

## Flow State (DFS-2) among Cricketers: A comparative study

Amandeep Kaur

Khalsa College, Amritsar, Punjab, India

### Abstract

The present study was conducted to examine the flow state between inter-university and inter-college level cricketers. To obtain data for this study, the investigators had selected Fifty (N=50) Female university level Cricketers of 19 to 25 years of age group to act as subjects from Colleges affiliated to Guru Nanak Dev University, Amritsar. They were further divided into two groups which includes twenty five (n=25) inter-university level cricketers and twenty five (n=25) inter-college level cricketers. The purposive sampling technique was used to obtain the required data. To measure the level of Dispositional Flow State of the subjects, the flow state battery constructed by Jackson & Eklund (2004) was administered. The 't' test was applied to find out the significant differences between inter-university and inter-college level cricketers. To test the hypotheses, the level of significance was set at 0.05. The results revealed significant difference with regard to the sub-variables; Challenge skill balance, Sense of control, transformation of time and Overall flow state-2.

**Keywords:** flow state, inter-university, inter-college, cricketers

### 1. Introduction

The ideal performance state in the sport and exercise environment is the optimal mental state reached as a result of the balance proven between the abilities proven by individuals during the physical activity and their perceived state, requirements or struggle at that moment<sup>[1]</sup>. In other words, it is the inner pleasure of an individual resulting from a challenging task and feeling of having the required level of ability to handle such struggle and challenges. If the athlete has a high level of performance and high level of ability, they experience the optimal performance achieving the optimal performance state in case a challenging task is given. Flow is an optimal psychological state that occurs when there is a balance between perceived challenges and skills in an activity<sup>[7]</sup>. Flow is generally viewed as a peak performance state, and there is some support for this assumption<sup>[9, 13]</sup>. It is a state of concentration so focused that it amounts to absolute absorption in an act concentration so focused that it amounts to absolute absorption in an activity. Research on flow in sport and exercise has increased in recent years<sup>[2, 11]</sup> has encouraged application of flow theory to physical activity settings, which is where some of his initial research into flow began. Based on their respective research findings, Jackson and Csikszentmihalyi<sup>[12]</sup> have recently written a book describing flow in sport and how to attain this optimal mental state. 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 be associated with optimal athletic performance as well as providing an optimal experience. Hence, an understanding of factors that promote flow states in exercise will inform the strategies of exercise practitioners who are interested in promoting enjoyment and adherence to exercise.

In addition, Kimiecik and Harris<sup>[14]</sup> suggested that flow leads to positive affective reactions, which they equate with enjoyment.

### 2. Methodology

To obtain data for this study, the researcher had selected one fifty (N=50) female inter-university and inter-college level cricketers of 19 to 25 years of age group to act as subjects. They were further divided into two groups which includes twenty five (n=25) inter-university level cricketers and twenty five (n=25) inter-college level cricketers. The purposive sampling technique was used to obtain the required data. All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study. To measure the level of dispositional flow state of the subjects, the flow state battery constructed by Jackson & Eklund (7) was administered. The flow state battery constructed by Jackson & Eklund (2004)<sup>[11]</sup>, which assess nine dimensions of Flow. From these dimensions, two versions of the scales were developed. These two versions are Dispositional Flow Scale-2 (DFS-2) and Flow State Scale-2 (FSS-2). The Dispositional Flow Scale-2 (DFS-2) as self-reported instruments designed to assess flow experiences in physical activity. The rating scale used for the DFS-2 is a 5-point likert scale, ranging from "1" (never) to "5" (always). The premise for using this type of assessment is that people who report more frequent occurrence of flow characteristics possess greater predisposition towards experiencing flow.

### 3. Data Analysis

'T' test was applied to find out the significant differences between inter-university and inter-college level cricketers. To test the hypotheses, the level of significance was set at 0.05.

**4. Results**

**Table 1:** Significant differences in the Mean scores of inter-University and inter-college level cricketers on the variables which have significant difference on Dispositional Flow Scale-2

Variables	Intersarsity level cricketers=25		Inter college level cricketers=25		t-value	Significance
	Mean	Sd	Mean	Sd		
Challenge Skill Balance	14.10	3.10	13.73	2.75	2.03*	0.24
Sense of Control	15.8	2.8	13.84	3.27	2.25*	0.014
Transformation of Time	12.68	3.11	10.24	2.25	3.17*	0.0026
Overall Dispositional flow scale-2	118.63	14.10	111.10	10.20	2.163*	0.15

\*Significant at 0.05 level  
Degree of freedom=48

Table-1 shows the results of inter-university and inter-college level cricketers with regard to the variable dispositional flow scale-2. The descriptive statistics shows the Mean and SD values of inter-university level cricketers on the sub-variable Challenge Skill Balance, Sense of Control, Transformation of Time and Overall Dispositional Flow -2 as the ‘t’-value 2.03,

2.25, 3.17 and 2.063 respectively shown in the table: 1 found statistically significant (P<.05). It has been observed from the above results that inter-university level cricketers have shown significantly better on Challenge Skill Balance, Sense of Control, Transformation of Time and Overall Dispositional Flow -2 than the inter-college level cricketers.

**Table 2:** Mean scores of inter-university and inter-college level cricketers on the variables which had no significant difference on Dispositional Flow Scale-2.

Variables	Intersarsity level cricketers=25		Inter college level cricketers=25		t-value	Significance
	Mean	Sd	Mean	Sd		
Action Awareness Merging	14.2	3.8	14.16	2.73	0.042	0.48
Clear Goals	16.96	2.57	16	4.14	0.98	0.16
Unambiguous Feedback	15.84	2.85	15.36	3.2	0.56	0.289
Concentration on the task at hand	16.48	2.72	16.92	2.28	-0.62	0.269
Loss of Self-Consciousness	15.68	3.24	16.64	2.97	-1.09	0.14
Autotelic Experience	17.28	2.65	16.16	2.80	1.45	0.076

\*Significant at 0.05 level  
Degree of freedom=48

Table-2 shows the results of inter-university and inter-college level cricketers with regard to the variable dispositional flow scale-2. The descriptive statistics shows the Mean and SD values of inter-university level cricketers on the sub-variable Action Awareness merging, Clear Goals, Unambiguous Feedback, Concentration on the task at hand and Autotelic Experience as the ‘t’-value 0.042, 0.98, 0.56, -0.62, -1.09 and 1.45 respectively shown in the table: 2 found statistically significant (P<.05). It has been observed from the above results that inter-university level cricketers have shown significantly better on Action Awareness Merging, Clear Goals, Unambiguous Feedback, Concentration on the task at hand and Autotelic Experience than the inter-college level cricketers.

difficulties of the activity and the skills, deep involvement of the players when the activity feels spontaneous and automatic, inherent feedback in the activity, enjoyable experience that is intrinsically rewarding and flow experience characteristics with in particular setting present in the inter-university level cricketers which enabled them to outshine the inter-college level cricketers. Motivation plays a prominent role in relation with Flow<sup>[15]</sup> and development of intervention studies in order to enhance flow in competition<sup>[16]</sup>. However, Table: 2 shows no significant differences on the sub-variables i.e. Action Awareness merging, Clear Goals, Unambiguous Feedback, Concentration on the task at hand and Autotelic Experience between inter-university and inter-college level cricketers. It can be safely summed up that both the groups equally developed on the extent attitude of the players which enabled them to know exactly what they are going to do, focus of the activity, knows what is happening in mind & body.

**5. Discussion**

It is observed from the findings of table-1 with regard to dispositional flow state scale-2 that significant differences have been observed on the sub-variables; Challenge Skill Balance, Sense of Control, Transformation of Time and Overall Dispositional Flow -2 between inter-university and inter-college level cricketers. When compared the mean values of both the groups, it has been found that inter-university level cricketers have performed significantly better on Challenge Skill Balance, Sense of Control, Transformation of Time and Overall Dispositional Flow -2. The above results might be due to the sense of balance between the perceived

**6. Conclusion**

There were significant differences found (table-1) on the sub-variables; Challenge Skill Balance, Sense of Control, Transformation of Time and Overall Dispositional Flow -2 between inter-university and inter-college level cricketers. The inter-university level cricketers have performed significantly better than inter-college level cricketers on the above said variables. However, no significant differences were found with regard to the sub-variables; Action Awareness Merging,

Clear Goals, Unambiguous Feedback, Concentration on the task at hand and Autotelic Experience

## 7. References

1. Jackson SA, Eklund RC. *The Flow Scales Manual*. Morgantown, WV: Fitness Information Technology, 2004.
2. Jackson SA. Athletes in Flow: A Qualitative Investigation of Flow States in Elite Figure Skaters. *Journal of Applied Sport Psychology*. 2002; 4(2):161-180.
3. Jackson SA. Factors Influencing the Occurrence of Flow in Elite Athletes. *Journal of Applied Sport Psychology*. 1995; 7(2):138-166.
4. Jackson SA. Toward a Conceptual Understanding of the Flow Experience in Elite Athletes. *Research Quarterly for Exercise and Sport*. 1996; 67(1):76-90.
5. Jackson SA, Csikszentmihalyi M. *Flow in Sports*. Champaign, IL: Human Kinetics, 1999.
6. Jackson SA, Eklund RC. Assessing Flow in Physical Activity: The Flow State Scale-2 and Dispositional Flow Scale-2. *Journal of Sport and Exercise Psychology*. 2002; 24(2):133-150.
7. Csikszentmihalyi M. *Flow: The Psychology of Optimal Experience*. New York: Harper & Row, 1990.
8. Jackson SA, Marsh HW. Development and Validation of a Scale to Measure Optimal Experience: The Flow State Scale. *Journal of Sport & Exercise Psychology*, 1996; 18:17-35.
9. Jackson SA, Roberts GC. Positive Performance States of Athletes: Toward a Conceptual Understanding of Peak Performance. *The Sport Psychologist*. 1992; 6(2):156-171.
10. Jackson SA, Kimiecik JC, Ford S, Marsh HW. Psychological Correlates of Flow in Sport. *Journal of Sport & Exercise Psychology*. 1998; 20(4):358-378.
11. Kimiecik JC, Stein GL. Examining Flow Experiences in Sport Contexts: Conceptual Issues and Methodological Concerns. *Journal of Applied Sport Psychology*. 1992; 4(2):144-160.
12. Jackson SA, Csikszentmihalyi M. *Flow in Sports*. Champaign, IL: Human Kinetics, 1999.
13. McInman AD, Grove JR. Peak Moments in Sport: A Literature Review. *Quest*, 1991; 43:333-351.
14. Kimiecik JC, Harris AT. What is Enjoyment? A Conceptual Definitional Analysis with Implications for Sport and Exercise Psychology. *Journal of Sport and Exercise Psychology*. 1996; 18(3):257-263.
15. Turksey A, Altinci E, Uster U. Relationship between Motivation and Dispositional Flow State on Football Players Participating in the U13-U16 Football Leagues. 3<sup>rd</sup> world conference on psychology and sociology, WCPS-2014.
16. Koehn S, Morris T, Watt A. Correlates of Dispositional and state Flow in Tennis competition. *Journal of applied Sports Psychology*, 2013; 25(3).