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A study on flow state among collegiate level players of indigenous games

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Abstract

The purpose of the study was to compare the flow state level of collegiate level kho-kho and kabaddi players. The total number of subjects was 30 males (N=30), the players were further classified into two groups of Kho-Kho and Kabaddi players with 15 subjects in each group with their age ranging between 18 to 25 years and were selected from the Lakshmibai National Institute of Physical Education, North East Regional Center, Guwahati. The variable of flow state was measured using questionnaire namely, Flow state scale developed by Jackson S. A., & Eklund, R. C (2002). In order to analyze the data, descriptive statistics such as mean, standard deviation and comparative statistics such as GLM Multivariate Analysis was employed and it was tested at 0.05 level of significance. The multivariate analysis for the subfactors of flow states of collegiate level male Kho-Kho and kabaddi players was found to be insignificant, revealing that both players of the groups owned similar levels of flow states. The value of Wilks' lambda (0.681) was found to be insignificant at 0.05 level of significance ($p=0.445$) revealing that the groups had similar levels of flow states.

Keywords: Kho-Kho, kabaddi, flow state, flow state scale, descriptive statistics, level of significance, multivariate analysis of variance

Introduction

Being in flow state has its benefits in every game, retained attention, focus, conscious concentration, involvement in the current activity, and above all having fun or enjoying the game as we never did before. All these can help to increase an athlete's performance and thus leading an athlete to reach his/her highest potential.

In a kho-kho and kabaddi match, being in flow can help you to reach to the best of your potential and feel immense pleasure or joy or happiness while doing the activity you love. Being in flow helps you to understand a balance between the challenge and skill and it is considered as the highest form of intrinsic motivation.

As the researcher himself has experienced flow although at the time wasn't aware that was a state of flow, while playing in front of tremendous crowd with opposite home team's roaring crowd, biased officials, against all odds being fully immersed in the moment of 'now' being in the moment consciously enjoying himself while playing one of the best performances, without any fear or worries, having the best performance of his life fully immersed in the game. At that moment nothing else matters not even the scores on the board. From the perspective of the researcher the game is all about playing to the best of one's ability, the scores on the board doesn't matter at all, if you are 100% satisfied with your own performance it doesn't matter even if you lose the match. All that matters is that few seconds of self-satisfaction from own performances after a match, a moment of bliss, happiness nothing else matter not even the negative opinion of your coach, if in your heart you know that you did to the best of your ability.

Flow is a state of mind in which a person becomes fully immersed in an activity. Psychologist Mihaly Csikszentmihalyi describes flow as a state of complete immersion in an activity. Being immersed can be defined as a state of focus in which a person is completely absorbed and engrossed in their work.

In Positive Psychology, a flow state also known as "being in the zone" is the mental state in which a person performing some activity is fully immersed in a feeling of energized focus, full involvement and enjoyment in the process of the activity.

Flow is a state of mind achieved when athletes feel completely engaged in their performance, lose their perception of time, concentrate on the moment (without distraction or dilution) and perform at extremely high levels. Csikszentmihalyi (1990) [13] defines flow as “a state in which people are so involved in an activity that nothing else seems to matter, the experience is so enjoyable that people will continue to do it even at great cost for the sheer sake of doing it.

According to the Zone of Optimal Functioning theory, an athlete performs his best when he is playing in his zone of optimum arousal. If he is under aroused or over aroused, he will not be able to perform well. Under arousal may cause boredom, apathy, laziness etc. over arousal may cause anxiety, panic attacks, distress, anger etc. but when the athlete is in his ZOF (optimal arousal zone), he is focused, in control of his performance and experiences a challenge skill balance. In his ZOF he performs his best. When the athlete is experiencing Flow, he is actually performing in his ZOF. Hence Flow and ZOF are closely related.

“Flow” is a state of mind – achieved when athletes feel completely engaged in their performance, lose their perception of time, concentrate on the moment (without distraction or dilution), and, perform at extremely high levels - Phil Del Vecchio III (2010). There are various benefits of flow, Flow focuses your attention on what is important and positive which can lead to improved performance. Flow can speed up learning and skill development, mastery over one’s skills, flow can help you to increase your productivity and most importantly increase enjoyment, happiness, fulfillment, satisfaction and creativity.

Motivation and flow are closely related, as the motivation is mainly divided into two -Intrinsic and extrinsic motivation. Intrinsic motivation is the type of motivation which comes from within the person or individual, when you do something because you love that activity and get happiness by engaging in that activity.

According to Csikszentmihalyi, Flow state is an example of highest intrinsic motivation where the athlete loses a sense of self, he surrenders completely to the present moment and sense of time is lost. There are certain steps for entering into flow state such as-

Elimination of distractions -It is important to note that one cannot experience flow if distractions (internal or environmental) disturb us, Goal setting- Setting clear goals which are challenging as well as attainable seek challenges i.e. stretch yourself consistently beyond your comfort zone, Develop a positive attitude - Enjoy the activity that you are doing and developing a positive attitude towards the activity / your sport, Balancing challenges and skills - Inducing Flow is about the balance between the level of skill of the athlete and the size of the challenge of competition, when challenge is bigger than one’s level of skills, he/she

becomes stressed and anxious and on the other hand when the level of skill exceeds the size of the challenge, the athlete can become bored and distracted. Hence striking a balance is important to keep in mind.

Methods

Selection of Subjects

The subjects selected for this study were male collegiate level kho-kho and kabaddi players of Lakshmbai National University of Physical Education, North East Regional Center, Guwahati with their age ranging between 18 to 25 years. The total number of subjects was 30 (N=30), which were further classified into two groups of kho-kho and kabaddi players with 15 subjects in each group.

Selection of Variable

The variable selected for the study was Flow State which was measured by using questionnaire as a tool. The Flow State Scale (FSS) is a new measure of flow in sport and physical activity settings. The nine FSS scales of the 36-item instrument represent the dimensions of flow discussed by Csikszentmihalyi (1990, 1993) [13, 14], and each scale is measured by four items. Development of items was based on (a) past research with flow state both within and outside of sport settings, (b) qualitative analysis of interviews with elite athletes, and (c) quantitative analyses conducted in the present investigation. This instrument assessed an athlete’s subjective perception of several flow state indicators. It is composed of 36 items representing the nine dimensions of flow such as- Challenge skill balance, Merging of action & awareness, Clear goals, Unambiguous feedback, Concentration on the task at hand, Sense of control, Loss of self-consciousness, Transformation of time, and Autotelic experience. Each item was answered in a 5-point Likert-type scale varying between 1-completely disagree and 5-completely agree. The score for each dimension was obtained through the mean value of its correspondent items, with higher values indicating higher disposition to experience a certain dimension of flow state.

Statistical Technique

In order to analyze the data collected on flow state, descriptive statistics such as mean, standard deviation and comparative statistics such as GLM Multivariate Analysis was employed and it was tested at 0.05 level of significance.

Results

To start with, the interpretation of data and discussion of findings of the total sample (N = 30) in kho-kho and kabaddi group with 15 subjects in each group investigated on the basis of flow state their descriptive statistics and the multivariate analysis has been presented in the following tables. The graphical representation of mean scores of the sub factors of flow state is presented in figure 1.

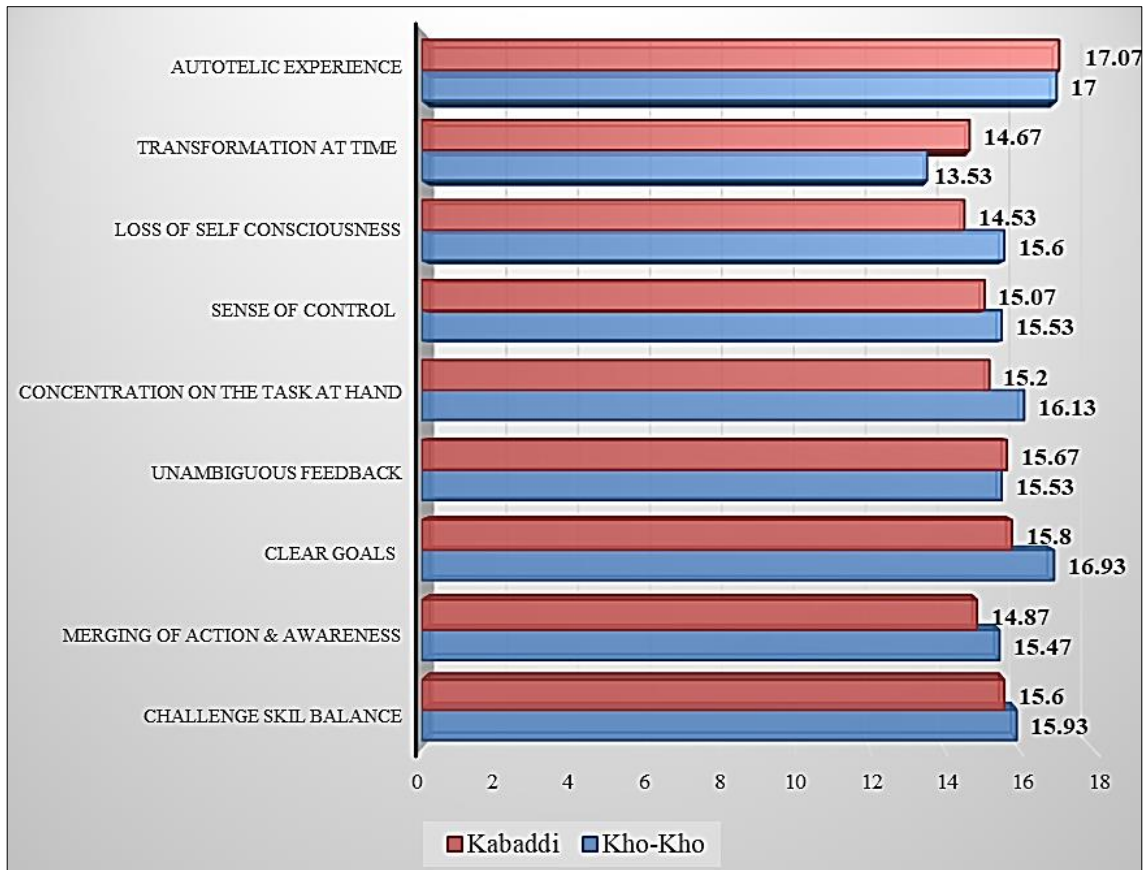


Fig 1: Means Scores of Flow State Subfactors of Male Collegiate Level Kho-Kho & Kabaddi Players

Table 1: descriptive statistics of flow state of male collegiate level kho-kho & kabaddi players

	Sports Group	Mean	SD	N
Challenge skill balance	Kho-kho	15.93	2.154	15
	Kabaddi	15.60	2.613	15
	Total	15.77	2.359	30
Merging of action & awareness	Kho-kho	15.47	3.182	15
	Kabaddi	14.87	2.973	15
	Total	15.17	3.041	30
Clear goals	Kho-kho	16.93	2.604	15
	Kabaddi	15.80	2.704	15
	Total	16.37	2.671	30
Unambiguous feedback	Kho-kho	15.53	1.407	15
	Kabaddi	15.67	2.795	15
	Total	15.60	2.175	30
Concentration on the task at hand	Kho-kho	16.13	2.295	15
	Kabaddi	15.20	2.145	15
	Total	15.67	2.233	30
Sense of control	Kho-kho	15.53	2.167	15
	Kabaddi	15.07	2.631	15
	Total	15.30	2.380	30
Loss of self-consciousness	Kho-kho	15.60	2.720	15
	Kabaddi	14.53	3.248	15
	Total	15.07	2.993	30
Transformation at time	Kho-kho	13.53	2.134	15
	Kabaddi	14.67	2.690	15
	Total	14.10	2.454	30
Autotelic Experience	Kho-kho	17.00	1.927	15
	Kabaddi	17.07	2.520	15
	Total	17.03	2.205	30

In below given table 1, reveals the mean and SD of Flow state of male collegiate Kho-kho and Kabaddi players. The total mean and SD in flow state sub-factors of challenge skill balance, merging of action & awareness, clear goals,

unambiguous feedback, concentration on the task at hand, sense of control, loss of self-consciousness, transformation at time and autotelic experience of kho- kho and kabaddi are 15.77 + 2.35, 15.17 + 3.04, 16.37 + 2.67, 15.60 + 2.17,

15.67 + 2.23, 15.30 + 2.38, 15.07 + 2.99, 14.10 + 2.45, 17.03 + 20 respectively.

The mean and SD in sub-factor of challenge skill balance of male collegiate Kho-kho and Kabaddi players are 15.93 + 2.15 & 15.60 + 2.61. In sub-factor of merging of action & awareness mean and SD are 15.47 + 3.18 & 14.87 + 2.97 respectively. In sub-factor of clear goals are 16.93 + 2.60 & 15.80 + 2.70 respectively. In sub-factor of unambiguous feedback of male collegiate Kho-kho and Kabaddi players are 15.53 + 1.40 & 15.67 + 2.79 respectively. The mean and SD in sub-factor of concentration on the task at hand of

male collegiate Kho-kho and Kabaddi players are 16.13 + 2.29 & 15.20 + 2.14 respectively. In sub-factor of sense of control of male collegiate Kho-kho and Kabaddi players are 15.53 + 2.16 & 15.07 + 2.63 respectively. In sub-factor of loss of self-consciousness are 15.60 + 2.72 & 14.53 + 3.24. The sub-factor of transformation at time of male collegiate Kho-kho and Kabaddi players the mean and SD are 13.53 + 2.13 & 14.67 + 2.69 respectively. And lastly, the mean and SD in sub-factor of autotelic experience of male collegiate Kho-kho and Kabaddi players are 17.00 + 1.92 & 17.07 + 2.52 respectively.

Table 2: Multivariate Analysis on Flow State of Collegiate Level Kho-Kho & Kabaddi Players

	Value	F	Hypothesis df	Error df	Sig.
Pillai's trace	.319	1.039 ^a	9.000	20.000	.445
Wilks' lambda	.681	1.039 ^a	9.000	20.000	.445
Hotelling's trace	.467	1.039 ^a	9.000	20.000	.445
Roy's largest root	.467	1.039 ^a	9.000	20.000	.445

Table 2 represents the multivariate analysis on flow state of collegiate level kho-kho & kabaddi players. Though there are four multivariate tests, the value of Wilks' lambda was considered. The value of Wilks' lambda (0.681) was found to be insignificant at 0.05 level of significance (p= 0.445).

Since the multivariate analysis was found insignificant no further analysis was done. The insignificant value of Manova depicted that the sub factors of flow state was at similar levels when compared between the male collegiate kho-kho and kabaddi players.

Discussion of findings

The multivariate analysis for the flow states subfactors of collegiate level male kho-kho and kabaddi players was found to be insignificant, revealing that both players of the groups owned similar levels of flow states. From the analysis of data it was observed that there has been no significant difference on the flow states subfactors when compared between the male collegiate level Kho-kho and Kabaddi players as the obtained multivariate analysis of flow states showed statistical insignificant difference as the value of Wilks' lambda (0.681) was found to be insignificant at 0.05 level of significance (p= 0.445).

Flow state mostly depends upon the individual's ability rather than the team's effort. It is the player's ability of self-regulation, as also it is the positive relationship between intrinsic motivation and flow. Majority of the literatures supports the fact that flow state helps to consciously realise and enjoy the highest level of performance. A study between team games and individual games revealed that, team games players experienced flow more than that of individual games, some studies result revealed that there were no significant differences found among players on the sub-variables of dispositional flow scale. Some results of the studies also suggested a reciprocal relationship between mental toughness and flow.

The result of the study is in consonance with the study conducted by Deol & Singh (2016)^[4] examining forty-five female basketball players on flow state. Result of the study revealed no significant differences among female basketball players on the sub-variables of flow states. Another study conducted by Koehn (2013)^[9] to examine the experience of flow in sport. The results confirmed there were no significant interaction effects between confidence and anxiety on flow state.

The principal reason behind finding the result as non-significant difference might be because the sample size selected for the study was too less to generalize the fact that the flow state should be or not similar in the kho-kho and kabaddi players. Since in this study only the male players of collegiate levels were compared with each other their flow state were found to be similar. Had been the gender-based comparison, comparison between different playing ability group players or comparison between team and individual games players was done the scenario would have been entirely unlike.

Conclusions

Thus, the conclusion drawn based on the analysis of data was that the multivariate analysis for the flow states subfactors of collegiate level male kho-kho and kabaddi players was found to be insignificant, revealing that both players of the groups owned similar levels of flow states. The value of Wilks' lambda (0.681) was found to be insignificant at 0.05 level of significance (p= 0.445) revealing that the groups had similar levels of flow states.

References

1. Boyd JM, Schary DP, Worthington AR, Jenny SE. An Examination of the Differences in Flow between Individual and Team Athletes. *Physical Culture and Sport*. 2018;78(1):33.
2. Cian Aherne, Aidan Moran P, Chris Lonsdale. The Effect of Mindfulness Training on Athletes' Flow: An Initial Investigation, *Humans Kinetics Journal*, In the *Sport Psychologist*. Jun 2011;25(2):177-184.
3. Crust L, Swann C. The Relationship between Mental Toughness and Dispositional Flow. *European Journal of Sport Science*. 2013;13(2):215–220.
4. Deol NS, Singh D. A comparative analysis of flow state in basketball performance: a psychological probe. *Pedagogics, psychology, medical-biological problems of physical training and sports*. 2016(1):47-51.
5. Edward Chavez J. Flow in Sport: A Study of College Athletes First Published January 21, 2009 Article Information. 2009;28(1)(s):69-91
6. Jackson SA. Factors Influencing the Occurrence of Flow State in Elite Athletes. *Journal of applied sport psychology*. 1995;7(2):138-166.

7. Jackson SA, Thomas PR, Marsh HW, Smethurst CJ. Relationships between Flow, Self-concept, Psychological Skills, and Performance. *Journal of Applied Sport Psychology*. 2001;13(2):129-153.
8. Keith Kaufman A, Carol Glass R, Diane Arnkoff B. Evaluation of Mindful Sport Performance Enhancement (MSPE): A New Approach to Promote Flow in Athletes. *Journal of Clinical Sports Psychology*. 2019;3(4):334-356.
9. Koehn S. Effects of Confidence and Anxiety on Flow state in Competition. *European Journal of Sport Science*. 2013;13(5):543-550.
10. Landhäußer A, Keller J. Flow and Its Affective, Cognitive, and Performance-Related Consequences. *Advances in Flow Research* Springer, In S. Engeser (Ed.), 2012, 65-85.
11. Matthew Pain A, Chris Harwood. Pre-Competition Imagery and Music: The Impact on Flow and Performance in Competitive Soccer *Human kinetic journal*. 2011;25(2):212-232.
12. Russell WD. An Examination of Flow state Occurrence in College Athletes. *Journal of Sport Behavior*. 2001;24(1).
13. Csikszentmihalyi M. Flow. The psychology of optimal experience. 1990:1-22.
14. Csikszentmihalyi Mihaly, Kevin Rathunde. The measurement of flow in everyday life: toward a theory of emergent motivation; c1993.