

A Comparative Study on Achievement Motivation and Sports Competition Anxiety among the Students of Different Tier of Academic Hierarchy

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Abstract—Introduction: Motivation is basic drive for all kinds of action. It has direct influence on academic achievement and sports performance that builds urge to incentive values of success. In other words, it can be defined as the need for success to attain excellence. Anxiety in pre competition especially in sports formulates positive inward settings in mind to overcome the challenge. There is a tendency to perceive competitive situations as some threatening issues and to respond them with feelings of apprehension and tension. Aim: Aim of the study was to compare the achievement motivation and competition anxiety among three different classes of students. Methods and Materials: To conduct the study the researcher has taken 131 male subjects from three different classes as Extra Department, Bachelor of Physical Education-I and Master of Physical EducationII, aged 19-28 years. Achievement motivation and sports competition anxiety were measured by the questionnaire. To analyze the data mean, standard deviation for each parameter as descriptive statistics and one way analysis of variance as inferential statistics were employed. Results: From the result of the study in achievement motivation ($p \geq 0.05$) and competition anxiety ($p \geq 0.05$) no significant differences were found among the said three groups. Conclusion: The study concluded that all three groups had almost the same state of achievement motivation and sports competition anxiety.

Keywords—Anxiety, sports psychology, sports competition anxiety, achievement motivation, academic hierarchy.

I. INTRODUCTION

Achievement motivation and sports competition anxiety are two important factors in the sports field. These two have great relationship in sports performance of an athlete. Khan et al. reported that high level of anxiety is associated with low level achievement motivation in players [1].

Anxiety is the emotional and cognitive dimension of physiological arousal. The symptoms of anxiety are negative emotional feelings, poor concentration level, increased pulse rate, perspiration, body temperature, blood pressure etc. Anxiety is a motivating force that, an inherent aspect of competitive mind is required for players to meet the demands of competition and to perform well under pressure.

Achievement motivation is defined as a habitual desire to achieve goal through individual effort. The achievement

oriented highly motivated athletes will demonstrate an extremely high persistence at actively, exhibit exceptional quality in performance. Motivation is the driving forces which provide the mental power to accept the regular training and face the challenges in the competition. Player who later reached international level in tennis possessed significantly higher level of achievement motivation than the player who never reached international level [2].

Extra departmental (E.D.), bachelors of physical education (B.P.ED.), masters of physical education (M.P.ED.) students are those who regularly participated in sports and Physical Education activities as a part of their educational curriculum. They are involved in sports as per schedule class routine for achieving the degree. The under graduate students are called E.D. students in Jadavpur University, M.P.ED. is a post-graduate degree in physical education. B.P.ED is a professional course before M.P.ED.

During performing sports, psychological state is very important consideration. Mood, attention, interest, emotion all act on one's performance. Regular involvement of sports builds anxiety because everyone wants to achieve high performance. Age and experience are very important factors which affect the performance level. According to this circumstance, this study aims to find out that whether there exist any differences in sports competition anxiety and achievement motivation among three tiers of students.

A. Objectives of the Study

- To compare the achievement motivation among the three different classes students; E.D., B.P.ED.-I and M.P.ED.-II.
- To compare the competition anxiety among the three different classes students; E.D., B.P.ED.-I and M.P.ED.-II.

B. Hypothesis of the Study

It was hypothesized that:

- Ho1: There was no significant difference in achievement motivation between three different classes.
- Ho2: There was no significant difference in sports competition anxiety between the three different classes.

II. SUMMARY FROM PAST STUDIES

Andrews and Debus worked on 'Persistence and the causal perception of failure: Modifying cognitive attributions' and

findings provide support for the attribution model of achievement motivation and provide an empirical foundation for the rationale of attribution retraining programs [3].

Atkinson and Litwin conducted a study on 'Achievement motive and test anxiety conceived as motive to approach success and motive to avoid failure'. The results highlight the importance of discovering why different methods of measuring apparently the same human motive do not yield comparable results [4].

Elliot et al. worked on 'A hierarchical model of approach and avoidance achievement motivation' and reported that mastery goals were grounded in achievement motivation and high competence expectancies; performance-avoidance goals, in fear of failure and low competence expectancies; and performance-approach goals, in achievement motivation, fear of failure, and high competence expectancies. [5]

Diener and Dweck worked on 'An analysis of learned helplessness: Continuous changes in performance, strategy, and achievement cognitions following failure' and suggest that in addition to the nature of the attribution one makes, the timing or even occurrence of attributions may be a critical individual difference [6].

Jones et al. conducted a study on 'Intensity and Direction as Dimensions of Competitive State Anxiety and Relationships with Competitiveness' and examined that there were no significant group differences on intensity of cognitive anxiety or of somatic anxiety or on direction of somatic anxiety; however, the highly competitive group of 34 subjects reported their anxiety as more facilitative and less debilitating than the low competitive group ($n = 35$) [7].

Jose worked on "Achievement motivation and stress on performance of archers in Kerala" and reported that achievement motivation and performance showed significant positive correlation ($r = .712$), whereas stress and performance showed significant negative correlation ($r = -.602$). Achievement motivation and stress are negatively correlated to each other ($r = -.459$) [8].

Rotter worked on 'Generalized expectancies for internal versus external control of reinforcement'. The report also describes the development of tests of individual differences in a generalized belief in internal-external control and provides reliability, discriminant validity and normative data for 1 test, along with a description of the results of several studies of construct validity [9].

Weiner and Kukla conducted a study on 'An attribution analysis of achievement motivation' and reported six experiments which relate achievement motivation to causal ascription and this study contended cognitions about causality mediate between level of achievement needs and performance [10].

Weiner and Heckhausen worked on 'Causal ascriptions and achievement behaviour: A conceptual analysis of effort and reanalysis of locus of control' and concluded that attributions to effort play an important role in determining the direction, magnitude, and persistence of achievement-oriented activity [11].

Weiner worked on 'An attribution theory of achievement motivation and emotion' and proposed a theory of motivation and emotion in which causal ascriptions play a key role. The strength of the empirical evidence and the capability of this theory to address prevalent human emotions are stressed, and examples of research on parole decisions, smoking cessation, and helping behavior are presented to illustrate the generalizability of the theory beyond the achievement-related theoretical focus [12].

III. METHODOLOGY

Selection of subjects, sampling technique, selection of variables, statistical procedure, procedure for administering the test, collection of data, and design of the study are described as follows:

A. Subjects

131 students were selected as subjects from different classes. From E.D, B.P.ED.-I, and M.P.ED.-II 48, 48 and 35 male students were considered respectively, aged ranging between 19-28 years.

B. Selection of Variables

The variables were Achievement motivation and Sport Competition Anxiety, and measured by Muthee J.M & Immanuel Thomas Questionnaire (2009) [13] and Questionnaire (SCAT) developed by Rainer Martens (1977) [14] respectively.

C. Design of the Study

Questionnaires were distributed to the students consecutive three days for three classes and then collected with their feedback. If any confusion was raised the researcher with the senior research scholar clarified that.

D. Collection of Data

1. Achievement Motivation

The purpose was to measure Achievement motivation of the subjects.

Procedure: At the beginning the subjects sat in a classroom. A copy of questionnaire had been provided to each of the subjects. The questionnaires provided to the subjects were the achievement motivation questionnaires of sports. In the questionnaire there are 32 questions and each question had five alternatives. The following instructions were given to the subjects:

1. Mention the particulars at the top of the answer sheet.
2. Answer the questions as frankly and truly as possible.
3. Read each statement below, decide if you "completely agree", "mostly agree", "agree to some extent" "mostly disagree" or "completely disagree" and tick the appropriate box to indicate your response.
4. Don't skip any question. Occasionally, a statement may not seem to apply to you or your interest, but answer each one somehow.

After delivering the instructions, the subjects started answer

the question. The answer sheets were collected from the subjects when they noised their input of information.

Scoring: After checking the answers, marks were given according to the chosen options and adding points. The total point earned in 32 questions was considered as score in achievement motivation test.

2. Competition Anxiety

The purpose was to measure the sports competition anxiety of the subjects.

Procedure: At the beginning the subjects sat in a classroom. A copy of questionnaire had been provided to each of the subjects. The questionnaires provided to the subjects were the sports competition anxiety questionnaires of sports. In the questionnaire there are 15 questions and each question had three alternatives. The following instructions were given to the subjects.

1. Mention the particulars at the top of the answer sheet.
2. Answer the questions as frankly and truly as possible.
3. Read each statement below, decide if you “rarely”, “sometimes”, or “Often” feel this way when completing in your sport, and tick the appropriate box to indicate your response.
4. Don’t skip any question. Occasionally, a statement may not seem to apply to you or your interest, but answer each one somehow.

After the completion of instructions, the subjects started answer the question. The answer sheets were collected from the subjects when they noised their input of information.

Scoring: After checking the answers, marks were given according to the chosen options and adding points. The total point earned in 15 questions was considered as score in sports competition anxiety test.

E. Statistical Procedure

The obtained data were treated statistically to get results and to draw conclusions. The mean and S.D. were used as descriptive statistics. The significance of statistical difference among three groups was measured by one way ANOVA test, as inferential statistics.

IV. RESULTS AND DISCUSSIONS

The Mean and S.D. of achievement motivation of different three classes were presented in Table I.

TABLE II
MEAN AND S.D. OF ACHIEVEMENT MOTIVATION OF THREE DIFFERENT CLASSES

Groups	No. of students	Mean ± S.D.
E.D.	48	113.19 ± 14.28
B.P.ED-I	48	111.79 ± 13.28
M.P.ED-II	35	110.8 ± 15.16

Table I shows that the mean and standard deviation of achievement Motivation of E.D students were 113.19 ± 14.28 , B.P.ED.-I students were 111.79 ± 13.28 and M.P.ED.-II students were 110.8 ± 15.16 . It is clear that the mean

achievement motivation of E.D. students was greater than the other two groups.

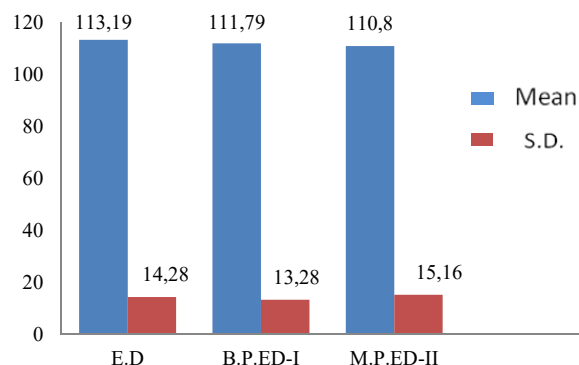


Fig. 1 Bar diagram of Mean and S.D. of achievement motivation in three different classes

TABLE II
ONE-WAY ANALYSIS OF VARIANCES OF ACHIEVEMENT MOTIVATION AMONG THE THREE GROUPS

Source	Degrees of Freedom (df.)	Sum of Squares (SS)	Mean Squares (MS)	'p'-value
Between Groups	2	119.98	59.99	
Within Groups	128	25686.95	200.68	0.74
Total	130	25806.93		

Level of significance- 0.05

Table II shows that p-value of three groups was 0.74, which was greater than 0.05. So, there were no significant differences of achievement motivation among three classes. Thus the study shows that achievement motivations among three groups bears no significant differences but having variations in mean because they were studying at same university level, their mentality or mental alertness might be worked as more or less same. Age group of all three classes lies between 19 to 28 year and they were fall adulthood age group thus their mental capability might be the same. The students of all three classes were in the field of sports and physical education thus there were no differences of achievement motivation.

The Mean and S.D. of sports competition anxiety of different three classes were presented in Table III.

TABLE III
MEAN AND S.D. OF SPORTS COMPETITION ANXIETY OF THREE DIFFERENT CLASSES

Groups	No. of students	Mean ± S.D.
E.D	48	19.21 ± 3.25
B.P.ED-I	48	18.81 ± 3.43
M.P.ED-II	35	18.81 ± 3.82

Table III shows that the mean and standard deviation of sports competition anxiety of E.D. students were 19.21 ± 3.25 , B.P.ED.-I students were 18.81 ± 3.43 and M.P.ED.-II students were 18.81 ± 3.82 . It is clear that the mean sports competition anxiety of E.D. students was greater than the other two groups.

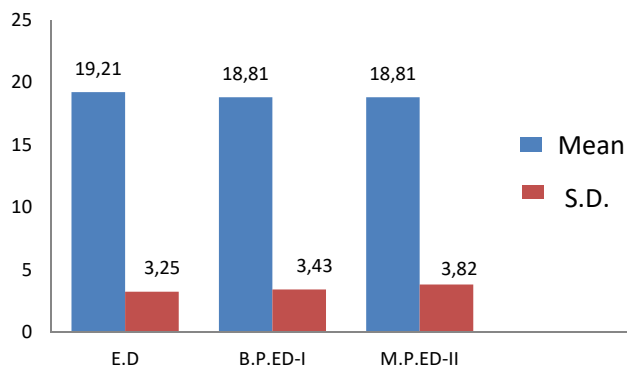


Fig. 2 Bar diagram of Mean and S.D. of sports competition anxiety in three different classes

TABLE IV
ONE-WAY ANALYSIS OF VARIANCES OF COMPETITION ANXIETY AMONG THE THREE GROUPS

Source	Degrees of Freedom (df)	Sum of Squares (SS)	Mean Squares (MS)	'p'-value
Between Groups	2	6.13	3.06	
Within Groups	128	1538.77	12.02	0.77
Total	130	1544.89		

Level of significance- 0.05

Table IV shows that 'p'-value of three groups was 0.77, which was less than the table value 3.07 at 0.05 level of significant. Thus we can say that there were no significant differences of competition anxiety among three classes.

The result of competition anxiety shows that there was no statistical significant difference, but E.D. students have more competition anxiety than B.P.ED.-I, and M.P.ED.-II students. The E.D. students are coming from other general stream rather than Physical Education. They have no such experience about sports and Physical Education. So naturally they have anxiety regarding the curriculum of Physical Education. The data were taken in February when they had already completed the first semester but if the data were collected in July of the previous year, at the resuming of that semester, then the difference may be significant.

A. Testing of Hypothesis

According to the hypothesis of the study, the observed result was confirming that there was no significant difference in achievement motivation and sports competition anxiety among the different three groups. So, as per the assessment of significance, null hypothesis was accepted.

V. CONCLUSIONS

- There was no significant difference in achievement motivation among the three different classes.
- There was no significant difference in sports competition anxiety among the three different classes.

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