

## SELF-DETERMINATION A CORRELATE OF COMPETITIVE ANXIETY AMONGST SELECTED NIGERIAN UNIVERSITY ATHLETES

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### Abstract

*This study sought to investigate relationship between self determination components and competitive anxiety of university athletes during NUGA competition 2016. It was guided by the hypothesis that self determination components will have no significant relationship on competitive anxiety. Self determination components under the study included, autonomy, competence, relatedness and causality orientations. The Basic Psychological Needs Scale (BPNS), General Causality Orientation Scale (GCOS) and the Sport Competitive Anxiety Test (SCAT) were instruments used for data collection. A total of 124 athletes from South East and North Central region of Nigeria participated in the study. The players were selected by simple random sampling. Data were analyzed using descriptive statistics and correlation analysis ( $r$ ) at ( $p=0.05$ ). Findings of the study showed that there was no significant relationship between autonomy, competence and competitive anxiety, therefore the hypotheses were accepted while the fourth hypothesis indicated that, there was significant relationship between causality orientations and competitive anxiety and the hypotheses stated in null form was rejected. The study concluded that self determination components except causality orientations predicted competitive anxiety. It recommended that sports psychologist and coaches should ensure that university athletes identify the components' of being self determined and sustenance of efficiency for these components will discard negative outcomes in sports competitions. Activation of self determination components should be raised to the appropriate level required for optimal performance in competitive situation.*

**Keywords:** Competitive anxiety, Self-determination, University athletes

## Introduction

The dynamics of sports is not entirely based on physiological competence as psychological aspects are equally important. One of this psychological aspect that focuses on the way people interpret internal or external stimulus inputs, and these interpretations gain meaning and power based on their relationship to people's basic psychological needs is called self-determination (Deci & Ryan, 2008). The basic psychological needs are said to be universal and innate, they include the need for autonomy, competence, relatedness and causality orientations.

Research in the area of sports psychology, typically considering able bodied athletes, suggests that levels of motivation are determined by individual self-determination and regulation of competitive behaviour. This assumption is predominantly based on the self-determination theory of motivation which proposes three dimensions of motivational sources: intrinsic motivation (IM), extrinsic motivation (EM) and amotivation (Deci & Ryan, 1985). These fundamental needs must be satisfied in the sports context : firstly to feel autonomous in performing physical activity, this involves being volitional and acting in such a way to represent one's integrated sense of self, the second need is to perceive relatedness with others in the field of involvement, to perceive competence in relation to the activity and need for causality orientations that distinguish its classes of behaviour attributing success and failure to either internal or external locus of causality (Deci & Ryan, 2000; Duda, 2005; Reinboth & Duda, 2006.) Research supports the view that individuals who experience higher levels of satisfaction of these fundamental needs express more self-determined forms of regulation (Deci & Ryan, 2000). Self-determined behaviour are initiated and regulated by choices, based on awareness of psychological needs and integrated goals. Elite athletes are open to nuances of events, people and circumstances that act as agent provocateur of stressors, activating fluctuations or problematic performance in different ways within sport milieu.

Stoeber (2011), aver that players may feel worried, tensed, stressed and threatened prior to or during a competition. These occur as a result of uncertainty and significance of the event, level of competition and crowd actions. Athletes in their perfectionist built possess mental skills of self-determination which is accompanied by adaptive behaviour such as high standards, positive achievement strivings, satisfaction and feelings of enhanced self-esteem and seen as a higher achiever. On the other hand, they exhibit maladaptive behaviour, amongst are: concerns over mistakes, doubt about actions, pressure of being observed and fear of failure which are associated with competitive anxiety. Behzadi, Hamzei, Nori and Salehian (2011) quoted Rezayee (2005) that, in fact, one of the variables that are significantly related to athletic performance is competitive anxiety.

Competitive anxiety is the tendency to determine antagonistic situations and take action accordingly with feelings of stress, pressure and nervousness. The competitive anxiety instantly accelerates just before the competition and suddenly decelerates after the

competition (Ahsan, Ruru & Kumar 2014). Competitive anxiety is one of the factors to decrease athletes' performance (Esfahani & Soflu, 2010). Student athletes participation trends indicate that a significant portion of the students population aspire to engage in sports but have lower participation rates. University athletes are participants in an organized competitive sport sponsored by the educational institution in which they enrolled. They must typically balance the roles of being a full-time student and a full-time athlete as they face high levels of stress related to their performances both in their sport and in the classroom. This stress is heightened by the expectations placed on the student athletes, by their coaches, administration and teammates to perform at a very high level (Kessinger & Miller 2007). University athletes typically experience different levels of stress based on various things that happen during their college lives for example pursuing a degree, time management and fluctuations between new experiences and transitions among others. Oyewumi, Dansu and Sunmonu (2011) buttressed that the academic structure of Nigerian tertiary institutions has no plan or provisions for the student athletes as a special population. They are saddled with so many obstacles including variations in academic calendar among institutions, unstable lectures and tutorials clashing with practice or training period test or examination anxiety while on training or competition tour, as well as the issue of hostel accommodation. All the experiences are heightened because everyone expects them to perform well at a high level all the time both inside and outside of the classroom and sports competitions. The consequences of not performing are very intense and can be severe and could even take the form of ridicule or even worse (Kessinger & Miller 2007). This may be viewed as problem because student's should be making tangible steps toward a future that focuses on all of their strengths, not just their athleticism but things such as professional contracts entice student athletes to put more effort into their sport. Student athletes experience complex developmental issues that should be addressed in the programmes and policies created by the institution. Athletes in the tertiary institutions are confronted with the challenges of balancing studies and optimum performance in competitive sports. It is imperative to understand the interplay demonstrated between self-determination psychological needs and competitive anxiety. Self-determination perspectives are typically used to explain motivational styles and associated behaviour in the face of competitive anxiety. An integrated approach, by amalgamating components of self-determination, proposes a redundant and comprehensive approach to understanding athlete motivation and consequent behaviour when an athlete experience competitive anxiety (Hagger, 2009).

In recent times, research has shown the interplay between self-determination perspectives and motivational differences, these variations indicates the direction of consequence behaviour exhibited by student athletes when they are confronted with competitive anxiety. The consequent behaviour are adaptive and maladaptive, adaptive behaviour such as *effort, satisfaction, persistence, autonomous*, are related to most self-

determined and high levels of intrinsic motivation (integrated and identified regulation) while maladaptive behaviour such as concerns over mistakes, doubt about actions, pressure of being observed and fear of failure which are associated with competitive anxiety. These are related to moderately self-determined with extrinsic motivation and less self-determined with amotivation. (Stump & Parker, 2000; Stoeber & Otto, 2006; Stoeber & Becker, 2008; Hamidi & Beshrat, 2010; Cervellón & González-Cutre, 2010; Stoeber, 2011; Sarkar & Fletcher, 2012; Gomez-Lopez, Granero-Gallegos, Rodriguez-Suárez & Abrales, 2013)

Athletes in the tertiary institutions are confronted with the challenges of balancing studies and optimum performance in competitive sports. It is thus of utmost importance to examine the factors related to anxiety in athletes. This study intends to explore the relationship between self-determination components and competitive anxiety in university athletes.

### **Research Question**

1. To what extent is the relationship between self-determination components of university athletes and competitive anxiety?

### **Research Hypotheses**

- Ho1 . There will be no significant relationship between autonomy and competitive anxiety among university athletes
- Ho2 . There will be no significant relationship between competence and competitive anxiety among university athletes
- Ho3 . There will be no significant relationship between relatedness and competitive anxiety among university athletes
- Ho4 . There will be no significant relationship between causality orientations and competitive anxiety among university athletes

### **Methodology**

The participants for the study were university athletes in attendance during 2016 NUGA games. They comprised of athletes from UNN and BSU participating in both individual and team sports. The random sampling technique was used to select 124 athletes as participant for the study. Standardized research instrument of Basic Psychological Needs Scale (BPNS), General Causality Orientation Scale (GCOS) and Sport Competitive Anxiety Test (SCAT) questionnaire were used to collect data for the study. The test retest reliability method was used to ascertain consistency and reliability of the instruments with reliability co-efficient of BPNS = 0.76 : 0.78 (*r*), GCOS = 0.77: 0.78(*r*) and SCAT = 0.76 : 0.78(*r*).

Demographic data of respondents

Table 1: Frequency distribution of respondents according to institution

|           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid BSU | 64        | 51.6    | 51.6          | 51.6               |
| UNN       | 60        | 48.4    | 48.4          | 100.0              |
| Total     | 124       | 100.0   | 100.0         |                    |

Table 1: reveals that a total of 124 university athletes were involved in the study ,where 64 (51.6%) were from Benue State University and 60 representing (48.4%) were athletes from the University of Nigeria Nsukka.

Table 2: Frequency distribution of respondents according to sports

|                  | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------|-----------|---------|---------------|--------------------|
| Valid Individual | 62        | 50.0    | 50.8          | 50.8               |
| Team             | 60        | 48.4    | 49.2          | 100.0              |
| Total            | 122       | 98.4    | 100.0         |                    |
| Missing System   | 2         | 1.6     |               |                    |
| Total            | 124       | 100.0   |               |                    |

Table 2 showed that , 62 athletes representing ( 50%) participated in individual sports while 60 are athletes participating in team sports representing ( 48.4%) and 2 athletes (1.6%) missing ,which means their type of sport was not indicated

Table 3: Frequency distribution of respondents according to gender

|            | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid MALE | 66        | 53.2    | 53.2          | 53.0               |
| FEMALE     | 58        | 46.8    | 46.8          | 100.0              |
| Total      | 124       | 100.0   | 100.0         |                    |

Table 3 shows that out of the total athletes involved in the study was 124, 66 (53.2%) were male and 58(46.8%) were female .This reveals there were more males for the study than female.

**Table 4: Frequency distribution of respondents according to age**

|                | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| BELOW 20YRS    | 54        | 43.5    | 43.5          | 43.5               |
| Valid 21-25YRS | 66        | 53.2    | 53.2          | 96.8               |
| 30 YRS ABOVE   | 4         | 3.2     | 3.2           | 100.0              |
| Total          | 124       | 100.0   | 100.0         |                    |

Table 4 above revealed that 54 (43.5%) were athletes below the age of 20years ,66 representing (53.2%) are between the ages of 21-25 and 4 (3.2%) are athletes above 30years of age.

**Table 5: Frequency distribution of respondents according to Sport Participation Experience**

|                | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| 0-2YRS         | 12        | 9.7     | 9.8           | 9.8                |
| Valid 3-5YRS   | 72        | 58.1    | 59.0          | 68.9               |
| 6YRS ABOVE     | 38        | 30.6    | 31.1          | 100.0              |
| Total          | 122       | 98.4    | 100.0         |                    |
| Missing System | 2         | 1.6     |               |                    |
| Total          | 124       | 100.0   |               |                    |

Table 5 above revealed the years of sports participation experience of the athletes. 12 athletes (9.7%) have 2 years' experience, 72 athletes (58.1%) have 3to 5 years' experience and 38 athletes ( 30.6%) have six years' experience . 2 athletes' years of experience in sports participation was not indicated (missing).

**Table 6 : Descriptive Statistics**

|             | Mean   | Std. Deviation | N   |
|-------------|--------|----------------|-----|
| AUTONOMY    | 1.7258 | .44975         | 124 |
| RELATEDNESS | 1.8710 | .33797         | 124 |
| COMPETENCE  | 1.9032 | .29806         | 124 |
| CAUSALITY   | 1.7499 | .92214         | 124 |
| ANXIETY     | 2.0161 | .55786         | 124 |

The descriptive statistics of the components and competitive anxiety showed that athletes' competitive anxiety score was the highest with (M= 2.02; S.D.= 0.56), followed by

competence ( $M= 1.90$ ;  $S.D.= 0.30$ ), relatedness ( $M= 1.87$ ;  $S.D.= 0.34$ ), causality orientations ( $M= 1.75$ ;  $S.D.= 0.92$ ) and the least is autonomy ( $M= 1.73$ ;  $S.D.= 0.45$ )

**Hypotheses 1:** There will be no significant relationship between autonomy and competitive anxiety among university athletes

**Table 7: correlations**

|                          | AUTONOMY | ANXIETY |
|--------------------------|----------|---------|
| Pearson Correlation      | 1        | -.113   |
| AUTONOMY Sig. (2-tailed) |          | .383    |
| N                        | 124      | 124     |
| Pearson Correlation      | -.113    | 1       |
| ANXIETY Sig. (2-tailed)  | .383     |         |
| N                        | 124      | 124     |

\*\*. Correlation is significant at the 0.05 level (2-tailed)

Since the calculated correlation coefficient ( $r$ ) between autonomy and competitive anxiety is  $(-.113, p > 0.05)$  which is not statistically significant as the  $p$  value (sig .2 tailed) of .383 is greater than the chosen alpha of 0.05. Therefore the null hypothesis of no significant relationship between autonomy and competitive anxiety fails to be rejected. There is negative low correlation between autonomy and competitive anxiety. This simply indicate that moderate level of autonomy will reduce drastically competitive anxiety in athletes. Therefore overwhelming statistical evidence has shown indeed there is no significant relationship between autonomy and competitive anxiety.

**Hypotheses 2:** There will be no significant relationship between competence and competitive anxiety among university athletes

**Table 8 Correlations**

|                            | ANXIETY | COMPETENCE |
|----------------------------|---------|------------|
| Pearson Correlation        | 1       | .108       |
| ANXIETY Sig. (2-tailed)    |         | .403       |
| N                          | 124     | 124        |
| Pearson Correlation        | .108    | 1          |
| COMPETENCE Sig. (2-tailed) | .403    |            |
| N                          | 124     | 124        |

\*\*. Correlation is significant at the 0.05 level (2-tailed)

The calculated correlation ( $r$ ) between competence and competitive anxiety is (.108) with a significant value of  $.403 > 0.05$  which is not statistically significant as the  $p$  value (sig .2 tailed) of .403 for two tailed test is greater than the chosen alpha of 0.05. Therefore the null hypotheses of no significant relationship between competence and competitive anxiety fails to be rejected because  $r = (.108)$ ,  $p > 0.05$ . There is very low positive correlation between competence and competitive anxiety. This implies that increase in level of competence in an athlete will allow very low level of competitive anxiety. Therefore there is no significant relationship between competence and competitive anxiety.

**Hypotheses 3:** There will be no significant relationship between relatedness and competitive anxiety among university athlete

**Table 9: Correlations**

|             |                     | RELATEDNESS | ANXIETY |
|-------------|---------------------|-------------|---------|
| RELATEDNESS | Pearson Correlation | 1           | .185    |
|             | Sig. (2-tailed)     |             | .150    |
|             | N                   | 124         | 124     |
| ANXIETY     | Pearson Correlation | .185        | 1       |
|             | Sig. (2-tailed)     | .150        |         |
|             | N                   | 124         | 124     |

**\*\*.** Correlation is significant at the 0.05 level (2-tailed)

A low positive Correlation coefficient ( $r = .185 < 1$ ) with a significant value of ( $.150 > 0.05$ ) was found between relatedness and competitive anxiety, therefore the hypotheses which states that there will be no significant relationship between relatedness and competitive anxiety is hereby accepted. This simply means that increase in athlete's relatedness will reduce level of competitive anxiety in sports competitions.

**Hypotheses 4:** there will be no significant relationship between causality orientations and competitive anxiety among university athletes.

**Table 10: Correlations**

|           |                     | CAUSALITY | ANXIETY |
|-----------|---------------------|-----------|---------|
| CAUSALITY | Pearson Correlation | 1         | .377**  |
|           | Sig. (2-tailed)     |           | .003    |
|           | N                   | 124       | 124     |
| ANXIETY   | Pearson Correlation | -.377**   | 1       |
|           | Sig. (2-tailed)     | .003      |         |
|           | N                   | 124       | 124     |

**\*\*.** Correlation is significant at the 0.05 level (2-tailed)

Causality orientations and competitive anxiety has a positive significant correlation ( $r=.377<1$ ), with a significant value of ( $.003 < 0.05$ ). This shows that increase in athletes causality orientations will definitely results into high level of competitive anxiety in athletes. Therefore, the hypothesis of no significant relationship between, causality orientations and competitive anxiety is hereby rejected.

### **Discussion of Findings**

Athletes' performance in sports competitions are characterized by various psychological components which determines both desirable and undesirable outcomes. Attaining the height of participating in games indicate the level of preparedness and efficiency with psychological components required. The findings from this study showed that autonomy, competence and relatedness as components of self-determination present in an athlete, will allow little or zero level of competitive anxiety in sport competitions. This is in line with the findings of (Sheldon, Williams and Joiner 2003; Chatzisarantis and Hagger 2007; Ryan, Williams, Patrick and Deci 2009) which revealed that autonomy is an internal state reflecting the integrated endorsement and organization of actions, competence is the experience of some level of effectiveness and confidence an relatedness the sense of connection and belonging which is essential to wellness and integrity. Also, Adie Duda and Ntounamis (2008) buttressed from their findings that self-determination components (autonomy ,competence and relatedness) predicted greater subjective vitality when engaged in sports while those athletes with low levels of these basic needs were especially susceptible to feeling emotionally and physically drained by their involvement in sports competitions. The presence of the basic psychological components of self-determination at a certain height in an athlete where confidence is built does not entertain or allow any form of negative consequences when competitive anxiety is absent. Causality orientations as one of the components of self-determination is related to competitive anxiety which measure individual differences in athletes orientations towards autonomous, control determined and impersonal functioning as its classes of behaviour according to Koestner and Zuckerman 2004:, Reinboth and Duda 2006:, Asssativ and Hassanein : 2014 satisfaction need for autonomy within the internal locus of causality served as a predictor of subjective vitality and positive self-evaluation with low levels of guilt. while (Deci and Ryan 2008:,Vallerand and Rousseau:,2010) from their studies stated that control determined orientation as one of the classes of causality orientations with regard to achievement appears to be related to adoption of a pressured ,extrinsic orientation and negative response towards sports activities. The impersonal orientation has been shown to be significantly related to negative self-evaluation as reflected in self-derogative and low self-esteem. Causality orientation in achievement settings is predictive of helpless feelings, thought and maladaptive behaviour in sports competitions.

This study has shown that autonomy, competence and relatedness as components of self-determination has no correlation with competitive anxiety which means moderate and high level of these components in an athlete discard the presence of competitive anxiety in sport competitions while causality orientations is correlated to competitive anxiety due to the its characterized negative self-evaluation and low self-esteem accompanied with maladaptive behaviour when in the pool sport performance.

### **Conclusion**

The peak of athleticism for a university athlete is attaining the height of participating in national competitions and tournaments. To sum up, this study integrates the self-determination components and connects them with competitive anxiety as a positive or negative consequence at different levels of attainment. The results obtained support some postulates and corollaries established by (Steober, 2011; Sarkar& Fletcher, 2012; Gomez-Lopez, Granero-Gallegos, Rodriguez-Suárez &Abrales 2013) which emphasized the importance of athletes' and coaches' understanding of different personal psychological built for sport competitions.

### **Recommendations**

Mastery of sport skills transmitted by the coach should involve the basic needs of autonomy, competence, relatedness and autonomous class of causality orientations as this will increase the athletes level of self-determination and a higher disposition to obtain optimal psychological execution experiences that promotes athletes' sports adherence and optimal performance .

This study suggest that sport psychologists and coaches should ensure athletes at the height of been an elite performer, should be able to identify the components' of being self-determined. This will assists the athletes to attain sustenance of efficiency; these components will discard negative outcomes in sports competitions. University athletes who are debilitating should implement cognitive restructuring technique and raise activation of self-determination components to the appropriate level required for competitive situations. Moreover, in this study a correlational design has been used, these variables could be studied longitudinally or experimentally to be able to establish more definitive conclusions and thus further our knowledge of psychological skills and physical activity. ,

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