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Interorganizational cooperation in sport tourism: A social network analysis☆

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ABSTRACT

Cooperation among organizations is crucial in many fields of sport management. However, little is known about how and why interorganizational cooperation occurs. In this study, cooperative relations among organizations were investigated in an informal sport tourism network in a German community and its surrounding area to explore the structure of interorganizational cooperation and demonstrate the value of social network analysis methods for understanding mechanisms of interorganizational cooperation. Statistical network analyses based on relational data revealed that the network of cooperation is sparse but characterized by substantial clustering, indicating a tendency for cooperation to occur in triangular structures. The most central network actor was a local sports agency, but there was no mechanism of preferential attachment. Other significant mechanisms for cooperative tie formation were brokerage and homophily regarding organizational aims. Lack of time and incompatible goals are the most important barriers to cooperation. The results add to prior qualitative studies and provide implications for managing sport tourism networks.

1. Introduction

Interorganizational cooperation and network forms of organization have gained significance in many industries as well as in the public and nonprofit-sector (Raab & Kenis, 2009). Comprehensive research in fields such as management and organizational theory (Zaheer, Gözübüyük, & Milanov, 2010), public health (Varda, Shoup, & Miller, 2012), politics and public administration (Kenis & Provan, 2009), and tourism (Baggio, Scott, & Cooper, 2010) has shown that cooperation in interorganizational networks (IONs) can generate benefits through sharing resources, knowledge and core competencies of involved actors, which may lead to accomplishment of common goals, increased performance and innovative behavior. While interorganizational relations and cooperation have been previously discussed in sport management research, social network analysis (SNA) – allowing analyses of interorganizational structures on the basis of relational data – is a relatively new approach in the field of sport management (Pieters, Knoben, & Pouwels, 2012; Quatman & Chelladurai, 2008).

The current study investigated the emergent patterns of cooperative structures within a network in regional sport tourism (RST) using SNA. The purposes of the analysis were to explore interorganizational cooperation in sport tourism (as

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an applied field of sport management), and to demonstrate the value of SNA for understanding the structure of interorganizational cooperation in sport management. Therefore, structural characteristics of cooperative relationships in a RST network were studied, and which structural (network-related) and attributive (actor-related) effects were significant mechanisms for interorganizational cooperation in RST were analyzed.

In the following, the network perspective and central concepts of SNA, its value for sport management research, and interorganizational cooperation in sport tourism networks are introduced. Subsequently, the case of a RST network will be presented, and finally, results and future directions for SNA in sport management research will be discussed.

2. The network perspective and social network analysis

The basic idea of the network perspective is to consider individuals and/or organizations as being embedded in a relational structure and, hence, not acting in isolation but in relation to other actors. While traditional approaches in the social sciences focused on analyzing autonomous, individual entities and their attributes (e.g., gender, age, number of employees, revenues), the network approach focuses on the relations between actors. Borgatti and Foster described this approach as a turn "away from individualist, essentialist, and atomistic explanations toward more relational, contextual and systemic understandings" (2003, p. 991). Being embedded in a social structure, an actor's actions can be constrained but also enabled.

In organizational network research, a main focus of analysis is on the utility of relations to other actors, that is, social capital (Borgatti, Mehra, Brass, & Labianca, 2009). Based on the concept of network relations as an organizational resource, interorganizational cooperation can be described as a process of a limited number of organizations that work together toward the same goal, but maintain control of their individual resources (Pechlaner & Volgger, 2012).

There are different perspectives on the process of network emergence through interorganizational cooperation. Interorganizational networks (IONs) can be considered as purposefully created groups of three or more organizations that share common goals and/or produce a joint outcome (Raab & Kenis, 2009), for instance, in strategic business networks or policy networks. Moreover, IONs can be considered as the outcome of an evolutionary process of cooperation among a number of interacting organizations. Gulati and Gargiulo (1999) argue that organizations tend to create stable relations to other organizations characterized by trust and a high level of information exchange to reduce costs and to avoid the risk of opportunism in strategic alliances. Over time these embedded relationships may form an ION of cooperation among organizations, which seek access to critical resources and to manage uncertain environments. IONs are considered to emerge evolutionarily from a process of repeated cooperation among organizations, built on trust and a reciprocal exchange of information and other resources. As such, voluntary IONs represent a structure of governance that differs from market structures or hierarchal organization (Powell, 1990). However, independent of the processes of emergence – evolutionary or deliberately created, or a combination of both – networks of interorganizational cooperation are relational constructs among social actors, that is, social networks that can be grasped by SNA.

In SNA, based on graph theory and sociomatrices, actors are considered as vertices or nodes that can be connected by edges or ties. Based on this terminology, a network can be defined "as a set of nodes and the set of ties representing some relationship, or lack of relationship, between the nodes" (Brass, Galaskiewicz, Greve, & Tsai, 2004, p. 795). In a social context nodes may represent various actors including persons, teams, organizations, communities, regions, etc. or social artifacts. There are four types of ties: (1) similarities (e.g., same location, same membership, same attitude); (2) social relations (e.g., kinship, friendship, liking or knowing an actor); (3) interactions (e.g., support, trade); and (4) flows (e.g., information, resources) (Borgatti et al., 2009).

SNAs require the collection of data on the network of interest. In some instances, such as school classes or clubs in a sports league, the members of a network are obvious. However, in many cases boundary specification is a challenging task because informal or non-intentionally formed networks may not have clearly defined boundaries. In these cases, network members must be defined by additional criteria such as actor attributes or type of ties. Boundaries can be defined using two strategies. The realist strategy entails that an initial set of network members are asked who else they consider to be network members. Using the nominalist strategy, researchers determine which actors to include based on analytic interest (Knoke & Yang, 2008). However, bounding poses an intricate problem in SNA that has to be addressed by considering the nature of the research question (Borgatti, Everett, & Johnson, 2013).

SNA uses several methods for analyzing central or peripheral actors, assessing network cohesion, similar positions and roles of actors, as well as macro- and micro-structures of networks (Hennig, Brandes, Pfeffer, & Mergel, 2012; Wasserman & Faust, 1994). Moreover, network visualization is a powerful tool for exploring and representing networks because structural patterns can easily be recognized and extensive information displayed simultaneously (Brandes, Freeman, & Wagner, 2014). In addition to network measures and visual representations for exploring and describing network structures, statistical modeling of social networks – a research field that has seen a rapid development in recent years (Snijders, 2011) – is a technique for analyzing why and how social relations occur. In contrast to traditional statistical methods based on the assumption of independent observations, network modeling explicitly takes into account the interdependence of observations, that is, a network relation depends on other network relations (Lusher, Robins, & Kremer, 2010).

A popular family of statistical models to analyze cross-sectional observations of networks are exponential random graph models (ERGMs) (Robins, Pattison, Kalish, & Lusher, 2007). Intuitively, an observed network can be understood as the result of combinations of ties according to certain rules describing how ties occur together. ERGMs aim to determine these rules,