PREDICTIVE DETERMINANTS OF ANXIETY, DEPRESSION AND STRESS ON ATHLETICS PERFORMANCE OF STUDENTS, UNIVERSITY OF PORT HARCOURT, NIGERIA: COUNSELLING IMPLICATIONS

Ekechukwu, R. O.[1i],
Isiguzo, B. C.[2]
[1]PhD, Department of Educational Psychology,
Guidance and Counseling,
University of Port Harcourt,
Nigeria
[2]Department of Educational Psychology,
Guidance and Counseling,
University of Port Harcourt,
Nigeria

Abstract:

The study investigated the predictive determinants of Anxiety, Depression and stress on Athletics performance of students in university of Port Harcourt. Three objectives, three research questions and corresponding null hypotheses were tested at 0.05 alpha level. The correlational research design was adopted. The population of the study comprised of 3,400 students who participates in sports in the University. A simple random sampling technique was used to draw the sample size of 1,700 students using 50% of the population through balloting system. Two non-cognitive instruments designed by the researchers titled "Anxiety, Depression and stress scale" (ADSS) and Athletics performance scale (APS) were used for data collection. The ADSS and APS contained 30 and 10 items respectively. Face and content validities of the instruments were ensured by experts in Educational Psychology. Cronbach Alpha reliability coefficient of ADSS and APS at 0.98, and 0.88. The linear regression was used to test the null hypotheses at 0.05 level of significance it was found out that Anxiety, Depression and stress can significantly predict athletics performance among students of University of Port Harcourt. It was concluded that sports counselors should be engaged in all sports events, so that they can use psychological principles, skills, therapies and approaches to ensure that sports, man and woman of the university maintain good psychological states at all times.

Keywords: anxiety, depression stress and athletics performance

[1] Correspondence: email mamatriplets01@yahoo.com

1. Introduction

The psychological factors involved in athletic performance have long been of interest to athletes, coaches and sport psychologists. (Gucciardi, Gordon and Dimmock, 2009). There are certain moments during competition, that appear to carry great psychological significance, when the momentum starts to shift in one direction or another. These situations require sport persons to remain completely focused and calm in the face of difficult circumstances. Determining the personality profile and psychological state of sport persons is the most important topic of research in psychological studies in the field of sports. There is now good evidence that athletic success and participation in physical activity can be predicted by personality traits and psychological state.

Athletic performance is described as carrying out specific physical routine or procedures by one who is trained or skilled in physical activity. The term "sports" subsumes all forms of physical activity that contribute to physical fitness, mental well-being and social interaction. (Ekechukwu & Nwankwo 2016). These include play, recreation, organized, casual or competitive sports and indigenous sports or games. Performance is influenced by a combination of physiological, psychological and socio-cultural factors. The mental health model cited in Opara, (2012) of sports performance purports that an inverse relationship exists between psychopathology and athletic performance. The model postulates that as an athlete's mental health either worsens or improves, performance should fall or rise accordingly.

During the past twenty years, there has been dramatic increased interest and participation in sport at the collegiate, as well as professional and leisure levels. History has recorded that, there has been sports of one description or another played by athletes, such as soccer, rugby, tennis, golf, cricket, high jump, long jump, hurdling, basketball and others. Hinkle cited in Opara, (2012) stated that countries athletes are suffering from exploitation, personal excesses, abuse of drugs as well as exhibiting various psychological problems. Athletes are subjected to different emotional difficulties as well as personality and relationship problems.

Because of the increased push or quest towards efficiency, success and value for money, it has become of great interest to players, coaches, administrators, spectators and owners to identify psychological attributes and mental skills associated with superiors sport performance, as a primary stage of facilitating athletes develops (Golby & Sheard, 2004, Kaur, 2017).

Based on the foregoing personal experiences the researcher holds the conviction that apart from exploitation, personal excesses and abuse as factors associated with athletic performance, psychological factors such as anxiety, depression and stress may play a key role in relation to athlete's performance.

Anxiety as defined by Davidoff in Nwankwo cited in opera (2012), is an emotion, characterized by feelings of anticipated danger, tension and distress and by the arousal of the sympathetic nervous system. In this case, the individual becomes intensed up, troubled, worried and distressed as a result of the arousal of the sympathetic nervous

system. Anxiety is an unpleasant overriding mental tension that has no apparent, identifiable cause (Ekechukwu, 2016)

Depression is a state of mind characterized by low mood and aversion to activity that can affect a person's behaviour and sense of well-being. (Salmans cited in Emekwur, 2016). People who depressed can feel sad, anxious, employ hopeless, worried, helpless, worthless guilty, irritable, hurt or restless (Wikipedia, 2014). Athletes influenced by this suddenly loses interest in activities that were once pleasurable, experience loss of appetite or eat excessively, have problems with concentration and may contemplate, attempt or commit suicide in extreme cases (Schmidt, 2005). Insomnia, excessive sleeping, fatigue, loss of energy or aches, pains or digestive problems may also be present. Depression is often a mental disorder, but it may also be a normal reaction to certain life events, a symptom of some medical condition a side effect of some drugs, a nutritional deficiency or medical treatment. Stress is a condition that results due to stressor or is a disturbing condition or state of the body that a person finds his/her as a result of the person's deny or routine activities (Amaeze, 2017). Ekechukwu (2016) stressed that stress is a psychological reaction caused by the perception of aversive situation; the situation can be hazardous to one's health. She went further to corroborate her assertion by explaining that stress can be soon as a psychological and physical strain or tension generated by physical, emotional, social, economic or occupational circumstances, events or experiences that are difficult to manage or endure. Based on this explanation athletes performance may be aversively affected by stress.

1.1 Statement of the Problem

Athletes experience certain levels of psychological problems which interfere with their normal functioning and performance in sport activities. These psychological variables may be responsible for certain crimes and disorderliness that plaque sporting events recently. The problem of this study therefore was to find out whether psychological factors such as anxiety depression and stress have influence on athletic performance and how sports counseling can be used to alleviate these problems. The researcher is bothered with the fact that sports counsellors who are trained to handle these psychological problems are most of the time left out or not contacted to apply the necessary and adequate skills and therapies to ease out these problems, hence the trigger on embarking on this study.

1.2 Aim and Objectives

The aim of the study is to establish the predictive determinants of some selected psychological variables on athletics performance among students in University of Port Harcourt. Specifically put, the study sought to:-
1) Ascertain the predictive determinant of anxiety on athletics performance.
2) Find out whether depression influences athletics performance in University of Port Harcourt.

3) Determine the predictive determinant on athletics performance of students in University of Port Harcourt.

1.3 Research Questions

The following research questions were considered to guide the study.

1) What is the predictive determinant of anxiety on athletics performance of students in University of Port Harcourt?
2) What is the predictive determinant power of depression on athletics performance of students in University of Port Harcourt?
3) What is the predictive determinant power of stress on athletics performance of students in University of Port Harcourt?

1.4 Hypotheses

The following null hypotheses were tested at 0.05 alpha level.

1) Anxiety does not have a significant predictive determinant power on athletics performance among students of University of Port Harcourt.
2) Depression does not have a significant predictive determinant power on athletics performance of students in University of Port Harcourt.
3) Stress does not have a significant predict determinant power on athletics performance of students in University of Port Harcourt.

2. Methodology

The correlational research design was adopted. The population of the study comprised all the athletes in the University of Port Harcourt. As at the time of research, there were about 3400 athletes in University of Port Harcourt. A simple random sampling technique was used to draw the sample size of 1700 students using 50% of the population through balloting system. Two non-cognitive instruments designed by the researchers tilled, "Anxiety, Depression and stress scale" (ADSS) and Athletics performance scales (APS) were used for data collection. The ADSS contained 30 items while DIDS contained 10 items respectively. Face and content validities of the instruments were insured by experts in Educational psychology Cronbach Alpha reliability estimate was used to establish the reliability coefficients of ADSS and APS at 0.98 and 0.88. The linear regression was used to test the null hypotheses at 0.05 level of significance.

3. Results

Research Question One: What is the predictive determinant influence of anxiety on Athletes performance in University of Port Harcourt?

Table 1a: Linear regression of Anxiety on Athletes performance

Model	R	R Square	Adjusted R square	Std Error of the Estimates
	.630[a]	.397	.297	1.14483
a. Predictors	(constant)	Anxiety	Dependent variable	Performance

a. Dependent variable: performance.

Table 1b showed that the t-test calculated is given as 2,015, with about value of ,226 and at a calculated probability value of ,000, it was showed that the p-calculated value of ,000 is less than p-critical value of 0.05 and therefore, the mill hypothesis is rejected. By implication, anxiety has a significant predict determinant influence on athletics performance among university of Port Harcourt students.

Research Question 2: What is the prediction determinants influence of Depression on athletics performance of university of Port Harcourt students?

Table 2a: Linear regression of Depression on Athletics Performance of
University of Port Harcourt Students

Model	R	R. square	Adjusted R Square	Std Error of the Estimates
1	,630[9]	,397	1297	1₁14483

a. Predictors (constant), depression, b, dependent variable, perform

Table 2a showed that there is a negative relationship between depression and athletics performance the coefficient of determinism was given as 39.7% (0.397), which shows that depression contributes up to 38,7% of athletics performance in university of Port Harcourt.

Hypothesis Two: Depression does not have a significant predictor determinant power on athletics performance in University of Port Harcourt.

Table 2b: t-test associated with linear regression of Depression
among University of Port Harcourt students

Model	Unstandardized Coefficient	Standardized Coefficient	+.	Sig
	B Std. Error	Belta		
1(constant)	22₁156 1₁037		10₁011	₁000
Depression	₁212 ₁003	₁226	2₁015	₁000

Table 2b showed that the t-test calculated at 2₁015, with about value of ₁226 and at a calculated probability value of ₁000. It was shown that the p-calculated value of ₁000 is less than p-critical value of 0₁05 and therefore, the mill hypothesis is accepted, by implication Depression has significant predictive determinant power on athletics performance of university of Port Harcourt students.

Research Question 3: What is the predictive determinant power of stress on athletics performance of University of Port Harcourt students?

Table 3a: Linear regression of stress on athletics performance

Model	R	R-Square	Adjusted R square	Std. Error of the Estimate
1	$_1713^9$	$_1509$	$_1408$	2_114483

a. Predictors (constant, stress b, Dependent variable performance

Table 3a shows that there is high positive relationship between stress and athletics performance. The coefficient of determinism was given at 50,8% (0,509), which shows that stress contributes up to 50,8% of athletics performance in university of Port Harcourt students.

Hypothesis 3: Stress does not have a significant predictive determinant power on athletics performance among university of Port Harcourt students.

Table 3: t-test associated with linear regression of stress on athletics performance

Model	Unstandardized coefficients	Standardized coefficient	+	Sig
	B Std. Error	Beta		
1(constant) stress	31_1086 2_1069		15_1023	$_1000$
	$_1116$ $_1083$	$_1313$	1_1398	$_1009$

a. Dependent variable performance

Table 3b showed that t-test calculated is given as 1_139, with a beta value of $_1313$ and at a calculated probability value if $_1009$. It was showed that the p-calculated value of $_1009$ is less than p-critical value of 0_105 and therefore, the mill hypothesis is regarded by implication, stress has a significant predictive determinant power on athletic performance among university of Port Harcourt students.

4. Summary of Findings

It was found out that anxiety and stress can significantly predict athletics performance among university of Port Harcourt students.

4.1 Discussion
4.1.1 Anxiety and Athletics Performance
It was found out that anxiety has a significant predictive determinant better value to athletics performance among university of Port Harcourt students. This is owned to the fact that anxiety from sports personals contributes to poor athletics performance. This agrees with (Hamton, 2011), who investigated the intensely and direction of anxiety in swimmers, has findings showed that there is significant difference between anxiety and swimmers performance.

Depression has a negative influence on athletic performance among university of Port Harcourt sport men and women. The result also indicated that majority of athletics in university of Port Harcourt who perform poorly is as a result of depression this agrees with Harins, cited in Opare, (2012) who investigated the relationship between depression and sport performance. This result revealed a significant main effect for

difference in depression between dysfunctional performances in sporting setting. Also in a related study, Furnharm, A. and Petrides K., (2003), who studied the relationship between depression and academic performance. Then result revealed a significant negative effect between depression and stress and athletics performance.

It was found out that stress has a significant predictive determinant beta value to athletic performance among university of Port Harcourt students. Stress has a significant negative relationship on athletics in University of Port Harcourt. The result also indicated that majority of athletic in University of Port Harcourt who perform poorly is a result of stress.

This agrees with Graham-Jones–Henely cited in Dparra (2012) who investigated the relationship between stress response and athletic performance among golfers in America. Their result showed that there is a significant relationship between stress and athletic performance among golfers. Ekeohukmu, Amacze, (2018), studied the predictive determinants of stress on dissociative identity disorder and found out that stress has a significant predictive determinant beta value on dissociative identity dissociative disorder among students, this is unconnected to the fact that stress according to Ekechukm (2016) is a psychological reaction comsed by the perception of evasive situation, the situation can be hazardous to one's health.

4.2 Conclusion
It was concluded that anxiety, depression and stress all contribute negatively to athletics performance in university of Port Harcourt students. It than means that mismanagement of any of the above psychological factors will seriously impact negatively on both sports men and women hence there is a clamor call to tackle these factors head on by sports counselors.

4.3 Recommendations
Based on the findings and conclusion, the following recommendations were made:-
1) Based on the result that there is significant difference between anxiety and high or low athletics among university of Port Harcourt students counseling psychologists should adopt psychological approaches in helping athletics to overcome their anxiety problems to enable them perform optimally, such approaches include systematic desensitization, cognitive restricting cognitive behavior therapy modeling and rational emotion therapy.
2) Depression and high or low athletic performance among university of Port Harcourt sports students, it was recommended that sports counselors should adopt counseling principles, techniques and skills that will help these sports men and women in this condition. This could be advanced through, individual and group counseling.
3) Based on the result that there is a significant difference between tress high or low athletic performance among university of Port Harcourt men and women, it is recommended that counseling psychologists should assist athletics on how to cope and manage their stress. They should be trained on time different stress

management techniques, sleeping techniques controlling adrenalin anneal and positive thinking techniques.

References

Ekechukwu R.,O. .. Isiguzo B.,C. (2016), Stress and its Associated Health Staff in Nigeria University: A Case study of University of Port Harcourt *European Journal of Psychological Research* Vol 3(1), 16-27.

Ekechukwu R.O….. Ameze F.E. (2018), Predictive Determinants of Stress, Anxiety and Emotional Intelligence on Dissociative Identity Disorder among Adolescents in Imo State, Nigeria. *Asian Journal of management Science …. Education* Vol.7(1), summary 2018. (1-7) Sapan.

Ekechukwu, R.O. (2016), *Counseling practicum made easy, socio-psychological approach*, Owerri, 3oc Mankpa publishers.

Emekwuru C.D. (2016), Psychological Factors as Correlates of post-Operative Recovery Among Mastectomy Clients in Port Harcourt. Counseling implications unpublished thesis of the school of graduate stralies University of Port Harcourt.

Gucciardic D.F. Gordon, S…. Dimmock, J.,A., (2009), Development and Preliminary Validation of Mantel Toughness Inventory for Australian Football, Psychology of Sport and Exercise, 10,201-209.

Hanton, J., (2001), Generality and specificity of Attention related to competitive Anxiety and sport performance. *Journal of sport psychology*, 9, 231-243.

Furnharm, A. and Petrides K., (2003), Treat Emotional Intelligence and Happiness-Social Behaviour and Personality Journal Vol 7(3).

Nwankwo G.O., …Ekechukwu R.O., (2017) Inadequate finding and substantial facilities as Determinants of Risk Associated with Football Leagues in South-South Geo-political Zone of Nigeria. Implication for sports counseling. *European Journal of Research and Reflections in Educational Science* Vol, 5, (11) pg 1-6.

Opera, S. (2012), Psychological Problems Associated with Athletics performance, Unpublished thesis of Department of Psychology, Guidance and Counselors University of Port Harcourt.

Tarundeep K. (2017), Influence of Psychological Factors on Athletics Performance, Supplement to International *Journal of Behavioral Development* Vol. 41, Issue 6, November, 2017.

Wikipedia (2014). Depression, Retrieved August 2014 from https://en.wikipedia.org/wiki/Major_depressive_disorder