

# Assessing a sport/cultural events network: An application of social network analysis

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## Aim of paper and research questions

The purpose of this study was to assess the complexity of a sport/cultural events network. To that intent, a social network analysis was conducted in a small community in the US. The study had three main objectives: (1) Examine relationships among organisations involved in planning and implementing sport and cultural events based on their communication, exchange of resources, and assistance; (2) Identify the most important actors within the events network and their relationships; (3) Investigate the structure of the events network and evaluate the community's capacity to capitalise on their event portfolio via a collaborative events network.

## Literature review

The organisation of events is shaped by relationships among key stakeholders. These stakeholders, including organizing entities, supporting public sector bodies, businesses, voluntary groups and community alliances are intertwined within a complex network (Chalip & Leyns, 2002; Getz, Andersson & Larson, 2007; Stokes, 2007). Social network analysis defines networks as sets of ties linking several individuals (Nelson, 1989). A network form of organisation is any collection of actors that pursue repeated, enduring exchange relations with one another (Podolny & Page, 1998). Social network analysis is a useful tool for understanding inter-organisational relationships (Burt & Minor, 1983; Scott, 2000). It has been successfully used in the fields of organisation studies and health policy (e.g., Provan & Milward, 1995; Provan, et al., 2003; Uzzi, 1997) demonstrating that networks foster learning, facilitate the management of resource dependencies, and enhance social capital (Podolny & Page, 1998; Powell, 1990). Within this context, the establishment of trust is identified as a critical component in the development of business inter-organisational networks (Perrow, 1993).

## Research design and data analysis

The sample included nine organisations that organised the host community's portfolio of sport and cultural events. Data was collected using an instrument adapted from Provan et al. (2003) and analysed using the statistical software for social network analysis UCINET (Borgatti, Everett & Freeman, 2002). Four types of links were measured (Shared Information, Shared Resources, Help Sent and Help Received). First, the analysis examined whether collaboration within the events network was consistent across all types of links (density and cohesion/reciprocity). It also examined the strength of the relationships between agencies (multiplexity scores). Secondly, it examined the organisations' levels of involvement in the network through comparing organisations on the basis of their individual centrality and multiplexity scores. Thirdly, attitudes toward trust and collaboration were also analysed.

## Results

The results showed a high reciprocity score for “Shared Information” (.708), which indicated a high level of mutuality in terms of communication and exchange of information. For the other types of links, however, the scores were lower. “Shared Resources” had a score of .571, “Help Sent” .526, while “Help Received” was the lowest with a score of .473. The overall cohesion of the network was average with a score of group reciprocity of .569. The results showed both unconfirmed network density scores and confirmed scores (both density and average number of links). The average organisation maintained 3.77 confirmed links to other organisations through “Information Sharing” which was the predominant type of link. Other types of links appeared to be weaker. “Shared Resources” averaged 2.66, while “Help Sent” and “Help Received” averaged 1.88 and 2.22 respectively. The confirmed density for “Information Sharing” (.4722) showed that the events network seemed to have a satisfactory communication level in terms of exchanging information about events. However, confirmed density scores were lower for “Shared Resources” (.333), “Help Sent” (.2361) and “Help Received” (.2778). For these indicators it became apparent that there were missing links between agencies. In terms of multiplexity, the average organisation in the network scored 1.44 (out of 4), which seemed somewhat low. This was explained by the fact that the organisations were linked through one or two types of links with “Information Sharing” being the predominant one.

## Discussion and conclusion

This case suggests that social network analysis can be a useful tool in evaluating a community’s capacity to capitalise on events. The events network studied can be characterised as a dense, to some extent reciprocal, diverse system of agencies that have high levels of trust and positive attitudes toward collaboration. Knowing the characteristics of an events network can allow the identification of opportunities (what characteristics, agencies or links can be strengthened) and weaknesses (what can be developed or improved). That information will help guide strategic directions and decisions. Existing ties among agencies will facilitate implementation of strategies. Consequently, an events network can be a source for creating and enhancing the social capital of the community by encouraging reciprocity and collaboration toward the whole scope of planning and implementing events. Further use of social network analysis to explore the nature, patterns, and effectiveness of inter-organisational relationships that affect event planning, implementation as well as leveraging would be extremely beneficial in our field.

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