

Dynamics of team cohesion: A social network perspective

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While tangible factors are easier to identify and measure, intangible factors are frequently a critical determinant of team performance in the sport context (see Curtner-Smith et al., 1999; Pickens, 1994; Voight & Callaghan, 2001). Some sport teams seem to perpetually under-perform, others hover around mediocrity, and only a few appear to function with the utmost efficiency and effectiveness. What accounts for this disparity in team performance is typically the subject of vigorous debate amongst media, fans, coaches, and athletes; however, the respective accolades or blame are frequently attributed to individual performance and decision-making alone, with little regard given to the group as a functional unit (Whannel, 2002). Aside from the traditional mainstream, tangible, practitioner-based factors such as variance in coaching ability, player talent, and critical in-game decisions, researchers have shown that group cohesion may also impact performance (Carron et al., 2002; Heuze et al., 2006). Carron et al. (1998) defined cohesion as “a dynamic process that is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs”(p. 213). Widmeyer et al. (1993) determined that 83% of the studies conducted in the area of cohesion found a positive correlation between cohesion and group performance. This correlation, however, may only hold true for certain types of groups and/or tasks. For example, Carron and Chelladurai (1981) proposed that cohesion was related to team success only in sports that require interactive dependence. That is, sports like basketball, in which team members must coordinate and adjust with one another in order to perform effectively, are interactively dependent. On the other hand, sports like track and field, where each athlete’s individual score is added to a composite, are not interactively dependent. Therefore, understanding the relationship between cohesion and performance and the factors that either foster or inhibit cohesion would benefit sport managers and/or coaches in pursuit of high performance on interactively dependent teams.

For the past two decades, nearly all research conducted in the area of team cohesion has utilized the conceptual framework introduced by Carron et al. (1985). In order to help define, categorize, and measure levels of cohesion, the model developed by Carron et al. (1985) divides cohesion into four dimensions: group integration-task (GI-T), group integration-social (GI-S), individual attractions to the group-task (ATG-T), and individual attractions to the group-social (ATG-S). Cohesion within this framework has then been evaluated based on the widely-used Group Evaluation Questionnaire, an 18-item self-report inventory anchored on a 9-point Likert-type scale. While this framework is extensively utilized within the sport management literature, few have explored alternative cohesion measures that may provide new insight and more illustrative and practical ways to evaluate cohesion. Within the more general management literature, a body of research known as social network analysis provides elucidatory metrics for the measurement of the individual relationships that comprise the social entities to which people belong. In fact, Quatman and Chelladurai (2008) characterize social network analysis as “a new and promising research lens to the field of sport management”(p. 339).

Deriving many of its principles from graph theory, social networking analysis utilizes algorithms and procedures that allow a researcher to map social structures that otherwise may be unnoticed through other conventional methods, such as the Carron et al. (1985) model. A social network approach can compliment and enhance our understanding of multifaceted topics in sport by aiming to better understand the relational embeddedness and connectedness of social units at the individual, organizational, and/or structural level (Kilduff & Tsai, 2007). In fact, Burt (1980) noted this potential for connecting micro- and macro-level structures as one of the benefits of network analysis. In this regard, social network analysis provides a unique theoretical framework through which to examine the behavior of both groups and individuals. Since social network analysis can contribute to our understanding of cohesion, this study applies established social network cohesion methodologies to a sport-specific setting. In the current study, the researchers measure the levels of cohesion in four specific areas, three of which are derived directly from the social networking literature (Krackhardt & Hanson, 1996). These three pre-established measures uncover and explicate the friendship, trust, and advice networks of each participant. To build upon and contribute to the traditional literature in this area, we also include a more sport-specific measure of individual and collective efficacy (Spink, 1990). Combined, these four measures (and open-ended questions regarding team dynamics, role perception, and goals) provide insight that extends the depth and scope of current work within the area of cohesion. This data is then used to: a) explore and visually depict the evolution of a team network over a season; b) determine if any patterns of change are related to performance variables (or revealed through data within the open-ended questions); and c) determine which cohesion networks (friendship, trust, advice, or collective efficacy), if any, are correlated with team performance. The participants include members of two NCAA Division I women’s basketball teams who have agreed to take part in the study. Due to the nature of social networking research, one group

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of individuals, or in our case one team, would be considered a sufficient sample to conduct a social networking inquiry (Kilduff & Tsai, 2003). However, the additional team will allow even greater insight as the researchers can compare and contrast the two teams (networks). The two teams are completing a short online survey at four critical points during the basketball calendar year. This roster-based survey, which has the participants indicate which team members fit a given criteria, will be used to collect information related to the individual team member's social network during the preseason, beginning, middle, and end of their season to track any possible network changes as the season progresses.

Once the data has been collected (currently two out of four phases have been completed), social network analysis-specific software called UCINET (Borgatti et al., 2002) will be utilized to generate indices of cohesion in the four aforementioned areas. These measures will be analyzed using traditional inferential statistical techniques as well as qualitative analysis on the open-ended questions. This data will then be compared against team performance and any patterns that emerge through the open-ended questions. Exploring the team cohesion of two basketball teams through a social networking lens will potentially generate insight that has not been captured by existing models and traditional methods. Such measures can then be used to better understand team cohesion, individual roles within the group, and network evolution while concomitantly elucidating issues related to organizational cohesion, effectiveness, and performance.