

## Study of Decision Making Style Among Individual Team and Combat Sports

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The purpose of this investigation was to determine the difference of decision making style among individual, team and combat sports. For the purpose of the present study, forty seven (N=47), Male subjects between the age group of 18-25 volunteered to participate in the study. Decision Making Style (GDMS) Scale developed by Scott and Bruce (1995) were used in the present study. To investigate significant difference among Individual, Team and Combat Sports with regards to the variable decision making style Analysis of Variance (ANOVA) was applied. The results of Analysis of Variance (ANOVA) among Individual, Team and Combat Sports with regards to the variable Decision Making Style were found statistically insignificant (P < .05).

**Keywords:** Decision Making Style, Individual Sports, Team Sports, Combat Sports

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## Introduction

The area of decision-making and judgement in psychology is broad in its scope. Travassos et al. highlighted differences in the nature of the decision (deterministic or probabilistic) and the temporal nature of the decision (static or dynamic) as key factors. Within the scope of DM in sport Johnson highlighted a number of different decision agents (e.g. athletes, coaches, officials), tasks (e.g., reactions, strategy, tactics), and contexts (e.g. discrete passages of play, continuous play, during breaks, and before play). In team sports, the dynamics of DM are even more complex. For players on both teams, playing well is underpinned by selecting the right course of action at the right moment and performing those course of action efficiently time and time again during the game . Recent research has explored the applicability of this ecological approach in a range of sport-specific settings including basketball, sailing, rugby and some combat sports.

## Methodology

### Selection of Subjects

For the purpose of the present study, forty seven (N=47), Male subjects between the age group of 18-25 volunteered to participate in the study.

The subjects were purposively selected from the following three Sports: Group-A: Individual (N1=12)

Group-B: Team (N2=20) Group-C: Combat (N3=15)

### Decision Making Style (GDMS) Scale

The scale was developed by Scott and Bruce (1995). It measures five aspects of decision- making which are rational, avoidant, intuitive, dependent and spontaneous. There are five items to access each of the styles. It uses 5-point Likert scale. The respondent is asked to indicate whether he agrees or disagrees with each statement on a 5-point scale ranging from strongly disagree to strongly agree. The five decision-making styles were identified as a result of factor analysis. The scale was found to be highly reliable (internal) consistency ranging from .68 to .94 (alpha). The

GDMS has represented a very good content validity,

Concurrent validity, and construct validity. All possible decision-making styles were identified from the literature. The items were written specifically to tap behaviors that prior literature suggested would indicate a particular style of decision making. The items were also examined by a number of independent researchers for the appropriateness of the behavior description. Thus, the scale has been judged to have face validity and logical content validity. The GDMS is a 25-question self-report measure that assesses decision making style. The five styles included on the measure are rational, intuitive, dependent, spontaneous, and avoidant. The GDMS has good validity and reliability ratings. Scott and Bruce (1995) have validated each of the five scales on the GDMS. Internal reliability for the rational scale is reported to be between .77 and .85, the intuitive scale, .78-.84, the avoidant scale, .93-.94, the dependent scale, .68- .86, and the spontaneous scale, .87.

### Statistical Techniques.

To investigate significant difference among Individual, Team and Combat Sports with regards to the variable decision making style Analysis of Variance (ANOVA) was applied.

### Result

Table-1 shows that the Mean and SD values of "Decision Making Style" of Individual, Team and Combat Sports were 101.1667±6.97832, 102.0000±6.03499 and 104.5333±5.40987 respectively.

#### **Table-1: Descriptive Statistics among Individual, Team and Combat Sports with regards to the variable Decision Making Style.**

Enclosed as Annexure 01

It is evident from Table-2 that results of Analysis of Variance (ANOVA) among Individual, Team and Combat Sports with regards to the variable Decision Making Style were found statistically insignificant ( $P < .05$ ).

#### **Table-2: Analysis of Variance (ANOVA) results among Individual, Team and Combat Sports with regards to the variable Decision Making Style.**

Enclosed as Annexure 02

Ä A glance at Table-3 showed that the mean value of Individual Sports was 101.166 whereas Team Sports had mean value as 102.000 This shows that the Team Sports had demonstrated significantly better on Decision Making Style than their counterpart’s Individual Sports.

Ä The mean value of Individual Sports was 101.166 whereas Combat Sports had mean value as 104.533. This shows that the Combat Sports had demonstrated significantly better on Decision Making Style than their counterpart’s Individual Sports.

Ä The mean value of Team group was 102.000 whereas Combat had mean value as 104.533. This shows that the Combat group had demonstrated insignificantly better on Decision Making Style than their counterpart’s Team.

**Table-3: Multiple Comparisons among Individual, Team and Combat Sports with regards to the variable Decision Making Style.**

Enclosed as Annexure 03

**Figure-1: Graphical representation of Mean and Standard deviation among Individual, Team and Combat Sports with regards to the variable Decision Making Style.**

Enclosed as Annexure 04

**Conclusion**

Within the psychology literature, there are a number of consistent approaches that have been adopted that seek to understand the processes through which individuals make decisions. While there is an increasing body of knowledge exploring DM in discrete tasks, there is currently a limited amount of research exploring the DM that occurs during game play. It has been noticed from the above results that insignificant differences were found with regards to the variable Decision Making Style.

**Annexure**

Annexure 01

Table-1: Descriptive Statistics among Individual, Team and Combat Sports with regards to the variable Decision Making Style.

Descriptive						
	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Individual	12	101.1667	6.97832	2.01447	92.00	113.00
Team	20	102.0000	6.03499	1.34946	92.00	113.00
Combat	15	104.5333	5.40987	1.39682	96.00	113.00
Total	47	102.5957	6.12429	.89332	92.00	113.00

Annexure 02

**Table-2: Analysis of Variance (ANOVA) results among Individual, Team and Combat Sports with regards to the variable Decision Making Style.**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	87.919	2	43.960	1.181	.316
Within Groups	1637.400	44	37.214		
Total	1725.319	46			

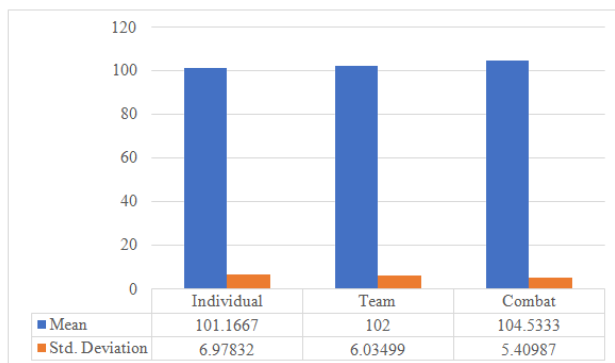
Annexure 03

**Table-3: Multiple Comparisons among Individual, Team and Combat Sports with regards to the variable Decision Making Style.**

Multiple Comparisons						
(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Individual (101.166)	Team	-.83333	2.2275	.933	-6.4767	4.8100
	Combat	-3.36667	2.3626	.371	-9.3524	2.6190
Team (102.000)	Individual	.83333	2.2275	.933	-4.8100	6.4767
	Combat	-2.53333	2.0836	.483	-7.8122	2.7456
Combat (104.533)	Individual	3.36667	2.3626	.371	-2.6190	9.3524
	Team	2.53333	2.0836	.483	-2.7456	7.8122

Annexure 04

**Figure-1: Graphical representation of Mean and Standard deviation among Individual, Team and Combat Sports with regards to the variable Decision Making Style.**



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