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# RELATIONSHIP BETWEEN STUDENT-ATHLETES TEAM COHESION AND SPORTS PERFORMANCE IN UNIVERSITIES IN THE NORTH - EAST ZONE, NIGERIA

**By**

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## Abstract

This study was conducted to determine the relationship between student-athletes team cohesion and sports performance in Universities in the North - East Zone Nigeria. Two objectives were set which leads to formulating research questions. The design of the study was correlational design. Similarly, a null hypothesis was tested at a 0.05 level of significance. The population for the study comprised 13 Universities in the North - East Zone Nigeria, 1170 student-athletes. A convenience sampling technique was used to select 3 Federal Universities and 270 student-athletes out of which 162 were males and 108 were females . Purposive sampling technique was used to select the three (3) Universities (Abubakar Tafawa Balewa University Bauchi, Modibbo Adama University Yola, and University of Maiduguri). The instruments used to collect data were Group Environment Questionnaire (GEQ) has 24 items which was adopted from Manning (2008), with the response mode of Not at all=1; Confidence=2; and Extreme Confidence= 3, and Sports Performance Questionnaire (SPQ) which used four points Likert scale response mode of Strongly Agree=4 points; Agree=3 points; Disagree=2 points; and Strongly Disagree= 1 point. The reliability of the instruments were .83 and .75 respectively. Descriptive statistics of mean and Standard deviation was used to answer the two research questions. Inferential statistics of Pearson Product Moment Correlation Coefficient ( r ) was used. The Pearson Product Moment Correlation Coefficient ( r ) tested the only hypothesis at 0.05 level of significant. SPSS version 20 was used to analyze the data. The results showed that there was a significant relationship between student-athletes' team cohesion and sports performance, which showed that students - athletes were related to sport performance. Based on the findings the following recommendations were drawn that Coaches should help train student -athletes develop a high sense of team cohesion especially during training sessions and sports competition. Moreso the study recommends that States Directors of Sports should liars with the Mobile Network Providers in their domain to help sponsor sports competitions in their various states. Based on the findings of the study it was concluded that student-athletes demonstrated positive team cohesion which apparently facilitated their performances.

**Key Words:** North - East Zone, Student - Athletes, Sports Performance, and Team cohesion.

## Introduction

One of the properties of a group is cohesion. Cohesion has been defined as a dynamic process that is reflected in the tendency of a group to stick together and remain united in the pursuit of it's instrumental objectives for the satisfaction of member affective needs (Carron, Bray and Eyes, 2002). Cohesion means togetherness, team spirit, closeness, and teamwork. The team's unity is supposed to be positive in interactive sports such as basketball, football, handball, hockey and volleyball. In interacting sports success depends upon appropriately combining each player's diverse skills in an interdependent pattern of teamwork. If players independently performed skills, and team success is determined by the sum of individual performance which leads to failure at the end of the day (Williams & Windmeyer, 1991), this shows that the team lacks cohesion. According to Gracia-Mas, Olmedillah, Ortega, Almeida, Lameiras, Sousad, and Cruz (2010), cohesion is the social affiliation within the team: it's the most extended concept for dynamics in the sportive teams, along with the sport cooperation that is relationship between personal objectives and those of the team mates and the coach.

Eys, Loughead, Bray, and Carron (2009) opined that the coach's effect on the ground and its cohesiveness are obviously relevant to participants in the current study. The coach is an integral member of the team or of the many principals who directs and interacts with the team to facilitate its achievements of desired objectives. Regardless of another point to consider is that youths seem to view cohesion as multidimensional and finally agreed that constraining task and social elements. Lowther, and Lane (2002) supported the assertion that a cohesive team is associated with positive individual feelings of cohesiveness to repair negative psychological states after defeat. They went on to say that a cohesion team will not only provide a supporting environment in terms of engendering feelings of belongingness, but also provide individuals with people to confide in. Consequently, Muthiaine, (2014) stressed that agreement among team players is an important component for team sports because it can influence a team's collective effort, their persistence in tough situations or defeat, and is a characteristic often observed in successful teams.

Eys, Loughead, Bray, and Carron (2009) revealed cohesion as one of the important small group variables within sport. Hence, the conceptualizing and examinations of cohesion have predominantly been oriented towards adult populations. The purpose of the current study was to gather understanding of what cohesion means to youths sports participants. 56 team sport athletes from two Secondary Schools took part in focus groups designed to understand participants' perceptions of: a) the definition of cohesion and indicators of cohesive and non- cohesive groups, and b) methods used to attempt to develop cohesion in their groups. Overall, the responses to part (a), yield 10 categories reflecting a group's task cohesion and 7 categories reflecting a group's social cohesion. Albeit, participants highlighted eight general methods through which their groups developed cohesion.

Results are discussed in relation to a current conceptualization of cohesion and affiliation considerations within a youth sport environment.

For many sporting experiences, athletes are members of groups or teams. These groups have a strong effect on the members of the group (Gu, & Xue, 2022). Cohesion is one of the most important small group variables that is derived from the evolution of group culture (Carron, & Chelladurai,1981). Although previous studies have shown that group cohesion can improve athletes' sports performance (Eys, Burner, & Martin, 2019, and Godfrey Coleman, Eys, 2021). One of the properties of a group is cohesion. Cohesion has been defined as a dynamic process that is reflected in the tendency of a group to stick together and remain united in the pursuit of its instrumental objectives for the satisfaction of member affective needs (Carron, Bray and Eyes, 2002). Cohesion means togetherness, team spirit, closeness, and teamwork.

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The relationship between cohesion and sports performance has always been the focus of attention (Eys, Burner, & Martin, 2019; Ma,& Wang, 2002; and Zhang, 2000). However, research shows that the actual situation is much more complex. The sports involved in the research of positive correlation between cohesion and sports performance are mainly collective events, such as basketball, volleyball, and hockey (Ma, Wang, 2002; and Zhang, 2000), whereas a small number of sports involved in the research of a negative correlation or no correlation are individual events, such as bowling and shooting (Ma, Wang, 2002; and Zhang, 2000). Because of the complexity itself and the limitation of our understanding, a lack of discussion about the mechanism and conditions between cohesion and sports performance was observed. Whilst there seems to be a significant relationship between cohesion and performance. In sports, the subject has been researched most extensively within the fields of management, leadership and psychology and Sports Psychology (Muthiaine, 2014).

Many credible studies exist in academia, with distinct and conflicting conclusions emerging on the subject. On one hand, there are some expert authorities who believe that there is insufficient evidence to suggest that team cohesiveness and achievement tend to be positively related. Many theorists however, concluded that cohesion amongst team members tends to solidify bonds that promote productivity amongst members of individual teams (Cox, 1990; and Martens, 1997), which can be directly related to positive performance outcomes. Accordingly, higher group cohesion is associated with sport performance. That is, performance has more impact on cohesion than cohesion has on performance. This may mean that the relationship between performance and cohesion is not symmetrical. Which might be in other words the impact of performance on cohesion is not equally the same. They continue with the notion that there are differences between cohesion levels of successful teams. For most team sports, the primary reason for sticking together is to increase the potential for obtaining success. For example, volleyball is a sport that takes more coordination and cooperation, team performance is related to level of changes in both task and social cohesion. Therefore, there is a strong relationship between cohesion and team performance. That is, highly cohesive teams are more successful than the teams with low level cohesion (Gurama, 2016).

In line with this Spink, (2010) said that sport participants who exhibit high scores in the expectations that they will participate in sport during the following season. This cohesion is a predictor of the intention to continue sports involvement. This prediction according to Ramzaninezhad, Keshtan, Shahamat, Kordshooli (2009), is undoubtedly related to lower state anxiety. Cohesion measures the strength of relationship between functionality within a given module. For example, high cohesion systems functionality is strongly related.

Cohesion is an ordinal type of measurement and is usually described as “high cohesion” or “low cohesion”. Modules with high cohesion tend to be preferable because high cohesion is associated with several traits, whereas low cohesion is associated with undesirable traits (Wikipedia,2012). Ramzaninezhad and Keshtan (2009) revealed that higher levels of team cohesion were related to higher levels of training and instruction, democratic, social support and positive feedback, and lower levels of autocratic behaviour. This may mean that the higher the cohesion, the stronger the team (Divine,(2012).

Wang, Hwang, and Chang (2011) explained that in the field of athletics team cohesion is a research topic Worth exploring the level of team cohesion as a key factor most likely to affect players feelings of satisfaction and sports performance, and contest. They affirmed that higher team cohesion leads to better sports performance. Based on the data in respect of the results of the research conducted it can be inferred that there was a difference between college table tennis players, perceived team support and team cohesion in terms of gender. The average points show that male players perceived team support higher than that of female players.

Muthiaine (2014) through a study examined the effect of performance outcome upon athlete's perceptions of team cohesion at the end of the season. Demonstrated the effect of single game outcomes was Ruder and Gill (1982) that in both intramurals and intercollegiate women's volleyball teams on team cohesion. The study shows that team cohesion is not static and phenomenally stable but seems to change throughout the season. The study further revealed that winning teams had a rise in group cohesion following the game, while losing teams suffered a decline. Gurama (2016) stated that student - athletes team cohesion has no one player indispensable, team success hence, depends largely on the team effort and ability.

The measure of success recorded by most elite teams has been shown to be reflected on team success which has been explained in relation to coaches competency.

A Coach who demonstrates a high level of technical, and inter-personal expertise would produce a team with consistent success profiles. Over the years, the North - East sub - region has maintained an amiable sport culture in its learning instructions. A handful of

these sports men/women and sport enthusiasts, teachers of Physical and Health Education and coaches have been absorbed into the Universities in the North - East Zone, and are supported to demonstrate high levels of performance outcomes in such sports, which enjoyed prominence in the past. It was observed that the performance of Universities in the North - East Zone is apparently low compared to their counterparts from other Geo-Political Zone. For example, the University of Maiduguri placed 6th and 9th at the 23rd and 24th NUGA games in Benin and Ile-Ife respectively. FUTYwas placed 23rd at the 23rd NUGA games in Benin. But the University did not feature at the 24th NUGA games at Ile-Ife. While ATBU Bauchi rarely made any impact in both the 23rd and 24th NUGA games. Following this assertion, the researcher was determined to investigate whether or not among student-athletes team cohesion is a predictor to sport performance in basketball, Handball, soccer, and volleyball in Universities in the North - East Zone, Nigeria.

## Methods

The study determined the relationship between student - athletes team cohesion and sports performance in Universities in the North - East Zone, Nigeria. The design for this study was correlation. Correlation describes the relationship between two or more variables in terms of strength of relationship and direction (Pallant,2011). Ramalingam (2005) explained that it is the degree to which two or more variables are related to each other. The design is appropriate for this study because it sought to determine the relationship between two or more variables which this study was concerned with. The population for the study comprises 6 Federal, 5 State, 2 Private Universities in the North - East Zone. The total population of the student - athletes in all the 13 Universities in the North - East Zone is 1170 based on the sports they participated (basketball, Handball, soccer, and volleyball games). Purposive sampling technique was used to select the three (3) Federal Universities (Abubakar Tafawa Balewa University Bauchi; Modibbo Adama University of Technology Yola, and University of Maiduguri), in the North - East Zone, Nigeria. The researchers' intention was to select the sample size from the Federal Universities because they have a similar characteristic that is relevant for this study carried out (Adefila, 2008). Once the group is located, the researchers' ask those who meet the inclusion criteria to participate in the study. This sample selected is based on the judgement of what is suitable to the study. A convenience sampling technique was used to select two hundred and seventy (270) student - athletes who registered for the sports of their choice (basketball, Handball, soccer, and volleyball games). 162 male and 108 female student - athletes was the sample size for the study.

## Material

The instruments used were Group Environment Questionnaire (GEQ) and Sports Performance Questionnaire (SPQ). 24 items of GEQ were adopted from Manning (2008) with the response mode of Not at all=1, Confidence=2, and Extreme Confidence=3. 24 items of SPQ were self-developed with the response mode of Strongly Agree=4, Agree=3,

Disagree=2, and Strongly Disagree=1. The validity of the instruments are.98 for GEQ and.78 for SPQ, which was self-developed. The method of data analysis using data that were generated for study to transform into t-scores and were scaled into 30%. That is, scores ranging from 20-30% were considered to be high level, 10 -19% considered to be moderate while 1-9% were said to be low level (Kothari & Garg, (2014).

Data Collected from the two research questions were analyzed using descriptive statistics of mean, standard deviation. Also data generated from the one hypotheses used inferential statistics of Pearson Product Moment Correlation Coefficient ( r ). This was because Pearson Product Moment Correlation Coefficient ( r ) explores the strength of the relationship between two continuous variables. This shows both directions (positive or negative) and the strength of the relationship. A positive correlation indicates that one variable increases, so does the other. A negative correlation indicates that as one variable increases the other decreases.

**Results**

The study was conducted to determine the relationship between student-athletes team cohesion and sports performance in Universities in the North -East Zone, Nigeria. The analysis was based as follows.

Research Question 1: What is the level of team cohesion of student -athletes in Universities in the North -East Zone, Nigeria?

**Table 1 Level of Team Cohesion of Student -Athletes in Universities in the North - East Zone, Nigeria**

| Institutions | Basketball | Handball | Soccer | Volleyball | Decision |
|---|---|---|---|---|---|
| ATBU | 24.59+4.67 | 27.65+3.06 | 22.56+4.22 | 27.45+2.66 | High Cohes. |
| MAUTECH | 26.09+2.43 | 26.25+2.73 | 24.93+3.33 | 26.58+7.10 | High Cohes. |
| UNIMAID | 24.28+4.27 | 28.79+4.14 | 25.42+3.70 | 27.43+3.43 | High Cohes. |

Key: 1-9%=Low Level, 10-10%=Moderate Level, and 20 -30%=High Level

Table 1 presents the mean and Standard deviation of student-athletes of team cohesion in Universities in the North -East Zone, Nigeria. ATBU results revealed a high level of team cohesion (basketball 24.59+4.67; Handball 27.65+3.06; soccer 22.56+4.22 and volleyball 27. 45+2.66) high level of cohesion in performance. MAUTECH results showed a high level of team cohesion (basketball 26.09+2.43; handball 26.25+2.73; soccer 24.93+3.33; and Volleyball 26.58+7.10) high level of cohesion in performance. UNIMAID 's results revealed high level of team cohesion (basketball 24.28+4.27; handball 28.79+4.14; soccer 25.42+3.70; volleyball 27.43+3.43) high level of cohesion in performance.

Research Question 2: What is the performance of student -athletes in Universities in the North -East Zone, Nigeria?

**Table 2: Sports Performance of Student-Athletes in Universities in the North -East Zone, Nigeria**

| Institution | Basketball | Handball | Soccer | Volleyball | Decision |
|---|---|---|---|---|---|
| ATBU | 24.07+2.34 | 24.16+2.50 | 24.15+2.70 | 25.82+1.16 | H. Perform. |
| MAUTECH | 25.58+1.35 | 26.69+1.02 | 25.98+1.54 | 26.59+1.32 | H. Perform. |
| UNIMAID | 27.43+2.91 | 24.52+2.48 | 26.82+4.24 | 25.05+2.01 | H. Perform. |

Key: 1-9%=Low Level, 10-19%=Moderate Level, 20 - 30%=High Level

Table 2 presents the mean and Standard deviation of student-athletes of team cohesion in Universities in the North - East Zone, Nigeria. ATBU results showed a high level of team cohesion (basketball 24.07+2.34; handball 24.16+2.50; soccer 24.15+2.70, volleyball 25.82+1.16) high level of cohesion in performance. MAUTECH revealed a high level of team cohesion (basketball 25.58+1.35, handball 26.69+1.02, soccer 25.98+1.54, volleyball 26.59+1.32) high level of team cohesion in performance. UNIMAID 's results showed high level team cohesion (basketball 27.43+2.91, handball 24.52+2.48, soccer 26.82+4.24, volleyball 25.05+2.01) high level of team cohesion in performance.

Hypothesis 1: There is no significant relationship between team cohesion and sports performance in Universities in the North-East Zone, Nigeria.

**Table 3: PPMCC of Team Cohesion and Sports Performance in Universities in the North -East Zone, Nigeria. N=270**

| Variables | Mean | SD | df | r-value | p-value | Decision |
|---|---|---|---|---|---|---|
| Team Cohesion | 17.5167 | 2.6170 | 268 | .273 | .05 | Rejected |
| Performance | 18.1300 | 3.680 | | | | |

Examining PPMCC table 3, the mean and Standard deviation correlation between team cohesion (17.5167+2.6170) and performance 18.1300+3.680) thi indicated high correlation between team cohesion and sports performance. Exploring the r-value (.273) and p-value (.05) which indicated significant relationship exists between team cohesion and sports performance in Universities in the North - East Zone, Nigeria. Therefore, the null hypothesis was rejected. This implies that there was a significant relationship between team cohesion and sports performance.

**Discussion**

This study sought to determine the level of team cohesion of student -athletes in Universities in the North -East Zone, Nigeria. It was found that student-athletes have a high level of team cohesion. This study supports Carron, Coleman Wheeler and Steven (2002) which had found high levels of team cohesion and sports performance between basketball and soccer players. Similarly Ramzaninezhad and Keshtan (2009) reported a study that cohesiveness and successes are related. Highly cohesive teams are more successful than teams with lower levels of Cohesion. In addition, research conducted by Raimbault and Fontayne (2006) reported group qualities, Cohesion can contribute to a team's sense of efficacy. In line with this Spink (1990) found that both individual attractions to the group Objectives, which is significantly different between volleyball players, was high.

This study also agreed with the Lent, Schmidt, Gloster, and Mouring (2004) who reported that Cohesion strongly predicted team rated performance; it also produced a larger correlation with sports performance than did collective efficacy. It may be that cohesive teams are motivated to work more closely together and put more effort into team tasks, resulting in better processes and products. Manning (2008) established in a study carried out concerning Cohesion and Sports Performance and used over 1,000 teams. He found there was a high level of relationship between Cohesion and Sports Performance. Also Wang, Huang and Chang (2011) reported a finding that correlation between perceived teammate support and team cohesion was high which means that the level of teammate support influences the Cohesion of teammates and team cooperation. In other words, the stronger the Cohesive the team has, the higher team support and the more the motivation to perform.

The hypothesis which sought that there was no significant relationship between team cohesion and sports performance in Universities in the North -East Zone, Nigeria was rejected. This result is consistent with the findings of Ramzaninezhad, Keshtan, Shahamat, and Kordshooli (2009) who reported Iranian volleyball clubs' professional league. The findings support the significant relationship between group Cohesion and collective efficacy, and highlight the interdependence in Sport, which can significantly affect the need for group cohesion and collective efficacy that contribute to team performance. Kocaeksi and Koruc (2013) reported on collective efficacy and team cohesion beliefs of successful and unsuccessful teams that there is a significant difference between successful and unsuccessful teams as regards to some dimensions of Cohesion and achievement (performance). This suggested that there was a strong relationship between Cohesion and performance. The results found significant relationship between Cohesion and achievement of both basketball and soccer players in the individual attractions to the group -task dimension (Carron, Bray & Eys, (2002).

Performance has had more Impact on Cohesion than Cohesion has on performance. This means as in Friedley and Manchester (2005) energetic groups of people who are committed to achieving common objectives, who work well together yield quality results are considered to be cohesive. In relation to this Marcos, Miguel,Olivia, and Calvo (2010) mentioned that several studies have highlighted the importance of the relatedness in the group, as well as the role that each player in the team plays. Some authors have pointed out the relevance of interactions in a team as well as clarifying the different roles that each player performs in and out of the match because each athlete plays a key role in the team functioning and affects group Cohesion.

## Conclusion

Based on the findings of this study it was concluded that student-athletes demonstrate team Cohesion that apparently facilitates their performances. Although previous records of their sports performances did not show that they were on top of the tables, they were quite satisfied that they worked as teams and pursued the same goals.

## Recommendations

Based on the results of this study, the following recommendations were preferred:

1. Coaches should encourage student -athletes by developing a high level of coaching competency, which helps design training programmes that meet up with the demands of athletes.
2. Coaches should help train student -athletes develop a high sense of team cohesion especially during training sessions and sports competition.
3. State Sports Directors should liars with the Mobile Network Providers in their domain to help sponsor sports competitions in their various state

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