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Dibyayan Ghosh
Department of Physical Education and Sport Science, Visva-Bharati University, Santiniketan, West Bengal, India

Asish Biswas
Research Scholar, Department of Physical Education, University of Kalyani West Bengal. India

Madhab Chandra Ghosh
Professor, Department of Physical Education, University of Kalyani, West Bengal, India

Corresponding Author:
Dibyayan Ghosh
Department of Physical Education and Sport Science, Visva-Bharati University, Santiniketan, West Bengal, India

Study on motor fitness, motor creativity & persistency among football, cricket and kho-kho players

Dibyayan Ghosh, Asish Biswas and Madhab Chandra Ghosh

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Abstract
Man has faced numerous problems since the beginning of life. They have solved the problems by the help of Physical Capacity and mental capacity *viz*., intelligence creativity etc. It can never say that the creative genius only born but can be manifest through proper congenial environments. Motor creativity is the physical expression of the creativity. When a child play it can be considered as the expression of creativeness in his own world of movement and actions. The physical aspects of motor creativity are only possible through motor movements. The ability of motor movement has been measured through motor ability test. Persistency of an individual mostly depends on mental power as well as it depends on motor capacity. 60 boys from 22 to 25 years were selected as the subject of the study among which 20 were football, 20 Kho-Kho and 20 cricket plays. All the subjects were taken from state level players in their respective games. The purpose of the study was to find relationship among persistency, motor fitness and motor creativity, whether motor creativity was dependent on persistency or on motor fitness or on both persistency and motor fitness together and whether persistency, motor fitness and motor creativity has any influence on performance of different nature of games. Motor creativity was measured by a newly constructed test by the researcher. The motor fitness of the subjects was measured through Indian Motor Fitness Test. The persistency of the subjects was measured through square puzzle test. In case of statistical procedure, Mean, Sd, 't'- test and correlation was done. The result shows that in motor fitness Kho-Kho players were better than other two groups and in motor creativity Kho-Kho players were also better than football and cricket group but in case of persistency cricket players were better than other two groups. The motor fitness, motor creativity and persistency were related to each other.

Keywords: Motor fitness, motor creativity, persistency

Introduction
Man has faced numerous problems since the beginning of life. They have solved the problems by the help of Physical Capacity and mental capacity *viz*., intelligence creativity etc.
The most important ability that makes a man an example that is his unique thinking ability that may be termed as creativity. Creativity is the highest function of intellect. Creativity stands for capacity to accept challenge and to change one's environment,
More or less every individual possesses creative ability to some degree. All can be creative in their respective fields of work. Man can be creative in painting, writing, music or discovering scientific theories, similarly be in motor behaviour, performing motor movements.
It can never say that the creative genius only born but can be manifest through proper congenial environments.
Motor creativity is the physical expression of the creativity. When a child play it can be considered as the expression of creativeness in his own world of movement and actions. So the motor creativity has two dimension Mental and Physical. Mental aspect helps to think and physical aspects helps to execute. In absence of any one of the aspects the motor creativity is not possible.
The physical aspects of motor creativity are only possible through motor movements. The ability of motor movement has been measured through motor ability test.
Persistency of an individual mostly depends on mental power as well as it depends on motor capacity.

The purpose of the study was to find

(1) Relationship among persistency, motor fitness and motor creativity.
(2) Whether motor creativity was dependent on persistency or on motor fitness or on both persistency and motor fitness together.
(3) Whether persistency, motor fitness and motor creativity has any influence on performance of different nature of games.

Schmidt 1960 observed the training response on persistency found that the inconsistency of the total response was less than the sum of the inconsistencies of the response components. Factors which increased the movement time (e.g., greater distance or slower speed) tended to decrease the consistency of both movement time and time of initiation of the response, tending to make the total response more inconsistent. There was a tendency for load to have stabilizing effect on slower movement, and to decrease the consistency of faster movements.

Materials and Methods

60 boys from 22 to 25 years were selected as the subject of the study among which 20 were football, 20 Kho-kho and 20 cricket plays. All the subjects were taken from state level players in their respective games. The subjects were gone through three tests. One motor creativity, motor fitness and persistency. Beside thus the personal data were collected.

Personal data: Age in year, Height in cm. and weight is kg were recorded.

Motor creativity: A newly constructed test by the researcher was administered. The test was consisted with five test items.

The total motor creativity score was found to add the correct response in five items.

Motor fitness: The motor fitness of the subjects were measured through Indian Motor Fitness Test (Index No.-1).
The test constructed with three test items - Chins, Push-ups and vertical jump.
The raw were first converted into scale score for each items separately and then the total motor ability score was obtained with the help of the formula: (Chins+ Push-ups) x (Vertical jump) = Motor Fitness.

Persistency: The persistency of the subjects were measured through square puzzle test. The test had been constructed separately. Every subjects had given 30 min maximum time to solve the puzzle.
Total no of min engaged to solve the puzzle was counted as score.

Results and Discussion

Motor Fitness

Table 1: The mean and SD of the scores of the subjects of motor fitness

	Football	Cricket	Kho-Kho
Mean	38.5	27.6	46.3
SD	13.4	10	13.5

From the above table it appears that in motor creativity football and Kho-Kho players showed higher value than cricket group and Kho-Kho group was also better in mean value than the football groups.

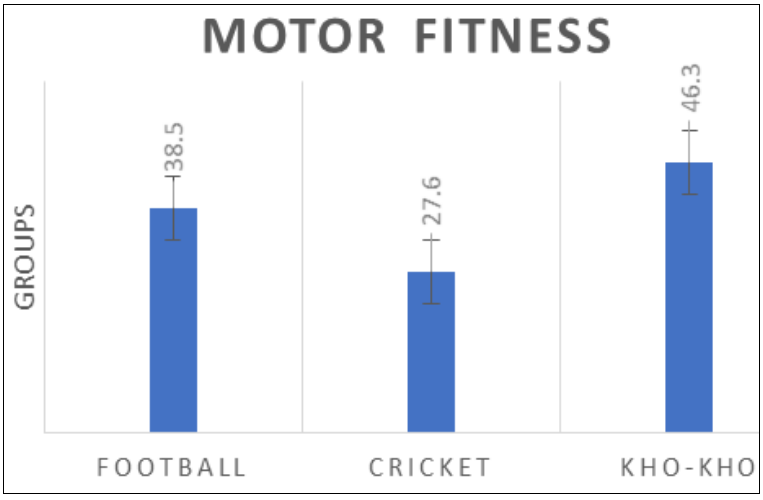

Fig 1: Represents the difference between groups in Motor Fitness

Table 2: Represents the 't' values of groups in Motor Fitness

	Football/ Cricket	Football/Kho-Kho	Cricket/Kho-Kho
't'- Value	4.02*	2.68*	6.85*

df- 38 Level of significant at .01 level-2.71**
Level of significant at .05 level-2.02*

From the t values a significant difference had been found between Football & Cricket group. Between Football & Kho-Kho, between Cricket and Kho-Kho groups. So, Kho-Kho players are significantly better in motor fitness that the other two groups and the Football group was also significantly better than Cricket Group in Motor fitness.

Motor Creativity

Table 3: Represents the Mean and SD values of the subjects in Motor Creativity

	Football	Cricket	Kho-Kho
Mean	134.2	125.2	137.5
SD	19.56	10.47	15.65

From the above table it appears that in motor creativity football and Kho-Kho players showed higher value than the cricket group and Kho-Kho group was also better than football group.

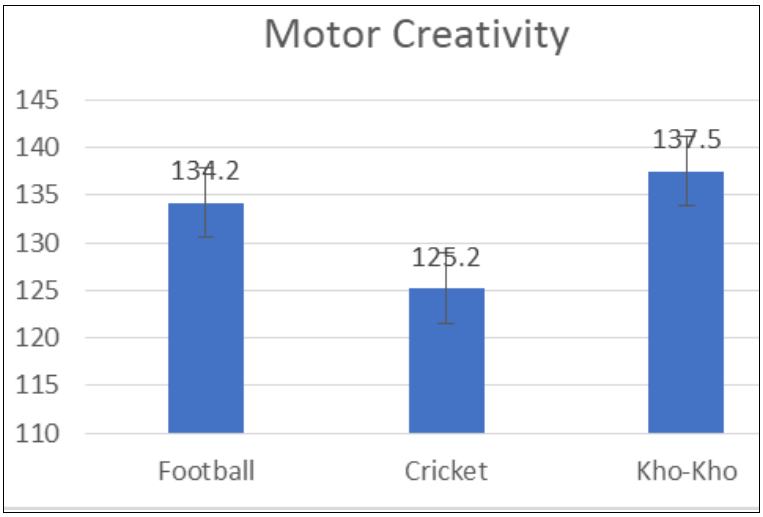

Fig 2: Represents the difference among the groups in Motor Creativity

Table 4: Represents the 't' values of groups in Motor Creativity

	Football/ Cricket	Football/Kho-Kho	Cricket/Kho-Kho
't'-value	2.91**	0.99*	4.29**

df-38 at .01 level-2.71, at .05 level-2.02

From t it appears that football players were significantly better in Motor creativity that the cricket players, but in case of football and Kho-Kho players, the Kho-Kho players had higher mean value in motor creativity than the football players.

Persistency

Table 5: Represents the Mean and SD value of subjects in persistency

	Football	Cricket	Kho-Kho
Mean	15.04	17.47	15.18
SD	7.28	7.80	7.25

From the above table it appears that in persistency the cricket group showed higher value than other two groups.

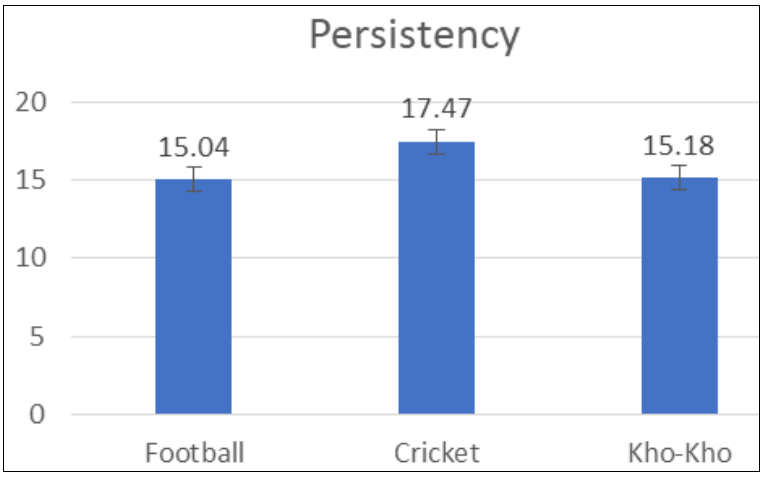

Fig 3: Persistency score among the three groups

Table 6: Represents the 't' value among the groups in persistency

	Football/ Cricket	Football/Kho-Kho	Cricket/Kho-Kho
't'-value	2.19*	0.59	2.11*

df-38 Level of significant at .05 level-2.02
Level of significant at .01 level-2.71

From the 't value it appears that the cricket players in persistency was better than football and Kho-Kho players. In a cross-sectional study among the cricket players, it was also found that Batsman are better in persistency than bowler.

Correlation

Table 7: Represents correlation among variable group wise and as a whole

Group	Motor Fitness vs Motor Creativity	Motor Creativity vs Persistency	Motor Fitness vs Persistency
Football	0.52*	0.06	0.21
Kho-Kho	0.56**	0.01	0.29
Cricket	0.33	0.18	0.79**
As a whole	0.65**	0.27*	0.33*

Group df-18 as a whole df-58

For football group Motor Fitness and motor creativity was related but motor fitness and Motor creativity was not related with Persistency.

In case of Kho-Kho group same trained was observed but for cricket group only motor fitness and persistency was related with each other but between motor fitness and motor

creativity positive relation exist but not significant. Motor creativity and persistency were not related.
Considering all the subjects as a whole it was found motor fitness, Motor Creativity and persistency were related with each other.

Conclusion

From the above result and discussion of the study the following Conclusions were drawn:

I. In motor fitness Kho-Kho players were better than football and cricket players.
II. In motor fitness the football players were also better the Cricket player.
III. In motor creativity football and Kho-Kho players were better them cricket players and Kho-Kho players were also better then football player.
IV. In Persistency the cricket players were better than Kho-Kho and football players and there were no difference between Kho-Kho and Football players.
V. Motor fitness and Motor Creativity for Football and Kho-Kho players were related but not significantly related for cricket players.
VI. The persistency of Cricket players related with Motor fitness.
VII. The Motor fitness, Motor Creativity as Persistency of players were related with each other.

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