

# Relevance of Team Cohesion in Training of Track and Field Athletes: A Review

Ravindra Kumar Walmiki  
Department of Physical  
Education,  
University of Mumbai

Dr. Manohar Mane  
Department of Physical  
Education,  
University of Mumbai

Hamish D'souza  
Sprinters Sports Club

*Abstract: Team spirit is often considered a peculiar characteristic of sportspersons. While the importance of unity among athletes is an evident in team games, its relevance in the training of sportspersons of individual sports, especially track and field athletics, is often not recognized. The purpose of this study is to review how team cohesion impacts athletes of various sports and understand how it could contribute to the overall performance of track and field athletes, who mainly compete individually.*

**Keywords:** team, cohesion, track and field

## 1. Introduction

The importance of group cohesion was expressed in 550 B.C. by Aesop who said, “United we stand, divided we fall”. Some teams like the Indian cricket teams, Manchester United F.C. under Sir Alex Ferguson, and Real Madrid C.F., to name a few, have often emerged victorious from vulnerable situations. The audience is often intrigued why some teams perform well consistently while why some teams, with excellent players, do not. Though the resources, skill and abilities play an important role, determinants of team performance like group structure and task allocation cannot be discounted.

## 2. Team Cohesion

Team cohesion is defined as “a dynamic process that is reflected in the tendency for a group to stick together and remain united in its pursuit of goals and objectives”. It may be motivated by two broad factors – task orientation and social cohesion (Carron, Widmeyer, & Brawley, 1985).

Group Environment Questionnaire (GEQ) (Carron, Widmeyer, & Brawley, 1985) and Social Network Analysis (SNA) (Scott, 2017) are widely used to measure team cohesion. According to the GEQ model, group integration and individual attractions to the group can be focused on either task (objectives of the group) or social characteristics (social relationships within the group). GEQ measures the cohesion through four constructs: Individual Attraction to Group-Task (ATG-T), Individual Attractions to Group-Social (ATG-S), Group Integration-Task (GI-T) and Group Integration-Social (GI-S). SNA plots an individual in an

interconnected network with the team to map and understand social relations, structure and temporal changes.

### 3. Classification of games for cohesion studies

Depending on cohesion and interaction, games can be classified as interactive (team members to work together to achieve the task) or coactive (members perform on individual basis to achieve a group task). Interactive games include basketball, hockey, soccer, etc whereas coactive games cricket, swimming, gymnastics. Track and field events are mostly individual events with relays being the only exception.

## 4. Effects of team cohesion on team games

### 4.1 Interactive games

One of the earliest studies found a positive relationship between cohesion and team performance (percentage of wins) in hockey. (Carron & Ball, 1977). A study on a female Netball team observed that while successful and unsuccessful teams did not have much difference in terms of social cohesion, teams with higher task cohesion were more successful than others (Wilson, 1998).

A recent study using Social Network Analysis as a tool investigated the cohesion and performance of two Division 1 women's basketball teams (Team A and Team B). The players, the coaching team and support staff were included in the survey conducted during offseason, preseason, midseason and at the end of the season. Team A, which had better task oriented cohesion and reported the highest levels of structural cohesion in terms of efficacy, trust and advice networks, had a better winning percentage as compared to Team B which had better social oriented cohesion and reported higher levels of friendship. (Warner, Bowers, & Dixon, 2012).

The 2016 UEFA European Football Championship witnessed inspiring performances from teams like Iceland and Wales against higher ranked teams. The teams' ability to work together as a cohesive unit to overcome shortcomings in individual talent was considered instrumental in their impressive performance. (Eys & Kim, 2017). A longitudinal study on soccer players found that cohesion and performance affect each other dynamically throughout the season, both positively and negatively, with a stronger direction from cohesion to performance. (Gioldasis, Stavrou, Mitrotasios, & Psychountaki, 2016)

### 4.2 Coactive games

Studies involving the relationship between team cohesion and performance in coactive sports have produced varying results.

When in the 1960 Olympics, the German rowing team, a coactive sport, (Jenkins, 2005) won despite internal conflicts, it was shown that crew members could successfully meet team goals without extensively affiliating with each other. (Lenk, 1969). However, a

study on high school wrestling teams conducted few years later refuted this claim. It was observed that while the overall team cohesiveness did not differ for successful and less successful seasons in preseason, at the end of the season, the successful teams displayed higher levels of team cohesiveness. It supported the theory that cohesion and team performance had a positive effect on each other. (Petley, 1973)

## 5. Effect of team cohesion on track and field athletes

There is little research or theory to understand group influence from a primarily individual sport perspective. This may be due to the perceived notion that athletes of individual sport are not required to interact during competition and hence cannot directly influence each other's performance. Despite the fact that most athletes viewed their sport performances as ultimately individual, they accepted the primacy of groups in promoting individual-level success.

### 5.1 Effect of team cohesion in training phase

One of the most telling indicators of the importance of positive group environments was that even national-level athletes went to relocate from less-than-ideal social and training conditions to find better team settings. The concept of interpersonal influence from teammates was robust and athletes identified several aspects of interpersonal influence: the group as the reason to compete, motivational influences, social comparison, teamwork, social influences. In addition to competitive and achievement-oriented incentives, their teams provided an incentive to remain in their sport during critical phases like injuries. The importance of the group as an incentive to participate also resonated with athletes when they were describing early sport experiences. The presence of a training group also helped induce confidence, accountability in training and ease self-regulation. Athletes found that interpersonal influences on self- regulation affected efforts, performance and also the pursuit for similar goals (Evans, Eys, & Wolf, 2013) even if it meant competing with each other. Team cohesion, intra team communication and team norms have found to contribute to the team member's satisfaction and intent to remain with the team. (Onag & Tepeci, 2014).

### 5.2 Effect of team cohesion in competition phase

Contrary to the perceived positive outcomes, the presence of a team may have some negative effects on an individual's performance like mellowing down the productive rivalries (Landers & Lueschen, 1974). While a cohesive team can create a healthy competition among individual athletes, lack of cohesion may overwhelm the athlete with competitiveness and can lead to negative feelings of jealousy and self-doubt. The Ringelmann effect (Kravitz & Martin, 1986), which leads to a weaker team effort as compared to cumulative productivity of a group, contradicts the stereotype of enhanced performance as a team. The actual group productivity often falls short of potential productivity due to co-ordination losses and motivation losses. This loss in the group productivity due to motivation losses, arising out of

reduction in individual efforts believing that other group member's will compensate the difference, is called social loafing. (Latane, Williams, & Harkins, 1979).

An experiment on 30 meter sprint relay teams, designed to eliminate co-ordination losses, to study the effect of motivational losses observed that, under conditions in which individual performances were identified, team with higher cohesiveness exercised lesser social loafing as compared to a team with lesser cohesiveness. This observation was further verified by meta-analysis. (Karau & Williams, 1993).

Although a group of athletes training together may be segregated by age groups and event types, their interdependence on collective outcomes (like winning inter-school championship) often served to unite the team members and motivated them to perform better. (Evans, Eys, & Wolf, 2013). A good pace setting strategy in long distance events is one of the most important components of success without injury. An athlete training or competing within a cohesive group will expend less effort on managing pace or dispelling failure-oriented thoughts and be able to maintain more positive affect thus, conserving regulatory energy. Positive team cohesion has also shown to help athletes cope with competition anxiety. (Teymori, Khaki, & Nikbhakhsh, 2014)

## 6. Summary

A team gives an athlete a sense of belongingness and can play a moderating effect in maintaining the correct physical and psychological state in high pressure situations. The positive effects of team cohesion on athletes in both coactive and interactive sports can be considered while studying the role of cohesion on track and field athletes.. However, considering the individualistic nature of the events, team cohesion exercises should be context based to avoid affecting the focus of individuals accustomed to solitary training.

Various studies on the effects of cohesion on the performance of a team have highlighted both positive and negative aspects of it. While many researchers have studied team dynamics in team sports, the effects of team cohesion on individual sports like track and field events are less explored and it is hoped that this review shall facilitate it to help design better training plans.

## 7. Bibliography

Baron, B., Moullan, F., Deruelle, F., & Noakes, T. D. (2011). The role of emotions on pacing strategies and performance in middle and long duration sport events. *British Journal of Sports Medicine*, 511-517.

Carron, A. V., & Ball, J. R. (1977). An analysis of the cause-effect characteristics of cohesiveness and participation motivation in intercollegiate hockey. *International Review for the Sociology of Sport*, 49-60.

Carron, A. V., Widmeyer, W. N., & Brawley, L. R. (1985). The development of an instrument to assess cohesion in sport teams : the Group Environment Questionnaire. *Journal of Sport Psychology*(7), 244-266.

Evans, B., Eys, M., & Wolf, S. (2013). Exploring the nature of interpersonal influence in elite individual sport teams. *Journal of Applied Sport Psychology*, 448-462.

Eys, M., & Kim, J. (2017, 6 28). *Team Building and Group Cohesion in the Context of Sport and Performance Psychology*. Retrieved from Oxford Research Encyclopedia of Psychology: <http://psychology.oxfordre.com/view/10.1093/acrefore/9780190236557.001.0001/acrefore-9780190236557-e-186>

Gioldasis, A., Stavrou, N., Mitrotasios, M., & Psychountaki, M. (2016). Cohesive and performance in soccer : A causal model. *Sport Science Review*, 97-112.

Jenkins, S. P. (2005). *Sports Science Handbook* (Vols. 1: A-H). Multi Science Publishing Co.Ltd.

Karau, S. J., & Williams, K. D. (1993). Social loafing : A metaanalytic review and theoretical integration. *Journal of Personality and Social Psychology*, 681-706.

Kravitz, D., & Martin, B. (1986). Ringelmann rediscovered : The original article. *Journal of Personality and Social Psychology*, 936-941.

Landers, D., & Lueschen, G. (1974). Team performance outcome and the cohesiveness of competitive coacting groups. *International Review of Sport Sociology*, 57-71.

Latane, B., Williams, K., & Harkins, S. (1979). Many Hands Make Light the Work : The causes and consequences of social loafing. *Journal of Personality and Social Psychology*, 822-832.

Lenk, H. (1969). Top performance despite internal conflict. In J. W. Loy, *Sport, culture and society : a reader on the sociology of sport*. Macmillan.

Onag, Z., & Tepeci, M. (2014). Team Effectiveness in Sport Teams: The Effects of Team Cohesion, Intra Team Communication and Team Norms on Team Member Satisfaction and Intent to remain. *Procedia - Social and Behavioral Sciences* (pp. 420-428). Elsevier.

Petley, J. W. (1973). *Team cohesiveness of successful and less successful high school varsity wrestling teams*. Ithaca College Theses.

Scott, J. (2017). *Social Network Analysis*. London: Sage Publications Ltd.

Teymori, S., Khaki, A. A., & Nikbhakhsh, R. (2014). The relationship between team cohesion and anxiety on team sports student athletes. *Bulletin of Environment, Pharmacology and Life Sciences*, 414 - 417.

Warner, S., Bowers, M. T., & Dixon, M. A. (2012). Team Dynamics : A social network perspective. *Journal of Sport Management*, 53-66.

Wilson, A. J. (1998). *Team cohesion, performance outcome and player satisfaction in state league netball*. Perth: Edith Cowan University.