised (Adika, 2000). Part of the causative factors of academic underachievement resident in the family as identified by Aremu and Adika (2000) is basic nutrition especially during the early years, which includes the child's breakfast. According to the authors, the brain's development averages about 75% of its final adult weight by age two, and by the age of five, it has about 90% of final adult weight. This implies that nutrition (specifically breakfast) influences a child's cognitive development and eventually affects academic ability of the learner. Apart from the adverse effect of malnutrition on the cognitive achievement of school children, malnutrition is also likely to result in poor attendance at school, low health status which will invariably lead to high withdrawal rate (Olusanya, 2010).

A few researches have been carried out on academic performances and breakfast. This is why many developed counties operate school breakfast programme to act as leverage for all learners, including those from poor backgrounds whose parents cannot afford such meals at home. Many studies indicate that school breakfast programs improve academic performance (Carroll, 2014). Also, it was found that Children who do not get sufficient meals are more likely to repeat a grade (Alaimo, Olson & Frongıllo, 2001; Klenman, Hail, Green, Korzec-Ramirez, Patton, Pagano & Murphy, 1998); elementary children who participated in a school breakfast program in Massachusetts did better on standardized tests than those who qualified but did not participate (Meyers, Sampson, Weltzman, Rogers, Wehler & Kayne, 1989). Similarly, students in a universal-free school breakfast program at an inner-city school showed improved math grade six months after the start of the program (Kleinman, Murphy, Little, Pagano, Wehler, Regal & Jellinek, 2002). Undernutrition and poor dietary intakes generally have been found to

be associated with poor attainment levels in several studies thus, many countries have implemented school feeding programmes in the expectation that the children's school performance will benefit. In the same vein, studies have found that access to nutrition, particularly breakfast, can enhance students' psychosocial well-being, reduce aggression and school suspensions, and decrease discipline problems (Brown, Beardslee, & Prothrow-Smith, 2008). It has also been found that breakfast meal is associated with improved strength and endurance in the late morning as well as better attitude towards school work (Murphy, Pagano, Nachmanı, Sperling, Kane, & Kleinman, 1998).

On comparison of malnourishment (due to breakfast skipping) and school ownership, Tee, Khor, Ooi, Young, Zakiyah and Zulkafi (2002) reported that pupils from public schools were more malnourished than their counterparts from the private school. This according to them, it is not surprising as the pupils from the public primary schools were from the rural communities with very low socio-economic status. The same is the case in Nigeria, where it is believed that only children from average and low socio-economic background attend government-owned public schools, while children from well-to-do homes attend private schools.

A recent study on how breakfast affects students' school performance and behavior found that eating breakfast every day is positively associated with improved school performance (Adolphus, Lawton & Dye, 2013), while other research has suggested that the quality of the breakfast, that is, one that includes nutritional foods, also had a positive impact on students' academic performances (Anderson, Gallagher & Ritchie, 2017). Also, studies indicated that a healthy lifestyle is important on the academic achievement of learners (Adolphus, 2013). O'Neil (2014) again found that eating breakfast can increase the cognitive capabilities in the learning process, while skipping breakfast will not only affect school performance, but also has impact on their psychological and physical development.

From the ongoing, it is glarıng that breakfast intake plays vital role in pupils' overall development including improving academic performance. The importance of this meal therefore cannot be overemphasized. A number of studies have been carried out on nutrition and pupils' development. However, not many researches have compared stake-holders' (especially teachers) perceptions on the impact of breakfast on pupils' academic performances. This study therefore looks into the impact of breakfast on pupils' school performances as perceived by school teachers.

Hypotheses

Two null hypotheses were set for this study namely:

i. There is no significant difference in the perceptions of male and female teachers on impact of breakfast on pupils' academic performances.
ii. There is no significant difference in the perceptions of private school and public school teachers on impact of breakfast on pupils' academic performances.

Methodology

The researcher employed a descriptive design. The population includes basic school teachers in Ibadan South West Local Government Area of Ibadan Metropolis. The researcher however, because of limited time and finances randomly selected two-hundred teachers from live private and five public basic

schools in the area, meaning twenty teachers from each of the schools. The main instrument used in data collection for the research was a self-developed scale tagged Impact of Breakfast on Pupils 'Academic Achievement Scale'. The scale has two main sections: Section A describes the demographic variables of respondents, while section B contains fifteen questions items on teachers' perceptions on impact of breakfast on pupils' academic performances, which was responded to on Likert format.

The validity (face and content) was ensured by subjecting it to scrutiny by experts in the field and colleagues in the field of Counselling Psychology. Their suggestions and contributions enriched the final draft. The reliability of the scale was calculated with the use of test re-test method, and the reliability coefficient was 0.92, which was found acceptable to the researcher. The researcher was personally involved in the distribution of the questionnaire to participants having sought the Head teachers' permission in the schools selected for the study. The purpose of the study was explained and the questionnaire was retrieved almost after about 50 minutes. The questionnaires to participants having collected for the study were subjected to the use of t-test statistical analysis in order to compare the perceptions of participants based on sex and school ownership.

Results

The results are hereby presented according to the hypotheses tested

Hypothesis One: There is no significant difference in the perceptions of male and female teachers on impact of breakfast on pupils' academic performances.

Table 1: Differences in male and female teachers' perceptions on the impact of breakfast on pupils' academic performances.

Variables	N	Mean	SD	Df	t-cal	t-crit	Decision
Male	80	69.60	1.91	198	1.67	1.96	Accepted
Female	120	69.10	2.30				

The result in table I shows that the t-cal is 1.67, while the t-crit is 1.96, with a degree of freedom 198. The t-cal is lesser than the t-crit (1.67< 196). This implies that the null hypothesis is hereby accepted meaning that school teachers do not differ in their perceptions of impact of breakfast on pupils' academic performances.

The above result implies that both male and female teachers view breakfast as highly efficient in enabling pupils' performances in the classroom. This finding is not out of place. It corroborates a number of earlier studies on the subject. For example, the study corresponds with the works of Onyechi and Ugwunnadi (2009) who found that primary school teachers (gender notwithstanding) agreed that breakfast is very important for cognitive development of children especially at the early stage of life. This is also in line with the findings of Adolphus, Lawton and Dye (2013) who concluded that school teachers confirmed that breakfast increases pupils' attention and that there is an increase in on-task behavior during lessons. Sımilarly, they were of the opinion that changes in cognitive performance also impact school performance and academic outcomes in a cumulative manner.

Hypothesis Two: There is no significant difference in the perceptions of private school and public school teachers on impact of breakfast on pupils' academic performances

Table 2: Differences in the perceptions of private and public school teachers on the impacts of breakfast on pupils' academic performances

Variables	N	Mean	SD	Df	t-cal	t-crit	Decision
Private School	100	06.27	1.52	198	31.78	1.96	Rejected
Public School	100	72.33	1.15				

The result above reveals that private school teachers have the mean (x) of 06.27 and Standard Deviation of 1.52, while public school teachers have a mean (x) of 72.33 and a Standard Deviation of 1.15. The degree of freedom is 198, the t-cal is 31.78, while the t-crit is 1.96. The null hypothesis is hereby rejected because the t-cal (31.78) is greater than the t-crit (1.96) ie. (31.78 >196). This implies that public schools and private schools teachers differ on their perceptions on the impact of breakfast on pupils academic performances.

The findings of this study might have been affected by the fact that most of Nigerian public schools are attended by chıldren of the less privileged and low income earners. Therefore, children might not be in the usual habits of going to school with money to buy food or even go to school with food basket, which is a normal occurrence in the public schools. It is a usual practice of private school pupils that a pupil apart from the school bag, the next most important thing is lunch box, which contains the child's food. This result is not out of place because it corroborates the findings of Olusanya (2010) which confirms that incidence of malnutrition is high among the primary school pupils especially among pupils in the public schools. The reason adduced for this is the socio-economic status of the parents. Previous studies e.g (Olusanya, 1997) has also shown that the food purchased by school children during break time in public schools is poor in both quality and quantity; this might not be unconnected from the socio-economic status of the parents which informs the meagre amount of money children are given to school. Olusanya (20I0) also found that in al anthropometric indices measured, the pupils from the public schools were more malnourished than their counterparts from the private schools and that the prevalence of stunting in particular in the public school was almost double that of private school. The finding was also in line with that of Tee, et al (2002), who found that public school pupils are undernourished compared to their private schools counterparts. This possibly informed the differences in the perceptions of public and private school teachers.

Recommendations

Based on the findings of the study, the following are recommended:

1. Stakeholders in the school system should organize a sensitization programme that will hinge on the importance of breakfast for all children in the basic schools.

2. The government of Nigeria should establish School Meal Programme to act as leverage for pupils of all socio-economic status. This will eliminate mal-nutrition in children and ensure their cognitive development.
3. Parents should ensure their wards/children are given breakfast as a matter of compulsion every school day before going to school.

Conclusion

Having seen the importance of breakfast in pupils' overall development and impact on their academic achievement, it is expedient to note that breakfast is the most important meal for children's cognitive development. The study concludes that there is no significant difference in the perceptions of male and female teachers regarding the impact of breakfast on pupils' academic performances and that there are significant difference in the perceptions of public and private school teachers on the impact of breakfast on pupils' academic performances.

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