



## Perceived Relationship between the Use of Psychological Aids and Athletic Performance of University of Benin Student Athletes

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**Abstract.** Psychological aids play a crucial role in enhancing athletic performance by improving focus, motivation, stress management, and overall mental preparedness. This study examines the influence of psychological aids on the perceived performance of Nigerian University Games Association (NUGA) athletes at the University of Benin. The research focuses on psychological techniques such as mental imagery, self-talk, relaxation exercises, and goal setting, assessing their impact on student-athletes' performance. A descriptive survey research design was adopted for this study, with a total population of 268 NUGA athletes. Using a simple random sampling technique, 137 student-athletes were selected. A self-structured questionnaire, validated by experts in Human Kinetics and Sports Science, served as the primary data collection instrument. The reliability of the instrument was established using test for internal consistency, yielding a cronbach alpha value of 0.81. Data were analyzed using descriptive statistics (frequency counts, percentages, mean, standard deviation) and inferential statistics (Pearson correlation). Findings from the research indicate that student-athletes possess a high level of awareness of psychological aids, and their application significantly enhances sports performance. Techniques such as mental imagery, relaxation exercises, and self-talk were found to improve focus, reduce anxiety, and boost confidence. However, challenges such as limited access to sports psychologists and inadequate training on mental skills were identified as barriers to optimal utilization. The study recommends the integration of psychological training into sports programs, increased awareness campaigns, and the provision of professional psychological support to athletes. These interventions will contribute to enhanced athletic performance, mental resilience, and overall sports success among university athletes.

**Keywords:** Perceived Relationship, Psychological Aids, Athletic Performance.

### 1. Introduction

Athletic success is often measured by the extent of an athlete's involvement in sports, where their physical, physiological, strategic, technical, and mental abilities play a significant role in overall performance across most disciplines (Bangsbo, 2015). According to Bangsbo, 2015, in movement-oriented sports, competitors need to demonstrate a combination of fitness, agility, strength, and speed. However, psychological factors are frequently neglected by athletes, coaches, and trainers (Adegbesan, Olowoleni, Abu & Ayodele, 2019). The Nigerian University Games Association (NUGA) was founded in 1965. It is a biennial games where all Nigerian university students come together for sporting activities. University of Benin student athletes have been performing very well in these games. A comprehensive understanding of sports requires the application of exercise science principles, as well as the optimization of training regimens and nutritional intake (Perez-Gomez, Thomassen, Nordsborg, Hellsten & Bangsbo, 2011). As Handelsman (2016) noted, athletes continually assess their progress in sports, aiming for excellence. Hence, setting appropriate goals and maintaining a consistent mindset during training and competition are keys to achieving these objectives. When athletes and coaches accurately define goals and identify areas for improvement, performance is enhanced (Olowoleni & Ayodele, 2021).

According to Olowoleni and Ayodele (2021), various factors, such as physical fatigue, personal circumstances, and professional or educational pressures, influence an athlete's focus and mental sharpness during competition. Psychological interventions involve consistent practice of mental skills to increase enjoyment, improve athletic and physical capabilities, and promote self-satisfaction. These interventions have shown a positive impact on athletes' mental health and competitive outcomes, leading to their widespread adoption (Gross, Moore, Gardner,

Wolanin, Pess & Marks, 2018). Although psychological skills may not directly enhance athletic performance, when combined with physical, technical, and tactical training, they contribute to improved results. Thus, factors like motivation, concentration, stress management, and emotional control are integral to understanding variations in athletic performance (Swann, Crust, Jackman, Vella, Allen & Keegan, 2017). Additionally, techniques such as hypnosis, visualization, music, relaxation exercises, yoga, and other psychological tools have been shown to boost performance in both training and competitions (Swann et al.). The psychological demands athletes face differ depending on the team, age group, gender, competition level, and type of sport (Elbe, 2009). Younger athletes, especially those competing at intermediate levels, often require encouragement to stay committed to their sport, particularly during training and competition. Therefore, fostering psychological development in young athletes is crucial for their success and equips them with vital psychological skills such as self-confidence, emotional regulation, motivation, and recovery techniques. These techniques, including hypnosis, visualization, encouragement, and relaxation methods, are essential for goal achievement and satisfaction in sports (Brière, Yale-Soulière, Gonzalez-Sicilia, Harbec, Morizot, Janosz et al, 2018).

Olowoleni and Ayodele (2020) found that goal-setting is a widely used technique in sports psychology that plays a key role in optimizing performance through mental training. It forms the foundation of psychological learning for athletes and coaches and underpins various methods like confidence-building and motivation. Setting specific, challenging goals results in greater achievement than more general objectives (Bandura, 2013). Goals are known to drive performance by motivating individuals; helping them transit from aspirations to accomplished targets. Mental imagery, or rehearsal, is the vivid mental representation of situations and skills without physically being present. Olowoleni and Ayodele (2020) described it as a simulated experience that engages multiple senses, allowing athletes to mentally visualize scenarios that feel real (Cox, 2012). Imagery involves all five senses—sight, touch, sound, taste, and smell—and is used in sports to reduce anxiety, enhance concentration, and improve self-determination (Parnabas, Parnabas & Parnabas, 2015). This technique helps athletes form mental images of desired outcomes, fostering a state of flow and better preparation for competition. Imagery also sustains goal visualization, contributing to enhanced motor skills and overall performance (Olowoleni & Ayodele, 2020; Di Corrado, Guarnera, Vitali, Quartiroli & Coco, 2019). The mental self-regulation of athletes, including factors like focus and stress control, plays a significant role in their performance, with experience and maturity being key to mastering these elements (Adegbesan et al, 2019). Regardless of skill level, performance anxiety can arise due to an athlete's inability to manage stress during competition (Takayuki & Hiroshi, 2015).

Intrinsic motivation is crucial for success in both training and competition, helping reduce anxiety (Olowoleni & Ayodele, 2021). Therefore, it is necessary to implement strategies that address psychological influences on sports performance, including stress, anxiety, tension, and aggression, through psychological aids such as hypnosis, imagery, and relaxation techniques, which this study aims to explore.

### 1.1 Statement of the Problem

Athletes, coaches, and trainers often overlook the psychological aspects of performance (Adegbesan, Olowoleni, Abu, & Ayodele, 2019), placing too much focus on pure physical skills, which may lead to suboptimal results. However, a combination of both skill and psychological factors is crucial for optimal athletic performance. Despite the long-recognized importance of sports psychology, many coaches ignore its potential to improve team performance (Adegbesan et al.). In Nigeria, many coaches focus on physical training while neglecting the psychological aspects (Olowoleni & Ayodele, 2020). While sports psychologists have specialized training, coaches can also utilize psychological principles to work with athletes and teams effectively (Ravizza, 2008). Athletes who are anxious or emotionally vulnerable are more likely to underperform under pressure, which can affect their ability to recover from mistakes and setbacks (Kaplanova, 2020). Anxiety causes distressing thoughts and affects focus, leading to performance issues. Athletes who experience anxiety can benefit from mental strategies like hypnosis, visualization, positive self-talk, and music, but many fail to recognize or use these tools for performance enhancement. This study aims to examine how these aids will help University of Benin athletes overcome the challenges they face in striving for athletic success.

### 1.2 Research Question

The following research question will guide this study:

- What is the perceived relationship between the use of psychological aids and athletic performance?

### 1.3 Hypothesis

The following hypothesis was formulated and tested at a 0.05 significance level:

H<sub>0</sub>: There is no significant relationship between the use of psychological aids in sports and athletic performance.

## 2. Research Methodology

### 2.1 Research Design

The descriptive survey design was used in carrying out this study. This design typically employs questionnaires to determine the opinions, attitudes, preference and perception of person of interest to the study.

Population of the Study  
The population for this study is of 268 student athletes who train daily using the University of Benin Sports

Complex Facilities/Equipment. The distribution of the student athletes is shown in the table that follows:

**Table 1:** Shows Population of Student Athletes by Departments

S/N	Faculties	Population of Student Athletes
1.	Agriculture	16
2.	Arts	17
3.	Basic Medical Sciences	18
4.	Dentistry	2
5.	Education	81
6.	Engineering	28
7.	Environmental Sciences	2
8.	Law	6
9.	Life Sciences	19
10.	Management Sciences	18
11.	College of Medicine	15
12.	Pharmacy	2
13.	Physical Sciences	29
14.	Social Sciences	15
Total		268

*Source: Office of the Director of Sports, University of Benin Sports Centre (2024).*

### 2.2 Sample and Sampling Technique

The sample size was 137 student athletes. This was obtained using simple random sampling techniques to select 50 percent from each faculty that made up the population. The distribution of the sampled respondents is shown in the table that follows:

**Table 2:** Shows Sampling of Student Athletes by Departments.

S/N	Faculties	Population of Student Athletes	Sample size
1.	Agriculture	16	8
2.	Arts	17	9
3.	Basic Medical Sciences	18	9
4.	Dentistry	2	1
5.	Education	81	41
6.	Engineering	28	14
7.	Environmental Sciences	2	1
8.	Law	6	3
9.	Life Sciences	19	10
10.	Management Sciences	18	9
11.	College of Medicine	15	8
12.	Pharmacy	2	1
13.	Physical Sciences	29	15
14.	Social Sciences	15	8
Total		268	137

### 2.3 Research Instrument

A self-developed, structured and validated questionnaire was used to generate the desired information regarding the influence of psychological aids on perceived sports performance (IPAPSP) of student athletes. The questionnaire was used to formulate statements from the variables of the study under the modified Likert scale response options of: Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD).

### 2.4 Method of Data Collection

The questionnaire was distributed to the respondents (student-athletes) and retrieved on the spot to avoid loss.

### 2.5 Method of Data Analysis

The data collected from the respondents through the questionnaire forms was analyzed using mean and standard deviation. Thereafter, inferential statistics of Pearson correlation was used in testing the hypothesis corresponding to the research question

### 3. Results and Discussion

**Research Question:** What is the perceived relationship between the use of psychological aids and athletic performance?

**Table 3:** Mean and standard deviation of responses on the use of psychological aids in sports and good sports performance

S/N	Items	Mean	SD	Remark
	I believe there is a direct link between using psychological aids and improved performance.	3.21	0.461	Agree
	I perform better in competitions when I use psychological aids.	3.49	0.516	Agree
	I have noticed a difference in my performance when I apply psychological aids compared to when I do not.	3.30	0.611	Agree
	Athletes who use psychological aids generally outperform those who do not, based on my experience.	3.26	0.622	Agree
	I would recommend the use of psychological aids to other athletes aiming for better performance.	3.38	0.643	Agree

Table 3 showed that the mean values range from 3.21 to 3.49, while the standard deviation values range from 0.461 to 0.643. The mean values show that the athletes agree to all five items regarding relationship between use of psychological aids in sports and sports performance, which is also indicated in the average mean of 3.33. The low values of the standard deviation show that their responses do not deviate far from one another.

Hypothesis 1: There is no significant relationship between the use of psychological aids in sports and sports performance.

**Table 4:** Pearson statistics on use of psychological aids in sports and sports performance.

Variables	N	Mean	SD	r-value	p-value	Decision
psychological aids	137	16.20	1.94			
sports performance	137	16.64	1.54	.524	0.000	Ho is rejected

The data in Table 4 revealed an r-value of 0.524, indicating a moderate positive correlation between the use of psychological aids and sports performance. The p-value of 0.000, which is below the 0.05 significance level, suggests the rejection of the null hypothesis, which claims no significant relationship between the use of psychological aids and sports performance. Therefore, there is a significant link between the use of psychological aids in sports and performance outcomes.

#### 4. Discussion of Findings

The research question and the corresponding hypothesis testing showed a significant relationship between the use of psychological aids and sports performance. This supports Martin's (2008) argument that elite athletes may initially resist psychological methods, believing they are only for those with psychological issues, but earlier research suggests that adhering to psychological principles is essential for optimal performance.

Physical performance in sports is not solely determined by an athlete's physiological state; psychological factors also play a critical role. These factors, including attention, concentration, motivation, emotions, stress, and other cognitive variables, significantly affect and enhance performance.

This also aligns more with Adeleke, Kehinde and Afolabi's (2013) observation that the coaches were familiar with psychological principles that can help the student athletes to do well in their sports (performance). Cross et al. (2018), noted the widespread use of psychological intervention (aids) due to their positive

impact on athletes will greatly help athletic performance.

#### 5. Conclusion

The study concluded that student-athletes generally possess a high understanding of psychological aids, leading to widespread use. The advantages of these aids significantly contribute to improved performance, demonstrating a clear relationship between the use of psychological aids and enhanced athletic outcomes.

#### 6. Recommendations

Based on the study's findings, the following recommendations are made:

- Organize regular seminars and workshops to emphasize the importance of psychological aids in sports, aiming to enhance the knowledge of athletes and coaches.
- Coaches should actively encourage athletes to integrate psychological aids into their training to optimize performance.
- Given the strong correlation between the use of psychological aids and sports success, student-athletes should consistently adopt these techniques.

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