COMPARATIVE STUDY ON SELECED PSYCHOLOGY VARIABLES AMONG ELITE PLAYERS IN TIME FACTOR AND NON TIME FACTOR GAMES IN DELHI STATE

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ABSTRACT

The purpose of this study is to explore the comparative study on selected variables among elite players in time factor and non-time factor games in Delhi state. For this study, we selected 50 elite players each from time factor and non-time factor games in Delhi state. Time factor games are hockey, kho-kho, basketball, football and non-time factor games are lawn tennis, volley ball, ball badminton, softball and carom. Self-esteem test was applied to measure self-confidence, Anxiety level and motivation. Data analysis included both descriptive statistical methods and paired sample t-test. This study thus recommended to people to play time factor and non-time factor games in Delhi state.

Keywords: Psychology, time factor games hockey, kho-kho, basketball, football and non-time factor games lawn tennis, volley ball, ball badminton, soft ball, caroms, psychology, and self-esteem.

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INTRODUCTION

Physical education is vital phase of education and integral part of educational process. Values must be established in physical education just as they are seen in general education. The physical education process must be determined to translate the established, needs and values into personal experience. To relate to them the person has to have the qualities; sufficient skill and knowledge in sports and exercise; adequate physical fitness; sufficient emotional poise and control and finally right attitude towards participation in sports and exercise. This will make him an intelligent and interested participant to help him become a more effective member of the society. To the society it would mean that this person is prepared to live a useful and enjoyable life both for himself, his community and for his country.

GAMES AND THEIR NATURE

There are two types of games. They are time-factor games and non-time factor games. The details of these games are discussed in the following paragraphs:

Time-Factor Games

1. Hockey
2. Kho-kho
3. Basket ball
4. Hand ball
5. Foot ball

HOCKEY: Buried deep in Egypt's Nile Valley lays the village of Beni Hasan, known for its ancient cliff tombs dating from 2000 BC. A drawing decorates one tomb, showing two men holding sticks with curved ends and standing over a ball. Add synthetic turf and shin guards, and it might pass for hockey at the Sydney 2000 Olympic Games. The British army helped spread hockey internationally through the British Empire, its popularity especially booming in India and Pakistan. The London Hockey Association was formed in 1886 and rules of the game were soon standardised. The International Hockey Federation (FIH) was formed in Paris in 1924 and the International Federation of Women's Hockey followed in 1927. Men's hockey first appeared at the 1908 Olympic Games in London. It reappeared in Antwerp in 1920, and then returned to stay at the 1928 Amsterdam Games. Women's hockey waited much longer, finally debuting in Olympics in 1980.

KHO-KHO: Kho-Kho ranks as one of the most popular traditional sports in India. The origin of kho-Kho is difficult to trace, but many historians believe, that it is a modified form of 'Run Chase', which in its simplest form involves chasing and touching a person. With its origins in Maharashtra, Kho-Kho in ancient times, was played on 'raths' or chariots, and was known as Rathera. Like all Indian games, it is simple, inexpensive and enjoyable. It does, however, demand physical fitness, strength, speed, stamina and a certain amount of ability. Dodging, feinting and bursts of controlled speed make this game quite thrilling. To catch by pursuit, to chase, rather than just run, is the capstone of Kho-Kho. The game develops qualities such as obedience, discipline, sportsmanship, and loyalty between team members.

BASKET BALL: Basketball was invented years ago by an American named James Naismith. It began in December in Springfield, Massachusetts. Dr. Naismith, who was a YMCA physical education teacher, had a real big problem. His students played football and soccer all during the fall season. But now winter was coming, and it would be too cold to play outside. Naismith wanted all of them to stay in good health, but he didn't have any sports for them to play inside. Finally, after much thinking, he came up with a great idea for an indoor game. He got two peach baskets and attached them to a balcony at the opposite ends of the gym. There were eighteen people in his class, so he divided them up into two groups with nine players on each team. Of course, they couldn't play the game without a ball, so he chose a ball that he had on hand: a soccer ball. When the first game began, the players started passing the ball around and one boy threw the ball in the basket. He scored and his team got the first three points. But even though the game was fun

to play, there were some problems that they had to solve. For example, whenever the players would throw the ball into the basket, they couldn't get it down without climbing up a ladder. So, they decided to cut holes in the bottom of the baskets for the ball to fall through. This helped them play faster. They used these peach baskets until 1906 when they were finally replaced by metal hoops with backboards.

HAND BALL: All these were based on soccer, but essentially replaced the foot with the hand, so that the ball could be advanced by batting or throwing, rather than kicking. 'Hazena' was being played by Slovak peoples as early as 1892; its rules were first codified in 1906 by a college professor. *Handbold* (the Danish word for handball) was developed in 1898 by a teacher, *Holger Nielsen*, as an alternative to soccer. In 1906, Nielsen revised the rules considerably and began organising competitions outside the school at which he taught. Similarly, Torball was created in 1915 by a German gymnastics teacher, Max Heiden. Professor Carl Schelenz of the Berlin Physical Education School in 1919 combined elements of handbold and Torball and adapted the soccer playing field for a new sport which he called handball (actually translating the Danish into German). Schelenz also borrowed from basketball, which was just becoming popular in Germany, to allow dribbling as a means of advancing the ball. By 1925, the game had become fairly popular in other European countries. The International Amateur Handball Federation (IAHF) was established in 1928; handball was a demonstration sport at the Olympics that year and again in 1932.

FOOT BALL: Derived from the English game of rugby, American football was started in 1879 with rules instituted by Walter Camp, player and coach at Yale University. Walter camp was born April 17, in New Haven, Connecticut. He attended Yale from 1876 to 1882, where he studied medicine and business. Walter Camp was an author, athletic director, chairman of the board of the New Haven Clock Company, and director of the Peck Brothers Company. He was general athletic director and head advisory football coach at Yale University from 1888 –1914 and chairman of the Yale football committee from 1888-1912. Camp played football at Yale and helped evolve the rules of the game away from Rugby and Soccer rules into the rules of American Football as we know them today. One precursor to Walter Camp's influence was William Ebb Ellis, a student at the Rugby School in England.

NON-TIME FACTOR GAMES:

1. Lawn Tennis
2. Volley ball
3. Ball Badminton
4. Soft Ball
5. Caroms.

LAWN TENNIS: The U.S. Open is a prestigious Grand Slam tournament. Tennis is a game played between two players (singles) or between two teams of two players (doubles). Players use a stringed racquet to strike a hollow rubber ball covered with felt (most of the time yellow, but can be any colour or even two-tone) over a net into the opponent's court. Originating in Europe in the late 19th Century as "lawn tennis", with its roots going back to the ancient game of real tennis, tennis spread first throughout the English speaking world, particularly among the upper classes. Tennis is now once again an Olympic sport and is played at all levels of society, by all ages, and in many countries around the world. Except for the adoption of the tie-breaker in the 1970s, its rules have remained remarkably unchanged since the 1890s. A recent addition to tennis has been the adoption of "instant replay" technology coupled with a point challenge system which allows a player to challenge the official call of a point.

VOLLEY BALL: The game of volleyball, originally called "Mintonette", was invented in 1895 by William G. Morgan, after the invention of basketball only 4 years before. Morgan, a graduate of the Springfield College of the YMCA, designed the game to be a combination of basketball, baseball, tennis and handball. The first volleyball net, borrowed from tennis, was only 6'6" high (though you need to remember that the average American was shorter in the 19th century). The offensive style of setting and spiking was first demonstrated in the Philippines in 1916. Over the years that

followed, it became clear that standard rules were needed for tournament play, and thus the USVBA (United States Volleyball Association) was formed in 1928.

BALL-BADMINTON: Because, historically, "Ball Badminton" seems to be inextricable linked to that of "Shuttlecock Badminton" it is necessary to refer to its early history, in so far as it is known. Ball Badminton, which is older than its shuttlecock counterpart, is still played in various parts of India today. The game which was played as early as 1856 by the royal family in Tanjore, the capital of Thanjavur district in Tamil Nadu, had an Indian name which was subsequently changed, no doubt to distinguish it from the very similar game of Badminton which is played the world over today. Very few early contemporary printed records for the game are known, but in 1984 two historical references appeared in souvenir brochures.

SOFT BALL: The game of softball originated in Chicago on Thanksgiving Day, 1887. A group of about twenty young men had gathered in the gymnasium of the Farragut Boat Club in order to hear the outcome of the Harvard-Yale Football game. After Yale's victory was announced and bets were paid off, a man picked up a stray boxing glove and threw it at someone, who hit it with a pole. George Hancock, usually considered the inventor of softball, shouted, "Let's play ball!" He tied the boxing glove so that it resembled a ball, chalked out a diamond on the floor (smaller dimensions than those of a baseball field in order to fit the gym) and broke off a broom handle to serve as a bat. What proceeded was an odd, smaller version of baseball. That game is now, 111 years later, known as the first softball game. Softball may have seen its death on the day of its birth if Hancock had not been so fascinated by it. In one week, he created and oversized ball and an undersized rubber-tipped bat and went back to the gym to paint permanent white foul lines on the floor. After he wrote new rules and named the sport indoor baseball, a more organised, yet still new, game was played. Its popularity was immediate

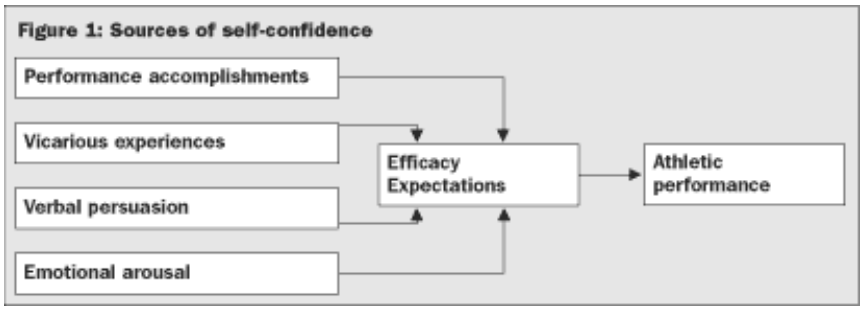
CARROMS: The Carrom Company was organised in 1889 and have provided over a century of entertainment for young and old alike. From games of strategy and skill to games of just plain fun, Carrom was a part of American family life for our grandparents and will be around for our grandchildren in the years to come. In the last quarter of the 19th century Henry Haskell, a Sunday school teacher, viewed with alarm the growing number of boys that loafed around pool rooms. Haskell had an inventive mind and he concentrated his thought on supplying a game which would appeal to these boys and supply wholesome enjoyment. Soon after, Haskell patented and introduced the U.S. Carrom game board.

VARIABLES AFFECTING PERFORMANCE OF PLAYERS

The beneficial effect of exercise on the cardiovascular system is well documented. There is a direct relation between physical inactivity and cardiovascular mortality as physical inactivity is an independent risk factor for the development of coronary artery disease. There is a dose-response relation between the amount of exercise performed from approximately 700 to 2000 kcal of energy expenditure per week and all-cause mortality and cardiovascular disease mortality in middle-aged and elderly populations. The greatest potential for reduced mortality is in the sedentary who become moderately active. Most beneficial effects of physical activity on cardiovascular disease mortality can be attained through moderate-intensity activity (40% to 60% of maximal oxygen uptake, depending on age). .. persons who modify their behaviour after myocardial infarction to include regular exercise have improved rates of survival. .. Persons who remain sedentary have the highest risk for all-cause and cardiovascular disease mortality.

Self-confidence: Sport psychologists define self-confidence as the belief that you can successfully perform a desired behaviour. Confident athletes expect success and have a high level of self-belief that appears crucial in determining how far they strive towards their goals. It is largely confidence that determines whether people give up or remain committed to their goals following a series of setbacks. Coaches can often see fluctuations in the balance between these two opposing states reflected in the behaviour of their athletes. While confident athletes are not afraid of making mistakes, often taking calculated risks in order to take charge of a situation, self-doubters often avoid responsibility, becoming over-conservative and paralysed by fear of failure. Think of the football striker who has not scored for a number of successive matches and is riddled with self-doubt. When presented with a half-chance which

would usually result in a snap-shot, he may elect to avoid responsibility and pass to a team mate. According to psychologist Albert Bandura, performers' situational-specific confidence, or 'self-efficacy', is based on four primary sources of information, represented graphically in Figure appearing below. The first and most important factor is past performance accomplishments. What we have achieved in training and competition forms the basis of future expectations of success or failure. Repeated success naturally leads to positive expectations of further success, higher motivation and enhanced self-belief.



Unfortunately, the flip side of this principle is that repeated failures can give rise to a downward performance spiral and a 'snowball effect' whereby a performer starts to believe that success is unattainable. Of course, such an athlete does not mysteriously lose his or her physical skills and talents, but without confidence in these abilities high-level performance is rarely achieved.

METHODOLOGY

The Statement

'Comparative Analysis of Selected Psychological Variables among Elite Players in Time Factor Games and Non-time Factor Games in Delhi'

Significance of the study

In Delhi time factor games are showing gradual but considerable increase but by and large the nation is not able to produce effective players in a continuum year. Many technical and scientific reasons may be attributed to this cause. Hence, an attempt is made through this study to find out the influence of a few important psychology variables which can play a vital role in achieving sound results in Delhi. These selected variables have been focussed upon by many reputed sports journalists, bureaucrats, coaches, Olympic and other sports federation officials, as the main reasons for time factor and non-time factor games not picking up in Delhi. Hence, a deeper study at doctoral level on this selected psychology variables on elite time factor and non-time factor games in Delhi is in order.

Objective of the study

1. The study was undertaken with the following objectives.
2. To find out the influence of anxiety among elite players of time factor and non-time factor games in Delhi.
3. To find out the influence a motivation among elite players of time factor and non-time factor games in Delhi.
4. To find out the influence a self confidence among elite players of time factor and non-time factor games in Delhi

Hypothesis

For the present study the following hypotheses were formulated:

1. There may not be any significant difference between elite players in time factor games and non-time factor games in relation to their **anxiety**.
2. There may not be any significant difference between elite players in time factor games and non-time factor games in relation to their **motivation**.
3. There may not be any significant difference between elite players in time factor games and non-time factor games in relation to their **self-confidence**.

Delimitation

1. The study is delimited to elite players in time factor games and non-time factor games in Delhi state.
2. The study was conducted on selected psychological variables.

Limitation

- Height, weight and nutrition of the subjects will not be taken into consideration for this study.
- Climatic conditioning, environment and health habits of the selected sample will not be considered for the study.

Sample of the study

The subjects were chosen from different degree and engineering colleges of Delhi who have represented "All India Inter University level" in various sports and games. The number of subjects was from ten different games that are five time factor games and five non-time factor games consisting of boys (50 time factor and 50 non time factor games). The following table illustrate the break up particulars of subjects selected from different games from the universities of Delhi

Table showing the game-wise subjects
(Time factor and Non-time factor games)

Sl. No.	Nature of the game	Name of the game	Number of subjects	Total
1.	Time factor games	1. Kabaddi 2. Hockey 3. Football 4. Khokho 5. Handball	10 10 10 10 10	**50**
2.	Non-time factor games	1. Softball 2. Volleyball 3. Lawn Tennis 4. Chess 5. Carrom	10 10 10 10 10	**50**

Tools Used

Three scale questionnaire methods were adapted to measure anxiety and motivation variables and reaction and movement time were also measured among the boys of the university.

1. Anxiety
2. Motivation
3. Self-confidence

Data Selection Procedure

As explained earlier the sample of the study consisted of players who had participated in university level in time factor and non-time factor games. The researcher collected the data from different degree college players who have represented university in various games. The researcher administered the psychological variables which include motivation, anxiety, reaction time and movement time among the players

Statistical Technique Used

The data collected in this study was subjected to statistical analysis with appropriate tools. Descriptive statistics was used to find out the means and standard deviations and t-test was computed. For graphical presentation excel package of MS-office was used for better representation.

RESULTS AND DISCUSSIONS

Results and Discussion on Hypothesis - 1

The results pertaining to the hypothesis – 1, 'there may not be any significant difference between time factor and non-time factor boy players in relation to their anxiety level' were presented in the Table - 1

Table - 1

Showing the mean, standard deviation, "t" values and p values of anxiety level for time factor and non-time factor boy players in football, hockey, badminton and volley ball sports

Sl. No.	Variables	N	Mean	S.D	T Ratio	P Value
1	Time factor game players (Boys)	100	21.30	3.90	8.50	0.00
2	Non-time factor game players (Boys)	100	17.00	3.90		

Graph - 1

Showing the mean and standard deviation of anxiety level for time factor and non-time factor boy players in football, hockey, badminton and volley ball sports

Discussion

Table - 1 and Graph - 1 show the mean values, standard deviation, "t" ratio and significance between time factor and non-time factor boy players in football, hockey, badminton and volley ball sports in relation to their anxiety level. The mean value of time factor boy players was 21.30, standard deviation was 3.90 and the mean value of non-time factor boy players was 17.00 and standard deviation was 3.90. The calculated "t" ratio was 8.50 and p value was 0.00 which was found to be significant at 0.05 levels.

Hence, Hypothesis – 1 was rejected.

Results and Discussion on Hypothesis – 2

The results pertaining to the hypothesis – 2, 'there may not be any significant difference between time factor and non-time factor boy players in relation to their motivation level' were presented in the Table - 2.

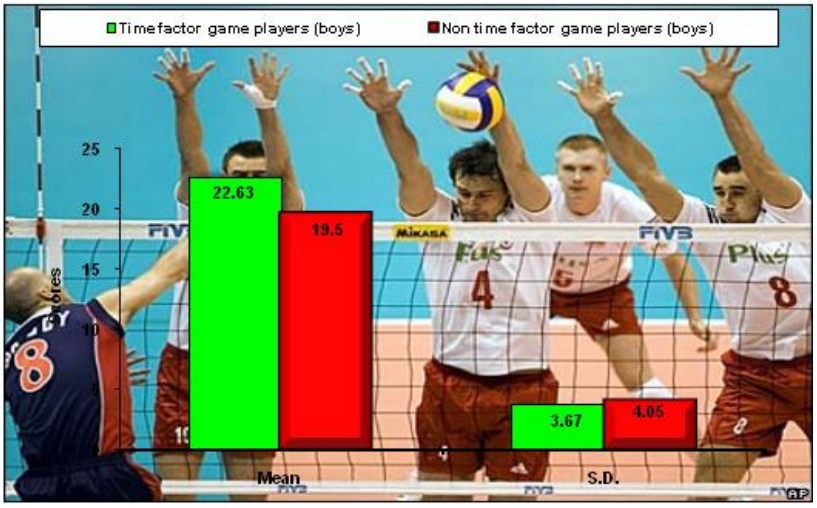
Table - 2

Showing the mean, standard deviation, "t" values and p values of motivation level for time factor and non-time factor boy players in football, hockey, badminton and volley ball sports

Sl. No.	Variables	N	Mean	S.D	T Ratio	P Value
1	Time factor game players (Boys)	100	22.63	3.67	5.67	0.00
2	Non-time factor game players (Boys)	100	19.50	4.05		

Graph - 2

Showing the mean and standard deviation of motivation level for time factor and non-time factor boy players in football, hockey, badminton and volley ball sports



Discussion

Table - 2 and Graph - 2 show the mean values, standard deviation, "t" ratio and significance between time factor and non-time factor boy players in football, hockey, badminton and volley ball sports in relation to their motivation level. The mean value of time factor boy players was 22.63, standard deviation was 3.67 and the mean value of non-time factor boy player's was 19.50 and standard deviation was 4.05. The calculated "t" ratio was 5.67 and p value was 0.00 which was found to be significant at 0.05 levels.

Hence, Hypothesis – 2 was rejected.

Results and Discussion on Hypothesis – 3

The results pertaining to the hypothesis – 3, 'there may not be any significant difference between time factor and non-time factor boy players in relation to their self-confidence' were presented in the Table - 3.

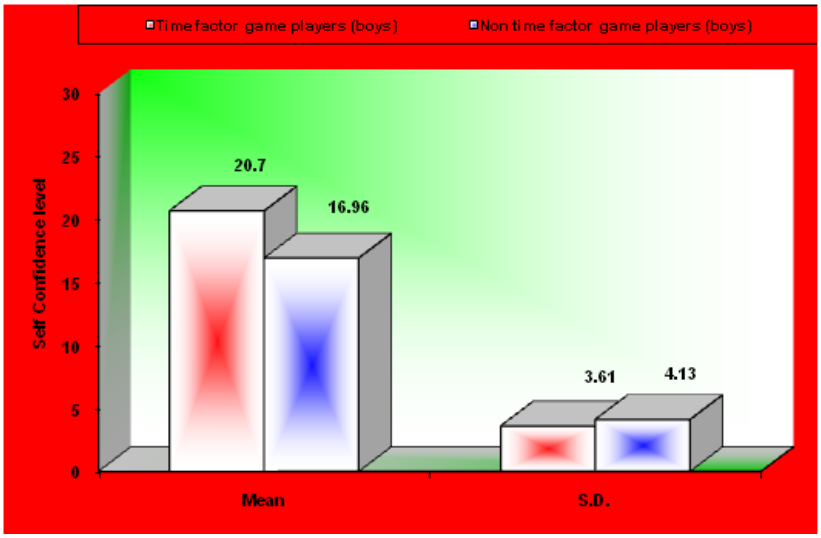
Table - 3

Showing the mean, standard deviation, "t" values and p values of self-confidence for time factor and non-time factor boy players in football, hockey, badminton and volley ball sports

Sl. No.	Variables	N	Mean	S.D	T Ratio	P Value
1	Time factor game players (Boys)	100	20.70	3.61	6.98	0.00
2	Non-time factor game players (Boys)	100	16.96	4.13		

Graph - 3

Showing the mean and standard deviation of self-confidence for time factor and non-time factor boy players in football, hockey, badminton and volley ball sports



Discussion

Table – 3 and Graph – 3 show the mean values, slandered deviation, "t" ratio and significance between time factor and non-time factor boy players in football, hockey, badminton and volley ball sports in relation to their self-confidence. The mean value of time factor boy players was 20.70, standard deviation was 3.61and the mean value of non-time factor boy players was 16.96 and standard deviation was 4.13. The "t" ratio was 6.98 and "p" value was 0.00 which was found to be significant at 0.05 levels.

Hence, Hypothesis – 3 was rejected.

CONCLUSION

A perusal of the entire presentation with a special reference to the chapter covering results and discussion would help in drawing the final conclusions for the present investigation.

1. It is concluded that significant difference was found between male time factor basketball and non-time factor volley ball players in relation to their **anxiety** at various levels of competition.
2. It is concluded that significant difference was found between male time factor basketball and non-time factor volley ball players in relation to their **motivation** at various levels of competition.
3. It is concluded that significant difference was found between male time factor basketball and non-time factor volley ball players in relation to their **self-confidence** at various levels of competition.

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