



Article : AGGRESSION AND AGILITY PERFORMANCE BETWEEN  
BASKETBALL AND KHO-KHO PLAYERS

Author : Dr. M.S. Pasodi [ Gulbarga University, Gulbarga ]  
Laxmikant Shirolu [ Govt. First Grade College, Chittapur, Dist. Gulbarga ]

Physical fitness implies the ability to function at one's level of Efficiency in all his daily living. Physical fitness is an instrument for social good. It is the capacity to successfully and fully respond physically, mentally and emotionally to the force of life without undue deliberations. Physical fitness is one of the facts of a person's all-round harmonious development. Physical fitness the cultural phenomenon of great complexity and magnitude is a historically preconditioned level of health and comprehensive development of a person. Physical activities, corresponding to the requirement of labor activity, normal functioning of the body's vital systems and longevity. Physical fitness adds grace to the young, wealth to the poor, and ornament to rich and acts as a consoling factor to the old. "The place of physical fitness in any society reflects something of that society's characteristics". Physical fitness provides a touch stone for

Understanding how people live, work and think .Think and may also serve as a barometer of a nation's progress in civilization.

Physical fitness is the art of humanity. It is the basic need for people. It is the fundamental form of human expression. It is the means of enhancing national prestige. It is an avenue of social adjustment. It is the most saving graces in the world.

According to Bucher (1958), Physical fitness is the ability of an individual to live a balanced life. It involves physical, Mental, emotional and spiritual factors and the Capacity for their wholesome knowledge.

Physical fitness means that the organic systems of the body are healthy and function efficiently so as to enable the fit person to engage in various tasks and leisure activities. Physical fitness is recognized by the general public as well as by professional physical educators as one of the primary goals of a physical education programmes. Historically, physical fitness has received greatest emphasis during times of war. From a physiological point of view, physical fitness is defined as the capacity to adopt and recover from strenuous exercise. A more general definition considers physical fitness is defined as the capacity to adopt and recover from strenuous exercise. A more general definition considers physical fitness as “The capacity to carry out daily tasks with vigor and alertness, without fatigue and with ample energy to enjoy leisure time pursuits and to meet unforeseen emergencies”.

Fitness is that state which characteristics the degree to which a person is able to function efficiently. Fitness is an individual matter. It implies the ability of each person to live most effectively within his potentialities. Physical activities help a man achieve high degree of physical conditioning. In schools there is a compulsory physical activities programme for all boys and girls, so it would be interesting to find out which of the components have better physical fitness. There are many physical fitness tests to evaluate the ability of the students to carry out daily tasks without undue fatigue.

The purpose of physical fitness is to create a Consciousness and enthusiasm amongst people and to stimulate their interest for physical welfare which will help them to have a better and more healthful living.

Every individual must know the importance of physical fitness. In other words one must have a fundamental knowledge of anatomy and physiology. This fundamental knowledge enables person to understand physical fitness. Physical fitness is the capacity of a person to function steadily and smoothly when a situation arises.

The benefits of physical fitness are numerous. The person who is physically fit has greater amount of strength, energy and stamina and improved sense of well being better protection from injury because of the well developed muscles, safeguard bones, internal organs and joints and keep moving parts limber and improved respiratory function.

Physical fitness varies with the individual and with the demands and requirements of a specific task. The collegiate athlete must constantly work to improve his or her strength, endurance flexibility, speed and agility. According to Golding and Bos strength, cardiovascular endurance, speed, agility, explosive power, flexibility, balance co-ordination is the important elements which make up physical fitness.

One of the main components of physical fitness is agility. Agility is the ability of a man to co-ordinate his movement and to synchronize them according to the requirements of changing conditions. In sports, experts distinguish between general and specific agility. General agility is expressed by the ability of a person to perform any movement. From the entire variable range of sporting activities in a functional and resourceful manner, specific agility develops in accordance with the type of the body movements of the particular completion event.

Previously it was believed that agility is a single factor by itself. Now it is believed that agility is a combination of several athletic traits including strength, reaction time, and speed of movement, power, and co-ordination. It is

demonstrated to such movements as dodging, zig zag, running, stopping and starting and changing body direction quickly. “Agility is the ability of the body or parts of the body to change direction rapidly and accurately”.

Changing directions repeatedly as in doing burpees or dodging around obstacles involves alternate concentric and eccentric contraction of involved muscle groups. For example in dodging around chair, the athlete must decelerate as he is about to change direction. In order to develop agility, it is unnecessary to consistently introduce the sportsman to new, more complicated movements and carry out already known movements under novel conditions. Agility is developed through practice and confidence in movements.

Ability is important in all activities involving quick Changes in positions at the body and the parts. Fast Starts and stops and quick changes in direction are Fundamental to good performance in practically all Court games, such as basketball, tennis, badminton and volleyball and in many field games, such as Soccer, football and baseball. These games require running ability. Gymnastic and diving also depend largely upon rapid body movements and quick Changes in body position.

**Aggression:**

There has always been interest in aggressive behavior and competitive sport. Several writers have maintained that sport provides a necessary “safety value” or cathartic release for the aggressive drives of the human (Scott, 1970; Lorenz, 1966). The arguments for and against aggression and violence in sport are often emotional debates. A major obstacle encountered in this discussion is that the discussants are frequently not talking about the same concept even though they are using the same term. When one begins to examine the various writings on

aggressive behavior, it is clear that the term aggression has the misfortune of being defined in a multitude of ways.

Three factors distinguish aggressive from non-aggressive behavior. The first is behavior selection. An aggressive act is an overt act that is either physical or verbal in nature and has the potential to physically or psychologically injure the target. The second distinguishing factor is that of intent. A person exhibiting aggressive behavior intends to injure the target. The final factor is that aggressive behavior is personal. It may be directed against the self or another animate being. Aggression directed against the self is often intro-punitive aggressive while aggression directed against others is extra-punitive aggressive.

Aggressive behavior is categorized further according to the primary reinforcement sought via the aggression. Hostile aggression is exhibited with the intent to injure the target. Seeing this goal accomplished is reinforcing itself. Thus, hostile aggression is an end rather than a means. Instrumental aggression also involves the intent to injure. However, when instrumental aggression is exhibited, seeing pain or injury is not the primary reinforcement. In instrumental aggression, the aggressor desires to acquire some extraneous reward such as victory, money, or prestige. Thus, instrumental aggression is a means to an end. An important point to note is that whether hostile or instrumental aggression is being exhibited, there is still intent to injure. They are both forms of aggression; the difference is in the primary reinforcement sought. In sport, both forms of aggression occur. Often a player can exhibit a legal behavior such as a tackle in football with the intent to injure the ball carrier. The act of tackling is implicit in the sport of football. The intent to injure the opponent is outside of the constitutive boundaries of the sport.

In order to attenuate the somewhat paradoxical situation described above various rules exist to reduce the probability of player injury through punitive action. In football, for example, there are penalties for clipping, clothes lining, head slapping, roughing the passer, and the catch-all unnecessary roughness penalty. All contact and collision team sports have similar constitutive structures. Even with constitutive structures designed to reduce overt punitive acts, aggressive behavior still occurs frequently in sport. Obviously other learning factors are influencing the decision to aggress behaviors in sport are often mislabeled as aggressive. The frequent overuse of the term aggression gives the impression that sports are designed to be violent displays.

**Basketball:**

Basketball is played by two teams of five players each. The purpose of each team is to throw the ball into the opponent's basket and to prevent the other teams from securing the ball or scoring. The ball may be passed, thrown, tapped, rolled or dribbled in any directions, subject to the restrictions laid down in the rules. There are many skills in basketball which are as follows: Low dribble, high dribble, chest pass, pushes pass, lay-up shot, hook shot and jump shot. A basketball player needs agility in maintaining the balance or tuning into pick up the ball and getting the ball. Basketball is the world's greatest ball game. The physical qualities which are needed for high level performance are quick reaction, quickness of the mark, speed over the distance, good balance, reasonable agility, etc.

Agility is very much involved in the game of basketball. A basketball player who passes his opponents stop quickly from one position to another or he does a complex routine. At the time of dribbling the player should change the movement in various ways. There are running in a zigzag manner and shifting the body position to maintain balance and his ability at the hands and arms.

### **Kho-Kho:**

Kho-Kho is an indigenous game. The game is played by two teams of nine players each. 'The game of kho-kho is based on natural principles of physical development. It is vigorous and fosters a healthy combative spirit among youths'. It is not merely running with speed but its "CHASE", a natural instinct to overtake to pursue to catch 'a kill'.

The specialty of Indian games is to make players light bodied, agile, ready witted, supple and daring. The success of the Indian Hockey team in the world Olympic Games is due to the wonderful quickness, agility, lightness of the body and dash all of which are developed by the Indian competitive games.

In Kho-Kho there are many skills like chasing, dodging, faking, taping, diving, etc. Agility is the foremost pre-requisite for a kho-kho player. The runner has to run fast in zigzag manner to escape from the chaser. The runner cannot run in a straight line, otherwise he can be easily put out. So, agility is very essential for kho-kho players.

Kho-Kho deserves the most prominent place in Indian National field Games. It gives very good exercises to both the team simultaneously never allow the defenders to take rest. The slow and dull players are quickly knocked out.

The investigator being a kho-kho player and Basket ball player was interested to find out whether kho-kho players or Basket ball players would have more agility and display more aggression. More over, this type of study has not been conducted so far to the best knowledge of the investigator.

### **Reliability of Data:**

The reliability of the performance of subjects was computed by correlating of scores of first day with those of third day. The value of 'r' obtained

by performance of agility of Kho-Kho player and basketball players are presented in Table-1.

**Table-1**  
**Co-efficient of Reliability of Test Retest score**

Sl. No	Variables	“r”
1.	Agility of Kho-Kho	0.813 *
2.	Agility of Basketball	0.742 *

\* Significant at 0.05 level of confidence

The value of co-efficient of reliability for all the test items was found to be significant at 0.05 level of confidence. With 28 degrees of freedom the value of coefficient of reliability required for significant at 0.05 level of confidence was 0.361 (Harrison Clark, 1984).

For finding out the differences between the performance of agility of Kho-Kho and Basketball player the level of significance was set at 0.05 level of confidence.

The mean out the differences between the performance of agility of Kho-Kho and Basketball player were presented in Table-2, and for finding out the significant difference between the two groups the ‘t’ test was applied. Data related to this is presented in Table-3.



**Table- 2**  
**Mean and Standard Deviation Scores of performance of Agility of Kho-Kho and basketball players.**

<b>Groups</b>	<b>Mean</b>	<b>Standard Deviation</b>
Kho-Kho Players	12.16	0.899
Basketball Players	12.09	0.803

Table-2 reveals that the mean scores of Kho-Kho player (12.16) and standard deviation is 0.899; and the Basketball group means scores is (12.09) and standard deviation is (0.803). The Kho-Kho players mean is greater than Basketball players.

**Table-3**  
**Shows differences in the performance of agility between of Kho-Kho and Basketball players**

<b>Group</b>	<b>Mean</b>	<b>DM</b>	<b>SD</b>	<b>SE</b>	<b>‘t’ ratio</b>
Kho-Kho	12.16	0.07	0.89	0.16	0.318
Basketball	12.09		0.80	0.14	

Table-3 reveals that the mean score of the Kho-Kho players is (12.16); standard deviation (0.89); standard error is (0.16); and basketball players mean scores (12.09); standard deviation (0.8) and standard error is (0.14). Since the ‘t’ value is 2.00 at 0.05 level of confidence.

The analysis of the data on dependent variables generally sported to the proposed hypothesis of the study. That is the mean scores of performance of agility of kho-kho players is the greater than that of Basketball players performance. The reason is that agility is important in all activities involving quick changes in positions at the body and the parts. Fast starts and stops and quick changes in direction are

fundamental to good performance in practically all court, and field games, such as Basketball, Tennis, Bad-Minton, Volleyball and Kho-Kho.

The specialty of Indian game kho-kho is that it make players light bodied, agile, ready witted, supple and daring. The game of kho-kho is based on natural principles of physical development. It is vigorous and fosters a healthy competitive spirit among youths. It is not merely running with speed but its “chase”, a natural instinct to overtake, to pursue to catch ‘a kill’ also the kho-kho players means scores are greater than the Basketball player that is in kho-kho there are skill like chasing, dodging, faking, tapping, diving etc. Agility is the foremost pre-requisite for kho-kho players. The runners have to run fast in zigzag manner to escape from the chaser. The runner cannot run in a straight line, otherwise he can be easily one put out. So, agility is very essential for kho-kho players. Kho-Kho deserves the most prominent place in field games. It gives very good exercise to both the team simultaneously never allow the defenders to take rest. Due to above said reason the kho-kho players agility’s mean score is greater than that of Basketball players.

The result of the study was shown insignificant. Because many reasons are there: number of sample is smaller and only one agility test was used to compare their agility performance. And another important reason is that both games’ movement like chasing, dodging faking and jumping etc., is more or less similar. Due to these above said reasons the study showed insignificant results.

### **b. Aggressive Behavior of Players**

High activation in players and spectators is also said to be one the reasons of aggression in sport. High arousal (activation) catalyzes more vigorous effort and action as a result of which people become more aggressive to achieve their objectives. In this process, whether or not they intend to inflict any harm on the

opponent is no debatable, the central point is that over-activation with such interaction naturally leads to some sort of aggression. Cratty (1988) rightly points out “Activation together with the instigation of an obviously intentionally aggressive act by an individual who may be easily retaliated against will generally trigger direct aggression. This particularly is true, if the aggressor is not likely to suffer any sanctions for the aggression and if the victim has, in the past, been rewarded and seen the utility of direct personal aggression (fighting hard wins games”. The main objectives of the study are to find out the differences in the aggressive behavior of the kho-kho and basket ball players. Therefore, the results of the study have been organized and discussed as under:

**Table-4**

**Table Shows the Mean, SD and 't' values of Aggressive Behavior of kho-kho and Basketball Players.**

<b>Variables</b>	<b>Kho-kho Players</b>	<b>Basketball Players</b>
Mean	9.83	12.83
SD	3.97	2.90
t-value	6.13**	

\*\* Significant at 0.01 level.

Table-4 reveals the mean, SD and 't' values of aggressive behavior of kho-kho and Basketball Players. The mean score of kho-kho and Basketball Players on aggressive behavior is 9.83 and 12.83 respectively. This difference in their mean score suggests that the kho-kho Players are moderate in their aggressive behavior when compared to the Basketball Players, who are more aggressive. The obtained 't' value of 6.13 which is highly significant at 0.01 level suggests the fact that, there is a significant difference in aggressive behavior between the kho-kho players and basketball players. Therefore, the hypothesis that there is a significant difference in the aggressive behavior of kho-kho Players and Basketball players is confirmed.

The purpose of the study was to compare the aggression and performance of agility of Basket ball and Kho-kho players. For the purpose the investigator selected thirty Basket ball and thirty Kho-kho male players of 18 to 19 years age from Tungabhadra College of physical education, Kottur, Bellary District. For measuring the agility performance shuttle run test (4 x 10 mtrs) was used. The collected data were analyzed by using the 't' ratio statistical technique and the results indicated that though the agility is higher for kho-kho players, there is no difference in the agility between the two groups of players. Further, the results

showed that there is a significant difference in aggressive behavior between the players of two games.

**Conclusions:-**

The study the following conclusions are drawn:

1. The performance of agility of kho-kho players is greater than that of Basket ball players.
2. The results of the study shown there was a no significant difference between kho-kho and Basket ball players agility performance.
3. There is a significant difference in the aggressive behavior between the two groups of players
4. Basket players have relatively higher aggressive behavior than the kho-kho players.

**References:**

1. Agrawal, J.C. (1978): Education Research –An Introduction New Delhi: A washman Book Depot.
2. Baley, James A. (1977): Illustrated Guide to Developing Athletic strength power and Agility New York: Parker publishing company Inc.
3. Barrow, Harold M. and Rosemary McGee. (1979): A Practical approach to measurement in physical Education. Philadelphia: lea and Febiger.
4. Bucher, Charles A. (1958): Administration of school Health and physical education. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
5. Cratty, Bryant. J. (1969): Perceptual Motor Efficiency in Children Philadelphia: Lea and Febiger.
6. Gabbard and Leblanc. (1987): Physical education for children Englewood Cliffs, New Jersey: prentice-Hall Inc.
7. Golding, Lawrence A. and Ronald R. Boss. (1967): Foundation of Physical fitness process. Minneapolis Minn: Burgess publishing company.
8. Hockey, Robert, V. (1985): Physical Fitness: The pathway to Healthful Living. (%the Edition), Saint Louis: Times Mirror/ Moby college publishing.
9. Jensen, Clayne R. and A, Grath Fisher. (1972): Scientific Basis of Athletic conditioning. Philadelphia: Febiger and Febiger
10. Johnson, Barry L. and Jack K. Nelson. (1982): Physical measurements for Evaluation in Physical Education. (3 rd Edition) Delhi; Surjeet publication.