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PERCEIVED INFLUENCE OF DANCE ON THE ACADEMIC NEEDS OF PRE-PRIMARY SCHOOL PUPILS IN LAGOS

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Abstract.

The focus of this study was on the perceived influence of dance on the academic needs of pre-primary school pupils in Lagos Island. Descriptive research design was adopted for this study. Four research questions and two research hypotheses were generated. The targeted population comprised of all teachers in all preschools in Lagos Island but the accessible population consisted of 10 pre-primary schools. The sampling technique was simple random sampling, selecting hundred (100) teachers, serving as the respondents. The instrument used for data collection was a self-designed questionnaire. Frequency counts and percentage was used to describe demographic data of sampled respondents, mean and standard deviation, answering the generated research questions while *t*-test and ANOVA statistical tools were used in answering the postulated research hypothesis. The findings showed that dance has influence on the physical fitness of pre-primary school pupils; dance has influence on the mental soundness of pre-primary school pupils; there is no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on gender; and there is no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on teaching in Lagos Island. Suggestions and recommendations were made that policy makers on Education should entrench the use of dance in the National Policy on Education for pre-primary schools; and school managements should orientate teachers on the relevance of dance and also ensure that they implement it in the class.

Key words –Dance, Academic, Needs, Pre-Primary, Influence, School Children.

Introduction

Since the end of the last century, the phenomenon of learning has received increasingly more attention. Both nationally and internationally, there is a political focus on learning and a “call for harnessing knowledge about learning and applying it more systematically to education” (Dumont, Istance & Benavides, 2013). This development changes both the main purpose of education and its modes of delivery. The education system has witnessed a shift from content-based to outcome-based curricula, and schools have become heavily influenced by pedagogical concepts such as ‘visible learning’ (Hattie, 2009). According to Hargreaves (2003), the change can be linked to globalization, the emergence of ‘the knowledge society’ and an enhanced focus on innovation and creativity. Knowledge and learning are considered as fundamental resources for future development.

Sustainability, learning in terms of learning outcomes, and lifelong learning have become increasingly recognized as important factors in the ‘global competition’ (Jarvis, 2007). The focus on education, however, took off in the Western world already in the early part of the 20th Century. According to Hargreaves (2003) the change can be linked to globalization, the emergence of ‘the knowledge society’ and an enhanced focus on innovation and creativity. Knowledge and learning are considered as fundamental resources for future development. Sustainability, learning in terms of learning outcomes, and lifelong learning have become increasingly recognized as important factors in the ‘global competition’ (Jarvis, 2007). The focus on education, however, took off in the Western world already in the early part of the 20th Century.

However, early childhood is a critically important stage in life. It is often referred to as the building blocks of brain development. Mustard (2010) opined that the basic architecture and function of the brain are established at this period. The essential healthy, physical, emotional and natural developments of a child occur at this period. Foundation of successful learning is also believed to be laid at this critical stage. Nakpodia (2012) posited that the child begins to initiate, imitate and develop certain important habits that will be used throughout later schooling. Early childhood/pre-primary education forms part of the educational programme in Nigeria. The National Policy on Education (2013) defined pre-primary education as the education given in an educational institution to children prior to their entering primary schools. It includes among others crèche, the nursery and kindergarten.

Furthermore, physical fitness and mental soundness are major academic needs for a preschool child. Physical activities contribute to the development of these needs. Physical activities are simply means any movement of the body that requires energy expenditure. This includes any motion you do through the day excluding sitting still or lying down. The popular ways to be active are through walking, cleaning, sports and recreation and can be done at any level of skill and for enjoyment. Physical activities in early childhood settings are critically important in helping reduce the increased health risks associated with overweight children (Epstein, 2007). The development of a child from inception greatly depends on the quality of movement expressed (Abass, 2001). Little children like to play and move about freely without any obstruction.

However, when children are allowed free movement they improve tremendously in their cognitive and psychomotor domain. Physical activity can contribute to the development of the child's academic understanding by integrating movement experiences with science, social studies, mathematics and other subjects (Sibley & Etnier 2003). It should be noted that none of findings recommended physical activity as a replacement of classroom instruction in the teaching of these areas, but that physical activity programmes could often be used effectively with these other academic programmes as a tool to aid learning. Children usually regard movement as 'fun' and generally prefer it to the routing 'work' of the classroom. Mathematical attributes could be developed in children through physical activity by the increasing need of the child to learn how to use numbers when involved in movement activities requires counting, addition, subtraction, multiplication and division.

Many games and sporting activities require the child to keep scores or compute averages that demand knowledge of figures. A child who finds it difficult learning figures in the classroom setting probably because of low attention span may find the field of play a good alternative for learning (Abass, 2001). Language skills are developed through the interactive nature of physical activities and sports. All these activities are capable of enhancing language capability through physical activity. The physical activity skills children acquire on the playground may transfer to academic tasks and real-world conditions that involve behavior inhibition, working memory, and strategy (Trudeau & Shepard, 2008).

According to Gallahue (1993) children's psychomotor development follows a progression that is linked to children's age ranges. Research into the benefits of playground equipment for children indicates that although all playground equipments provides children with opportunities for physical or psychomotor development, different components are more appropriate for children operating in different phases of physical psychomotor development. Physical development in children sometimes seems to happen at light-speed, it is usually aimed at development of physical fitness and fundamental motor skill. Taking part in physical activity contributes to organic development and a sense of general well-being (Abass, 2010; Lee, 2013). It was against this backdrop the researcher deemed it fit to investigated perceived influence of dance on the academic needs of pre-primary school pupils in Lagos Island.

The main purpose of this study was to examine "the perceived influence of dance on the academic needs of pre-primary school pupils in Lagos Island". Specifically, this study would determine:

- i. the perceived influence of dance on the physical fitness of pre-primary school pupils.
- ii. the perceived influence of dance on the mental soundness of pre-primary school pupils.
- iii. the perceived influence of dance on the academic needs of pre-primary school pupils based on gender.

- iv. the perceived influence of dance on the academic needs of pre-primary school pupils based on school type.

Research Questions

The study was guided by the following research questions:

1. what is the perceived influence of dance on the physical fitness of pre-primary school pupils?
2. what is the perceived influence of dance on the mental soundness of pre-primary school pupils?
3. what is the perceived influence of dance on the academic needs of pre-primary school pupils based on gender?
4. what is the perceived influence of dance on the academic needs of pre-primary school pupils based on teaching experience?

Research Hypotheses

The following research hypotheses were postulated to guide the study:

- Ho₁:** There is no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on gender.
- Ho₂:** There is no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on teaching experience.

This study adopted a descriptive survey research design. The population for this study comprised of all pre-primary school teachers in Lagos Island, while simple random sampling technique was used to select 10 pre-primary schools. Also, simple random sampling, was used to sample 100 teachers serving as the respondents for this study. A self-designed questionnaire was used by the researcher to obtain data from the respondents. The questionnaire was titled "Perceived Influence of Dance on the Academic Needs of Pre-Primary School Pupils (PIDANPSPQ)". The items were measured on a four Likert scale format having four responses: Strongly Agree = 4, Agree = 3, Disagree = 2 and Strongly Disagree = 1. Reliability is an inevitable quality of a test. It is the extent to which the results obtained from the test can be relied upon as being consistent and being the true score (Ary et al, 2002). The reliability of the response was ascertained using split half method of reliability after obtaining the data, while the reliability index stood at 0.78. The result of the reliability confirmed that the research was reliable. Descriptive statistics of frequency count and percentage were used for demographic data, while mean and standard deviation for answering the research questions and the independent t-test and ANOVA for answering the research hypotheses.

Analysis of Demographic Information of the Respondents

Table 1: Frequency and Percentage Distribution Showing the Gender of the Respondents

Gender	Frequency	Percentage (%)
Male	42	42.0
Female	58	58.0
Total	100	100

Table 1 shows that out of 100 respondents that participated in this study, 42 (42.0%) were male, while 58 (58.0%) were female. From this, it can be deduced that although the study sampled gender, majority of the respondents were female.

Table 2: Frequency and Percentage Distribution Showing the Teaching Experience of the Respondents

Teaching Experience	Frequency	Percentage (%)
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1-2 year	51	51.0
3-4 year	43	43.0
5-6 year	6	6.0
Total	100	100

Table 2 shows that out of 100 respondents that participated in this study, 51 (51.0%) have between the range of 1-2 year teaching experience, 43 (43.0%) have between the range of 3-4 year teaching experience, while 6(6.0%) have between the range of 5-6 year teaching experience. From this, it can be deduced that majority of the respondents have between the range of 1-2 year teaching experience.

Answering of Research Questions

The research questions were all answered with the use of mean and standard deviation.

Research Question 1: *what is the perceived influence of dance on the physical fitness of pre-primary school pupils?*

In answering this research question, mean of responses of the teachers' choice to each item on the questionnaire that addressed the perceived influence of dance on the physical fitness of pre-primary school pupils, and was calculated using 2.5 as the cut off. The output of the analysis reveals thus:

Table 3: Mean and Standard Deviation Analysis Showing Perceived Influence of Dance on the Physical Fitness of Pre-Primary School Pupils

S/N	ITEMS	X	SD
1.	Dance improves blood circulation, giving children a much-needed boost of energy, concentration, and focus.	2.68	1.188
2.	Dancing involves using their muscles, which means it increases muscle strength. e.g. drawing patterns.	2.62	1.196
3.	Dance helps children maintain a healthy weight to prevent childhood obesity	2.74	1.228
4.	Dance makes children's hearts able to pump blood more efficiently	2.66	1.112
5.	Dance improves motor skills, which allow for safe, successful and satisfying participation in other physical activities.	2.67	1.138
6.	Dance instills a stronger sense of self-worth in children based on their mastery of skills and concepts in physical activity.	2.37	1.041
7.	Dance helps to relieve stress and maintain mental and emotional wellbeing	2.59	1.016
8.	Dance helps in improving children body coordination	2.38	1.033
9.	Dance helps a child express more complex emotions physically	2.50	1.150
10.	Dance improves children's sleep and energy levels	2.36	1.159
Grand mean		2.56	

Table 3 reveals that dance has influence on the physical fitness of pre-primary school pupils. Responses to items that sought information on perceived influence of dance on the physical fitness of pre-primary school pupils revealed that perceived influence of dance on the physical fitness of pre-primary school pupils was positive, because the benchmark weighted mean score stood at 2.50 and their weighted mean score was 2.56 which is above the benchmark weighted mean score.

Research Question 2: *what is the perceived influence of dance on the mental soundness of pre-primary school pupils?*

In answering this research question, mean of responses of the teachers' choice to each item on the questionnaire that addressed the perceived influence of dance on the mental soundness of pre-

primary school pupils, and was calculated using 2.5 as the cut off. The output of the analysis reveals thus:

Table 4: Mean and Standard Deviation Analysis Showing Perceived Influence of Dance on the Mental Soundness of Pre-Primary School Pupils

S/N	ITEMS	X	SD
1.	When children dance, it can release bursts of creative thinking and enhance imagination.	2.62	1.135
2.	It enhances the brain function, concentration, memory, thinking and cognitive skills, which are all vital for a child's development.	2.15	1.140
3.	Dance has a positive impact on a children's learning and productivity in school	2.54	1.184
4.	Dance reduces anxiety and depression. The activity gives children a feel good endorphins and improves their mood.	2.25	1.140
5.	Dance encourages communication in a variety of different ways. This not only boosts the ability to have conversation but also builds confidence, trust and social relationships	2.64	1.078
6.	Young children will create movement spontaneously when presented with movement ideas (such as dance) or problems that can be solved with a movement response.	2.51	1.096
7.	Dance is capable of motivating children's academic learning	2.56	1.192
8.	Dance sharpens children's mind and improves their retentive memory	2.46	1.193
9.	Dance makes children sensitive to changes in their environments	2.62	1.170
10.	Dance makes children inquisitive and thereby makes them explore their environments	2.78	1.168
Grand mean		2.51	

Table 4 reveals that dance has influence on the mental soundness of pre-primary school pupils. Responses to items that sought information on perceived influence on the mental soundness of pre-primary school pupils revealed that perceived influence on the mental soundness of pre-primary school pupils was positive, because the benchmark weighted mean score stood at 2.50 and their weighted mean score was 2.51 which is above the benchmark weighted mean score.

Hypotheses Testing

The research hypotheses generated in the course of this study was tested using Independent t-test and ANOVA at 0.05 alpha level.

H₀₁: *there is no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on gender.*

In testing this research hypothesis, the independent t-test statistical tool was used at 0.05 level of significance. The output of the analysis reveals thus:

Table 5: Summary table of independent T-test analysis showing the significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on gender

Gender	N	X	SD	DF	Cal. value	p.value	Decision
Male	42	29.41	3.92				
Female	58	28.10	5.86	98	1.06	0.21	Accepted

Table 5 shows that the p. value of 0.21 is greater than the significance level of 0.05. This showed that there was no difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on gender. Hence, the null hypothesis is accepted since the p-value 0.21 is greater than 0.05 ($0.21 > 0.05$). Thus, there is no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on gender in Lagos Island.

H₀₂: *There is no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on teaching experience.*

In testing this research hypothesis, ANOVA statistical tool was used at 0.05 level of significance. The output of the analysis reveals thus:

Table 6: A table of ANOVA analysis on the significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on teaching experience

	Sum of Squares	df	Mean Square	F	Sig.	Decision
Between Groups	12.686	2	6.343			
Within Groups	2618.064	97	26.990	.235	.791	Accepted
Total	2630.750	99				

Table 6 shows that the p. value of 0.791 is greater than the significance level of 0.05. This showed that there was no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on teaching experience. Hence, the null hypothesis is accepted since the P-value .791 is greater than 0.05 ($.791 > 0.05$). This means that there is no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on teaching in Lagos Island.

Conclusion

From the result of the study, it was discovered that Dance has influence on the physical fitness of pre-primary school pupils in Lagos Island. According to Loeffler (2003) expands this description "dance is an enjoyable way for young children to develop their physical skills, channel their energy, stimulate their imagination and promote their creativity. Creative dance involves using body actions to communicate an image (the wind), an idea (a journey) or a feeling (strength)". Cone and Cone (2005) maintain "Dance provides children with the means to express and communicate what they really feel and know about themselves and the world. Socially, children enjoy interacting with others through movement. They laugh and talk with each other while sharing an experience that is fun and personally rewarding".

More so, it was revealed that dance has influence on the mental soundness of pre-primary school pupils in Lagos Island. A study conducted by Opacic, Stevens and Tillmann (2009) posited that dance movements are ruled by a non-verbal grammar or movements vocabulary that may regulate structure of movement sequences. Therefore, this dance movement may enhance the structured organization of learning. BrainDance is a progressive and controlled series of physical movements that are based on the eight major movement patterns of infants' brain development and is designed to enhance learning by encouraging neurological re-patterning and encouraging body connectivity and alignment (Gilbert & Rossano, 2006).

It is a warm-up exercise combining both physical and mental activity. The brain does an enormous amount of growing during that first year of life. Brain cells become increasingly available and connections between cells and different parts of our brain begin to develop. Some learning challenges and disabilities are believed to be a result of lacking development in one or more of these movement patterns during infancy. BrainDance may help to correct any neurological imbalances that may have occurred during this time, as well as to encourage mind and body integration (Gilbert, 2000). The healthy eye tracking exercises that strengthen the eye muscles (Gilbert, 2000), therefore, can also enhance reading fluency.

Furthermore, the findings show that there is no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on gender and also there

is no significant difference on the perceived influence of dance on the academic needs of pre-primary school pupils based on teaching in Lagos Island.

Recommendations

From the findings of this study, the following recommendations were made:

- i. Policy makers on Education should entrench the use of dance in the National Policy on Education for pre-primary schools.
- ii. School managements should orientate teachers on the relevance of dance and also ensure that they implement it in the class.
- iii. Parents and guidance should embrace dance as one of the ways of introducing learning to children
- iv. Both indigenous and western education should be taught from early years

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