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## Comparative study on eye foot co-ordination and rhythmic ability between selected folk dancers and racquet sports players

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and Dr. L Santosh Singh**

### Abstract

The purpose of the study was to compare on eye foot co-ordination and rhythmic ability between selected female folk dancers (Bihu, Jhumur, missing) and racquet sports players (Badminton, Table tennis). To obtain the data the investigators selected total 40 forty subjects i.e.  $N_1=20$  subjects of selected folk Dancers from Inter-college youth festival held at North Lakhimpur college, Lakhimpur (2015) and  $N_2=20$  sportspersons from Inter-college Badminton and table tennis players of the age group of 18-25 years. The study was delimited to assess eye foot co-ordination and rhythmic ability only. It was hypothesized that there would be significant difference between the two groups. To analyze the collected data independent 't' test was employed and the level of significance was set at 0.05 of confidence. The result of the data indicated that there was not significant differences between the two groups since eye-foot coordination (Tabulated  $t_{0.05}(38)=1.686 > 0.16$ ) and rhythmic ability (Tabulated  $t_{0.05}(38)=1.686 > 0.32$ )

**Keywords:** Eye foot co-ordination, rhythmic ability, racquet sports, folk dance

### 1. Introduction

Physical fitness is a prerequisite quality of life. It is the condition that helps a person to look and feel well to carry out daily duties and responsibilities successfully. It helps to enjoy one's social, cultural and recreation interests. In addition to meet unusual or emergency demands, physical fitness is necessary. If a nation is to remain strong, it requires physically, mentally, spiritually and socially fit citizen, for that physical fitness is must. A Physical fitness person has well condition of various system of the body. So each system can do its part towards effective performance.

Co-ordination is a very essential part in games and sports and dance. Eye foot co-ordination is the connection from eyes to feet, in response to movement and reactions. It is the ability to execute action with the feet, guided by the eyes. Rhythm is a strong, regular, repeated pattern of movement or sound. Rhythm is the movement or variation characterized

Rhythm is by the regular recurrence or alternation of different quantities or conditions defined as the expression of timing, and its practicality in sports is vast. While there are many developing sound speed in young athletes, one of the most crucial is rhythm. Rhythm is a singular characteristic within the broader scope of coordination-and this is important because many trainers and coaches do not realize that coordination is not an entity unto itself. It is a system of skills and comprised of several varying physical traits. In folk dance of Assam, such as Bihu, Jhumur, Missing dance and Bagurumba of Bodos. There is a various form movement of body. Example Bihu dance of both males & females perform, but female performed Bihu dance has more variations. There are many stages in female dance such as freehand, twisting, with rhythm pepa blowing and Dhol (drum). It is enlivened by rapid changes in rhythm, mood, movements, pace and improvisation.

### 2. Methodology

#### 2.1 Selection of Subjects

Total 40 forty ( $N=40$ ) subjects,  $N_1=20$  subjects from selected female folk Dancers i.e Bihu,

Jhumur and missing dancers from Dibrugarh University Inter-college youth festival held at North Lakhimpur College, Lakhimpur (2015) and  $N_2=20$  female racquet sports players from Inter-college level Badminton and table tennis tournament held at Digboi college, Digboi and NLB City college respectively, Dibrugarh (2014) respectively between the age group of 18-25 years. The simple random technique was used to select the subjects.

**2.2 Selection of variables:** To analyze the data following variables was taken up for the present study:

- Eye foot co-ordination
- Rhythmic ability

**2.3 Procedure of test**

**2.4 Eye- Foot Co-ordination**

**2.4.1 Purpose:** To measure the Eye-Foot Co-ordination of selected female folk Dancers and selected female racquet sports players.

**2.4.2 Equipment:** A stopwatch, marking of foot prints to guide foot placement in a specific pattern.

**2.4.3 Test Administration**

The tester gave a demonstration in front of the subjects. Subjects were asked to help according to the sprints as quickly as possible. Two trials were allowed after a slow practice trial.

**2.4.4 Scoring:** Performance was recorded in the nearest second.

**2.5 Rhythmic Ability**

**2.5.1 Purpose:** To measure the Rhythmic ability between selected female folk Dancers and racquet sports players.

**2.5.2 Equipment:** Eleven hoops each 1 metre diameter, one stop watch, one measuring tape.

**2.5.3 Test administration**

The subject had to run a distance of 30 meter with maximum sprinting speed marked between two lines. The sprinting time of the subject was taken by stopwatch in the second attempt the subject has to run at a particular rhythm with maximum speed through eleven hoops, which were arranged systematically. Three hoops were kept in a sequence against each other at a distance of 5m away from starting line. Similarly three hoops were kept in a sequence in the middle of the running distance. The subject had to run through those hoops stepping between each hoop. The researchers have to explain the test along with one demonstration and each subject were given one trial run.

**2.5.4 Scoring:** The difference between the timing of the first and second attempt will be taken as the score.

**2.6 Statistical Analysis**

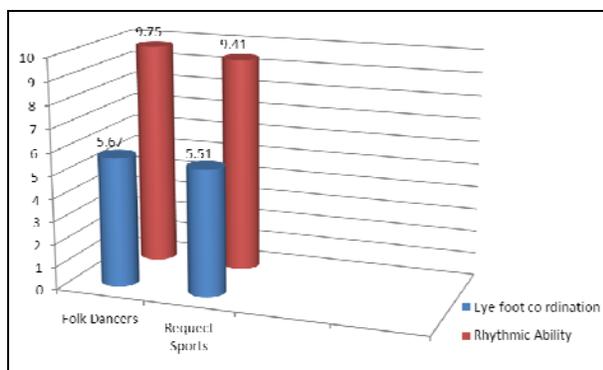
To compare eye foot co-ordination and rhythmic ability between selected female folk dancers and racquet sports players, Means, Standard Deviation were computed. To analyze the collected data independent ‘t’ test was employed and the level of significance was set at 0.05 of confidence.

**3. Results and Discussion**

**Table 1:** Comparison of Eye Foot Co-Ordination and rhythmic ability between selected folk Dancers and female racquet sports players

Variable	Group	Mean	Standard Division	Mean Difference	Standard Error	t-ratio
Eye Foot Co-ordination	Folk Dancers	5.67	3.54	0.16	0.92	0.16
	Racquet sports players	5.51	2.1			
Rhythmic Ability	Folk Dancers	9.75	3.38	0.34	1.04	0.32
	Racquet sports players	9.41	3.20			

Not significant at 0.05 level of confidence Tabulated  $t_{0.05}(38) = 1.686$



**Fig 1:** Graphical representation of Eye Foot Co-Ordination and rhythmic ability between selected female Folk Dancers and female racquet sports players

From Table-1 it is evident that the calculated t- value of 0.16 is quite less than the tabulated t-value of 1.686. Hence statistically there was not significant difference in eye-foot coordination between selected female folk dancers and female racquet sports players. On the other hand with regards to rhythmic ability it is evident that the calculated t- value of 0.32 is quite less than the tabulated t-value of 1.686. Hence statistically there is not significant difference between the two groups.

**3.1 Discussion of Findings**

The findings of the table-1 reveals that statistically there are not significant differences in eye-foot coordination and rhythmic ability between selected female folk dancers and selected female racquet sports players of affiliated college of Dibrugarh University. It may be attributed to the fact that both need fine motor coordination to perform the stance, movement and skills related to them and their involvement to folk dance and Racquet sports may help them to develop or improve their eye-foot coordination and rhythm ability at the same level.

**4. Conclusion**

On the basis of findings it is concluded that there is no significant difference in eye-foot coordination (Tabulated  $t_{0.05}(38) = 1.686 > 0.16$ ) and rhythmic ability (Tabulated  $t_{0.05}(38) = 1.686 > 0.32$ ) between selected female folk Dancers and Racquet Sports Players.

**5. References**

1. Anna Espenchade. Development of Co-ordination in Boys and Girls. Research quarterly, 1986; 18(2):30-43.
2. Dulce D. Shafer. Patterns of Handedness: Comparative Study of Nursery School Children and Captive Gorillas. Recent Research in Psychology. 1993; 76(1):267-283.
3. Ghosh Gautam. A Comparative Study of Coordinative

- Ability between the Athletes of Track Event and Field Events. Unpublished Master's Thesis, LNIPE, Gwalior, 2002.
4. [http://en.wikipedia.org http://en. /wiki/Dance.](http://en.wikipedia.org/wiki/Dance)
  5. Lloyd *et al.* Comparative Study of the Effects of Rhythmic Auditory Cueing and Visual Cueing in Acute Hemiparetic stroke. *International Journal of Therapy & Rehabilitation*, 2012; 19(5):1-5.
  6. Mir Hamid Salehian, Gholam Reza Aftabi, RecepGursoy, Lida Karimi Aghdam. Comparison of the Left Basketball Lay-Up in Hand and Foot Ipsilateral and Contralateral Conditions, *Pelagia Research Library European Journal of Experimental Biology*, 2012; 2(3):740-742.
  7. Kumar Jitender, Verma KK. A Comparative study of Coordinative Abilities of Kabaddi Players at Junior and Sub-Junior Levels. *Indian Journal of Sports Studies*. 2006; 6(1):47-54.
  8. RahilRazeghi, ParvanehShafieNia, NahidShebabbushehri, Farzad Maleki. Academic Journals Full Length Research Paper Effect of Interaction between Eye-hand dominance on Dart Skill. *Journal of Neuroscience and Behavioral Health*. 2012; 2(4):6-12.
  9. Rawal Bhavna. Comparison of selected Co-ordinate abilities of Basketball and Handball Players. Unpublished M.P.E. Thesis, L.N.I.P.E., Gwalior, 1999.
  10. Verma Kavita, Sardar Biswajit. A Comparative Study of Coordinative Abilities of Taekwondo in Different Weight Categories. *International Journal of Behavioral Social and Movement Sciences*. 2012; 1(4):75-88.