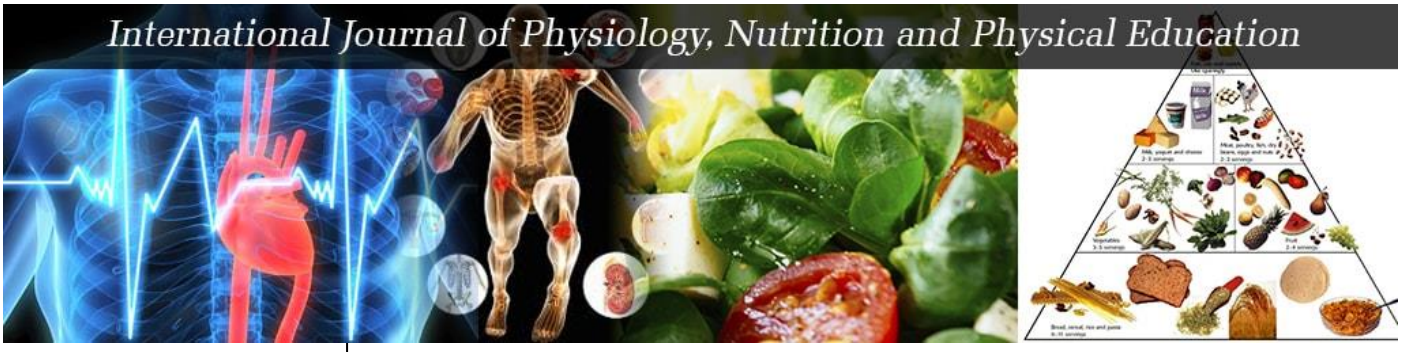

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Study of flexibility midst bowler and batsman

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Abstract
Purpose of this study was to find out the difference of flexibility midst bowler and batsman. The sample (*viz*., N=32) for the current study is branded into the subsequent groups: Group-A: Bowler (n_1=16) and Group-B: Batsman (n_2=16). An independent samples *t* test was used to analyze. In all the analyses, the 5% critical level ($p \leq 0.05$) was considered to indicate statistical significance. The mean & standard deviation of bowler was 2.375 & 0.957, whereas the mean & standard deviation of batsman was 1.9375 & 1.236. The t-value is -1.119. The result is not significant at $p < .05$.

Keywords: flexibility, bowler, batsman

Introduction
Negative effects include the risk of failure leading to poor mental health [1, 2], risk of injury [3, 4], eating disorders [5], burnout [6] and exercise-induced gastrointestinal tract discomfort [5]. In sport, there are unfortunately also reports of physical and psychological abuse [6]. Negative aspects are more common in elite-level sports, where there is a fine balance between maximum performance and negative health. A somewhat unexpected effect of sport participation is that people submitting to planned training in some cases perform less physical activity compared to those who are exercising without a set schedule. One explanation can be a reduced spontaneous physical activity in the latter group [7]. Because physical activity is increasingly executed in an organized manner [8], Sport's role in society has become increasingly important over the years, not only for the individual but also for public health [9].

Material & Methods
Flexibility (Sit and Reach Test)
- **Purpose:** To measure flexibility, and specifically measures the flexibility of the lower back and hamstring muscles.
- **Equipment Required:** Sit and Reach Box.
- **Procedure:** This test involves sitting on the floor with legs stretched out straight ahead. Shoes should be removed. The soles of the feet were placed flat against the box. Both knees should be locked and pressed flat to the floor - the tester may assist by holding them down. With the palms facing downwards, and the hands-on top of each other or side by side, the subject reaches forward along the measuring line as far as possible. Ensure that the hands remain at the same level, not one reaching further forward than the other. After some practice reaches, the subject reaches out and holds that position for at one-two seconds while the distance was recorded. Make sure there were no jerky movements.
- **Scoring:** The score was recorded to the nearest centimeter or half inch as the distance reached by the hand.

Sample
The sample (*viz*., N=32) for the current study is branded into the subsequent groups:
- Group-A: Bowler (n_1=16)
- Group-B: Batsman (n_2=16)

Statistics
The researcher used Statistical Package for the Social Sciences (SPSS) to compute the data

of this study. An independent samples *t* test was used to analyze. In all the analyses, the 5% critical level ($p \leq 0.05$) was considered to indicate statistical significance.

Results

Table 1: Comparison matrix of flexibility balance between bowler and batsman

	Bowler	Batsman
Sample size	16	16
Arithmetic mean	2.3750	1.9375
95% CI for the mean	1.8648 to 2.8852	1.2786 to 2.5964
Variance	0.9167	1.5292
Standard deviation	0.9574	1.2366
Standard error of the mean	0.2394	0.3091
F-test for equal variances		P = 0.332
Difference	-0.4375	
Pooled Standard Deviation	1.1059	
Standard Error	0.3910	
95% CI of difference	-1.2360 to 0.3610	
Test statistic t	-1.119	
Degrees of Freedom (DF)	30	
Two-tailed probability	P = 0.2720	

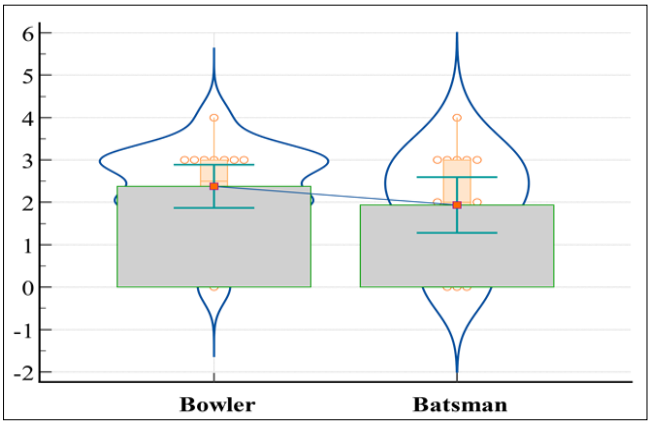

Fig 1: Graphical comparison matrix of Flexibility balance between bowler and batsman

Flexibility

Table-1 illustrates that the mean & standard deviation of bowler was 2.375 & 0.957, whereas the mean & standard deviation of batsman was 1.9375 & 1.236. The t-value is -1.119. The result is not significant at $p < .05$.

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