

Comparison of Team Cohesion Between Medalist and Non Medalist All India University Level Male Water-Polo Players

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Abstract-Purpose: This study aimed to analyze and compare team cohesion between medalists and non-medalists water polo players. **Method:** Researchers selected 50 intercollegiate-level male water polo players from across India from six different teams (three medalists and three non-medalists) who attended the AIU. Team cohesion data were examined using the Group Environmental Questionnaire (GEQ), a psychological questionnaire. **Result:** The value of the t-statistic for the group social is 3.048 and for the group-integrated task is 3.046, so the t-statistic is significant for the corresponding p-value for the social group is 0.004 and for the group-integrated task is 0.004, which is less than 0.05. **Conclusion:** There are significant differences in perceptions among male water polo players within groups and between medalists and non-medalists at the intercollegiate level regarding group social and group-integration tasks. The results of this study indicate that further research is needed to examine the true value of male water polo players, medal and non-medal, at the intercollegiate level.

INTRODUCTION

Naturally, coaches, athletes, and sports enthusiasts know that there is more to sporting success than the collective or individual skill of a team. There are many examples of talented teams falling short of expectations and untalented teams surpassing expectations. There is an established principle in sports that a group of individuals working together is far more effective than the same individual working alone.

Team performance appeared to be a more complex interplay of interpersonal and situational factors than the simple sum of individual efforts. Therefore, exercise psychologists could not ignore that psychosocial factors influence group performance. I

was doing research on another important factor influencing performance: team cohesion [1]. Cohesion has been defined as "a dynamic process reflected in the tendency of a group to come together and maintain cohesion in the pursuit of its instrumental goals or the satisfaction of the emotional needs of its members" [2]. Cohesion includes task and social dimensions [3]. A literature review by Caron et al. (2007) confirmed that both task and social cohesion are associated with improved performance. Recent research by [4] and [5] found a positive relationship between cohesion and performance.

Cohesion is the cornerstone of teamwork because effective teamwork requires a high level of team spirit and collaboration. The way teams deal with it distinguishes between successful and unsuccessful outcomes [6], [7] and [8]. A fundamental prerequisite for success is a kind of collaborative awareness in which team members are aware of the context of their actions [8] & [9]. This allows the team to work above the collective efforts of all individual members.

The relationship between cohesion and athletic performance in sports teams has been extensively studied in sports psychology. The general conclusion is that cohesion has a clear positive effect on performance outcomes [10], [11] & [12]. These results apply to various sports such as soccer [13], basketball [14], and volleyball [15]. In his review of 30 studies on team cohesion, Widmeyer et al. (1993) found that 83% of them reported a positive association between cohesion and performance [16]. A study by Caron et al. (2002) reported moderate-to-large effects of cohesion and performance on the relationship between cohesion and performance [17]. Studies have shown that postseason cohesion is higher in successful teams than in unsuccessful teams [18], [19] & [20]. A study

by Bray and Whaley (2001) showed that higher cohesion led to higher levels of exertion and improved performance [21]. Improving team cohesion is one of the most difficult tasks for a coach, he said. He must first have players who are willing to sacrifice, cooperate, and work hard. To create a truly cohesive group, each individual must be willing to lose themselves within the group. Not until you're comfortable as a second stringer, but until you prioritize the well-being of your team over your own personal goals. He can keep working hard to finish first, but he shouldn't be hostile if he doesn't meet his personal goals, not those of the team.

In recent years, the game of water polo has probably done more to spread and stimulate interest in swimming than any other branch of the sport. It is a game that provides ample opportunity to show and develop stamina. The practice tends to improve the speed of all who participate in this pastime as well as raise the minds of the devotees as to the best way to rule the water. Instilling good ideas in Long distance swimming typically employs only one swimming style, but the abrupt change of position required in water polo necessitates a constant style change. This is a beneficial stage of the game in itself; it is the stage that teaches the swimmer how perfect their powers are. Thus, the current researcher wants to find out: Does team cohesion matter in water polo? If yes, then is it really important to be a medalist? To find out the answer to these questions, the current author is going to conduct a survey on several water polo players, in which medalists and non-medalists are both included.

METHODS

Selection of Participants

To achieve the purpose of the study, the researchers selected 50 All India Inter-university level male water polo players from across India from six different teams (three medalists and three non-medalists) who participated in the AIU Aquatics Championship 2021-2022 held at KISS, deemed to be the University of Bhubaneswar, Odisha.

Selection of Variable

It was determined to choose team cohesiveness based on literary evidence, communication with psychological specialists, discussions with notable physical educators in this sector, and the availability

of tools. Albert V. Carron et al. developed the Group Environment Questionnaire (GEQ) to assess team cohesiveness in 1985.

The Variables are:

- Group social
- Group integration- task

Statistical Technique

In the study, the mean and standard deviation were employed as descriptive statistics. An independent t-test was employed as a statistical technique with the data analysis program SPSS 20 at the 0.05 level of significance to compare the specified personality characteristics between both groups.

Collection of data

Data on the psychological variable selected in this study—team cohesion—were collected using standardized questionnaire (GEQ). Questionnaires were provided to subjects during the tournament with the prior consent of the managers and coaches accompanying the teams. They were asked to direct the player to be the subject of research. Subjects selected for this study were contacted personally and asked for their good-faith cooperation in this regard. Subjects were given the necessary instructions before each test was performed, rice field. The purpose of the study was clearly explained to them to give each subject greater insight into psychological functioning. By receiving these instructions, subjects will be able to achieve optimal levels of performance. Subject's reaction was kept private so that he could not hide his true feelings. Once the instructions were clearly understood, subjects were asked to respond as quickly as possible without invalidating the question or statement. None of the subjects had serious problems understanding questions or statements written entirely in English.

RESULT

Data was collected using the Group Environment Questionnaire (GEQ), which was then, analyzed using an independent t-test at the 0.05 level of significance and presented in the tabular form shown below:

Table-1: Descriptive and t-table for variable group social of All India inter-university level water polo medalists and non-medalists

Group	Mean	Standard deviation	Mean difference	Standard error difference	t-value	Two sided P-value
Medallist	31.40	7.65	6.41	2.10	3.04	.004
Non-medallist	25.0	6.22				

❖ There was a significant difference in perception of Group Social between All India inter-university medalist [M = 31.40, SD = 7.65] and non-medalist [M = 25.0, SD = 6.22] male water-polo players; hence the t-value is $t(49) = 3.048$ is significant to its p-value ($p = 0.004$) which is less than 0.005.

Figure-1: Graphical representation of the mean of the GROUP SOCIAL of the medalist and non-medalist AIU Water-Polo player

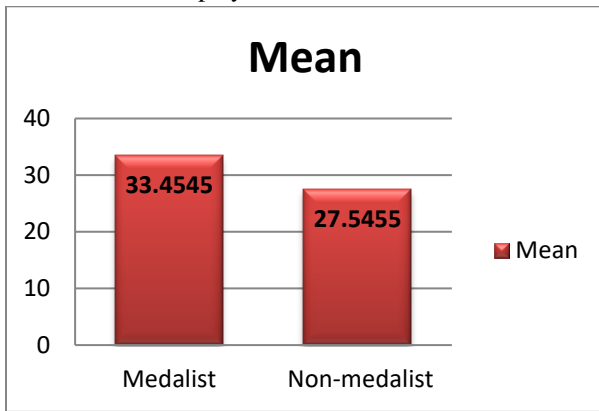


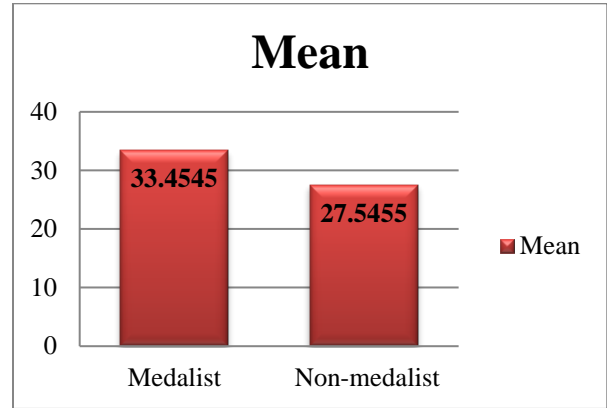
Table-2: Descriptive and t-table of Group-Integration Task of the Medalist and Non-Medalist All India Inter-University Water Polo Players

Group	Mean	Standard deviation	Mean difference	Standard error difference	T value	Two sided P value
Medallist	33.4545	7.50065	5.90909	1.94007	3.046	.004
Non-medallist	27.5455	5.15223				

❖ There was a significant difference in perception of Group-Integration Task between All India inter-university medalist [M = 33.45, SD = 7.50] and non-medalist [M = 27.54, SD = 5.15] male water-polo players; hence the t-value is $t(49) = 3.046$ is

significant to its p-value ($p = 0.004$) which is less than 0.005.

Figure-2: Graphical representation of the mean of the GROUP-INTEGRATION TASK of the medalist and non-medalist AIU Water-Polo player



DISCUSSION

Conventional wisdom holds that group cohesiveness is substantially connected to performance, according to Janet McLeod and Kathryn Von Treuer (2013). This might be based on the idea that greater cohesiveness leads to greater sharing of collective goals. However, empirical and meta-analytical research has continuously failed to show a link between cohesiveness and performance. This issue might be traced in part to disagreements over the precise definition of cohesiveness and its components [22]. Paramjit Singh Ghuman (1999) explored group cohesion in athletes and non-athletes and identified the components that influence group cohesiveness. They concluded that athletes have greater cohesiveness scores than non-athletes on cohesion assessments. Sportsmen score higher than non-athletes on components such as enjoyment, acceptance, trust, respect, mutual aid, confiding, understanding, and spontaneity. It demonstrates greater cohesion in athletes than in non-athletes [23].

Thus it was found that the values of t-statistics for the following variables are, for group social t-value = 3.048, and p-value = 0.004 and for group integration-task t-value = 3.046, and p-value = 0.004, both the t-value are significant to its p-value which is less than 0.05. After conducted the scientific research process the data shows that there was a significant difference in perception of Group cohesion between All India

inter-university medallist and non-medallist male water-polo players.

CONCLUSION

By fulfilling the research gap, the current author concludes that team cohesion plays a really important role when it comes to participating in team games; hence, the same thing is applied in water polo, and team cohesion plays a significant role in water polo. After completing the research process, the current author concludes that a team that is more cohesive in nature will perform better. According to the data in this study, medalist teams are more cohesive in nature, while non-medalist teams are less cohesive.

ETHICAL DECLARATIONS

Conflict of interest

There are no conflicts of interest to disclose for the current author.

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Consent to Participate

Prior to participation, subjects provided verbal consent.

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