



Social Network Participation And Coverage By Tourism Industry Sector

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Abstract

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Social network participation and coverage by tourism industry sector

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a b s t r a c t

Although identified as an emerging scientific paradigm, social network research has yet to be developed fully in tourism studies. Social network theory focuses on the ties between actors within a particular network. An individual can influence his or her success through the structure, extent and diversity of their network. Within the tourism industry, the study of social networks can be used to enhance understanding of the interactions that take place within, or among businesses, by examining the formal and informal connections linking them together. This study examined involvement or membership in associations (networks) of five key tourism industry segments in a thriving tourism region along participation and coverage dimensions. The results showed that tourism sectors participate differently in social networks. Specifically, the hotel and lodging sector participates in a greater number and covers more types of networks than the retail/shopping sector.

Keywords:

Social networks

Supply-side

Tourism sectors

Member organizations

Social capital

1. Introduction

Government, nonprofit organizations, and commercial enterprises encompass the numerous individuals, corporations, organizations, and agencies that collectively produce the supply-side of tourism (Gunn, 1994). It is generally agreed the supply side of tourism includes five major components, attractions, services, promotion, transportation, and information (Blank, 1989; Gunn, 1994; Jafari, 1982; Mill & Morrison, 1985; Murphy, 1985) that operate interdependently (Smith, 2006). Often the tourism industry is criticized as 'fragmented' (McKercher, 1993; Pavlovich, 2003; Pearce & Butler, 2001) or viewed as a conglomeration of separate industries (Smith, 2006). The fragmented nature of tourism and the interdependency of the tourism sectors underline the importance that the supply-side organizations work together to provide a high-quality experience to tourists. However, previous research on the supply side of tourism has emphasized community, resident or destination approaches (Andereck & Vogt, 2000; Carey, Gountas, & Gilbert, 1997; Smith, 1988), service performance

(Kozak, 2002), or economic development (Milne & Ateljevic, 2001). Very little investigation has been undertaken regarding the level, extent or strength of interaction between the five core industry sectors within the tourism system. However, understanding interactions among industry sectors may offer insights to researchers and practitioners about an organization's beliefs and behaviors, factors contributing to organizational or sector success, and public regard for one tourism sector over another. Additionally, if strong social networks can lead to financial, social or political benefits for a tourism service provider (Morison, Lynch, & Johns, 2004), then understanding the scale and nature of social networks is important. This research aims to identify and analyze the social networks of tourism providers in a thriving tourism area where businesses, governments and nonprofit organizations prioritize involvement and membership in a variety of local, regional, state, and national associations and organizations. Social network theory (SNT) provides the overarching theoretical reasoning of this empirical work.

2. Literature review

The literature pertinent to this research is first reviewed according to SNT and two related theories or concepts: social exchange and social capital. This is followed by a review of the tourism literature where these theories have been applied.

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3. Social network theory

Social network theory was first proposed in the 1950s by [Barnes \(1954\)](#) who defined social networks as social structures consisting of 'nodes' or 'actors' connected through various social familiarities, or 'ties,' ranging from acquaintances to close family-like connections. The actors (often called 'nodes') can be persons, teams, organizations, or concepts. Ties connect pairs of actors and can be directed (i.e. potentially in one-direction, as in giving advice to someone) or undirected (i.e. as in being physically proximate), and can be dichotomous (i.e. present or absent, as in whether two people are friends or not) or valued (i.e. measured on a scale, as in strength of friendship) ([Barnes, 1954](#)).

The theory focuses on the relationships and ties with other actors within the network, not on the attributes of individual actors. An actor influences his/her success through their network structure ([Burt, 1997](#)). While much research in the social sciences has focused on individual characteristics, network approaches offer a great advancement by identifying cohesive groups of actors who engage in frequent direct interactions ([Collins & Raven, 1968](#); [Frank, 1995](#)) or blocks of actors who engage in structurally similar patterns of interaction ([Borgatti & Everett, 1994](#); [Borgatti, Everett, & Shirey, 1990](#); [Merton 1957](#); [Nadel, 1957](#); [White, Boorman, & Breiger, 1976](#)). The underlying premise is that an actor's thoughts and behaviors are related to the thoughts and behaviors of others in their group. These processes play an important role in affecting people's beliefs and behaviors that cannot be explained purely in terms of individual attributes or organizational context. On a much larger scale, social network theory has been developed in the context of the small world problem or six degrees of separation phenomenon ([Milgram, 1967](#)), as well as the strength of ties principle ([Granovetter, 1973, 1982](#)).

Social network analysis has emerged as both a technique ([Barnes 1972](#); [Berkowitz, 1982](#); [Bott, 1971](#); [Frank, 1996](#); [Leinhardt, 1977](#); [Marsden & Lin 1982](#); [Mitchell, 1969](#); [Price, 1981](#); [Rogers & Kincaid, 1981](#); [Rogers, 1987](#); [Wellman & Berkowitz, 1988](#)) and topic of study ([Stokowski, 1990](#)). The idea of networks arose out of a number of scientific disciplines. Within the physical sciences, the network metaphor was used to describe chains or webs of cellular and molecular interactions in biology and physics ([von Bertalanffy, 1950](#)) and the movement of animal herds in wildlife biology and population ecology ([Lewis, 1977](#)). The origins of network research in the social sciences are found in sociology, anthropology, geography, social psychology, information science, and organizational studies ([Barnes, 1954](#); [Mitchell, 1969](#); [Moreno, 1951](#); [Rogers, 2005](#)). Although identified as an emerging scientific paradigm ([Frank, 1996](#)), social network research has yet to be developed fully in recreation, leisure, and tourism studies ([Stokowski, 1990](#)). However, the related concepts of social capital and social exchange theory have been employed in the tourism literature. Before delving into the tourism literature on SNT, summarizing the use of social capital and social exchange theories is merited.

3.1. Social capital and social exchange theory

Social capital, as defined by [Cohen and Prusak \(2001\)](#), consists of the stock of active connections among people: trust, mutual understanding, and shared values and behaviors that bind the members of human networks and communities and make cooperative action possible. Through mutual consensus and cooperation, social capital allows people to address and resolve collective problems more easily and effectively (e.g. in a neighborhood, a school, a business or a business sector). Social capital refers to the network position of the individual and the ability to draw on the resources contained by members in the network. To clarify, the

more connections (or ties) a person has in the social network, the more knowledge, influence, and power the person will control. The networks that constitute social capital serve as conduits for the flow of helpful information, thereby facilitating goal achievement. Social networks can be analyzed to measure social capital or the value or utility that one gets from his/her social networks. Consequently, a map of social networks allows for the evaluation of the social capital of that individual.

Social capital has provided a theoretical framework for studying community development ([Gittell & Vidal, 1998](#)), organizational development ([Cohen & Prusak, 2001](#)), grief intervention ([Preece, 2002](#)), economic performance ([Baker, 1990](#)), creation of intellectual capital ([Nahapiet & Ghoshal, 1998](#)), learning in response to change and sustainability in communities ([Falk & Harrison, 2000](#)), community and school achievement ([World Bank, 1999](#)), community development ([Gittell & Vidal 1998](#)), patterns of social disparity created by lack of technological skills ([Resnick, 2002](#)), civic engagement ([Putnam, 1993; 2000](#); [Sirianni & Friedland, 2001](#)), and economic gains ([Sobel, 2002](#)). Despite growing efforts by scholars to examine, understand, and apply social capital, little has been done to extend this understanding to communities where tourism is a part of the economic mix ([McGehee, Lee, O'Bannon, & Perdue, 2009](#)). Social capital can have a substantial influence on a tourism business success, affecting such aspects as collective promotion of tourism services, sharing of employment resources, and collaborating on policies for the benefit of the tourism industry ([Macbeth, Carson, & Northcote, 2004](#); [McGehee et al., 2009](#); [Okazaki, 2008](#)).

In communications, one of the many theoretical approaches to the study of relationships is the social exchange theory proposed by [Thibault and Kelley \(1952\)](#). This theory is based on the exchange of rewards and costs to quantify the values of outcomes from different situations for an individual. People strive to minimize costs and maximize rewards and then base the likelihood of developing a relationship with someone on the perceived possible outcomes. When these outcomes are perceived to be greater, individuals disclose more, and develop closer relationships with that person. Communication and relationships are concepts that are inextricably intertwined. It is through communication that relationships are developed and within this context, social networks are built.

Social exchange theory has been applied in a variety of fields and research settings including social exchange in the context of negotiation and exchange ([Molm & Peterson, 1999](#)), caregiver burden ([Call, Finch, Huck, & Kane, 1999](#)) and group formation ([Lawler & Thye, 1999](#)). In addition, social exchange theory has been applied in a number of tourism studies ([Ap, 1990](#); [Gursoy, Jurowski, & Uysal, 2002](#); [McGehee & Andereck, 2004](#)). According to social exchange theory, people evaluate an exchange based on the costs and benefits resulting from the exchange. Thus, residents' evaluation and support of tourism will depend on the perceived benefits of an exchange. Those residents who perceive themselves as benefiting from tourism will view it positively, whereas those residents seeing the costs outweighing the benefits in the exchange will view tourism negatively. In large part, social exchange theory within a tourism context has focused primarily on resident and tourist attitudes and perceptions, with no apparent literature exploring social exchange theory related to tourism providers or the supply side of the tourism system.

4. Social network theory and tourism supply

[Pavlovich \(2003\)](#) proposed that a relational perspective is particularly relevant in the tourism industry because organizations form groups and cluster together within a destination context.

'Complementary products of activities, accommodation, transport and food co-exist alongside support activities and infrastructure to form a complex system of connections and interrelationships' (Pavlovich, 2003, p. 203). Generally, tourism destinations comprise different types of complementary and competing organizations, multiple sectors, infrastructure and an array of public/private linkages creating a fragmented supply structure. 'Strong market interdependence forms between these organizations, as suppliers pass customers from one organization to another in order to provide a comprehensive tourist experience' (Grefe, 1994, p. 203).

A tourism destination is a web of suppliers and community members, therefore the application of SNT to the supply side of tourism would be a viable means to study community resident groups, the three economic segments (e.g. public, private, non profit), and the tourism system of service provider. While businesses and organizations that cater to tourists develop their own web of communication and interactions through and towards the end of serving the tourist. Wilson, Fesenmaier, Fesenmaier and Van Es (2001) identified 10 conditions as being critical for rural tourism development. Two of them, coordination and cooperation between businesspersons and local leadership, and coordination and cooperation between rural tourism entrepreneurs, emphasize the importance of interplay between tourism system actors.

Examining both the formal and informal connections within or among businesses can be used to enhance understanding of the interactions. These networks offer businesses the opportunity to gather information, collaborate, and determine policy. As a result, social networks play a role in the success of businesses and organizations, where it can affect hiring, increase the availability of information and resources, and offer access to opportunities such as cooperative marketing and influencing policy (Ireland, Hitt, & Vaidyanath, 2002). Organizations and associations best known for network opportunities and collective efforts are chambers of commerce, trade associations, and particularly for tourism convention and visitor bureaus.

4.1. Chambers of commerce, convention and visitor bureaus, and trade associations

Associations of businesses can be traced back to Roman times (Sturges, 1915), even before social network theory existed. The first such association to bear the name 'chamber of commerce' was that of Marseilles, France. Established in 1599, the goal of the chamber of commerce was to expand the business interests of members. In North America, the first chamber of commerce appeared in New York State in 1770; on the local level, the first chamber was founded in 1773 in the city of Charleston, South Carolina. Early chambers were comprised of tradesmen who voluntarily organized to protect and promote commerce and to address issues related to business such as conflict resolution, regulation enforcement, setting policy and law, pricing strategy, and infrastructure improvement to increase trade (Friedman, 1947).

Industrial recruitment and job creation were the foci of chambers in the 1950s and 1960s, followed by more socioeconomic concerns, such as inadequate housing, schools, community services, and high unemployment in the 1970s through 1990s. More recently, chambers increased involvement in government, realizing many of the problems facing business can be addressed in the legislative arena. According to the U.S. Chamber of Commerce (2006), the basic mission of the chamber of commerce is to create and promote a climate where business can operate in a productive and profitable manner. In 1911, President William Howard Taft approved the formation of the U.S. Chamber of Commerce. As the world's largest business federation, the U.S. Chamber of Commerce represents the unified interest of chambers throughout the United States, with more than three million

members from businesses of all sizes, sectors, and regions. As a collection of a number of business sectors, chambers offer diverse opportunities for social networking among its members.

Recognizing the importance of tourism, many communities established a convention and visitors bureau or strengthened chamber organizations to serve the tourism system and the broader community. A convention and visitors bureau (CVB) is a not-for-profit umbrella organization that represents a city or urban area in the solicitation and services of all types of travelers to that city or area, whether they visit for business, pleasure, or both. A single entity like a chamber or CVB brings together the interests of city government, trade and civic associations, and individual 'travel suppliers' - hotels, motels, restaurants, attractions, local transportation - towards building outside visitor traffic to the area (Goeldner & Ritchie, 2009; Masberg, 1998). CVBs, more recently referred to as destination marketing organizations (DMO's), promote the long-term development and marketing of a destination, focusing on convention sales, tourism marketing and service (IACVB, 2006). The CVB/DMO can be viewed as a facilitator of social exchange and an incubator of a social network within the tourism system.

A pioneers in tourism social networks was Detroit Michigan, the first city in the U.S. to establish an organization dedicated to promoting the city to conventions and trade association meetings, when in 1896, a group of hotel owners collaborated to fund a full-time position for the purpose of promoting the city (Gartrell, 1992; Trafton, 1991). Detroit became a model for hotel and business owners in other U.S. cities including Cleveland in 1904, Atlantic City in 1908, and St. Louis and Denver in 1909. In 1914, the International Association of Convention Bureaus (IACB), now the Destination Marketing Association International (DMAI), was formed to provide the convention industry with a forum for exchange of information to enhance the professionalism, effectiveness, and image of its members, or rather, its social network (IACVB, 2006; Gartrell, 1992; Trafton, 1991). The role of the CVB has expanded beyond attracting conventions, to include general promotion of regional tourism and economic development. Charged with marketing an entire destination to meeting professionals, business travelers, tour operators, and individual visitors, DMO's represent the hotels, facilities, attractions, restaurants and other providers serving travelers.

To examine SNT in a tourism provider context, involvement in membership organizations among tourism suppliers is a logical place to explore the applicability of the concept. Membership organizations such as chambers provide opportunities for individuals to personally interact, gain insight and potentially understand the industry's needs beyond one's own business, allowing for strategic alliances to be formed, cooperative partnerships to be forged and policies/regulations to be established for long-term success of the overall tourism destination (Gartrell, 1992). Businesses involved with membership organizations exchange time and resources (e.g. membership fees, leadership, recruitment attendance) to develop social networks (e.g. interpersonal relationships) for the benefit of gaining social capital, and make decisions about which social networks are most appropriate and valuable by employing social exchange theory.

4.2. Statement of problem and hypotheses

This goal of this research was to investigate the social networks of tourism providers along two dimensions of network involvement or membership- i.e. participation and coverage-in professional and community-based organizations. Data were collected from tourism providers in a Midwestern county in the United States. Providers were classified into tourism sectors so that sectors differences in organizational involvement might be

analyzed. By understanding network structure, extent of participation, and diversity of coverage in distinct networks, this research suggests that an increase in networks may lead to greater social exchange and social capital in a tourism industry geographic's area.

The two dimensions of networks studied were participation and coverage. Participation reflects the breadth of involvement, or specifically in the case of this study, the number of social networks in which a tourism service provider is involved. The networks could be any number of membership/affiliation organizations such as CVBs, trade associations, economic development groups, or civic clubs. Because the types of organizations that exist are so vast, categories were developed to summarize their focus/foci. The categories in this study were drawn from logical groupings of the membership organizations listed by the study's sponsoring CVB and consisted of five themes: tourism trade associations, CVBs and chambers of commerce, economic development organizations, cultural/historic organizations, and service/civic groups. Coverage is the degree of involvement in varying types of social networks or in this case, membership organizations. Within the framework of five social network categories, involvement in one category is considered minimum coverage while involvement in five social network categories is maximum coverage. Fig. 1 depicts the social exchange process linking tourism service providers and tourism sectors to the social networks of membership/affiliation organizations.

If social capital can be enhanced through social networks, it would advantage tourism service providers to involve themselves in the particular networks that they find beneficial. However, do all tourism service providers participate in social networks at the same level? Do they have the same time, staff or financial resources to participate in all that they would like? If not, how do they decide which to join? And finally, are the networks all of

the same *type*, e.g. business associations versus civic organizations versus cultural organizations. While there are many research questions to be explored regarding tourism service providers and their social networks, this study focuses on the participation level and participation coverage in social network categories. The study assumes a null hypothesis. The following hypotheses were tested:

H1-H5. The five tourism industry sectors will *not participate* in a different *number* of social networks within each type (category) of social network tested in this study: cultural/historic organizations (H1), CVB's/chambers of commerce (H2), economic development organizations (H3), civic/service groups (H4), and tourism trade associations (H5).

H6. The five tourism industry sectors will not have varying levels of *coverage* in the social network categories of cultural/historic organizations, CVB's/chambers of commerce, economic development organizations, civic/service groups, and tourism trade associations.

5. Methods

5.1. Study area

The sample consisted of tourism service providers in a county located in a Midwestern state in the U.S. Tourism in this county is well established and valued as an important economic sector. One of the cities in the county is a top visited destination in the state. The county is divided into five areas, each with its own CVB or chamber representing that particular area. Additionally, a primary CVB represents all the areas, and is responsible for the promotion of tourism to the entire region. The primary CVB sponsored the

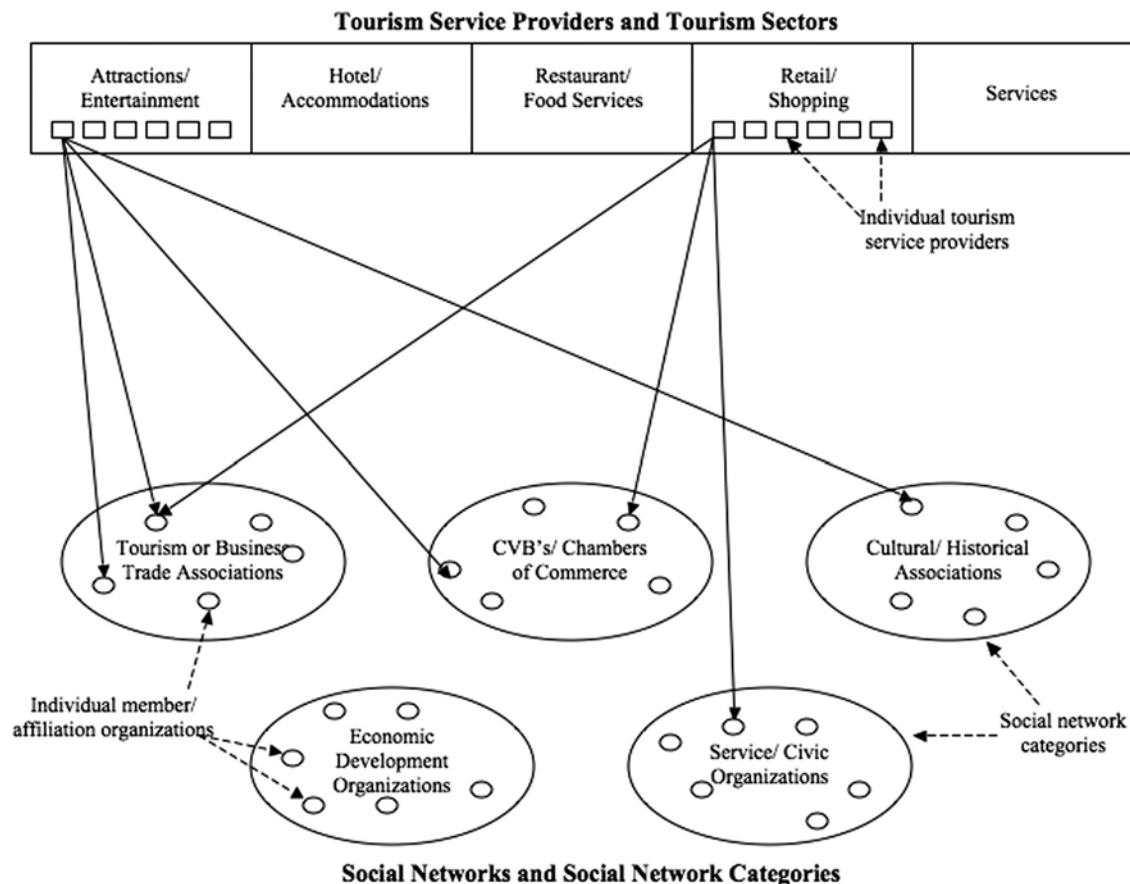


Fig. 1. Framework of social networks in tourism.

research project as part of a general tourism assessment for the county. The first portion of the assessment focused on the supply side; a later phase focused on the demand side. Information gathered from the assessment was included in a multi-year strategic plan as well used in general tourism supply database management.

The service providers were identified using lists provided from the chambers and CVB's located in the region. Additional organizations were identified through an audit of brochures and information from visitor's centers, information guides, state travel web sites, chamber and CVB websites, and finally telephone listings from each of the geographic locations in the study. The total mailing list consisted of 646 businesses and organizations. A mail survey was viewed as the most appropriate research method to study a large group of businesses and organizations offering tourism services. A letter accompanied the survey instrument and was personally addressed to the local owner or manager and signed by the university researchers and CVB Executive Director who sponsored the research. The owner or manager was asked to consider their professional and community ties, not those for individual or family purposes.

5.2. Survey design, measurement, and distribution

The survey instrument was developed to collect data necessary to test social network theory, as well as update a database used by the primary CVB. The instrument was designed as an eight-page booklet consisting of 24 questions. In addition to the information required for the database, respondents were presented with a list of local, state, and national membership organizations and asked to indicate if they were involved with (e.g. volunteering time or donating resources to an organization) or were a member of (e.g. membership fees or dues paid). For this paper's analysis, involvement and membership were not differentiated. Both were included because some groups do not have membership and membership does not necessarily mean a person is involved. The list of organizations was compiled by the sponsoring CVB with assistance from the researchers. In addition, respondents were offered a category 'other' to indicate involvement or membership in organizations not included on the list.

The mailing process followed a modified Dillman method (Dillman, 2000). The procedure involved the following steps: (1) initial mailing of the survey packet, including a personalized cover letter, the questionnaire, and a return postage-paid envelope, (2) a reminder postcard about 10 days later for those who did not return the questionnaire, and (3) a second mailing of the entire survey packet to those who continued to show no response to the first two phases of the process. The second mailing of the survey packet followed after another two weeks after the postcard. In addition, the area CVB's and chambers of commerce conducted follow-up phone calls to non-respondents resulting in an additional 150 surveys. However, it should be noted many of the surveys obtained through follow-up calls were from the county where an outlet mall is located. These respondents provided only the data necessary to update the database, omitting information on social networks. The overall response rate was 73% ($n = 472$). For the purpose of this paper, however, only those respondents who provided responses to the questions regarding involvement in social network organizations were included in the analysis, therefore the total sample size was 273 or 42% of the full sample.

5.3. Data analysis

Each returned survey was categorized according to one of the five tourism industry sectors: (1) attractions/entertainment (e.g. golf courses, museums, parks, theatres), (2) hotel/accommodations

(including B&Bs, motels, and camp grounds), (3) retail/shopping, (4) restaurant/food services, and (5) services (e.g. audio visual equipment rental, travel agency, tour guides) (Gunn, 1994; Jafari, 1982; Mill & Morrison, 1985; Murphy, 1985). Classification was based on the original population list, as well as validated with questions in the survey. Next, using the list of 65 membership/affiliation organizations that the respondents might be involved in (e.g. volunteering time or donating resources to an organization) or hold membership (e.g. membership fees or dues paid to be a member), a total number was calculated for each tourism industry sector.

Finally, the list of 65 membership organizations were recoded into five social network categories: (1) cultural/historical (e.g., area arts association, historical society), (2) CVB/chamber of commerce (e.g. county CVB or chamber of commerce, state association of CVBs, International Association of CVBs), (3) economic development (e.g. local economic development corporation, state economic development association), (4) service/civic (e.g. conservation club, Kiwanis Club, Women's Club, Rotary, Jaycees), and (5) tourism trade (e.g., American Hotel and Lodging Association, American Automobile Association, Society of Incentive and Travel Executives). Nine percent of respondents wrote in organizations not in the list of 65 organizations. These 'other' mentions tended to be religious organizations. Because categories of social networks within tourism were not found in the literature, the categories used in the study were formed by the researchers, keeping in mind the professional and civic realms of social networks found in communities (Morrison, Lynch, & Johns, 2004), the mix of strong associations and 'weak-ties' found in business networks (Deans, Gill, & Apedaile, 1996), the compulsory and competitive nature of social networks (Adams, 1967), and the interaction of the public, non-profit, and private sectors within tourism social networks (Dredge, 2006). The total number of social network categories a tourism industry sector was a member of was termed social network coverage, with '1' being the lowest level of social network coverage and '5' being the highest level. Data were analyzed with SPSS (17.0) using descriptive statistics and ANOVA functions to identify the participation and coverage of tourism industry sectors in social networks.

6. Results

6.1. Tourism sector profile

The profile of the tourism service providers ($n = 273$) involved in this study were classified into the five industry sector categories as follows: (1) attractions/entertainment—18% ($n = 50$); (2) hotel/accommodations—13% ($n = 35$); (3) restaurants/food services—21% ($n = 57$); (4) retail/shopping—32% ($n = 88$); and (5) services—16% ($n = 43$). When some businesses fell into more than one industry sector, for instance a hotel with an on-site restaurant, the primary source of business was used to categorize businesses. Officials from the regional CVB confirmed the categories to which the service providers were assigned.

6.2. Member/affiliation organization profile

Tourism service providers were involved in or members of five social network categories including local, state, and national organizations and associations. The majority (85%) of respondents were members of a CVB or chamber ($n = 233$) organization and over one-quarter (29%) were members of a cultural or historical ($n = 67$) association or organizations. Almost half (40%) were members of a tourism or business ($n = 93$) related organization or association, while tourism industry sectors were least involved

Table 1
Industry sector membership participation levels in social networks.

Dependent variable social network category	Industry sector	N	Range	Mean ^b	Std. dev.
Cultural or historical (6) ^a	Attractions/entertainment	20	0–3	1.55	0.83
	Hotel/accommodations	7	0–2	1.71	0.49
	Restaurant/food services	9	0–1	2.00	1.00
	Retail/shopping	19	0–3	1.42	0.90
	Services	12	0–5	2.42	1.44
	Total	67		1.75	1.02
CVB or chamber (7) ^a	Attractions/entertainment	37	0–4	1.57	0.84
	Hotel/accommodations	34	0–3	2.00 ^c	0.78
	Restaurant/food services	48	0–1	1.54	0.71
	Retail/shopping	78	0–4	1.44 ^c	0.80
	Services	36	0–5	1.61	1.13
	Total	233		1.59	0.86
Economic development (3) ^a	Attractions	7	0–1	1.00	0.00
	Hotel/accommodations	3	0–1	1.00	0.00
	Restaurant/food services	6	0–1	1.17	0.41
	Retail/shopping	1	0–1	1.00	–
	Services	5	0–3	1.40	0.89
	Total	22		1.14	0.47
Service or civic (12) ^a	Attractions/entertainment	2	0–2	1.50	0.71
	Hotel/accommodations	11	0–3	1.36	0.67
	Restaurant/food services	7	0–1	2.29	1.80
	Retail/shopping	3	0–1	1.33	0.58
	Services	4	0–5	2.25	1.89
	Total	27		1.74	1.26
Tourism or business trade (31) ^a	Attractions/entertainment	11	0–3	1.45	0.82
	Hotel/accommodations	22	0–10	3.09	2.22
	Restaurant/food services	27	0–1	2.89	3.22
	Retail/shopping	17	0–5	1.71	1.31
	Services	16	0–15	2.25	3.62
	Total	93		2.44	2.64

^a Number of possible organizations in the social network category.

^b Mean of the number of organizations/associations within the social network category in which industry sectors participated.

^c Scheffé $p < 0.05$.

Table 2
ANOVA for effects of industry sector on participation in social networks.

Dependent variable social network category		SS	df	MS	F	Sig.
Cultural or historical	Between groups	8.76	4	2.19	2.27	0.072
	Within groups	59.93	62	0.97		
CVB or chamber	Total	68.69	66			
	Between groups	7.71	4	1.93	2.70	0.031 ^a
Economic development	Within groups	162.73	228	0.71		
	Total	170.45	232			
Service or civic	Between groups	0.56	4	0.14	0.59	0.676
	Within groups	4.03	17	0.24		
Tourism or business	Total	4.59	21			
	Between groups	5.29	4	1.32	0.81	0.531
	Within groups	35.89	22	1.63		
	Total	41.19	26			
	Between groups	35.18	4	8.80	1.28	0.283
	Within groups	603.74	88	6.86		
	Total	638.93	92			

^a $p < 0.05$.

in or less likely to be members of economic development (9%, $n = 22$), and service or civic (12%, $n = 27$) organizations or association (Table 1).

6.3. Hypothesis testing

The first set of analyses examined differences in social network participation according to tourism industry sector groups (Table 1). Attractions/entertainment providers had the highest participation in CVB/chamber networks ($n = 37$), followed by cultural/historical networks ($n = 20$). Hotel/accommodation providers also had high participation in CVB/chamber networks ($n = 34$), as well as tourism trade networks ($n = 22$). Not surprisingly, the restaurant/dining sector displayed a similar pattern of network participation as the hotel/accommodation sector, with CVB/chamber networks leading ($n = 48$), followed by tourism trade ($n = 27$). The retail/shopping sector networked most in CVB/chamber networks ($n = 78$), followed by cultural/historical ($n = 19$) and tourism trade networks ($n = 17$). The tourism services sector held the most participation in CVB/chamber networks ($n = 36$), tourism trade networks ($n = 16$), and cultural/historical networks ($n = 12$), in that order.

Results of the ANOVA testing for differences among tourism industry sectors in their social network participation are shown in Table 2. There was a significant difference in the number of memberships between tourism sectors for the CVB's/chambers of commerce category, $F(4, 228) = 2.70$; $p < 0.05$, but no significant differences, however were found in the other four social network categories. Known to be conservative, Scheffé post hoc analyses

were conducted to avoid spurious significant results occur with multiple comparisons (Iversen & Norpoth, 1976; Sirkin, 1988). Post-hoc tests reveal a significant different between the hotel/accommodation sector ($M\frac{1}{4}2.40$, $SD\frac{1}{4}0.78$) and the retail/shopping sector ($M\frac{1}{4}1.44$, $SD\frac{1}{4}0.80$) on the number of chamber or CVB network ties. Based on these data, H2 stating that tourism sectors would (not) have different participation levels in the number of CVB or chamber network affiliates was rejected. A significant overall difference was estimated and group differences also existed. H1, H3, H4 and H5 were supported by the data of no differences within tourism sectors.

Social network coverage according to industry sector is shown in Table 3; means and standard deviations are provided in Table 4. Coverage is the degree of involvement in varying types of social networks or in this case, membership organizations. Within the framework of five social network categories, involvement in one category is considered minimum coverage while involvement in five social network categories is maximum coverage. Most tourism service providers (44%) indicated being involved in or members of only one social network category ($n\frac{1}{4}121$). Over one-fourth (28%) of providers involved in just one category of social networks were from the retail/shopping sector, while just 8% of providers were from the hotels/accommodations sector. Under a third (32%) of tourism providers ($n\frac{1}{4}87$) showed coverage in two social network categories, the retail/shopping sector (27%) and attractions/entertainment sector (26%) showing the most. In general, tourism industry sectors coverage in more than two social networks categories was limited, however 37% of providers with networks spread over three categories were from the retail/shopping sector. Fourteen percent of providers overall were involved in three social network categories ($n\frac{1}{4}38$), and providers involved in four ($n\frac{1}{4}17$) or five ($n\frac{1}{4}10$) categories made up less than 10% of the sample (Table 3). Ten providers had the maximum coverage in five social network categories and they represented: hotel/accommodations ($n\frac{1}{4}3$), restaurant/dining ($n\frac{1}{4}3$), tourism services ($n\frac{1}{4}3$), and retail ($n\frac{1}{4}1$).

ANOVA tests indicated the tourism industry sectors were significantly different in their level of coverage in social networks, $F(4, 268)\frac{1}{4}2.60$, $p\frac{1}{4}0.036$ (Table 5). Post hoc analysis indicated the social network coverage for the hotel/accommodations ($M\frac{1}{4}2.40$, $SD\frac{1}{4}1.26$) industry sector was significantly different from the retail/shopping ($M\frac{1}{4}1.74$, $SD\frac{1}{4}0.93$) industry sector. The means and standard deviations for social network coverage across tourism industry sectors are provided in Table 4. Based on these data, H6 stating that tourism sectors would (not) have different coverage in networks was rejected. A significant overall difference was estimated and group differences also existed (Table 5).

7. Conclusions and managerial implications

This study provided a conceptual model of social networks within the tourism industry and tested hypotheses regarding the

participation and coverage of industry sectors in social networks. The major findings indicate that tourism industry sectors involvement in social networks can be further explored using the current conceptual framework. The benefits of social networks have been argued by research conducted by the World Bank (1999) who found social and economic benefits related to being involved in social networks. The current study identified social networks found in the tourism industry sector and demonstrated the potential of using them as a platform to enhance understanding of the interactions that take place within, or among business. Most central to the problem of this research was the exploration of differences between five tourism industry sectors in their involvement or membership in social networks. The results indicated statistically significant differences between tourism industry sector groups in the number of social networks in which they participated within the CVB/chamber social network category, as well as differences in the coverage of social networks. The hotel and accommodation sector shows high levels of participation within tourism networks, including the CVB and chamber network and the tourism or business trade network. The accommodation sector also led in overall coverage of networks. The retail and shopping sector shows low levels of participation within all but the tourism or business trade network and also lead in the lowest

Table 4
Means and standard deviations for social network coverage across tourism industry sectors.

Industry segments	N	M ^a	Std. deviation	Std. error
Attractions/entertainment	50	1.86	0.88	0.151
Hotel/accommodations	35	2.40 ^b	1.26	0.180
Restaurant/food services	57	1.91	1.18	0.141
Retail/shopping	88	1.74 ^b	0.93	0.114
Services	43	2.05	1.17	0.162
Total	273	1.93	1.08	0.331

^a Means for social network coverage, ranged from 1 to 5.

^b Post hoc Scheffé test revealed significant differences ($p\leq0.05$).

Table 5
ANOVA for effect of industry segment on social network coverage.

Source	SS	df	MS	F	Sig.
Between groups	11.80	4	2.95	2.60	0.036 ^a
Within groups	303.88	268	1.13		
Corrected total	315.68	272			

^a $p\leq0.05$.

Table 3
Social network coverage by industry sector.

Industry sector	Number of social networks categories ^a					
	One (n)	Two (n)	Three (n)	Four (n)	Five (n)	Total (n)
Attractions/entertainment	16% ($n\frac{1}{4}19$)	26% ($n\frac{1}{4}23$)	11% ($n\frac{1}{4}4$)	23% ($n\frac{1}{4}4$)	0% ($n\frac{1}{4}0$)	18% ($n\frac{1}{4}50$)
Hotel/accommodations	8 ($n\frac{1}{4}10$)	13 ($n\frac{1}{4}11$)	18 ($n\frac{1}{4}7$)	23 ($n\frac{1}{4}4$)	30 ($n\frac{1}{4}3$)	13 ($n\frac{1}{4}35$)
Restaurant/food services	24 ($n\frac{1}{4}29$)	16 ($n\frac{1}{4}14$)	18 ($n\frac{1}{4}7$)	23 ($n\frac{1}{4}4$)	30 ($n\frac{1}{4}3$)	21 ($n\frac{1}{4}57$)
Retail/shopping	38 ($n\frac{1}{4}46$)	28 ($n\frac{1}{4}24$)	37 ($n\frac{1}{4}14$)	18 ($n\frac{1}{4}3$)	10 ($n\frac{1}{4}1$)	32 ($n\frac{1}{4}88$)
Services	14 ($n\frac{1}{4}17$)	17 ($n\frac{1}{4}15$)	16 ($n\frac{1}{4}6$)	13 ($n\frac{1}{4}2$)	30 ($n\frac{1}{4}3$)	16 ($n\frac{1}{4}43$)
Total	100% ($n\frac{1}{4}121$)	100% ($n\frac{1}{4}87$)	100% ($n\frac{1}{4}38$)	100% ($n\frac{1}{4}17$)	100% ($n\frac{1}{4}10$)	100% ($n\frac{1}{4}273$)

^a The five social network categories are cultural/ historical, CVB/chamber of commerce, economic development, service/civic, and tourism trade.

overall coverage of networks. Attractions/entertainment, restaurant/food service, and tourism services fell between these high and low network positions.

These results show relatively involved tourism providers particularly in tourism networks. Both historically and at present CVB's and chambers of commerce play a major role in tourism industry development and growth. The primary mission of CVBs is to generate overnight business, thereby affecting all other industry sector such as restaurants and entertainment. Within the U.S., the occupancy tax charged at accommodations is often used to finance the operating budget for CVBs in part or in full. Therefore, the relationship between CVBs and the accommodations sector evidenced in the research findings could be expected. However, accommodations must have knowledge of surrounding attractions as their patrons are visiting. Therefore, participating in CVB programs is beneficial for learning about industry happenings on a local level. Likewise, their membership in cultural/historical networks and tourism trade networks assists them in knowing about current industry events as well as partnering with area attractions through package development.

The economic development and service/civic social network categories had the lowest participation from tourism industry service providers. Low participation in civic and service organizations can largely be explained by the social phenomenon of 'bowling alone' as described by Putnam (2000). Many members of society have sought out other ways to spend their professional and leisure time leaving some community groups and activities missing members or participants. The low participation in economic development organizations may be influenced by the fact that two of the three organizations are state-focused, rather than locally-focused.

As a conduit for social networks, all of the member/affiliation organizations named in the survey (and beyond) can promote the potential benefits of involvement in social networks, including but not limited to, enhanced knowledge sharing that comes from established relationships and shared goals, lowered cost of doing business through collaboration, and greater coherence of action (Morrison et al., 2004). Membership/affiliation organizations could leverage research about the benefits of social networks to encourage participation from constituents who are not currently active.

Based on social exchange theory, tourism industry sectors can gain social capital through their willingness to be involved in various social networks. Achieving maximum coverage by strategically selecting affiliation in diverse types of social networks may offer the greatest return on investment and increase success. Over the past decade, most research on social networks and its relationship with economic development has been conceptual, focusing on its definition and how it functions. Examining issues such as how social networks can be successfully created and nurtured within the tourism industry is important to understand how social networks fit into a broader development agenda. Given the paucity of literature examining supply side social networks in tourism, hospitality, and leisure, this study illustrates the first insight into the role social networks may play in providing a competitive edge to managers wishing to advance their operations.

7.1. Limitations and future research

This research represents an initial effort in understanding participation in social networks within the context of tourism by aggregating the tourism related businesses in a Midwest region and analyzing the structure of their relationships. While the results might suggest a model of social networks related to the tourism industry, not all organizations contacted chose to participate in the study, therefore the sample cannot be considered representative of all tourism businesses. In addition, although we have observed differences between tourism industry sector groups

and their involvement or membership in social networks, important dimensions of social networks including strength and degree of importance, and other activities such as communications were not addressed. The scope of this research focused on which groups different sectors of the tourism industry participate not what is done in those memberships. Using the conceptual framework offered in this study, a number of other lines of inquiry might be tested, such as the different involvement in professional networks among private sector businesses, public agencies, and non-profit organizations (Dredge, 2006); the varying involvement of tourism providers in networks serving local, regional, and national constituents; or the ownership or branding by a local resident or investors compared to nationally recognized franchised brands. Exploring social networks as they extend beyond the local area is also essential to increasing understanding. Clearly, these avenues should be considered in future research. This paper provides insight into how the tourist industry is currently involved in social networks, and direction on where future research can focus.

The selection of tourism sector classifications and social network categories were taken from tourism and from social networks/capital research, respectively. While both sets of classifications were based on established literature, other suitable categorizations might be appropriate. For example, the tourism trade association category might be segmented more specifically into transportation, attractions, outdoor recreation, lodging, food service, events, and general businesses. In that way, we might learn which networks beyond the obvious (hotel/accommodation sectors participating in lodging networks, for example) would appeal to the industry sectors.

The list of member/affiliation organizations used in the survey instrument was formed by the sponsoring CVB with assistance from the researchers. It was the preference of the sponsoring CVB to restrict the list of social networks to formally recognized professional and civic groups. However, social networks extend beyond the reach of this realm, therefore future studies might also include faith-based, educational, avocation/hobby, recreation, and family-based groups. In this regard, the respondent would be providing information regarding their individual affiliation (and not their organization's), which would extend beyond the scope of the current research.

This study was an exploratory venture to determine differences in tourism sector involvement in social networks. Future studies might also address the outcomes gained from involvement in the social networks (including status, business referrals, information, feeling of unity), the strength and direction of the networks, and the levels of staff that retain benefits from the networks. Likewise, the specific programs and activities of the social networks might be examined to determine which is most useful and in what ways to different tourism sectors or providers. Indices may be created to measure the costs and rewards associated with membership participation and to quantify the values of outcomes from different situations for an individual business owner.

Because social networks can be used to enhance social capital, sense of community, exchanges that represent sharing resources, and localized economies, tourism managers who wish to gather information, collaborate (e.g. by way of cooperative marketing) or establish new local policies may consider becoming active within these social networks. Of course, involvement takes time, energy and financial commitment, and each manager would need to determine the 'point of diminishing returns' for the particular business or organization.

Over the past decade, most research on social networks and its relationship with economic development has been conceptual, focusing on its definition and how it functions. Examining issues such as how social networks can be successfully created and nurtured within the tourism industry is important to understand

how social networks fit into a broader development agenda. Given the paucity of literature examining supply-side social networks in tourism, hospitality, and leisure, this study illustrates a first insight into the role that social networks play in the annual operation of tourism sectors to managers wishing to advance their operations.

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