Original Research Article

An Analysis of Competition Anxiety for Different Positioned Basketball Players

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ABSTRACT

Anxiety is a psychological condition which changes the internal state of the body. During competition of games and sports the anxiety level is increased and might influence the performance of an athlete. The purpose of the study was to study the competition anxiety of National level basketball players and to find out the difference in competition anxiety level among the players played for different position. A total of 62 national level basketball players within the age of 15-19 years were selected randomly as subject for this study. Positional competition anxiety was studied by measuring the competition anxiety of players who played in different position and bear separate responsibility in basketball match. Competition anxiety level was the criterion measure in this study. Competition anxiety was measured by Illinois Competition Anxiety Test Questionnaire (1977) Mean and standard deviation was used as descriptive statistics and coefficient of correlation was calculated by product moment method. All calculations were done by the standard statistical procedure. Only 0.05 level of significance was considered for the present study. Result revealed higher anxiety level for defensive position basketball player than feeder position and offence position. Lowest was found for feeder position. However, the significance of difference of competition anxiety for different position player in basketball was calculated by ANOVA and result revealed that difference was not statistically significant. From above findings it was concluded that there was no significant difference in the competition anxiety for different position player in basketball.

Key words: Basketball players, Competition anxiety, Position of play, National level.

INTRODUCTION

Anxiety is a negative emotional state with feelings of worry, nervousness and apprehension that is associated with the activation of the body. [1] It leads to stress on our body. The issue of anxiety is an important aspect of performance. Sports performance is not only a product of physiological factors and biomechanical techniques but psychological factors also play a crucial role in determining performance. Anxiety can affect performance in many ways. Whether it is during the tense moments of a championship game or amidst that dreaded History exam, anxiety affects our performance via changes in the body, which can be identified by certain indicators such as cutting nail by teeth, moving around aimlessly, headache, cold and clammy hand, constant need to urine etc. Sports-related anxiety is to be associated with psychological dysfunction and drop-outs for young athletes from sports. [2,3] Han, Kim and Lee (2006)

speculated that anxious athletes with distorted perception would be more sensitive and irritable in competitive arenas. [4] Competition anxiety is also a native emotional state with feeling of worry and nervousness during competition. Performance executed by different players in different position is also influence by the psychological factors. Every athlete has a certain anxiety level that is a key factor to affect his or her performance. This anxiety or stress level also depends on factors such as past experiences, coping responses and genetics. According to the Eysenck's study (1982) the playing position in the team and the level of sports should be considered in research study to identify the factors influence on sports performance. [5] Present paper studied the anxiety level of different positional players of Basketball in competitive situation.

A number of theories have been developed to attempt to clarify the relationship between stress and performance. In 1943, the drive theory was introduced. It was claiming that an athlete who is appropriately skilled will perform better if their drive to compete is aroused. The inverted-U theory was formed in 1962. It states that there is an optimal amount of arousal that an athlete will perform at. However, if that level of arousal is passed then the level of performance will decrease. The same thing happens when the level of arousal is lower than the optimal level. Though this hypothesis has had much support for many years, it too has fallen out of favor due to its over simplification on a subject as complex as brain and behavior. Other theories that have been proposed like the multidimensional anxiety theory and the catastrophe theory all make their predictions on how anxiety plays a role in one's performance level, but the results remains inconclusive. [6]

In recent research, the factor of competitive anxiety has been dissected into two segments - somatic and cognitive anxiety. Cognitive anxiety is characterized by negative expectations, lack of concentration, and images of failure. Somatic anxiety refers to physiological symptoms such as sweaty hands and tension and other physiologic changes. [7] In order to chalk out optimal performance, the precursors of anxiety need to be sought out. The temporal patterning of anxiety, before, during and after competition has been receiving a lot of attention in research.

A certain level of stress is needed for optimal performance. Too little stress expresses itself in feelings of boredom and not being challenged. Several studies reported that a certain level of stress is needed for optimal performance. Competitive stress does not necessarily impair performance and can in certain circumstances enhance it. At an optimum level of stress one gets the benefits of alertness and activation that improves performance. [8] But even while making such statements; it is important to realize that there is currently no conclusive evidence except for the fact that stress and anxiety do have an influence in performance. The purpose of the present study was to find out the anxiety level of the Basketball players who were engaged to perform specific responsibility in different position.

MATERIALS AND METHODS
Subject
A total of 62 national level basketball players (23 male and 39 female) within the age of 15-19 years were selected randomly as subject for this study.
Criterion measure
Competition anxiety level was the only criterion measure in this study.
Test and Tools used

Competition anxiety was measured by Illinois Competition Anxiety Test Questionnaire (1977). [9]

Statistical procedure

Mean and standard deviation were used as descriptive statistics and one way ANOVA was computed to find out the significance of difference between three different groups. Only 0.05 level of significance was considered for the present study. All statistical calculations were done by the standard statistical software.

RESULTS AND FINDINGS

The mean value and standard deviation of competition anxiety of three positional players namely Defensive position (Gr-A), Midfield position (Gr-B) and Offence Position (Gr-C) have presented in table-1. As the mean values for different groups were different the ANOVA was computed to find out the significance of the difference between means and result have presented in Table-2.

Table-1: Mean and SD of competition anxiety of three positional players in Basketball

Statistical parameters	Gr-A	Gr-B	Gr-C
Mean	18.9	16.53	17.42
Standard Deviation	3.05	2.87	2.23
Number of Subjects	21	26	15

Table-2: Result of ANOVA for competition anxiety of three positional players in Basketball

Sources of variation	df	Sum of squares	Mean square variance	F-value
Among the mean of conditions	2	52.91	26.46	0.202#
Within condition	59	7738.09	131.15	
Total	62	7791		

Not statistically significant.

As per Table-1 the highest mean value for competition anxiety was found for Gr-1 group and lowest was found for Gr-2. The result presented in graphical form in Figure-1. The result of ANOVA indicated that this difference in competition anxiety between different positional players was not statistically significant.
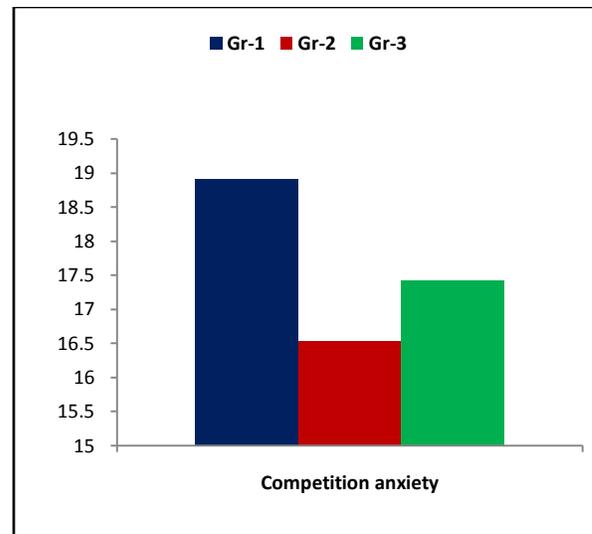

Figure-1: Comparison of competition anxiety of different positional players in Basketball

DISCUSSION

Anxiety leads psychological stress which effects sports performance differently. Present study found higher competition anxiety in Basketball among defenders and lowest for midfielders. The second highest competition anxiety level was found for attacking players. This might be due to the defending players were always anxious and worried about the opponent attacks and they always tried to protect them to make score. On other side midfielders were mainly engaged to supply the ball to the attacking team mates for scoring. As they were not directly responsible for scoring their anxiety might be lower. The attackers were also responsible to make score for their team and thus they were felt a little bit more anxiety than midfielders. Statistically in significant F-value proved that all players of a team in competition were felt anxiety almost same level. Han (2011) reported the better cognitive performances were negatively correlated with stress and anxiety. [10] Landers, Wang and Courtet (1985) analyzed both experienced and inexperienced shooters to establish links between stress conditions and peripheral narrowing. They found that

increased levels of arousal subsequently result in a narrowing of the athlete's field of attention. [11] Han, Kim and Lee (2006) found both trait and state anxieties of the 'winner' group were lower than those of the 'no winner' group. [4] Anxiety effect negatively on sports performance which developed during the competition might be due to the fear of failure, concerns about social evaluation by others (particularly the coach and the team mates & the spectators), lack of readiness to perform, and loss of internal control over one's environment. [12]

CONCLUSION

The competition anxiety level of the different positioned Basketball player was different among which the defenders had highest anxiety level, followed by the shooter and midfielders, though the difference in anxiety level between groups was not statistically significant.

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