

Gender Differences and Sports Performance among Secondary School Athletes in Calabar Metropolis, Cross River State

P.E. Ekuri

Department of Human Kinetics and Health Education, Faculty of Education,
University of Calabar, Calabar, Nigeria

Abstract: The aim of this study was to examine gender difference and sports performance among secondary school athletes in Calabar metropolis of Cross River state, Nigeria. To achieve the purpose of this study, two research hypotheses were formulated to guide of this study. The survey research design was considered most appropriate for the study. Simple random sampling technique was adopted in selecting the six public secondary schools used for the study. A total of two hundred respondents were randomly selected for the study. A questionnaire was designed by the researcher with the help of some measurement and evaluation experts that gave its content and face validation. To test the hypotheses, independent t-test analysis was considered appropriate for the study. The 0.05 level of significance was used for the statistical testing of each hypothesis with critical values and degrees of freedom. The results obtained revealed that there is a significant influence of biological factor and socio-cultural factor on athlete's sports performance based on gender. Based on these findings, it was recommended among others that relevant authorities should ensure that male and female athletes continue to participate in sporting events based on their gender due to the influence of biological factors and that male and female students should be regularly and adequately sensitized on the enormous benefits that are associated participation in physical activities in order to promote their level of performance and interest as well as improve their cognitive abilities.

Key words: Gender, sports performance and school athletes, abilities, cognitive, associated

INTRODUCTION

One of the most enduring problems in Nigeria school system is student's low performance when it comes to sports event, especially, at the junior and senior secondary school competition and inter-house competition. Generally, it has been observed by psychologist, sociologist and educationist that there is a disparity in the sports performance of male and female athletes especially in Calabar metropolis.

Wanno, (2010) observed that secondary school male graduates in Nigeria usually perform well enough in terms of becoming the best athletes than their female counterparts. He also states that 90% of male students in Nigeria have interest in sports than female students. According to him, male students possess a psychological boast which enable them to perform better than the female. However, Academic and Abel, noted that student's sports performance is influenced by a number of sex related variables. In their view, entering secondary school produces in most students a sharp change in their mode of living and in human relations. Many new tensions, pressures and stress arises from the new way of life. The degree of independence of both male and female students suddenly increases and their new freedom possesses a great problem. The quest for achievement

increases, especially, for the male students while there is a new setting among peers of differing sexes and conflicting belief. The problem in the setting cut across: personal characteristics, social relationship and the demand which life makes on the individual. Thus, students are increasingly faced with emotional problem which may be linked to sex incompatibility with detriment effect on learning and even sports performance.

Research has shown that male and female students display differing abilities, especially in sports. Hudy (2007) studies of brain structure and function of hormonal influence on cognitive performance of psychological development in schools, pupils and of human evolution, however, provide more clear evidence that man aid biological advantaged in learning, performing, developing sports tasks and makes sense in light of the fact that most of the studies are on sex influence on sports performance among secondary schools students.

Obanga (2004) highlighted that a critical look at the afore-stated factors will reveal a need for the commitment of government to obliterate all impediments to girl's success in sports. He further claim that the poorest and the most marginalised people in the world are women it must, therefore, be noted that the gender gap between male and female sports performance that has it roots in primary schools becomes more obviously in the secondary school. To clarify the prevailing situation, Obanga (2008) again

cautions that considering the influence of sex on the sports performance of student's, especially in primary and secondary school students;

- Gender parity should not be confused with cognitive ability and gender equity
- Overall assessment of student's performance figures should not tend to hide the wide disparities

The states that are far from attaining gender parity at the primary level are also the ones that are yet to do so, at the secondary school level. The situation at the moment is still shrouded in controversies whether sex (gender) influence athlete's sports performance in Calabar metropolis of Cross River state. Therefore, the analysis of the differences in sports performance among secondary school athletes as examined in this study is to explore the differences in biological factor and socio-cultural factor that influence sports performance interests between genders.

Statement of problem: Extant literature has revealed that one of the most enduring problems in Nigeria school system is student's low performance when it comes to sports event, especially at the junior and senior secondary school competition and inter-house competition. Some of the factors that are attributed to the low performance of the junior and senior secondary students in sports could be personal and environmental factors such as; physical fitness, social-cultural background, socio-economic level, family influence, inferiority complex, anxiety among others. Generally, it has been observed by psychologist, sociologist and educationist that there is a disparity in the sports performance of male and female athletes, especially in Calabar metropolis.

Research questions: The following research questions were drawn to guide the study;

- To what extent does biological factor influence athlete's sports performance based on gender in Cross River state?
- To what extent does socio-cultural factor influence athlete's sports performance based on gender in Cross River state?

Hypotheses: The hypotheses formulated for the study are listed below and were tested at 0.05 level of significance.

- There is no significant influence of biological factor on athlete's sports performance based on gender:
- There is no significant influence of socio-cultural factor and athlete's sports performance based on gender

Literature review: Sport is an activity recognised as playing a relevant societal role to promote education, health, intercultural dialogue and individual development, regardless of an individual's gender, race, age, ability, religion, political affiliation, sexual orientation or socioeconomic background. A close look at secondary school students reveals some behaviour whose cause does not appear easily understandable but this behaviour has influence on secondary school athlete's sports performance. For example, whenever there is a group of secondary school athletes there is different behaviour from each of the athletes. Among other behaviour one will find athletes that always feel withdrawn from others their behaviours depict them as being anxious. This effect, Meyer notes is undoubtedly due to the fact that what constitute a complex task differs with the intelligent level of individual's student. Philip and Sohaila, (2014) in their contributions revealed that athletes who are developing coping ability for anxiety and who are high training anxious might perform better in training than those with non-coping ability and who are low training anxious. They further revealed that high training anxious athletes do not develop coping abilities and they, generally, perform poorer than other athletes.

Grime and Allinsmith (2002) and Tobia (2004) pointed out what when materials to be learnt are well organised anxious student would perform relatively better than non-anxious student. Philip and Sohaila (2014) noted that anxiety affects female's athlete's more than male athletes. According to them, female athletes find it difficult to go for training exercise on regular basis. There are some females who may concentrate in watching movies at home knowing that they are supposed to be at the pitch for training purpose. Kagan and Haremann (2000) claim that anxiety by male and a female athlete is generally, not bad itself because it can influence performance positively. The bad aspect of it is when it is allowed to go beyond gainful limit. This is in their view because a moderate anxiety is a motivation for goals attainment while high level of anxiety is detrimental to success.

The fear of sustaining injury and intimidation on the part of the male counterpart's weakling's females moral and eagerness to participate in sport. As revealed in the literature, the Olympic games are deemed crucial for sports women's athletic and social achievements (Beutler, 2008; International Olympic Committee, 2012; Capranica *et al.*, 2005, 2008; Kamberidou and Patsadaras, 2007 and Women's Sport Foundation, 2010) and designed to provide equal prominence to female and male competitions while reconfiguring social, cultural and regional differences worldwide through the prism of competition and athlete visibility (Vincent *et al.*, 2002). However, according to Matthews *et al.* (2012) in

Capranica *et al.* (2013) gender inequities often remain at the grass roots or local level, substantiating that these elite events represent an exception rather than the rule. Most female athletes around the world are not ensured a livelihood from their athletic involvement.

Ali *et al.*, (2013) in his research indicated that anxiety types or levels do not significantly account for the difference in the sports performance of male and female athletes. What however is responsible for performance differentials is the extent to which athletes of both sexes allow anxiety to persist in the training periods. Globally, it is acknowledged that societies are influenced by fundamental religious belief; culture tends to create obnoxious norms that sometimes restrict students or athletes, access to and performance in school. Cognisant to this, goal number five of Dakar declaration of Education for all (EFA) focused on eliminating gender disparities in primary and secondary school by eliminating all socio-cultural variables that hinders male and female access to quality education.

Obanga (2008) noted that the gender gap between the sports performance of male and females athletes that has its root in primary schools, becomes more widened in secondary school is due mainly to some socio-cultural influence. Kohe in a study of relationship between sports achievement and socio-cultural variables found out that low-status students who come from polygamous home are more serious about school work and have higher aspirations. Many investigations have also found out that several underestimations come from disrupted homes. Archer and Yamashita, (2003), attributed the difference between male students sports performance to family influence. He maintained that the male child preference syndrome is still prevalent in Nigeria culture.

In like manner, the issue of low performance of female athletes in sports has also been reported other countries. In Sargodha division, Punjab, according to Jabeen *et al.* (2017), many of the heads of institutes consider the sport activities as wastage of time and financial resources, so, they always show non-cooperation or very little interest in the female school about sports activities. They always prefer educational classes and other curricular activities to sports. They are not cooperating or facilitating the physical instructors with financial and moral support. They do not encourage the players and do not facilitate with proper coaching or sports seminars etc. Therefore, the rate of female participation in sports and other activities are very poor in most countries of the world as in the case of Nigeria.

This situation subjects the girl-child to attitudes or rejection, prejudice and discrimination. Some societies prefer sending their female children to house-help or hawking around the street than to participate in sports activities. They normally said that before someone become notorious in sports activities it needs much labour

and having of godfather. According to Crenshaw (1989) in Jabeen *et al.* (2017), female have generally been ignored in many occupations including providing chances for participation in sports. In the circumstances it becomes need of the hour to provide equal chances to the female folk in many different occupations including participation in sports activities. Capranica *et al.* (2013), observed that male athletes often receive financial support to make a living in their sport including extended careers as coaches, trainers, referees, sports administrators, managers, executive board members and media celebrities. These stereotypic gender roles still represent pockets of resistance, particularly in heavily entrenched male-dominant sports (i.e., American football, baseball, motor sports, Sumo wrestling) which influence selective media coverage and notoriety that ultimately lead to lower retention rates for female athletes (European Commission, 2012; UNESCO., 2012).

Kamberidou and Patsadaras (2007) opined that this affects the inclusion and advancement of women in sports careers and governance. Azgaku (2007), asserted that cultural pattern hinder female child sports performance in submission, women in Nigeria (2000), stated that some adolescent girls in Northern Nigeria are forced into early marriage while they are still undergoing biological and psycho-social changes and they are invariably affected in sports. The fact remain that there is a consistent, possibly universal, sex difference in sports participation of the male and female athletes. According to Deaner *et al.* (2016), males play sports more frequently than females, generally, at least twice as much in terms of duration or frequency.

Udoh (2002), opines that poverty compels some parents to withdraw their daughters from school, so that, they may not participate in sporting activity in the school, even when the child is not in school. The parent said that female child participating in sports expose them to prostitution because of free movement when going for training. Girls who are forced into commercial sex work do not maximally benefit from sport opportunities. He further noted that some of the major problems which female athletes face in school concern the unquestioned and non-problematic gender-biased nature of schooling. Literature has also revealed that lack of time, lack of knowledge, family problems and lack of money and companion are the most significant recreational constraints in the way of female participation in sport (Jabeen *et al.*, 2017).

In similar view, Adeyemi (2011), noted that socio-cultural conflicts and emotional problems in the home can affect sports performance achievement of the child. Russell, maintained that sports vary from one culture to another and also within the same culture. There are variations in forming strategies due to conflicting

beliefs and ideologies. This has tended to put the school child in a state of confusion between maintaining the traditional approaches to faring acquired at home and accepting the modern method taught in school. More contemporary studies which have found that female athletes are most likely to show gains in male-dominated academic areas such as mathematics and science have used a combination of functionalism and critical feminist theories to interpret why females in sport perform better academically in male-dominated education domains. These studies argue that participating in sports, a male-dominated domain, teaches female athletes not only skills and values necessary for success in academics but also provides a social environment which challenges gender stereotypes about female limitations in other primary masculine domains such as math and science (Philp and Shoaila, 2014).

MATERIALS AND METHODS

The researcher adopted the survey research design for this study. The design was deemed appropriate in describing and interpreting the gender differences and sports performance among secondary school athletes in Calabar metropolis, Cross River state. The population of the study consisted of secondary school athletes in Calabar. These athletes are the ones that represent their various schools during competitions. The total population of this study was seven hundred and eighty four respondents comprising of 453 males and 331 females athletes. A total number of two hundred athletes utilised for the study were drawn from secondary school in Calabar. The main instrument used for data collection was a structured questionnaire designed by the researcher. The questionnaire items were divided into two sections. Section 1 was used to collect information on the demographic data of the respondents while section 2 contained data on the gender differences (biological and socio-cultural factor) and sports performance among secondary school athletes. The instrument used for data collection was validated using face validation by the team experts in the department of measurement and evaluation University of Calabar. Each item in the questionnaire was formulated to relate to the topic under investigation. Reliability of the instrument was ascertained by using test retest method and an r of 0.72 was obtained.

Hypothesis one: There is no significance influence of biological factor on athlete's sports performance based on gender. Independent t-test statistical tool was used for data analysis. The result of this analysis is presented in Table 1.

The result of analysis presented in Table 1 shows that the calculated t-value of 2.108 is higher than the critical

Table 1: Independent t-test analysis of the influence of biological factor on athlete's sports performance based on their gender (N = 200)

Gender	N	X	SD	Cal-t
Male	118	11.231	3.014	2.108*
Female	82	12.088	2.614	

Significant at 0.05; $df = 198$; critical $t = 1.960$

Table 2: Independent t-test analysis of the influence of socio-cultural factor on athlete's sports performance based on their gender (N = 200)

Gender	N	X	SD	Cal-t
Male	118	12.368	2.747	2.108*
Female	82	13.122	2.134	

Significant at 0.05; $df = 198$; critical $t = 1.960$

t-value of 1.960 at 0.05 level of significance with 198 degree of freedom. This implies that the null hypothesis is rejected. Therefore, there is a significant influence of biological factor on athlete's sports performance based on gender in Calabar metropolis.

Hypothesis two: There is no significance influence of socio-cultural factor and athlete's sports performance based on gender. Independent t-test statistical tool was used for data analysis. The result of this analysis is presented in Table 2.

The result of analysis presented in Table 2 shows that the calculated t-value of 3.418 is higher than the critical t-value of 1.960 at 0.05 level of significance with 198 degree of freedom. This implies that the null hypothesis was rejected. Therefore, there is a significant influence of socio-cultural factor on athletes sports performance based on their gender in Calabar metropolis.

RESULTS AND DISCUSSION

Discussion of findings: The findings obtained from analysis and testing of hypothesis one showed that the null hypothesis was rejected. This implies that there is a significant influence of biological factor on athlete's sports performance based on gender in Calabar metropolis of Cross River state. This finding is in agreement with the work of Philip and Sohaila (2014) which reports that a close look at secondary school athletes reveals some behaviour whose cause does not appear easily understandable. But these behaviours have influence on secondary school athlete's sports performance. For example whenever there is a group of secondary school athletes there is different behaviour from each of the athletes. Among other behaviour one will find athletes that always feel withdrawn from others. Their behaviour depict then as being anxious this effect is undoubtedly due to the fact that what constitute a complex task differs with the intelligence level of individual athletes.

The findings of Kagan and Haremann (2000) also reported that female students find it difficult to go for training exercise on regular basis. There are some females who may concentrate in watching movies at home knowing that they are supposed to be at the pitch for training purposes. They claimed that anxiety by male and female athletes is generally, not bad itself. The bad aspect of it is when it is allowed to go beyond gainful limits. This is because a moderate anxiety is a motivation for goals attainment while high level of anxiety is detrimental to success.

The findings obtained from analysis of hypothesis two showed that the null hypothesis was rejected. This implies that there is a significant influence of socio-cultural factor on athlete's sports performance based on their gender in Calabar metropolis. This finding is in agreement with the findings of Azgaku (2007) which reported that a good or personal adjustment or desirable or undesirable home condition does not account for expected sex difference in school achievement but it rather contributes to underachievement in sports regardless of the gender Adeyemi (2011) was able to show that school children from societies where cultural values interfere with school norms are likely to be affected in sports. He noted that socio-cultural conflicts and emotional problems in the home can affect sport performance of the child. Some adolescent girls in northern Nigeria are forced into early marriage while they are still undergoing biological and psycho-social changes and they are invariably affected in sports.

The findings of Russell also supported the findings of this study by maintaining that sports vary from one culture to another and also within the same culture. There are variations in forming strategies due to conflicting beliefs and ideologies. This has tended to put the school child in a state of confusion between maintaining the traditional approaches to farming acquired at home and accepting the modern method taught in school. For athletes (both sexes) to achieve high sports performance, the school, home and government must strive to see off the socio-cultural heresies that seem to affect or hinder participation of students in sports.

CONCLUSION

Based on the research that has been presented in the previous section, some of the conclusions can be drawn with regard to the factors that influence gender performance in sports among secondary school athletes in Calabar metropolis, Cross River state. Findings obtained from analysis of data and testing of hypotheses revealed that there is a significant influence of biological factor and socio-cultural factor on athletes sports performance based on their gender in the study area. It is concluded that the

gender divergence in school athletic performance begins at the age of 12-13 years and reaches adult plateau in the late teenage years.

It is also concluded that, the magnitude of the divergence varies between athletic skills among student's athletes, the timing and tempo are closely parallel with each other and with the rise in circulating testosterone in boys athletes during puberty to reach adult male levels. It is generally, accepted that physical activity confers benefits to psycho-social health, functional ability and general quality of life and has been proven to reduce the risk of coronary heart disease. Conditions associated with physical inactivity include obesity, hypertension, diabetes, back pain, poor joint mobility and psychosocial problems because physical inactivity is a major public health challenge because of the severe health implication associated with it. On the other hand, sports participation and performance promotes healthy living and contributes positively to the physical, emotional, intellectual and social well-being of athletes. Sports also provides an avenue to reduce youth restiveness as well as encourage the development of talents into useful skills that could enable an individual to earn a living. The benefits of sports participation are enormous and long lasting covering various aspects of life.

RECOMMENDATIONS

Based on the findings of the study and the conclusion drawn, the researcher recommends that; female athlete should be encouraged to improve their habits and behaviour towards training in order to perform better. Relevant authorities should ensure that male and female athlete continue to participate in events based on their gender due to the influence of biological factors on student's sports performance. Concerned stakeholders should intensify efforts aimed at removing all forms of socio-cultural barriers that limit the chances of students involving in sporting activities especially the females. Male and female students should be regularly and adequately sensitized on the enormous benefits that are associated with participation in physical activities in order to promote their level of participation and interest as well as improve their cognitive abilities.

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