



(RESEARCH ARTICLE)



Psychological determinants of sports participation among athletes of tertiary institutions in Ebonyi state

Ben Ngozi Ohuruogu ¹, Frank Edwin Nwani ¹, Patricia Chinma Ngwakwe ¹, Orj Scholastica Amuche ¹, David Ifeanyi Nwigiji ¹, Benjamin Nkwede ¹, Raphael Ogbonna Nwodeh ², Ngozi Onuenyim ² and Christian Okechukwu Aleke ^{1,*}

¹ Department of Human Kinetics and Health Education, Ebonyi State University, Abakaliki, Nigeria.

² Department of Physical and Health Education, Ebonyi State University College of Education Ikwo, Ebonyi State, Nigeria.

World Journal of Advanced Research and Reviews, 2022, 16(01), 011–017

Publication history: Received on 02 August 2022; revised on 27 September 2022; accepted on 30 September 2022

Article DOI: <https://doi.org/10.30574/wjarr.2022.16.1.0897>

Abstract

Background: The performances of athletes in Ebonyi State tertiary institutions were observed to be low. Therefore, the present study explored the psychological determinants of sports participation among athletes of tertiary institutions in Ebonyi State.

Methods: This was an institutional based cross-sectional study conducted among 481 students drawn from Alex Ekwueme Federal University, Ikwo, and Ebonyi State University, Abakaliki. Two research questions and two hypotheses were used to guide the study. Mean scores and standard deviation were used to answer the research questions. Analysis of Covariance (ANCOVA) was used to test the hypotheses.

Results: The findings shows that fear of injury and anxiety was a determinant of sports participation in tertiary institutions in Ebonyi State. It was also found that there was significant difference in the mean response of male and female athletes on the sports participation. This finding implies that sports participation of athletes was determined by psychological determinant.

Conclusion: Based on the findings of the study, the following recommendations were made, that, government and its agencies should provide adequate infrastructural facilities required for athletes in order to improve athlete's participation and increase sport development in the country. Also, the school management in collaboration with the host communities should ensure conducive environment for athletes.

Keywords: Sports Participation; Psychological Determinants; Athletes; Tertiary Institutions; Ebonyi State

1. Introduction

Universities throughout the world are centres of sporting activities. Many of those who win medals at international sporting events are either students or fresh graduates. It is understandable that students in universities are mainly youths, an ideal age for developing interest in sporting activities. Sporting activities contribute in maintaining good health among both the young and the old. Several factors determine sports participation among athletes of tertiary institutions. Study has revealed such factors as age, gender and marital status (Anderson, 2014). These factors form an important aspect of personal attributes which either enforce or inhibit the extent to which individuals can participate in sporting activities.

* Corresponding author: Christian Okechukwu Aleke

Department of Human Kinetics and Health Education, Ebonyi State University, Abakaliki, Nigeria.

The unique role of age in sport participation is incontestable. It is a known fact that there is a certain age noted for excellent sport performance particularly competitive sport. Competitive sport by its very nature requires a lot of energy, power and agility. This is the more reason why competitive sports have always been identified with youths. It is expected that undergraduates would be more involved in sport as most of them are at their youthful age with varied sport potentialities and skills which could produce excellent sport results.

Sport by nature, be it recreational or competitive, involves physical and mental coordination prowess. According to Ikulayo (2018), age has a strong influence on physical performance. The fact that universities admit a large number of youths into various courses at undergraduate level yearly makes the nation's expectation about sport development in Nigerian universities genuine most especially when considering the age of the students and sport potential as evidence by their post-primary school sport records. Igbanugo (2014) indicates that most undergraduates are between the age group of 22 –25. This group is noted for its ability to engage in physical exercises for prolonged period of time. This explains the physiological basis why youths are more engaged in varied physical activities like sport and do excel. Gender, according to Fadoju (2019), refers to the social roles and expectations that are associated with being male or female which largely influence their lives. Though there are physiological differences between men and women, Krane and Williams (2014) added that the two sexes are more similar than their difference. However, the roles of men and women are undergoing significant changes both at work, play and in the family. Adeyanju (2019), in support of this view, maintains that despite the fact that many discriminatory practices exist against women involvement in sport, there are those who dare the consequences. They participate, sponsor, encourage and reward sport women. This means, if all cultural barriers hindering the participation of women in sport are removed, it is likely that women will be freed from this deprivation and discrimination. Babatunde (2014) stated that gender is a strong determinant of sport participation among undergraduates in first generation Nigerian universities. It is further discovered that male students participate in sport more than their female counterparts.

Psychological factors that affect sports participation include: stress reactivity, and mental well-being, such as reduced depression, anxiety, tension and stress, and increased vigor and clear-mindedness (Bahrke and Morgan, 2018). Ikhiyoa (2014) stated that the manipulation of essential elements in administrative environment for the purpose of ensuring efficiency and effectiveness in running a sporting organization to achieve a set objective plays a vital role in achieving a result. Bucher and Kroee (2012) said that sport administration is an art of managing programmes, human and material resources in sports organization with the sole aim of accomplishing the objectives of the organization. A good sport administrator should know when to ignore opinion, when to accede it and when to try to marshal it. Sports administrators should help set, a realizable target that will assist in achieving a stated objectives in their sports, this allows participants to focus and concentrate in sports participation and in achieving these functions is one of the main factors of this study.

The business of managing sports rest on administrator's leadership quality and how performs the task depends on a lot of variables which include availability of facilities and equipment, funds and supplies and his/her personality traits which if all properly managed and harnessed make them contribute positively to sports development and excellence. Omolawon (2015) observed that the personnel involved in managing sports programmes are a vital factor in sport participation. Jones (2015) asserted that the type of personnel and administrative style adopted by sports administrator may influence athlete's participation or withdrawal from sports participation.

The importance of facilities for sporting activities cannot be over emphasized. Facilities provisions are important aspect of sports programmes management. Excellent programme is the key work in sports competition and this requires well equipped good playground for training. Adedeji (2010) also pointed out that there must be sufficient motivation in the form of attractiveness of facilities, supplies and equipment to captivate athlete's interest to participate in sports or games.

According to Awosika (2019) it might be impossible to achieve satisfactory results from athlete whose training facilities and equipment are inadequate or of sub-standard. Inadequacy of sports facilities in universities constitute a big cog in the successful administration, organization and management of sports programmes in universities. Bucher and Knotee (2012), opined that facilities should be planned and constructed with an eye to the future. Therefore, facilities maintenance should be given a serious attention for the long lasting of the facilities. Facilities maintenance management is an important tool needed for effective sport participation.

Duru (2015) pointed out that there is nothing basically wrong with Nigeria or her athletes, the problem is psychological factors such as anxiety, fear of failure or injury among others. Amuchic (2012) concluded that there is hardly any continuity in our sport development efforts. Several studies have been carried out on the issues of sports participation among undergraduates in Nigeria. For instance, Asagba, Balogun, Odewumi and Oladipo, (2012) worked on personality

traits of sports performance and effective sports participation in south western Nigeria. While Ogbemudia (2014) worked on problems of sports in Nigeria, but to the researcher's knowledge, there are few studies on psychological factors as predictors of sports participation among athletes of Tertiary Institutions in Ebonyi State. It is in the light of the above observation that this study set out to determine the psychological factors as predictors of sports participation among athletes of Tertiary Institutions in Ebonyi State. The objectives of the study was to:

- Investigate the influence of fear on sports participation among athletes of tertiary institutions in Ebonyi State.
- Determine the influence of anxiety on sports participation among athletes of tertiary institutions in Ebonyi State.

2. Material and methods

2.1. Research Design

The descriptive survey research design was employed for the study. Survey research design was considered appropriate for use in this study, since the study is concerned with collecting data from a small sample of the population without manipulation of any variable. The area of the study was Alex Ekwueme Federal University, Ikwo, and Ebonyi State University, Abakaliki. Ikwo Local Government Area is one of the local governments in Ebonyi State, South-Eastern Nigeria. It lies between latitude 4°45'N and 7°15'N, and longitude 6°50'E and 7°25'E. Ikwo Local Government is bounded in the east by Abi Local Government of Benue State, in South by Ezza South local government, in the West by Abakaliki Local Government and in the North by Onicha Local Government. On the other hand, Ebonyi State University, Abakaliki, is a multi-campus university having official faculties which include; faculty of Agriculture and Law faculty at the CAS campus; faculty of Health Sciences and faculty of Basic Medicine at the Presco campus; faculty of sciences, faculty of Social Sciences and Humanities, and faculty of Management at the main campus; and lastly faculty of Education at Ishieke campus. The population of the study consisted 481 participants, comprising 245 students from Alex Ekwueme Federal University, Ikwo, AEFUNAI, and 236 students of Ebonyi State University, Abakaliki EBSU. Due to the small size of the population, the researcher therefore decided to use all the population for the study. Therefore, there was no sample size and sampling techniques.

2.2. Instrument for Data Collection

The instrument for data collection was restructured questionnaire titled "Psychological Factors as Predictors of Sports Participation Among Athletes Questionnaire (PFPSAQ)" designed by the researcher. This was used to elicit information from the respondents based on their demographic data and research questions that guide the study. The questionnaire contains two parts. Part 1 deals with demographic data of the respondents. Part 2 was used to elicit information from the respondents based on the five research questions that was formulated to guide the study. It contains 39 items divided into sections A, B, C and D. Items 1-9 (section A) sought information on the determine of fear of injury on sports participation among athletes; items 10-19 (section B) was structured to elicit information on the determine of anxiety on sports participation among athletes, items 20-29 (section C) sought information on the determine of self-confidence on sports participation among athletes, items 30-39 (section D) elicit information on the determine of self-esteem on sports participation among athletes.

2.3. Method of Data Collection

Copies of the questionnaire were distributed to the two hundred and seven-three (273) respondents in the sports department in the institution. The researcher with the help of three research assistants briefed the respondents on how to fill the instrument will distribute. The completed copies of the questionnaire were collected on the spot.

2.4. Method of Data Analysis

The completed copies of the questionnaire were coded and analyzed using the Statistical Package for Social Science (IBM SPSS Version 25). The research questions were answered descriptively using percentage and frequency distribution tables. Research questions 1-4 was answered on individual item basis using mean and standard deviation. The likert scale questions were judged based on weighted mean 2.5 such that items with weighted mean less than 2.5 were rejected. Some of the items that were negative questions were reversely coded accordingly. The hypotheses were tested using Chi-square at 0.05 level of significance.

3. Results

Table 1 Fear of Injury on Sports Participation among Athletes of Tertiary Institutions in Ebonyi State

S/N	Fear	SA	A	D	SD	\bar{X}	S.D
1	Fear of injury is not necessary in sports	148	204	63	66	2.90	0.99
2	Fear of injury makes me not to participate in sporting activities	168	192	67	54	2.98	0.96
3	Fear of injury makes me not to concentrate in sport activities	222	156	46	57	3.12	1.00
4	Injury incurred induced fear among athletes	200	156	66	54	3.03	1.02
5	Injury discourages colleagues from participating in athletes	211	128	82	66	3.01	1.05
6	Every sport is associated with injury	126	143	12	84	2.64	1.05
7	First aid team take care of injuries	185	125	99	72	2.87	1.08
8	Fear of injury does not limit good athletes	177	129	10	71	2.85	1.07
	Grand Mean					2.92	

The results in table 1 show that all the items are accepted because they have mean values above 2.50. The grand mean of 2.92 is also above 2.50. Therefore, the respondents (athletes) agreed that fear of injury determines sports participation in tertiary institutions in Ebonyi State.

Table 2 Determining the Anxiety on Sports Participation Among Athletes of Tertiary Institutions in Ebonyi State

S/N	Anxiety	SA	A	D	SD	\bar{X}	S.D
9	I feel nervous performing before spectators	171	132	101	77	2.82	1.08
10	I get easily teased up	210	151	51	69	3.04	1.05
11	I am easily overtaken by stress	157	122	65	137	2.62	1.20
12	I feel anxious about something or someone almost all the time	216	125	57	83	2.98	1.12
13	I sometimes feel I am a failure	154	104	166	57	2.73	1.03
14	I am a very sensitive person	141	128	124	88	2.66	1.08
	Grand Mean					2.80	

The results in table 2 show that all the items are accepted because they have mean values above 2.50. The grand mean of 2.80 is also above 2.50. Therefore, the respondents (athletes) agreed that anxiety determines sports participation in tertiary institution in Ebonyi State.

3.1. Test of Hypotheses

H0₁: There is no significant difference in the mean responses of male and female athletes on fear of injury as a determinant of sport's participation of athletes in tertiary institutions in Ebonyi State

Table 3 T-test Result on fear of injury as a determinant of sports participation of athlete based on gender

S/N	Variable	No	\bar{x}	S.D	Df	T.cal	T.crit	Decision	Significant
15.	M	280	2.90	1.00	479	0.13	1.960	Accept H0	Not significant
	F	201	2.89	0.96					
16.	M	280	2.96	1.01	479	0.66	1.960	Accept H0	Not significant
	F	201	3.01	0.90					
17.	M	280	3.00	1.06	479	3.15	1.960	Reject H0	Significant
	F	201	3.29	0.89					
18.	M	280	2.92	1.05	479	2.67	1.960	Accept H0	significant
	F	201	3.17	0.96					
19.	M	280	2.94	1.07	479	1.78	1.960	Accept H0	Not significant
	F	201	3.11	1.01					
20.	M	280	2.68	1.03	479	0.88	1.960	Accept H0	Not significant
	F	201	2.59	1.07					
21.	M	280	3.06	1.03	479	4.50	1.960	Accept H0	Significant
	F	201	2.62	1.09					
22.	M	280	3.03	1.05	479	4.30	1.960	Accept H0	Significant
	F	201	2.61	1.06					
	T-test value					2.25	1.960	Accept H0	Significant

The T-test value of 2.25 is greater the t.crit value of 1.960. Therefore, H_{01} is rejected, meaning that there is a significant difference in the mean responses of male and female athletes on fear of injury as a determinant of sport's participation of athletes in tertiary institutions in Ebonyi State.

Table 4 T-test result on Anxiety as a determinant of sport participation athlete based on gender

S/N	Variable	No	\bar{x}	S.D	Df	T.cal	T.crit	Decision	Significant
23.	M	280	2.80	1.10	479	0.60	1.960	Accept H0	Not significant
	F	201	2.86	1.06					
24.	M	280	2.89	1.09	479	3.74	1.960	Reject H0	Significant
	F	201	3.25	0.97					
25.	M	280	2.83	1.16	479	4.60	1.960	Reject H0	Significant
	F	201	2.32	1.21					
26.	M	280	2.95	1.14	479	0.82	1.960	Accept H0	Not significant
	F	201	3.03	1.09					
27.	M	280	3.04	0.98	479	8.12	1.960	Reject H0	Significant
	F	201	2.31	0.95					
28.	M	280	2.97	1.01	479	7.63	1.960	Reject H0	Significant
	F	201	2.24	1.03					
	T-test value					4.25	1.960	Reject H0	Significant

From the results of analysis in Table 6, the T-test value of 4.25 is greater than 1.960, hence, H_0 is rejected. This means that there is a significant difference in the means responses of male and female athletes on anxiety as a determinant of sport's participation in tertiary institutions in Ebonyi State.

4. Discussion

This chapter presents the discussions of the findings with regard to the research questions that guided the study.

4.1. Fear of injury determines sports participation among Athletes of Tertiary Institutions in Ebonyi State

The study revealed that fear of injury influence sports participation of athletes of tertiary institutions in Ebonyi State. According to Nummenmaa (2015), fear is typically launched by a possibly dangerous situation, is a part of a person's normal defensive mechanisms, and has effects on the sympathetic nervous system. Linking the current understanding of fear and the model, it can be stated that fear is a negatively toned, typically prior to performance experienced emotion, which is typically closely tied to the dominant situation (or the interpretation of the situation). Typically fear manifests as intense yet relatively brief by its duration. However, Nummenmaa (2015) has argued that fear mechanisms could also trigger beforehand, and that these prolonged states of alertness and anxiety could develop into serious states of fear. By its form, fear possesses strong relations to motivational, bodily-somatic and operational issues.

4.2. Anxiety determines sports participation among athletes of tertiary institutions in Ebonyi State

The present study further revealed that anxiety determine sports participation among athletes of tertiary institutions in Ebonyi State. This is in line with the observation made by Fazey and Hardy (2018) suggest cognitive anxiety has a mediating influence on the effects of physiological arousal, which instead can directly influence performance. Both above theories follow the main idea of inverted-U Hypothesis, but the differences appear in the component's relations to performance. Like Inverted-U Hypotheses in general, The Cusp Catastrophe Model has also received vast amounts of critique. The theories have been found too complex, which significantly complicates testing and applicability to general usage." As a result of this, according to him, anxiety creates fear and emotions among the sports participation of athletes. The participant further reported that anxiety determine sports participation among athletes of tertiary institutions in Ebonyi State. The finding is in line with the report of Nummenmaa (2015) who observed that emotions have an essential effect on our everyday life as they guide our actions, automatically alter our alertness, and essentially affect the way we observe and interpret environment. The level of alertness has direct impact on sport performance, and efficient observation of the surroundings is a necessity in many sports

5. Conclusion

The findings of the study have revealed that fear of injury, and anxiety determines sports participation among athletes of tertiary institutions in Ebonyi State. The study further made the following recommendations as follows:

- That if all the needed nuts and bolts required for effective sports participation among athletes of tertiary institutions in Ebonyi State are put in place, the glory of sports will be restored in Ebonyi State.
- That government and its agencies should provide adequate infrastructural facilities required for athletes in order to improve athlete's participation and increase sport development in the country.
- That school management in collaboration with the host communities should ensure conducive environment for athletes.
- More time should be allocated to athletes' students in school in order to develop young athletes.
- Government and school management should ensure that qualified lecturers are recruited to handle athletes related course in the school.
- The Ministry of Sports should make sure that there is adequate fund allocated to school that offers sports in order to enhance effective teaching and learning of athlete.

Compliance with ethical standards

Acknowledgments

We wish to acknowledge all the Sports directors of tertiary institutions in Ebonyi state for their prompt approval to carry out this study. Also, to all the athletes who consented and participated actively to this study.

Disclosure of conflict of interest

The authors declare that there are no competing or potential conflicts of interest.

Statement of informed consent

Written informed consent was obtained from all subjects before the study.

References

- [1] Anderson, A. (2014). Self-esteem and perfectionism in elite athletes: Effects on competitive anxiety and confidence. *Personal Individual Difference*, 32(5), 865–75.
- [2] Ikulayo, L. (2018). *The psychology of sex difference*. Stanford, CA: Stanford University Press.
- [3] Igbanugo, U. (2014). Gender difference in adolescent self-efficacy in sport. Thesis Master degree, Kinesiology Department, Lakehead University.
- [4] Fadoju, K. (2019). The effect of an ecological imagery program on soccer performance of elite players. *Asian Journal of Sports Medical*. 3(2), 81-9.
- [5] Krane, K. and Williams, U. (2014). Confidence and leader performance. *Organization Dynamic*, 33(3), 254–69.
- [6] Adeyanju, H. (2019). Home advantage in the winter Olympics (1908-1998). *Journal of Sports Science*. 1(9),129–39
- [7] Babatunde, M. (2014). Brain mechanisms subserving self-generate imagery: Electrophysiological specific and patterning. *Psychophysiology*, 1(4), 586-602.
- [8] Bahrke, E. and Morgan, A. (2018). The relationship of mental imagery and mental rehearsal to performance of a motor task. *Journal of Sport Psychology*. 2, 211-220.
- [9] Ikhioya, R. (2014). *Imagery in Sport*. Text book. Printed in the United States of America, Champaign, IL: Human Kinetics. 387.
- [10] Bucher, D. and Kroee, K. (2012). Cognitive skills and athletic performance. In P.C. Kendall &Hollon, S.D. (Eds), *Cognitive-behavioral interventions: Theoryresearch and procedures*. New York: Academic Press.
- [11] Omolawon, U. (2015). The effects of an imagery rehearsal, relaxation, and selftalk package on basketball game performance. *Journal of Sports & Exercise Psychology*, 12, 157-166.
- [12] Jones, H. (2015). An Analysis of the Sport Confidence Construct: Competitive Sports. *Korean Journal Measurement Evaluation of Physical Education Sport Science*; 16(1), 23–36.
- [13] Adedeji, G. (2010). The relation of depression and anxiety to life- stress and achievement in students. *British Journal of Psychology*. 95(4):509–21.
- [14] Awosika (2019). The relationship between self-confidence, mood state, and anxiety among collegiate tennis players. *Journal of Sport Behavior*, 2(7), 230-239.
- [15] Duru, F. (2014). Expert-Novice differences in planning strategies during collegiate singles tennis competition. *Journal of Sports &Exercise Psychology*, 22(1), 39-62.
- [16] Amuchic, D. (2012). Confidence and leader performance. *Organization Dynamic*, 33(3), 254–69.
- [17] Asagba, E. K.; Balogun, T.; Odewumi, Y. and Oladipo, W. (2012). Long-term trends in home advantage in professional team sports in North America and England. *Journal of Sport Science*. 2(3), 337–50.
- [18] Ogbemudia, J. (2014). Elite divers and wrestlers: A comparison between open-and closed skilled athletes. *Journal of Sport Psychology*. 5, 390-409.
- [19] Nummenmaa, M. (2015). Speaking clearly: A critical review of the self-talk literature. *Psychology of Sport and Exercise*, 7, 81-97.
- [20] Fazey, B. and Hardy, F. (2018). Imagery interventions in sport. *Advances in applied sport psychology: A review*. 2008. P.5-36.