Analysis of achievement motivation and aggression among the attacker, setter and libero player at intercollegiate men volleyball players

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Abstract
The purpose of the study was to find out whether there was any significant difference in achievement motivation aggression for the inter collegiate level attacker, setter, libero of the volley ball players. In order the achieve the purpose of the study 90 selected men volley ball players only. To assess the level of aggression inventory questionnaire was used and the data were collected from the subjects. To assess the level of achievement motivation the sports achievement motivation questionnaire designed and validated by Mr. Kamlesh was used the data were collected from the subjects. The collected data were put into statistical analysis. The level of significance was set at 0.05 level to find out the significance difference between means one way analysis of variance was used.

Keywords: Sport psychology, motivation, aggressive in sports

Introduction
Sport has become one of the most widely practiced human activities Whether as professionals or amateurs, regularly or occasionally, millions of people now engage in the various forms of physical and sporting activity available in the European Union. “The life is like sport. The lord is the greatest sportsman. He plays without thinking of winning or losing” Physical Education is an integral part of total Education. It is an education through physical Fitness, Social Fitness, moral fitness and emotional fitness for an individual to develop not only a good physique but also help in develop desirable social qualities. The word ‘Sports’ occasionally denotes either to a pleasant part time or somewhat hazardous recreation.

Today sports are considered as international discipline as it develops international understanding and universal brotherhood. Sports develop national character and also it provides to fullest self-expression to man and it is one of the fundamental needs. Human being is considered as an intellectual animal that wants to participate in physical activities to attain personal achieve growth and development and to maintain good health.

It is natural is both quality and a child to participate in activities like running, jumping, throwing etc., Sport is a dynamic, creative, continuous process which gives meaning to reflect and the values believes and ethics of participation. Sports is a chief component in promoting friendship, peace and understanding between people society and country because the trouble free delight come only from sport.

Sports
The word ‘Sports’ occasionally denotes either to a pleasant part time or somewhat hazardous recreation.

Sports are psycho-social activity. Sports have a very important role in modern society. It is important to an individual, a group, antion and indeed the world. The word sports have a popular appeal among people of all ages and both sexes, much of the attraction of sports comes from the wide variety of experience and feelings that result from participation of joy, anguish, success, failure, exhaustion pain relief and a feeling of belonging. Sports can bring money, glory, status and good will.
Psychology
Psychology is the study of human behavior and human relationship. Sports psychology means applying psychological theories and concepts to aspects or sports such as coaching and teaching. Sports psychology is concerned with analyzing human behavior in various types of sport settings. It is individuals’ behavior acting individually and acting in a group. This sport psychologist uses psychological in assessment techniques and intervention strategies are on effort to help individuals to achieve their optimal performance. According to M.L. Kamlesh sports psychology is the application or psychological principles to sport and psychological activity at all levels of skill development.

Sport Psychology
Sports psychologist is the scientific study of people and their behaviors in sport. The main job of a sports psychologist is to recognize how participation in sport exercise and physical activity enhances a person’s development. Sport psychology is a specialization within psychology that seeks to understand psychological/mental factors that affect performance in sports, physical activity and exercise and apply these to enhance individual and team performance. It deals with increasing performance by managing emotions and minimizing the psychological effects of injury and poor performance. Some of the most important skills taught are goal setting relaxation, visualization, self-talk awareness and control, concentration, using rituals, attribution training, and per iodization.

Motivation
Ask any person who is successful in whatever he or she is doing what motivate him/her, and very likely answer will be “goals”. Goal setting goals, is extremely important to motivation and success. What motivates you? Why are you in college? If you are in college because that’s what your parents want, you may find it difficult to motivate Yourself. Sure, it’s possible to succeed with someone else providing the Motivation for you. “If you graduate from college, I’ll give you a car!” or Worse “If you don’t graduate from college, you won’t get a car.” But Motivates that comes within really makes the difference.

So honest with yourself. Are you genuinely interested in going in College? Have you set realistic goals for yourself? How can you develop the internal motivation that really counts? When it comes to motivation, KNOWING is not important as DOING.

Aggression
Aggression refers to any behavior that is hostile, destructive and/or violent. Generally, aggressive behavior has the potential to inflict injury or damage to the target person or object. Example of aggressive behavior includes physical assault, throwing objects, property destruction, self-harming behaviors, and verbal threats.

Aggressive In Sports
Used by the athlete to channel their will to win at all odds and determination to sacrifice their own or their opponents, bodies in the Cause of victory.

Volley Ball
Volleyball is a typical American game. It was invented by “William, G, Moran” Physical Director of Holyoake YMCA Mass, U.S.A. in the year 1895. He wanted to introduce a game to the members of his YMCA with a view to provide a suitable recreational game less strenuous then that of Basket Ball. There was at the time, a game called “Minton” in which at worsted yarn ball was batted back and forth over a 7 foot net with help of a racket. Morgan modified this game by eliminating the rocket and worsted yarn ball and experimented with an inflected basketball bladder, which was batted with the hands on over the net. He introduced this game in his gymnasium and he called this game as ‘Mintonette’. Since the basketball bladder was not conducive for proper play, a new ball devised though the help of a sports company. Dr. A.T. Haisteds of spring field college, gave the application of “Volley Ball” to this game, since the idea of the play was to volley the ball to and from over the net.

It was hypothesized that there will be a significant of achievement motivation and aggression among the attacker, setter, and Libra player at inter collegiate level volleyball players.

The limitation of the present study is as follows, the food habits, other regular habits and life style are not controlled. The regular activities of the students will not be controlled. Family background of the subject will not be considered. Environmental factors, which contribute to the mental ability of the players, were not taken into consideration. The response of the subject to the questionnaire might not be honest in all cases and this was recognized as a limitation.

Definition of Terms
Aggression
Defines aggression as the intentional response a person makes to inflict pain or harm on another person

Achievement Motivation
Achievement motivation is an effective arousal state directing behavior in an achievement oriented activity cognitively appraised as potentially satisfying. The desire to accomplish difficult tasks and overcome obstacles. More specifically, when an individual is not so much concerned with success or failure in a given task as with attaining a certain standard set for him or herself.

Attacket
An offensive shot where a player returns the ball to the opponent’s court. Normally this is done in a manner where the attacker hits the ball above the height of the net in a downward direction toward the floor.

Setter
Setters have the task for orchestrating the offense of the team. They aim for second touch and their main responsibility is to place the ball in the air where the attacker can hit the ball into the opponents’ court in the easiest way possible. They have to be able to operate with the hitters with variety and break up the enemy’s block. Setters need to have swift and skillful appraisal and tactical accuracy, and must be quick at moving around the court.

Libero
“Lee beh rob”—Lee—means to act against the wind from same side of the two part and dictionary word.

Methodology
In this chapter the selection of subject, administration of questionnaire, selection of variables, reliability of the data, instrumental reliability, testing competence, subjects reliability, orientation of the subject, collection of the data and statistical techniques employed for anglicizing the data have been described.
Selection of Subjects
A total of 90 inter collegiate level consist of attacker setter and libero are selected. Selected as a random, they were divided in to 3 equal groups (30 from attacker, 30 from setter and 30 from libero).

Selection of Variables
The research scholar reviewed the available scientific literature, books, journals, periodicals, and magazine and research papers pertaining to the study. Taking into consideration of the importance of these variables and the feasibility criteria for these following variables were selected for the investigator.
1. Achievement motivation
2. Aggression

Reliability of Data
The reliability of data was censured by establishing the instrument reliability and subject reliability.

Instrument Reliability
The purpose of this research study was to measure the achievement motivation and aggression level for the attacker, setter and libero on volleyball players. The questionnaires, which were used to measure achievement motivation and aggression were standard questionnaire and they considered reliable.

Subject Reliability
As the same subjects were used to measure for achievement motivation and aggression of ability with questionnaires by the same investigator were considered reliable.

Orientation of the Subjects
Prior to the administration of the test, to obtain full cooperation from the subjects they were oriented to the purpose of the study. The investigator explained each psychology factors and the questionnaires in detail to the subjects.

Collection of Data
The administration of the test and the method of the collection data were explained questionnaire.

Psychological Variables
Achievement motivation laws measured by using questionnaire.

Achievement Motivation
Motivation was measured through achievement motivation questionnaire prepared by M. L. Kamlesh Achievement motivation was given to all investigation. The computed questionnaire was scored as follows. For items 1, 3, 4, 9, 10, 11, 12, 13, 16, 17 and 20 the response answer “a” scored two points: if he answer “B” scored only zero points. For items 2, 5, 6, 7, 8, 14, 15, 18, and 19 the desponence answer “b” is scores 2 points, if he answer “a” scored only zero points. The larger the score, higher the achievement motivation of the subject (The copy of questionnaire was given in Appendix-I).

Aggression
To measure the aggression Anandakumar aggression scale prepared by crafty was used. Aggression was given to all investigation; The computed questionnaire was scored as follows. For items 1,4,5,6,9,12,14,16,18,21,22,24 and 25 answers “yes” he scored two point. In the answer “no” get zero point. For items 2,3,7,8,10,11,13,15,17,19,20, and 23 answer “no” he scored two point. If he answer “yes” zero point. (The copy of questionnaire was given in appendix-II)

Statistical Techniques
The data that were collected from the subjects were treated statistically. To find out the significance difference among the attacker, setter and libero with their achievement motivation and aggression for that Analysis of Variance (ANOVA) was used to find out any significant difference among the group.

Data
However valid, reliable and adequate the data may be, it does not serve any useful purpose unless it is carefully processed, systematically classified and tabulated, scientifically analyzed, intelligently interpreted and rationally concluded. After the data had been collected, it was processed and tabulated using Microsoft Excel - 2000 Software. The data collected on achievement motivation and aggression from three types of players (Attackers, Setter and Libero) at inter collegiate men Volleyball players. Then the data were analyzed with reference to the objectives and hypotheses by using differential statistics including One way ANOVA followed by unpaired t-test and Pearson’s correlation coefficient technique by using SPSS 16.0 statistical software and the results obtained thereby have been interpreted.

Hypothesis: There is no significant difference between three groups of players (Attackers, Setter and Libero) at inter collegiate men Volleyball players respect to achievement motivation scores.

To achieve this hypothesis, the one way NAOVA test was applied and the results are presented in the following table.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Degrees of freedom</th>
<th>Sum of squares</th>
<th>Mean sum of squares</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>86.67</td>
<td>43.33</td>
<td>3.4596</td>
<td>0.0358*</td>
</tr>
<tr>
<td>Within groups</td>
<td>87</td>
<td>1089.73</td>
<td>12.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>1176.40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the results of the above table it can be seen that, the three groups of players (Attackers, Setter and Libero) at inter collegiate men Volleyball players differ statistically significant respect to achievement motivation scores (F=3.4596, p<0.05) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the attacker players have significant higher achievement motivation scores as compared to Setter and Libero players at inter collegiate men Volleyball players. The mean of achievement motivation scores are also presented in the following figure.
Sub Hypothesis: There is no significant difference between Attackers and Setter players at inter collegiate men Volleyball players respect to achievement motivation scores. To achieve this hypothesis, the t-test was applied and the results are presented in the following table.

<table>
<thead>
<tr>
<th>Players</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attacker player</td>
<td>30.4667</td>
<td>3.3501</td>
<td>2.0303</td>
<td>0.0469*</td>
</tr>
<tr>
<td>Setter player</td>
<td>28.8000</td>
<td>2.9989</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05

From the results of the above table it can be seen that, the Attackers and Setter players at inter collegiate men Volleyball players differ statistically significant respect to achievement motivation scores (t=2.0303, p=0.05) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the attacker players have significant higher achievement motivation scores as compared to Setter players at inter collegiate men Volleyball players. The mean of achievement motivation scores are also presented in the following figure.

Sub Hypothesis: There is no significant differences between Attacker and Libero players at inter collegiate men Volleyball players respect to achievement motivation scores. To achieve this hypothesis, the t-test was applied and the results are presented in the following table.

<table>
<thead>
<tr>
<th>Players</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attacker player</td>
<td>30.4667</td>
<td>3.3501</td>
<td>2.3904</td>
<td>0.0201*</td>
</tr>
<tr>
<td>Libero player</td>
<td>28.1333</td>
<td>4.1666</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05

From the results of the above table it can be seen that, the Attackers and Libero players at inter collegiate men Volleyball players differ statistically significant respect to achievement motivation scores (t=2.3904, p<0.05) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the attacker players have significant higher achievement motivation scores as compared to Libero players at inter collegiate men Volleyball players. The mean of achievement motivation scores are also presented in the following figure.

Sub Hypothesis: There is no significant differences between Setter and Libero players at inter collegiate men Volleyball players respect to achievement motivation scores. To achieve this hypothesis, the t-test was applied and the results are presented in the following table.

<table>
<thead>
<tr>
<th>Players</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setter player</td>
<td>28.8000</td>
<td>2.9989</td>
<td>0.7113</td>
<td>0.4798</td>
</tr>
<tr>
<td>Libero player</td>
<td>28.1333</td>
<td>4.1666</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05

From the results of the above table it can be seen that, the Setter and Libero players at inter collegiate men Volleyball players do not differ statistically significant respect to achievement motivation scores (t=0.7113, p>0.05) at 5% level of significance. Hence, the null hypothesis is accepted and alternative hypothesis is rejected. It means that, the Setter and Libero players at inter collegiate men Volleyball players respect to achievement motivation scores have similar achievement motivation scores. The mean of achievement motivation scores are also presented in the following figure.
**Hypothesis:** There is no significant difference between three groups of players (Attacker, Setter and Libero) at inter collegiate men Volleyball players respect to aggression scores.

To achieve this hypothesis, the one way NAOVA test was applied and the results are presented in the following table.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Degrees of freedom</th>
<th>Sum of squares</th>
<th>Mean sum of squares</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>297.60</td>
<td>148.80</td>
<td>9.6898</td>
<td>0.0002*</td>
</tr>
<tr>
<td>Within groups</td>
<td>87</td>
<td>1336.00</td>
<td>15.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>1633.60</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\*p<0.05

From the results of the above table it can be seen that, the three groups of players (Attackers, Setter and Libero) at inter collegiate men Volleyball players differ statistically significant respect to aggression scores (F=9.6898, p<0.05) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the attacker players have significant higher aggression scores as compared to Setter and Libero players at inter collegiate men Volleyball players. The mean of aggression scores are also presented in the following figure.

**Hypothesis:** There is no significant differences between Attacker and Setter players at inter collegiate men Volleyball players respect to aggression scores.

To achieve this hypothesis, the t-test was applied and the results are presented in the following table.

<table>
<thead>
<tr>
<th>Players</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attacker</td>
<td>30.8000</td>
<td>1.8644</td>
<td>2.8827</td>
<td>0.0055*</td>
</tr>
<tr>
<td>Setter</td>
<td>28.0000</td>
<td>4.9827</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\*p<0.05

From the results of the above table it can be seen that, the Attackers and Setter players at inter collegiate men Volleyball players differ statistically significant respect to aggression scores (t=5.2290, p<0.05) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the attacker players have significant higher aggression scores as compared to Libero players at inter collegiate men Volleyball players. The mean of aggression scores are also presented in the following figure.
**Sub Hypothesis:** There is no significant differences between Setter and Libero players at inter collegiate men Volleyball players respect to aggression scores.

To achieve this hypothesis, the t- test was applied and the results are presented in the following table.

**Table:** Results of t-test between Setter and Libero players at inter collegiate men Volleyball players respect to aggression scores

<table>
<thead>
<tr>
<th>Players</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setter player</td>
<td>28.0000</td>
<td>4.9827</td>
<td>1.3428</td>
<td>0.1846</td>
</tr>
<tr>
<td>Libero player</td>
<td>26.4000</td>
<td>4.2149</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05

From the results of the above table it can be seen that, the Atta Setter and Libero players at inter collegiate men Volleyball players do not differ statistically significant respect to aggression scores (t=1.3428, p>0.05) at 5% level of significance. Hence, the null hypothesis is accepted and alternative hypothesis is rejected. It means that, the Setter and Libero players at inter collegiate men Volleyball players respect to aggression scores have similar aggression scores. The mean of aggression scores are also presented in the following figure.

**Hypothesis:** There is no significant association between achievement motivation and aggression scores of all players i.e. Attacker, Setter and Libero at inter collegiate men Volleyball players

**Table:** Results of correlation coefficient between achievement motivation and aggression scores of all players i.e. Attacker, Setter and Libero at inter collegiate men Volleyball players

<table>
<thead>
<tr>
<th>variables</th>
<th>Correlation coefficient between achievement motivation with</th>
<th>Correlation coefficient</th>
<th>t-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression</td>
<td>scores</td>
<td>0.2880</td>
<td>2.8208</td>
<td>0.0059*</td>
</tr>
</tbody>
</table>

* p<0.05

To achieve this hypothesis, the Karl Pearson’s correlation coefficient technique has been applied and the results are presented in the following table. From the results of the above table, it can observed that, a significant and positive relationship was observed between achievement motivation and aggression scores of all players i.e. Attacker, Setter and Libero at inter collegiate men Volleyball players (r=0.2880, p<0.05) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the achievement motivation scores are increases or decreases with increase or decrease in aggression scores of all players.

**Conclusion**

On the basis of the interpretation of the data the following appropriate conclusions are drawn from the study. Attacker players have significant higher achievement motivation scores as compared to setter and Libero players at inter collegiate men volleyball players. (F=3.4596, p<0.05)Attacker players have significant higher aggression scores as compared to setter and Libero players at inter collegiate men Volleyball players. (F=9.6898, p<0.05)

Similar study may be conducted taking to the other psychological variables. Similar study may be conducted for school, state, national and university level volleyball players. Similar study may be conducted among different sports and games. Similar study may be conducted among female volleyball players. Similar study can be conducted among different age groups in different disciplines.

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