A COMPARATIVE STUDY OF FLOW STATE BETWEEN HANDBALL AND FOOTBALL PLAYERS

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Abstract
The present study is an attempt to find out comparison of flow state of Handball and Football players. Sample was taken from 50 Handball and 50 Football male players randomly selected from different schools of Chandigarh. To assess the flow state of subject Jackson & Eklund Flow state Scale-2 (FSS-2) 2004 was used. The flow scales assess nine dimension of flow; t-test was used to compare the flow state of Handball and Football players. Significant difference was found among Handball and Football players. The results of the study will assist coaches and players to know the Flow state variables and their impact on the performance of male Handball and Football players.

Key Words: Flow, Handball and Football.

Introduction

Understanding the psychological factors that accompany successful athletic performance is a high priority for applied sports psychology, with a major area of focus being mental links to optimal performance. To advance knowledge in this area, it is important to examine specific psychological constructs with theoretical relevance to optimal performance in order to understand what psychological processes might be contributing to quality of performance. Flow is an optimal psychological inter school that occurs when there is a balance between perceived challenges and skills in an activity (Csikszentmihalyi, 1990). It is a state of concentration so focused that it amounts to absolute absorption in an activity. Research on flow in sport and exercise has increased in recent years. Knowledge of factors associated with the attainment of flow is an important goal for those interested in the quality of athletes' experience and performance in competition. Theoretically, flow as an optimal mental state, would be expected to associated with optimal athletic performance as well as providing an optimal experience. Flow is generally viewed as a peak performance State. Hence, an understanding of factors that promote flow state in exercise will inform the strategies of exercise. Flow leads to positive effective reactions, which they equate with enjoyment. There is a consensus that flow is a state in which one is totally absorbed in the task, leading to optimal physical and mental functioning. It is seen as an altered state of awareness in which one feels deeply involved in the activity and where mind and body operate harmoniously. The present study is an attempt to find out the significance of Flow State of Handball and Football players. It was hypothesized that there is significant difference between Handball and Football player's Event Experience Scale scores as measured by the Flow State Scale-2, (FSS-2). The results of present study will assist the coaches and players to modify their training program and will also help them to understand the concept of flow and its effect on sports performance.

Methodology and Procedure

The subjects for the study were 50 male Handball and 50 Football players from different schools of Chandigarh. To assess the flow state of subject Jackson & Eklund Flow State Scale- 2 (FSS-2) 2004 was used. The flow scales assess nine dimension of flow and in present study we were studying nine dimensions of Flow i.e. Challenging Activity and Required Skills, Merging of Action and Awareness, Clear Goals and Unambiguous Feedback, Concentration on the Task at Hand, Sense of Control, Loss of Self-consciousness, Transformation of Time, Autotelic Experience. In order to examine the study t-test was used and the level of significance was 0.05 Analysis & Results .The comparison between the inter school male Handball and Football players for the selected Flow state variables were statistically analyzed by using 't' test. The data pertaining to the same is presented in Table no. 1 to Table no. 9.

Table 1,Comparison of scores on Challenge Skill Balance between male Handball and Football Players

Variable	Group	Mean	SD	SE	't'- Ratio
challenging activity that requires skills	Handball Football	13.52 14.76	2.22 2.27	0.32 0.31	-2.76**

**Significant at .01 level

It is depicted from the Table no. 1 that the Football players have good Challenge Skill Balance (M=14.76) than Handball players (M=13.). The calculated' values in case of inter school Handball and Football was found to be statistically insignificance as the value obtained was -2.76 whereas, the tabulated value was 2.52. at 98 degrees of freedom at 0.01 level of significance.

Table 2,Comparison of Scores on Clear Goals Between Male Handball And Football Players

Variable	Group	Mean	SD	SE	't'- Ratio
merging of action and awareness	Handball	13.48	2.21	0.30	-3.02**
	Football	14.78	2.09	0.31	

**Significant at0 .01 level

It is depicted from the Table no. 2 that the Football players have good Clear Goals (M=14.78) than Handball players (M=13.48) .The calculated't' values in case of inter school Handball and Football was found to be statistically significance as the value obtained was -3.02 whereas, the tabulated value was 2.52 at 98 degrees of freedom at 0.01 level of significance.

Table 3,Comparison of Scores on Sense of Control Between Male Handball ond Football Players

Variable	Group	Mean	SD	SE	't'- Ratio
clear goals	Handball	12.72	2.02	0.35	-2.42*
	Football	13.82	2.50	0.35	

*Significant at .05 level

It is depicted from the Table no. 3 that the Football players have good Sense of control (M=13.82) than Handball players (M= 12.72) .The calculated't' values in case of inter school Handball and Football was found to be statistically insignificant as the value obtained was -2.42 whereas, the tabulated value was 2.52 at 98 degrees of freedom at .05 level of significance.

Table 4,Comparison of scores on Unambiguous Feedback between male Handball and Football Players

Variable	Group	Mean	SD	SE	't'- Ratio
Unambiguous Feedback	Handball	13.00	2.36	0.33	-3.07**
	Football	14.50	2.52	0.36	

**Significant at 0.01 level

It is depicted from the Table no. 4 that the Football players have good Unambiguous feedback (M=14.50) than Handball Players (M=13.00). The calculated 't' values in case of inter school Handball and Football was found to be statistically significance as the value obtained was -3.07 whereas, the tabulated value was 2.52 at 98 degrees of freedom at0 .01 level of significance.

Table 5,Comparison of scores on Action Awareness Merging between male Handball and Football Players

Variable	Group	Mean	SD	SE	't'- Ratio
concentration on the task at hand	Handball	13.06	2.24	0.32	-2.31*
	Football	14.08	2.18	0.31	

*Significant at 0.05 level

It is depicted from the Table no. 5 that the Football players have good Action Awareness (M=14.06) than Handball players (M=13.06) .The calculated't' values in case of inter school Handball and Football was found to be statistically insignificant as the value obtained was -2.31whereas, the tabulated value was2.52 at 98 degrees of freedom at 0.05 level of significance.

Table 6,Comparison of scores on Total Flow between male Handball and Football Players

Variable	Group	Mean	SD	SE	't'- Ratio
sense of control	Handball	115.9	10.2	1.43	-2.32*
	Football	121.2	12.4	1.74	

*Significant at .05 level

It is depicted from the Table no. 6 that the Football players have good sense of control (M=121.2) than Handball players (M=115.9) .The calculated't' values in case of inter school Handball and Football was found to be statistically insignificant as the value obtained was -2.32.whereas, the tabulated value was 1.96 at 98 degrees of freedom at .05 level of significance.

Table 7,Comparison of scores on loss of self-consciousness between male Handball and Football Players.

Variable	Group	Mean	SD	SE	't'- Ratio
loss of self-consciousness	Handball	12.42	2.58	0.37	-2.67**
	Football	13.82	2.67	0.38	

**Significant at 0.01 level

It is depicted from the Table no. 7 that the Football players have good loss of self-consciousness (M=13.82) than Handball players (M=12.42) .The calculated't' values in case of inter school Handball and Football was found to be statistically insignificant as the value obtained was -2.67.whereas, the tabulated value was 2.52 at 98 degrees of freedom at 0.01 level of significance

Table 8, Comparison of scores on transformation of time between male Handball and Football Players.

Variable	Group	Mean	SD	SE	't'- Ratio
transformation of time	Handball	12.86	2.43	0.34	-2.69**
	Football	14.20	2.56	0.36	

**Significant at 0.01 level

It is depicted from the Table no. 7 that the Football players have good transformation of time (M=14.20) than Handball players (M=12.86) .The calculated't' values in case of inter school Handball and Football was found to be statistically insignificant as the value obtained was -2.69 whereas, the tabulated value was 2.52 at 98 degrees of freedom at 0.01 level of significance.

Table 9,Comparison of scores on an autotelic experience between male Handball and Football Players.

Variable	Group	Mean	SD	SE	't'- Ratio
An Autotelic Experience	Handball	12.58	2.15	0.30	-2.67**
	Football	13.82	2.75	0.39	

**Significant at 0.01 level

It is depicted from the Table no. 7 that the Football players have good loss an autotelic experience (M=13.82) than Handball players (M=12.58).The calculated't' values in case of inter school Handball and Football was found to be statistically insignificant as the value obtained was -2.67.whereas, the tabulated value was 2.52 at 98 degrees of freedom at 0.01 level of significance
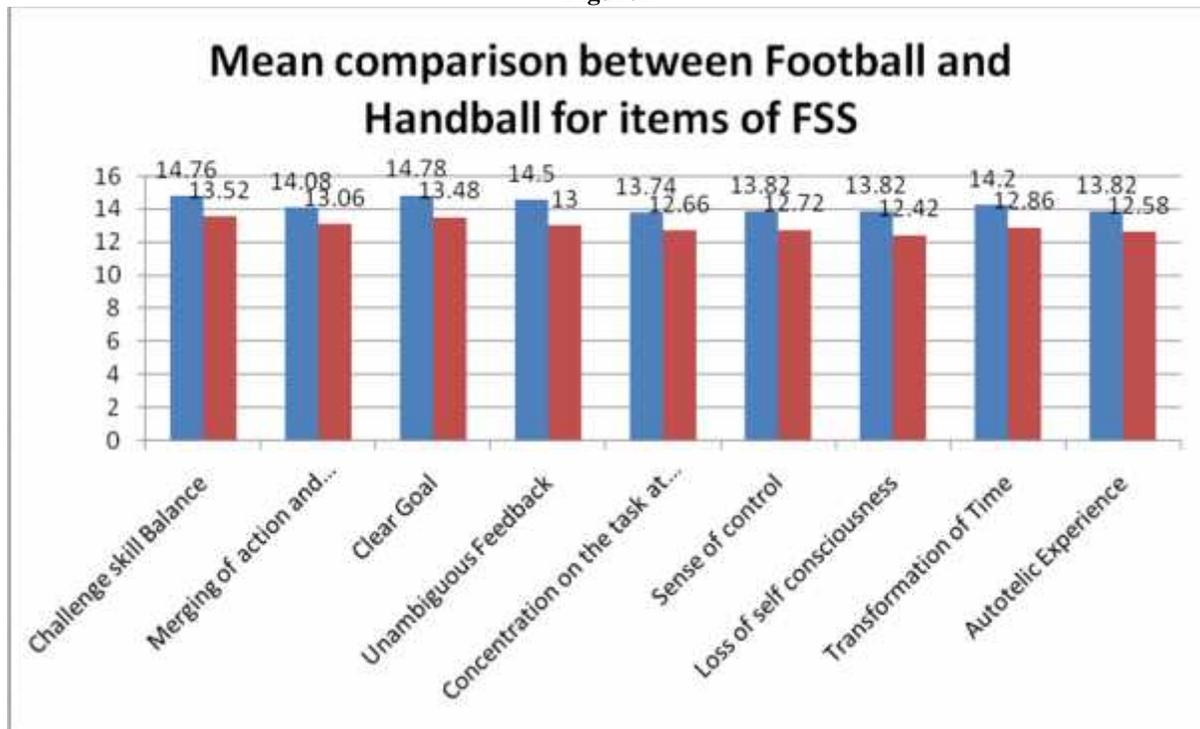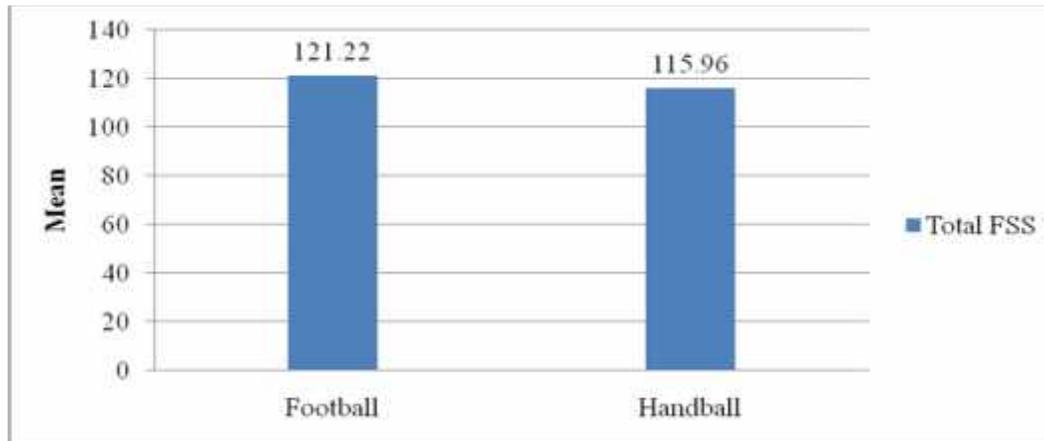
Figure1

Figure2: Mean comparison for FSS

Conclusion of the Study

It is concluded on the bases of above findings that the significant difference was found between Handball and Football players. Football players had greater mean value in all sub variables of flow state scale. This may be because football had more time in duration of game, size of playfield and have specialised offensive and defensive players at a same time. It will be helpful for the coaches, trainers and physical education teachers for the performance in their related fields.

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