# Social capital, knowledge sharing and innovation of small- and medium-sized enterprises in a tourism cluster

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## Abstract

**Purpose** – This study aims to identify the structural relationship among social capital, knowledge sharing, innovation and performance of small- and medium-sized enterprises (SMEs) in a tourism cluster.

**Design/methodology/approach** – A total of 199 valid questionnaires are collected from SMEs in the Bomun tourism cluster in South Korea. A structural equation modeling approach is used to test the research hypotheses.

**Findings** – The findings suggest that social capital constructs, including network density of structural capital, relational capital and cognitive capital, all positively influence knowledge sharing among SMEs in the cluster. This implies that creating social capital is critical to enhancing the competitiveness of SMEs. This study confirms that knowledge sharing positively affects SME performance through innovation.

**Research limitations/implications** – This study suggests that social capital, consisting of structural, cognitive and relational capital, facilitates increased knowledge sharing and innovation in a tourism cluster, which in turn enhances SME business performance.

**Practical/implications** – This study suggests that tourism cluster policies should focus on how to create a friendly operational climate to build social capital and support SME innovation.

**Originality/value** – This study contributes to the literature on social capital and innovation as well as the discourse on tourism clusters by addressing knowledge sharing among SMEs in a tourism cluster. It also expands the knowledge sharing and innovation literature by focusing on inter-organizational social networking among SMEs.

**Keywords** Innovation, Social capital, Knowledge sharing, Tourism cluster, Bomun tourism complex, Small- and medium-sized enterprise (SME)

**Paper type** Research paper

## Introduction

Industrial clusters are groups of enterprises, institutions and organizations in a particular industry in close geographic proximity, resulting in efficient collaborative synergy. Such clusters have long been examined by geographers, economists and sociologists (Novelli *et al.*, 2006; Porter, 1990; Rosenfeld, 1997); more recently, tourism researchers have started to study tourist destinations as clusters. Most of these studies have been based on Porter's (1990) Diamond model, concentrating on structural and macro aspects of tourism clusters, including spatial proximity, efficiency and competitiveness, while overlooking micro

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aspects such as the social and cultural relationships between individual companies (Chuluunbaatar *et al.*, 2014; Kim and Wicks, 2010; Tinsley and Lynch, 2007).

This study focuses on two aspects of tourism clusters:

(1) the small-scale characteristics of tourism clusters; and

(2) cluster facilitators.

The first aspect addresses the nature of tourism clusters. Unlike manufacturing, tourism products consist of both goods and services from diverse enterprises including numerous small- and medium-sized enterprises (SMEs), which, compared to large enterprises, struggle with capital requirements, research and development, human resource demands and information costs (Iordache *et al.*, 2010; Michael, 2003; Novelli *et al.*, 2006; Thomas *et al.*, 2011). This puts SMEs at a distinct competitive disadvantage, making the formation of close networks among SMEs critically important to their survival and growth.

The second aspect addresses factors that give tourism clusters competitive advantage. Social capital is thought to empower open and efficient exchange of information and resources between companies (Inkpen and Tsang, 2005; Novelli *et al.*, 2006; Porter, 1990; Rosenfeld, 1997), enriching relationship networks for the knowledge sharing necessary for companies to flourish (Martínez-Pérez *et al.*, 2016; Michael, 2003; Thomas *et al.*, 2011; Werner *et al.*, 2015) and innovate (García-Villaverde *et al.*, 2017; Hausman, 2005; Lai *et al.*, 2014; Tsai, 2016). It is necessary to identify how tourism clusters can facilitate SME knowledge sharing and innovation.

Tourism research has not addressed which kinds of social capital stimulate knowledge sharing within a cluster (Martínez-Pérez *et al.*, 2016; Shaw and Williams, 2009; Thomas *et al.*, 2011). Some studies have explored social capital and knowledge sharing in large enterprises but have not addressed its impact either on performance and innovation of SMEs or on tourism clusters, giving no insight into sound policy for tourism clusters and small business sectors. We seek to fill this knowledge gap by focusing on the relationship between knowledge sharing, innovation and tourism performance within the Bomun Complex, the first national tourist district established in South Korea. It opened in 1979 in the historic city of Gyeongju, designated by UNESCO as a World Heritage Site. The Bomun Complex is a suitable sample tourism cluster for our study with SME hotels, restaurants, entertainment facilities and shops.

This study addresses two questions. First, does social capital drive SME innovation and performance? Second, if so, what is the structural relationship among social capital, knowledge sharing, innovation and performance in SME-dominated tourism clusters? Our findings contribute to the theory of tourism clusters and how SMEs function in terms of social capital, knowledge sharing and innovation, with practical implications for facilitating social capital formation and knowledge sharing in tourism clusters.

## Literature review and hypothesis development

### *Tourism clusters and small- and medium-sized enterprises*

The concept of industrial clusters arose from Alfred Marshall's theory of industrial districts and agglomeration economies (Marshall, 1920), which emphasizes benefits of concentrating business activity in a geographic area to decrease supplier costs, increase buyer demand through spillover and decrease transportation costs to both suppliers and buyers. Porter (1998, p. 254) defined an industrial cluster as "a geographically proximate group of interconnected companies in a particular field, linked by commonalities and complementarities", whereas Rosenfeld (1997, p. 4) defined clusters as a "geographically bounded concentration of interdependent businesses with active channels for business

transactions, dialogue, and communications, and that collectively shares common opportunities and threats". Clusters contribute to interconnections between firms, suppliers and related institutions within a geographical boundary, resulting in knowledge spillover based on geographical proximity (Porter, 1990) and greater ability to innovate (García-Villaverde *et al.*, 2017; Martínez-Pérez *et al.*, 2016; Novelli *et al.*, 2006) and compete (Porter, 1990; Rocha, 2004). Tourism studies increasingly conceptualize tourist destinations as industrial clusters. Focusing on Porter's Diamond model, tourism researchers have evaluated the performance and impact of tourism clusters (Estevão and Ferreira, 2012; Jin *et al.*, 2012), and have identified critical factors shaping the competitiveness of these clusters (Jackson and Murphy, 2006; Jackson, 2006; Hong, 2009).

The tourism industry can be viewed either as fragmented, with many separate SMEs offering accommodations, attractions, restaurants, shops, transportation and travel agencies, or as integrated, with a package or bundle of diverse products and services provided by SMEs from different business sectors in one geographic area (Iordache *et al.*, 2010; Michael, 2003; Novelli *et al.*, 2006; Thomas *et al.*, 2011). SMEs occupy an expanding economic role in many countries facing economic slowdowns, as reflected in the world tourism organization and the organisation for economic co-operation and development (OECD) measures to improve the productivity and competitiveness of SMEs in the tourism industry (OECD, 2008).

SMEs are not smaller versions of larger companies: they are disadvantaged by being less financially secure, facing shortfalls in human capital and access to information and often being less experienced in managing strategic decision-making. Nevertheless, SMEs gain some competitive advantages from simpler organizational structures offering flexibility, effective and open communication channels and lower resistance to change, although Davies and Downward (2007) argued that SMEs in the tourism industry are like manufacturing oligopolies with non-price competition and price inflexibility. Michael (2003) characterized small antique retailers co-located in rural Australia as a diagonal tourism cluster, "the concentration of complementary (or symbiotic) firms, where each additional firm adds value to the products and services produced by the existing firms" (p. 139).

Strategic alliances and cooperation among SMEs at a tourist destination are particularly important to growth and competitiveness (Peattie and Moutinho, 2000). Thorburn (2005) suggested that external collaboration of Australian tourism SMEs created a value chain transferring different levels of tacit knowledge. Pansiri (2008) identified commitment and compatibility as critical to an alliance's longevity, showing the importance of SME executives' commitment to strategic alliances, and of compatibility and trust between partners. Williams and Tse (1995) and Morrison (1998) highlighted the importance of collaboration between tourism SMEs, even with competitors, to enhance service. Bernini (2009) argued that clustering benefits the tourism industry by pulling together SMEs from different economic sectors. Lynch *et al.* (2000) and Morrison *et al.* (2004) highlighted benefits that tourism networks provide stakeholders, including SMEs, governmental bodies or organizations, and others. Lynch *et al.* (2000) pointed out that these benefits include knowledge transfer, tourist education, communication, development of new cultural values, early development of small enterprises, cooperative activities, fostering a common purpose and focus, community support for a destination, enhanced product quality and visitor experience and more repeat business.

### *Social capital*

The concept of social capital provides a theoretical foundation that informs our understanding of tourism clusters. Social capital refers to "features of social organization,

such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (Putnam, 1995, p. 67). It involves "actual and potential resources embedded within, available through and derived from" the network (Nahapiet and Ghoshal, 1998, p. 242) and social structures that facilitate action within the network (Coleman, 1988). It is now seen as essential to enhancing performance at all levels (Coleman, 1988). Putnam (1993) concluded that nations with high levels of social capital with generalized reciprocity and trust are more likely to enjoy sustained economic progress.

Social capital is multi-dimensional, largely divided into three dimensions: structural, relational and cognitive. Structural social capital refers to the overall pattern of connections in the social system shaped by property, personal and commercial relationships in terms of density, centrality, connectivity, hierarchy and network configuration (Ahuja, 2000; García-Villaverde *et al.*, 2017; Martínez-Pérez *et al.*, 2016; Lefebvre *et al.*, 2016; Nahapiet and Ghoshal, 1998; Uzzi, 1997). Relational social capital refers to assets created and leveraged through relationships based on respect, friendship, trust, norms, sanctions, obligations and expectations (Coleman, 1988; Putnam, 1993; Uzzi and Gillespie, 2002). Cognitive social capital refers to shared representation, interpretations, vision and systems of meaning among parties, including collective narratives with shared language and vocabulary (García-Villaverde *et al.*, 2017; Inkpen and Tsang, 2005; Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998; Uzzi, 1997).

Social capital in all its dimensions has been understood to significantly influence organizational performance and innovation. According to Martínez-Pérez *et al.* (2016), social capital of firm workers led to innovation in the Spanish hospitality industry. García-Villaverde *et al.* (2017) showed that cognitive social capital positively influenced radical innovation of hospitality firms, whereas structural social capital negatively influenced it.

*Social capital and knowledge sharing*

Clusters can help companies improve performance by creating social capital (Braun, 2015; Lai *et al.*, 2014). Networking enables small firms to share knowledge and thereby spark innovation (Pikkemaat and Weiermair, 2007; Yoo *et al.*, 2016), but only if firms believe that value can be created through cooperation and knowledge sharing (Inkpen and Tsang, 2005; Shaw and Williams, 2009). Norms and rules among cluster actors increase the exchange of informal or tacit knowledge (Chen *et al.*, 2014; Lin, 2007). Kim and Wicks (2010)'s tourism cluster development model for global competitiveness emphasized how networking and cooperation among cluster actors could maximize benefits to individual companies and the region.

Shaw and Williams (2009) viewed tourism clusters as vehicles for tacit knowledge transfer, arguing that proximity facilitates trust and common values for effective knowledge sharing through inter-firm linkages and informal individual relationships. Sørensen (2007) argued that strong individual relationships with employees at other institutions within a tourism destination are more important to knowledge transfer than proximity itself. Inkpen and Tsang (2005) proposed a set of conditions that facilitate knowledge transfer for different social capital frameworks, be they intra-corporate networks, strategic alliances or industrial districts.

A dense social network can promote cooperation to enhance knowledge sharing, information transfer and sustained exploitative innovation (Ahuja, 2000; Tsai, 2016; Uzzi, 1997), whereas strengthening intra-group solidarity may constrain flexibility in local community development (Woolcock and Narayan, 2000). Oh *et al.* (2004) suggested that a moderate level of internal group closure resulting from structural relationships and informal social ties between group members maximized effectiveness. Li *et al.* (2014) showed that

information sharing among Chinese employees was directly affected by trust and shared vision but was only indirectly affected by trust and social interaction. Hashim and Tan (2015) found that examining the continuous knowledge sharing intention of members of the online business community resulted from their affective commitment and trust in the community.

Cognitive social capital includes sharing visions, norms, rules, collective narratives, language and vocabulary, which promotes creation and sharing of new knowledge (Inkpen and Tsang, 2005; Uzzi, 1997). Lefebvre *et al.* (2016) revealed that structural, cognitive and relational dimensions of social capital all positively affect knowledge sharing among network members. Swift and Hwang (2013) also found that cognitive trust affected knowledge sharing and created an organizational learning environment among marketing executives. Cooke *et al.* (2005) showed that innovative SMEs involved relationships of higher trust and made better use of collaboration and information exchange than is possible with large companies . Braun (2015) stated that relational capital contributes to the success of regional clusters, providing SMEs with knowledge, resources and opportunities. Relationships based on trust and reciprocity are likely to promote the transfer of specialized knowledge and resources (Uzzi and Gillespie, 2002). Hence, this study proposes the following hypotheses:

*H1*. Social capital positively influences knowledge sharing.

*H1-1*. Network density positively influences knowledge sharing.

*H1-2*. Network centrality positively influences knowledge sharing.

*H1-3*. Relational social capital positively influences knowledge sharing.

*H1-4*. Cognitive social capital positively influences knowledge sharing.

*Knowledge sharing, innovation and performance*

Knowledge sharing has been understood to promote innovation and performance. Nahapiet and Ghoshal (1998) argued that innovation results from exchange of knowledge and experience between parties who find communication meaningful. Lai *et al.* (2014) found knowledge management to be a key mediating factor in innovation of companies in Taiwanese industry clusters. Innovation has been understood as a significant antecedent to improved organizational performance in a competitive business environment (Hjalager, 2010; Lai *et al.*, 2014; Li *et al.*, 2014). Wang and Wang (2012) suggested that both explicit knowledge sharing and tacit knowledge sharing positively influence innovation and financial performance of high technology firms in China. Hu *et al.* (2009) found knowledge sharing by international hotel employees in Taiwan positively influenced innovation in new services and in quality of service.

Despite the importance of innovation in spurring competitive advantage, innovation of SMEs has been addressed in relatively few studies (Braun, 2015; Hausman, 2005; Hsu *et al.*, 2011; Hjalager, 2010). Nicolau and Santa-María (2013) showed that innovation of Spanish hotels positively affected sales levels and market value. Lin (2013) also found that service innovation positively influenced performance in the Chinese tourism sector. In addition, Yang (2010); Kim *et al.* (2013); Wang *et al.* (2013) and Li *et al.* (2014) empirically validated a direct causal relationship between knowledge sharing and performance. Kim *et al.* (2013) suggested that knowledge sharing positively affected organizational performance among employees of South Korean five-star hotels. Li *et al.* (2014) showed that both content and

quality of information sharing positively influenced manufacturing performance of Chinese companies.

This study proposes the following further hypotheses:

*H2*. Knowledge sharing positively influences innovation.

*H3*. Knowledge sharing positively influences performance.

*H4*. Innovation positively influences performance.

*Proposed model*

Our conceptual model is presented in Figure 1, showing the relationship between social capital constructs, knowledge sharing, innovation and performance of SMEs in tourism clusters.

## Research method

*Study site*

We apply this research model to the Bomun Tourism Complex (hereafter "the Bomun cluster"), a popular destination with typical tourism cluster facilities: an international convention center, tourist accommodations, golf resorts, shopping malls, spas, an amusement park and an art gallery, with multiple SMEs located in a 19.38 $km^2$ area around Bomun Lake. It was the first tourism complex in South Korea, funded in 1979 by several federal agencies, including the Kyongju Tourism Agency [now the Gyeongsangbuk-do Tourism Corporation: the (GTC)], and the private sector. The government had designated the tourism industry as a major strategic industry in 1975, consulted with the International Bank for Reconstruction and Development (IBRD), and decided to develop Kyongju (now Gyeongju) as the first comprehensive Korean tourism development (Kim, 1980). UNESCO has designated Gyeongju as a world heritage site and Gyeongju and the Bomun cluster are internationally recognized as a major tourist destination.

*Measurement*

We developed a questionnaire after performing an extensive literature review and considering the uniqueness of SMEs. Social capital constructs were developed specifically for tourism clusters based on previous research. Structural social capital was operationalized to mean social network interactions among tourism SMEs in the Bomun cluster. We focused on two constructs of structural social capital: network density and network centrality, adapting measurements from Antia and Frazier (2001); Nahapiet and

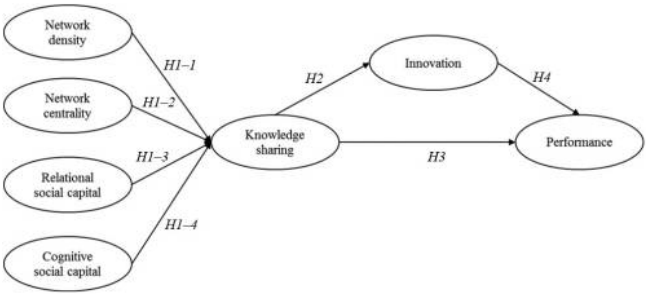



**Figure 1.**
Proposed research model

Ghoshal (1998); Tsai and Ghoshal (1998) and Zheng (2010). Three items measured network density, the level of social ties linking people together within the cluster (e.g. "I maintain a good relationship with other enterprises in the Bomun cluster"). Three items measured network centrality, an actor's position in the Bomun network (e.g. "My enterprise is an important member among others in the Bomun cluster"). Another three items measured relational social capital, assets created through personal relationships, including trust, trustworthiness, norms and expectations (Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998). Three items measured cognitive social capital, meaning assets providing shared representations, interpretations, vision and goals (Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998). Four items measured knowledge sharing (e.g. "I frequently exchange important information [such as market trends] with others in the Bomun cluster"), adopted from Bock *et al.* (2005); Collins and Smith (2006) and Chen *et al.* (2014).

Innovation is defined as the degree to which an organization offers new or improved products and services to the market (Lumpkin and Dess, 1996; Woodman *et al.*, 1993). No consensus exists on how to measure SME innovation, as traditional large enterprise patent counts or R&D activities do not seem appropriate (Gumusluoğlu and Ilsev, 2009; Lee and Newton, 2000). Hence, we generated three items to measure innovation based on subjective comparisons of SMEs (e.g. "My firm provides new products and services earlier than others"), based on Chen *et al.* (2011); Jiménez-Jiménez and Sanz-Valle (2011) and Zheng (2010).

Performance is defined as business growth in sales, revenues and employees since the previous year. Studies have measured business performance by objective measures, subjective measures or both (Bagnoli and Vedovato, 2014; De Pablos, 2002; Lin and Chen, 2007; Reichel and Haber, 2005). We used subjective evaluation of respondents, as SME business performance data are difficult to be obtained (Morrison and Teixeira, 2002; Reichel and Haber, 2005) and such self-reports have been shown to be reliable (Dess and Robinson, 1984). Previous studies (Agarwal *et al.*, 2003; Lin and Chen, 2007; Wiklund and Shepherd, 2005) have applied subjective measures for SME performance in a one-year period. In our study, all variables were measured on a seven-point Likert scale from 1 = strongly disagree to 7 = strongly agree. In addition, respondents answered questions about demographics, business type and job position.

*Data collection and analysis*

An on-site survey was conducted with employees or owners of tourism SMEs in the Bomun cluster in Gyeongju, Korea, from April to June 2015. Sørensen (2007) asserted that employees are important sources of knowledge; therefore, this study considered both employees and owners as critical research subjects. For data collection purposes, the Bomun cluster was divided into four geographical zones with four trained survey interviewers. Each interviewer visited tourism enterprises in an assigned zone. Those who agreed to participate responded to a self-administered questionnaire. Interviewers were available to explain terms used and participants were allowed to ask his/her boss about performance questions. Respondents were given a small gift as a token of appreciation. A total of 250 questionnaires were distributed; 199 completed surveys were collected for a response rate of 79.6 per cent. After a validation check, all 199 responses were analyzed.

This study uses structural equation modeling (SEM) to test the research hypotheses (Figure 1). Data were analyzed using SPSS 18.0 and AMOS 18.0 software. A frequency test investigated respondent demographics. Our SEM first used confirmatory factor analysis (CFA) to identify items. We then calculated the structural relationships in the latent constructs in the model to evaluate the structural model and test hypotheses. AMOS 18.0

was also used to calculate the significance of assigned weights as well as the subdivision of correlations into direct, indirect and total effects among latent constructs. The significance of these effects was tested using a bootstrapping analysis with a nonparametric sampling procedure with 1,000 bootstrap samples and 95 per cent confidence intervals.

## Results

### *Demographic characteristics of respondents*

Table I shows respondent demographics. Of note, 58.4 per cent of respondents were male and 41.6 per cent were female. Most respondents (66.8 per cent) were 40-59 years old, followed by those 20-29 years old (14.1 per cent). Of note, 61.6 per cent of respondents earned two-year college or higher education degrees and 37.9 per cent of them had a high-school diploma, 41.9 per cent of respondents represented food and beverage businesses, followed by 29.8 per cent accommodation businesses, 12.1 per cent retail shops such as souvenir shops and convenience shops and 6.6 per cent tourist attractions. The remainder were from karaoke establishments, gas stations and bike rental shops. The majority of respondents were owners or CEOs (52.3 per cent), followed by staff (16.1 per cent), managers (14.1 per cent), directors (9.0 per cent) and assistant managers (8.5 per cent).

### *Measurement model*

The data obtained confirmed the univariate normality of variables. However, most social science data do not meet the multivariate normality assumption, and our data also showed multivariate non-normality based on Mardia's standardized coefficient. One way to test the model when the multivariate normality assumption is violated is using the robust maximum likelihood method based on Satorra–Bentler (S–B) $\chi^2$. However, according to Byrne's (2010)

**Table I.** Demographic characteristics of respondents ($N = 199$)

| Category | Variable | *N* | (%) |
|---|---|---|---|
| Gender | Male | 115 | 58.4 |
| | Female | 82 | 41.6 |
| Age | 20-29 | 28 | 14.1 |
| | 30-39 | 22 | 11.1 |
| | 40-49 | 58 | 29.1 |
| | 50-59 | 75 | 37.7 |
| | 60-69 | 16 | 8.0 |
| Education level | Elementary school | 1 | 0.5 |
| | High school | 75 | 37.9 |
| | Two-year college | 55 | 27.8 |
| | University | 60 | 30.3 |
| | Graduate | 7 | 3.5 |
| Business type | F&B | 83 | 41.9 |
| | Retail shops | 24 | 12.1 |
| | Accommodation | 59 | 29.8 |
| | Public agency | 10 | 5.1 |
| | Tourist attraction | 13 | 6.6 |
| | Others | 9 | 4.5 |
| Position | Staff | 32 | 16.1 |
| | Assistant manager | 17 | 8.5 |
| | Manager | 28 | 14.1 |
| | Director | 18 | 9.0 |
| | CEO/Owner | 104 | 52.3 |

test, when an uncorrected (usual) ML approach is used with multivariate non-normal data, the results concerning statistical significance of the estimated parameters remain the same when an S-B robust ML approach (corrected ML) is used. That is, as Byrne (2010) suggested, despite the tendency of the uncorrected ML estimator to overestimate the statistical significance of estimates, the statistical significance of parameters is still reliable when the usual ML estimation approach is used. Hence, this study proceeded with ML estimation.

The measurement model in Table II was derived from CFA. The indices of all goodness-of-fit testing indicate a satisfactory level of fit. The findings confirm that the proposed model fits the data well: $\chi^2$ (df = 188, $N$ = 199) = 377.836; normed $\chi^2$ = 2.01; goodness-of-fit index (GFI) = 0.854; normed fit index (NFI) = 0.927; Tucker–Lewis index (TLI) = 0.953; comparative fit index (CFI) = 0.962; root mean square error of approximation (RMSEA) = 0.071; standardized root mean square residual (SRMR) = 0.039. The reliability of multi-item scales was also confirmed, and all coefficients of Cronbach's alpha were above the cut-off value of 0.7 (Nunnally, 1978): network density (0.945), network centrality (0.909), relational social capital (RSC) (0.953), cognitive social capital (CSC) (0.923), knowledge sharing (0.95), innovation (0.94) and performance (0.944).

Table III shows the results of convergent and discriminant validity testing. All average variance extracted (AVE) and composite reliability values for multi-item scales were greater than the minimum criterion of 0.5 and 0.7, respectively (Hair *et al.*, 2006). The results indicate a sufficient level of convergent validity for the measurement model. The discriminant validity of the constructs was also confirmed, as all squared correlations between the two constructs were smaller than values for the AVE for corresponding inter-constructs (Fornell and Larcker, 1981).

*Hypotheses testing*

Figure 2 shows the results of the proposed model in this study. They indicate that the proposed structural model fits the data well showing $\chi^2$ = 408.046 (df = 196), normed $\chi^2$ = 2.082, GFI = 0.842, NFI = 0.921, CFI = 0.957, RMSEA = 0.074, and standardized RMR = 0.075. The explained variance of endogenous constructs was 66.5 per cent for knowledge sharing, 20.8 per cent for innovation and 20.6 per cent for performance. Our data indicated that network density ($\beta$ = 0.225, $p < 0.01$), relational social capital ($\beta$ = 0.204, $p < 0.01$) and cognitive social capital ($\beta$ = 0.497, $p < 0.01$) had significant impacts on knowledge sharing in tourism clusters, supporting *H1-1*, *H1-3* and *H1-4*. The relationship between network centrality and knowledge sharing was not statistically significant, failing to support *H1-2* ($\beta$ = 0.041, not significant).

*H2* hypothesizes that knowledge sharing will be positively related to innovation of a tourism SME. This was confirmed ($\beta$ = 0.456, $p < 0.01$). *H4* hypothesizes that innovation positively affects enterprise performance, which was supported ($\beta$ = 0.439, $p < 0.01$). The impact of knowledge sharing on performance, however, was not confirmed and *H3* was not supported.

*Indirect and total effects*

The total effects are equal to the sum of all direct and indirect effects of one variable on another (Kline, 2011). Standardized total effects are interpreted as path coefficients. Table IV shows the total effects of each dependent variable. Innovation is the most powerful antecedent for predicting performance, with the largest total effect of 0.439, followed by knowledge sharing (0.231), cognitive social capital (0.115), network density (0.052) and relational social capital (0.047). As for innovation, knowledge sharing is the most powerful factor with the largest total effect (0.456), followed by cognitive social capital (0.227),

**Table II.**
Results of confirmatory factor analysis and goodness-of-fit indices for measurement model

| Constructs and variables | Regression weights | Factor loadings | S.E. | Error variance | C.R. | $\alpha^a$ |
|---|---|---|---|---|---|---|
| *Factor 1: network density* | | | | | | 0.945 |
| Good relationship with other enterprises in the Bomun cluster | 1.036 | 0.917 | 0.05 | 0.375 | 20.814 | |
| Relations among other firms in the Bomun cluster are very close | 1.039 | 0.952 | 0.046 | 0.207 | 22.695 | |
| Frequent communication with other enterprises in the Bomun cluster | 1 | 0.902 | | 0.423 | | |
| *Factor 2: network centrality* | | | | | | 0.909 |
| My enterprise is an important member among others in the Bomun cluster | 1.039 | 0.871 | 0.064 | 0.568 | 16.343 | |
| My enterprise plays a central role in the Bomun cluster | 1.091 | 0.889 | 0.064 | 0.521 | 16.926 | |
| My enterprise has established extensive relationships with surrounding firms | 1 | 0.874 | | 0.511 | | |
| *Factor 3: relational social capital (RSC)* | | | | | | 0.953 |
| I believe that if I am in trouble, other firms will try to help me out | 1.101 | 0.935 | 0.052 | 0.331 | 21.306 | |
| I believe that if I need any help, other firms are willing to help | 1.131 | 0.984 | 0.047 | 0.079 | 23.928 | |
| I can always rely on other members in the Bomun cluster | 1 | 0.884 | | 0.527 | | |
| *Factor 4: cognitive social capital (CSC)* | | | | | | 0.923 |
| I always agree with other firms on what is important for the development of the Bomun cluster | 0.891 | 0.833 | 0.051 | 0.677 | 17.581 | |
| I share the same ambitions and vision with other firms on the development of the Bomun cluster | 0.967 | 0.905 | 0.045 | 0.402 | 21.566 | |
| I am enthusiastic about pursuing the collective goals and missions of the Bomun cluster | 1 | 0.945 | | 0.231 | | |
| *Factor 5: knowledge sharing* | | | | | | 0.95 |
| I frequently exchange important information (such as market trends) with others in the Bomun cluster | 1 | 0.885 | | 0.555 | | |
| I often obtain valuable information through relationships with others in the Bomun cluster | 1.05 | 0.928 | 0.051 | 0.356 | 20.667 | |
| I share my business experience with others in the Bomun cluster | 1.045 | 0.961 | 0.046 | 0.183 | 22.55 | |
| I learn a lot from others in the Bomun cluster | 1.011 | 0.871 | 0.057 | 0.652 | 17.796 | |

(*continued*)

**Table II.**

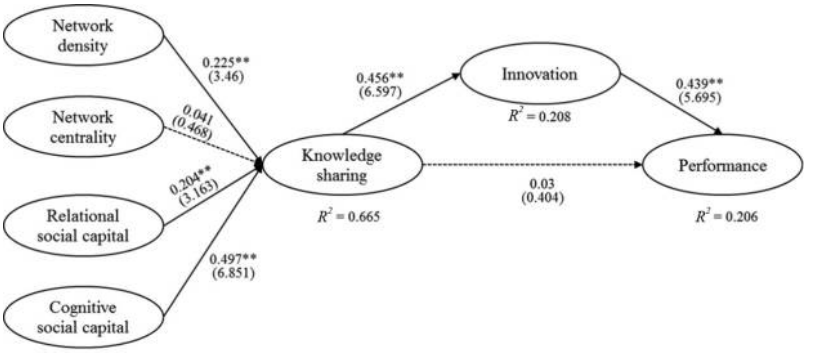
| Constructs and variables | Regression weights | Factor loadings | S.E. | Error variance | C.R. | $\alpha^{a}$ |
|---|---|---|---|---|---|---|
| *Factor 6: innovation* | | | | | | 0.94 |
| My firm provides new products and services before others do | 1 | 0.902 | | 0.395 | | |
| Our new products and services are often perceived as novelty goods by customers | 1.044 | 0.936 | 0.049 | 0.268 | 21.307 | |
| Our new products and services make us competitive with others | 1.002 | 0.912 | 0.05 | 0.35 | 20.19 | |
| *Factor 7: performance* | | | | | | 0.944 |
| My business has experienced an increase in sales compared to last year | 1 | 0.972 | | 0.132 | | |
| My business has experienced an increase in operating revenues compared to last year | 0.984 | 0.988 | 0.024 | 0.054 | 40.864 | |
| My business has experienced an increase in employees compared to last year | 0.78 | 0.808 | 0.043 | 0.741 | 18.105 | |

**Notes:** $\chi^2$ (df = 188, $N$ = 199) = 377.836 ($p$-value = 0.000), normed $\chi^2$ =2.01, GFI = 0.854, NFI = 0.927, TLI = 0.953, CFI = 0.962, RMSEA = 0.071, SRMR = 0.039; [a]Cronbach's alpha

**Table III.**
Reliability and validity for measurement model

| Constructs | Mean | CR | AVE | ND | NC | RSC | CSC | KS | IN | PERF |
|---|---|---|---|---|---|---|---|---|---|---|
| ND | 3.945 | 0.884 | 0.854 | 1.000 | | | | | | |
| NC | 4.467 | 0.813 | 0.771 | 0.630 (0.397) | 1.000 | | | | | |
| RSC | 3.878 | 0.893 | 0.875 | 0.577 (0.333) | 0.644 (0.415) | 1.000 | | | | |
| CSC | 4.288 | 0.846 | 0.802 | 0.534 (0.285) | 0.705 (0.497) | 0.490 (0.240) | 1.000 | | | |
| KS | 3.767 | 0.884 | 0.832 | 0.632 (0.399) | 0.659 (0.434) | 0.601 (0.361) | 0.744 (0.554) | 1.000 | | |
| IN | 3.767 | 0.882 | 0.840 | 0.366 (0.134) | 0.490 (0.240) | 0.358 (0.128) | 0.436 (0.190) | 0.446 (0.199) | 1.000 | |
| PERF | 3.496 | 0.892 | 0.858 | 0.256 (0.066) | 0.355 (0.126) | 0.364 (0.132) | 0.233 (0.054) | 0.217 (0.047) | 0.453 (0.205) | 1.000 |

**Notes:** Numbers in the parenthesis indicate squared correlation among latent constructs; CR, composite reliability; AVE, average variance extracted; ND, network density; NC, network centrality; RSC, relational social capital; CSC, cognitive social capital; KS, knowledge sharing; IN, innovation; PERF, performance




**Notes:** $\chi 2 = 408.046$, $df = 196$, $p < 0.0001$, normed $\chi 2 = 2.082$, NFI = 0.921, CFI = 0.957, RMSEA = 0.074, SRMR = 0.075; *$p < 0.05$, ** $p < 0.01$; two tailed test; standardized coefficient ($t$-value)

**Figure 2.**
Results of the research model

| | Direct effect | | | Indirect effect | | | Total effect | | |
|---|---|---|---|---|---|---|---|---|---|
| Constructs | KS | IN | PERF | KS | IN | PERF | KS | IN | PERF |
| ND | 0.225** | | | | 0.103** | 0.052** | 0.225** | 0.103** | 0.052** |
| NC | 0.041 | | | | 0.019 | 0.009 | 0.041 | 0.019 | 0.009 |
| RSC | 0.204* | | | | 0.093* | 0.047* | 0.204* | 0.093* | 0.047* |
| CSC | 0.497** | | | | 0.227** | 0.115** | 0.497** | 0.227** | 0.115** |
| KS | | 0.456** | 0.03 | | | 0.2** | | 0.456** | 0.231** |
| IN | | | 0.439** | | | | | | 0.439** |

**Notes:** *$p < 0.05$; **$p < 0.01$

**Table IV.**
Results of structural equation modeling

network density (0.103) and relational social capital (0.093). The most significant factor in assessing the effect of predicting knowledge sharing was cognitive social capital (0.497), followed by network density (0.225), and relational social capital (0.204).

## Discussion and conclusions

### *Conclusions*

This study focuses on two aspects of tourism clusters: first, tourism clusters made up of SMEs must account for small-scale characteristics of diverse business sectors providing a bundle of tourism products and services; second, geographical proximity alone is insufficient to guarantee success of the cluster, so facilitators of SME innovation and increased performance must be identified. This study analyzed these issues focusing on SMEs in the Bomun tourism cluster in South Korea and examining the structural relationship among social capital, knowledge sharing, innovation and performance. The results reveal that network density, relational social capital and cognitive social capital have significant positive effects on knowledge sharing, with cognitive social capital having the greatest effect on knowledge sharing; and that knowledge sharing among SMEs has a significant and positive effect on performance through innovation.

Therefore, the main contribution of this study is to identify the development of social capital as facilitating SME competitiveness in a tourism cluster. Creating social capital increases knowledge sharing and transfer among tourism cluster actors, overcoming SME's lack of managerial skills and resources needed for innovation. Strong social networks, shared vision and common goals and trust among cluster members are key elements of social capital that enable SME knowledge sharing and innovation.

### *Theoretical implications*

This study contributes to the tourism cluster and innovation literature by applying social capital theory to SMEs. This study is unique in addressing SME knowledge transfer and innovation within a cluster; the results show that social capital among tourism SMEs enhances innovation and performance. Finally, it expands knowledge transfer and innovation literature by focusing on inter-organization social networks among SMEs.

Prior research on social capital and management has focused largely on structural and relational social capital (Camps and Marques, 2014; Lefebvre *et al.*, 2016; Lee, 2009) to the near exclusion of cognitive social capital (Lee, 2009), and it has done so in an intra-organizational rather than an inter-organizational or cluster context (Camps and Marques, 2014). This study fills this gap and confirms the role of cognitive social capital among SMEs in a tourism cluster in facilitating knowledge sharing and thereby promoting innovation and performance; that is, shared vision and collective goals encourage knowledge sharing within a cluster, resulting in innovative behaviors and enhancing performance. Our findings are consistent with previous studies that showed shared vision and culture are crucial in knowledge sharing and innovation in inter-organizational context (Chen *et al.*, 2014; Li *et al.*, 2014; Lin, 2007) and that the shared cognitive culture of entities in close geographical proximity is a core element in knowledge transfer (Shaw and Williams, 2009) and innovation (Hauser *et al.*, 2007).

This study also suggests the importance of network density within a tourism cluster. A local destination network has been seen as especially benefiting small tourism firms (Copp and Ivy, 2001; Morrison, 1998). Our findings concur with previous studies to the effect that strong social network density promotes cooperation that facilitates knowledge sharing, improves information transfer and sustains exploitative innovation (Ahuja, 2000; Martínez-Pérez *et al.*, 2016; Uzzi, 1997). SMEs in close proximity and frequent communication share more information.

Strong social networking among cluster actors is more effective in an environment of trust. Our findings suggest that relational social capital is important in knowledge sharing and tourism performance. As researchers have suggested (Chen *et al.*, 2014; Cooke *et al.*, 2005; Uzzi and Gillespie, 2002), reciprocal relationships of trust are more likely to encourage the kind of knowledge and resource exchange that contributes to SME innovation and performance in a tourism cluster. Building trust is key to collaborative innovation among SMEs, and even between large companies and SMEs. Many in the Bomun cluster perceived others only as competitors, not helpers: this perhaps indicates a low level of trust when respondents had few chances to meet, communicate and share ideas about the tourism cluster as a whole. Given the importance of trusted social networks, further studies should pinpoint barriers to developing such an environment and should focus on how SMEs can fully engage social networks within a cluster. Network centrality has been discussed as an important construct of structural social capital; however, our findings showed, as did those of Woolcock and Narayan (2000), that network centrality was not statistically significant in facilitating knowledge sharing in a tourism cluster. The Bomun cluster may not have enough active networks among individuals to create network centrality.

While some studies (Kim *et al.*, 2013) suggest the direct impact of knowledge transfer on organizational performance, our findings suggest that the knowledge sharing does not increase business performance in the absence of innovation. Kim *et al.*'s (2013) study focused on knowledge-sharing activities within different units of a single hotel that directly resulted in increased sales. Sharing of knowledge and resources by distinctly different companies would be expected to take a longer and more circuitous route, requiring something to spur collaborative innovation between a wide range of cluster actors including SMEs, large companies, public agencies, local universities and research institutions. Such a system should be designed to increase opportunities to share information and resources and to transfer knowledge and technological skills to SMEs throughout the cluster. This could be expected to facilitate innovative activities in the cluster and enhance individual firm performance and the overall success of the cluster.

*Practical implications*

Our findings suggest that tourism cluster policies should focus on building social capital to support SME innovation and thereby enhance the competitiveness of tourism clusters. The first step should be to build cognitive social capital among actors. The public sector, including destination management organizations, plays a critical role in developing the shared visions and missions of tourism destinations and delivering them to all cluster actors to encourage collaboration aimed at enhancing performance of the entire cluster. Although the GTC has been in charge of the development and management of the Bomun cluster, the cluster's goals and vision have not been effectively shared with all cluster actors. To facilitate knowledge sharing and innovation, the public sector including the GTC should make an ongoing effort to engage both SMEs and large tourism companies in developing common goals and collaboration amongst all members.

Second, SMEs should actively participate in social networking to facilitate knowledge transfer and innovation. SMEs that remain isolated within the Bomun cluster have less opportunity to access current market trends in and around the cluster, which could block innovation. Unfortunately, network density was not high in the study region. The GTC hosts only infrequent workshops and meetings for cluster management, and they generally address issues common to the larger companies like hotels and condominiums; hence, most cluster actors are SMEs with limited involvement in formal meetings organized by the GTC. Van Niekerk (2014) argued that the public sector should help build network relationships that include all stakeholders. The GTC and municipality should incentivize SMEs to participate in networking activities to strengthen the Bomun cluster.

This study further suggests that the focus of tourism cluster policy should be to show SMEs the positive impact of collaborative innovation on their bottom line. Weak networks leave SMEs lacking in managerial skills, resources and collaborative opportunities, making it incumbent on the public sector to create and promote social capital, highlight the value of collaborative innovation and educate SMEs to use the cluster as a resource to develop their innovative capabilities. Policies should encourage creative tourism ventures and create systems that promote collaborative innovation of SMEs.

*Limitations and future research*

Social capital promotes regional learning both within a region and beyond (Malecki, 2012; Cooke and Wills, 1999). On limitation of this study is that it focuses on social capital within one cluster. Future research should examine social capital from networking beyond a single cluster. More research is needed on social capital, knowledge sharing and collaborative innovation of SMEs in a tourism cluster: future research should focus on the structure of

networks with SMEs and large companies, the public sector, and other institutions in a tourism cluster; the role of the public sector on collaborative innovation of SMEs; ways to build social capital with all cluster actors; the co-creation of knowledge by cluster actors and customers; and the impact of education on collaborative innovation. Another limitation of our study is that we examined the overall perception concerning degree of innovation, not differentiating specific types of innovation and for that reason, perhaps, did not identify network centrality as a significant factor. Future study could explore network centrality in the context of SMEs and tourism clusters, looking at particular types of innovation.

Methodologically, this study measured innovation and performance of SMEs using subjective employee perceptions, as objective SME performance indicators are lacking. Further research could explore working definitions and measurements of SME innovation and performance. Moreover, collection of all data through a self-administered survey may cause common rater effects. Further investigation was conducted to assess common method bias (CMB) using a single-method-factor approach (unmeasured method factor model) as suggested by Podsakoff, MacKenzie; Lee & Podsakoff (2003) and Min *et al.* (2016). The results showed an average substantive factor loading of 0.912, whereas the average method factor loading was 0.380. Although we were not able to apply a procedural remedy such as temporal separation, the statistical remedy showed a low ratio of method variance to substantive variance. Indeed, some of the variables in method variance were shown to be significant, raising little concern about common method variables. However, there is no clear critical value for an acceptable ratio of substantive variance to method variance. Some researchers have stated that CMB is often trivial and does not jeopardize the validity of findings (Meade *et al.*, 2007, p. 4), though it may still be considered an inherent limitation in a study such as ours (Conger *et al.*, 2000). Some researchers (Min *et al.*, 2016) have recently questioned CMB in hospitality research. To insure against CMB, future research can use procedural remedies such as temporal separation or psychological separation, and/or statistical remedies such as partial correlation approaches, single-method-scale-score approaches, single-method-factor approaches or multiple-method-factor approaches (Podsakoff *et al.*, 2003).

## References

Agarwal, S.M., Erramilli, M.K. and Dev, C.S. (2003), "Market orientation and performance in service firms: role of innovation", *Journal of Services Marketing*, Vol. 17 No. 1, pp. 68-82.

Ahuja, G. (2000), "Collaboration networks, structural holes, and innovation: a longitudinal study", *Administrative Science Quarterly*, Vol. 45 No. 3, pp. 425-455.

Antia, K.D. and Frazier, G.L. (2001), "The severity of contract enforcement in interfirm channel relationships", *Journal of Marketing*, Vol. 65 No. 4, pp. 67-81.

Bagnoli, C. and Vedovato, M. (2014), "The impact of knowledge management and strategy configuration coherence on SME performance", *Journal of Management & Governance*, Vol. 18 No. 2, pp. 615-647.

Bernini, C. (2009), "Convention industry and destination clusters: evidence from Italy", *Tourism Management*, Vol. 30 No. 6, pp. 878-889.

Bock, G.W., Zmud, R.W., Kim, Y.G. and Lee, J.N. (2005), "Behavioral intention formation in knowledge sharing: examining the roles of extrinsic motivators, social-psychological forces, and organizational climate", *MIS Quarterly*, Vol. 29 No. 1, pp. 87-111.

Braun, C. (2015), "A qualitative analysis of the networks of tourism SMEs in Germany: managing business networks for knowledge transfer", University of Nottingham, Doctoral dissertation.

Byrne, M.B. (2010), *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*, Taylor & Francis Group, New York, NY.

Camps, S. and Marques, P. (2014), "Exploring how social capital facilitates innovation: the role of innovation enablers", *Technological Forecasting and Social Change*, Vol. 88, pp. 325-348.

Chen, J.S., Tsou, H.T. and Ching, R.K. (2011), "Co-production and its effects on service innovation", *Industrial Marketing Management*, Vol. 40 No. 8, pp. 1331-1346.

Chen, Y.H., Lin, T.P. and Yen, D.C. (2014), "How to facilitate inter-organizational knowledge sharing: the impact of trust", *Information & Management*, Vol. 51 No. 5, pp. 568-578.

Chuluunbaatar, E., Ottavia, Luh, D.B. and Kung, S.F. (2014), "The role of cluster and social capital in cultural and creative industries development", *Procedia – Social and Behavioral Sciences*, Vol. 109, pp. 552-557.

Coleman, J.S. (1988), "Social capital in the creation of human capital", *American Journal of Sociology*, Vol. 94, pp. S95-S120.

Collins, C.J. and Smith, K.G. (2006), "Knowledge exchange and combination: the role of human resource practices in the performance of high-technology firms", *Academy of Management Journal*, Vol. 49 No. 3, pp. 544-560.

Conger, J.A., Kanungo, R.N. and Menon, S.T. (2000), "Charismatic leadership and follower effects", *Journal of Organizational Behavior*, Vol. 21 No. 7, pp. 747-767.

Cooke, P. and Wills, D. (1999), "Small firms, social capital and the enhancement of business performance through innovation programmes", *Small Business Economics*, Vol. 13 No. 3, pp. 219-234.

Cooke, P., Clifton, N. and Oleaga, M. (2005), "Social capital, firm embeddedness and regional development", *Regional Studies*, Vol. 39 No. 8, pp. 1065-1077.

Copp, C.B. and Ivy, R.L. (2001), "Networking trends of small tourism businesses in post-socialist Slovakia", *Journal of Small Business Management*, Vol. 39 No. 4, pp. 345-353.

Davies, B. and Downward, P. (2007), "Exploring price and non-price decision making in the UK package tour industry: insights from small-scale travel agents and tour operators", *Tourism Management*, Vol. 28 No. 5, pp. 1236-1261.

De Pablos, P.O. (2002), "Knowledge management and organizational learning: typologies of knowledge strategies in the Spanish manufacturing industry from 1995 to 1999", *Journal of Knowledge Management*, Vol. 6 No. 1, pp. 52-62.

Dess, G.G. and Robinson, R.B. (1984), "Measuring organizational performance in the absence of objective measures: the case of the privately-held firm and conglomerate business unit", *Strategic Management Journal*, Vol. 5 No. 3, pp. 265-273.

Estevão, C. and Ferreira, J.J. (2012), "Tourism cluster positioning and performance evaluation: the case of Portugal", *Tourism Economics*, Vol. 18 No. 4, pp. 711-730.

Fornell, C. and Larcker, D.F. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 382-388.

García-Villaverde, P.M., Elche, D., Martínez-Pérez, Á. and Ruiz-Hortega, M.J. (2017), "Determinants of radical innovation in clustered firms of the hospitality and tourism industry", *International Journal of Hospitality Management*, Vol. 61, pp. 45-58.

Gumusluoğlu, L. and Ilsev, A. (2009), "Transformational leadership and organizational innovation: the roles of internal and external support for innovation", *Journal of Product Innovation Management*, Vol. 26 No. 3, pp. 264-277.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2006), *Multivariate Data Analysis*, Pearson, Upper Saddle River, NJ.

Hashim, K.F. and Tan, F.B. (2015), "The mediating role of trust and commitment on members' continuous knowledge sharing intention: a commitment-trust theory perspective", *International Journal of Information Management*, Vol. 35 No. 2, pp. 145-151.

Hauser, C., Tappeiner, G. and Walde, J. (2007), "The learning region: impact of social capital and weak ties on innovation", *Regional Studies*, Vol. 41 No. 1, pp. 75-88.

Hausman, A. (2005), "Innovativeness among small businesses: theory and propositions for future research", *Industrial Marketing Management*, Vol. 34 No. 8, pp. 773-782.

Hjalager, A.M. (2010), "A review of innovation research in tourism", *Tourism Management*, Vol. 31 No. 1, pp. 1-12.

Hong, W.C. (2009), "Global competitiveness measurement for the tourism sector", *Current Issues in Tourism*, Vol. 12 No. 2, pp. 105-132.

Hsu, S.-M., Hsieh, P.-H. and Yuan, S.-T. (2011), "Roles of SMEs in service industry innovation: a case study on leisure agriculture service in tourism regional innovation", *The Service Industries Journal*, Vol. 33 No. 11, pp. 1068-1088.

Hu, M.L.M., Horng, J.S. and Sun, Y.H.C. (2009), "Hospitality teams: knowledge sharing and service innovation performance", *Tourism Management*, Vol. 30 No. 1, pp. 41-50.

Inkpen, A.C. and Tsang, E.W. (2005), "Social capital, networks, and knowledge transfer", *Academy of Management Review*, Vol. 30 No. 1, pp. 146-165.

Iordache, C., Ciochinã, I. and Asandei, M. (2010), "Clusters-tourism activity increase competitiveness support", *Theoretical and Applied Economics*, Vol. 17 No. 5, pp. 99-112.

Jackson, J. (2006), "Developing regional tourism in China: the potential for activating business clusters in a socialist market economy", *Tourism Management*, Vol. 27 No. 4, pp. 695-706.

Jackson, J. and Murphy, P. (2006), "Clusters in regional tourism an Australian case", *Annals of Tourism Research*, Vol. 33 No. 4, pp. 1018-1035.

Jiménez-Jiménez, D. and Sanz-Valle, R. (2011), "Innovation, organizational learning, and performance", *Journal of Business Research*, Vol. 64 No. 4, pp. 408-417.

Jin, X., Weber, K. and Bauer, T. (2012), "Impact of clusters on exhibition destination attractiveness: evidence from mainland China", *Tourism Management*, Vol. 33 No. 6, pp. 1429-1439.

Kim, N. and Wicks, B.E. (2010), "Rethinking tourism cluster development models for global competitiveness", *International CHRIE Conference-Refereed Track 2010 Proceedings*, 30 July, *San Juan, Puerto Rico*, Paper 28, available at: http://scholarworks.umass.edu/refereed/CHRIE_2010/Friday/28

Kim, S.H. (1980), "Concepts and strategies for planning and development of tourism resources – the experience of Kyongju-Bomun Project in Korea", *Asian Economies*, Vol. 32, pp. 15-37.

Kim, T.T., Lee, G., Paek, S. and Lee, S. (2013), "Social capital, knowledge sharing and organizational performance: what structural relationship do they have in hotels?", *International Journal of Contemporary Hospitality Management*, Vol. 25 No. 5, pp. 683-704.

Kline, R.B. (2011), *Principles and Practice of Structural Equation Modeling*, The Guilford Press, NY.

Lai, Y.L., Hsu, M.S., Lin, F.J., Chen, Y.M. and Lin, Y.H. (2014), "The effects of industry cluster knowledge management on innovation performance", *Journal of Business Research*, Vol. 67 No. 5, pp. 734-739.

Lee, F.C. and Newton, K. (2000), "Innovation of SMEs in the knowledge-based economy", *Journal of Small Business & Entrepreneurship*, Vol. 15 No. 4, pp. 2-31.

Lee, R. (2009), "Social capital and business and management: setting a research agenda", *International Journal of Management Reviews*, Vol. 11 No. 3, pp. 247-273.

Lefebvre, V.M., Sorenson, D., Henchion, M. and Gellynck, X. (2016), "Social capital and knowledge sharing performance of learning networks", *International Journal of Information Management*, Vol. 36 No. 4, pp. 570-579.

Li, Y., Ye, F. and Sheu, C. (2014), "Social capital, information sharing and performance: evidence from China", *International Journal of Operations & Production Management*, Vol. 34 No. 11, pp. 1440-1462.

Lin, C.P. (2007), "To share or not to share: modeling tacit knowledge sharing, its mediators and antecedents", *Journal of Business Ethics*, Vol. 70 No. 4, pp. 411-428.

Lin, L. (2013), "The impact of service innovation on firm performance", *The Service Industries Journal*, Vol. 33 Nos 15/16, pp. 1599-1632.

Lin, Y.Y. and Chen, M.Y.-C. (2007), "Does innovation lead to performance? An empirical study of SMEs in Taiwan", *Management Research News*, Vol. 30 No. 2, pp. 115-132.

Lumpkin, G.T. and Dess, G.G. (1996), "Clarifying the entrepreneurial orientation construct and linking it to performance", *Academy of Management Review*, Vol. 21 No. 1, pp. 135-172.

Lynch, P.A., Halcro, K., Johns, N. and Buick, I. (2000), "Developing small and micro-enterprise networks to build profitable tourist destinations", *Destination Development Conference, ETOUR, Mid-Sweden University, Ostersund*.

Malecki, E.J. (2012), "Regional social capital: why it matters", *Regional Studies*, Vol. 46 No. 8, pp. 1023-1039.

Marshall, A. (1920), *Principles of Economics: An Introductory Volume*, Macmillan & Co, London.

Martínez-Pérez, Á., García-Villaverde, P.M. and Elche, D. (2016), "The mediating effect of ambidextrous knowledge strategy between social capital and innovation of cultural tourism clusters firms", *International Journal of Contemporary Hospitality Management*, Vol. 28 No. 7, pp. 1484-1507.

Meade, A.W., Watson, A.M. and Kroustalis, C.M. (2007), "Assessing common methods bias in organizational research", Paper presented at the 22nd Annual Meeting of the Society for Industrial and Organizational Psychology, New York, NY.

Michael, E. (2003), "Tourism micro-clusters", *Tourism Economics*, Vol. 9 No. 2, pp. 133-145.

Min, H., Park, J. and Kim, H.J. (2016), "Common method bias in hospitality research: a critical review of literature and an empirical study", *International Journal of Hospitality Management*, Vol. 56, pp. 126-135.

Morrison, A. (1998), "Small firm co-operative marketing in a peripheral tourism region", *International Journal of Contemporary Hospitality Management*, Vol. 10 No. 5, pp. 191-197.

Morrison, A. and Teixeira, R. (2002), "Small hospitality firms: business performance obstacles", Paper Presented at the International Small Hospitality and Tourism Firm Conference, Leeds Metropolitan University, Leeds.

Morrison, A., Lynch, P. and Johns, N. (2004), "International tourism networks", *International Journal of Contemporary Hospitality Management*, Vol. 16 No. 3, pp. 197-202.

Nahapiet, J. and Ghoshal, S. (1998), "Social capital, intellectual capital, and the organizational advantage", *The Academy of Management Review*, Vol. 23 No. 2, pp. 242-266.

Nicolau, J.L. and Santa-María, M.J. (2013), "The effect of innovation on hotel market value", *International Journal of Hospitality Management*, Vol. 32, pp. 71-79.

Novelli, M., Schmitz, B. and Spencer, T. (2006), "Networks, clusters and innovation in tourism: a UK experience", *Tourism Management*, Vol. 27 No. 6, pp. 1141-1152.

Nunnally, J.C. (1978), *Psychometric Theory*, 2nd Ed., McGraw-Hill, New York, NY.

OECD (2008), *Enhancing the Role of SMEs in Global Value Chains*, OECD Publishing, Paris, available at: http://dx.doi.org/10.1787/9789264051034-en

Oh, H., Chung, M.H. and Labiance, G. (2004), "Group social capital and group effectiveness: the role of informal socializing ties", *Academy of Management Journal*, Vol. 47 No. 6, pp. 860-875.

Pansiri, J. (2008), "The effects of characteristics of partners on strategic alliance performance in the SME dominated travel sector", *Tourism Management*, Vol. 29 No. 1, pp. 101-115.

Peattie, K. and Moutinho, L. (2000), "The marketing environment for travel and tourism", in Moutinho, L. (Ed.), *Strategic Management in Tourism*, CABI Publishing, Glasgow, pp. 17-37.

Pikkemaat, B. and Weiermair, K. (2007), "Innovation through cooperation in destinations: first results of an empirical study in Austria", *Anatolia: An International Journal of Tourism and Hospitality Research*, Vol. 18 No. 1, pp. 67-83.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.

Porter, M.E. (1990), "The competitive advantage of nations", *Harvard Business Review*, Vol. 68 No. 2, pp. 73-93.

Porter, M.E. (1998), *On Competition*, 1st ed., Harvard Business School Press, Boston, MA.

Putnam, R.D. (1993), "The prosperous community: social capital and public life", *The American Prospect*, Vol. 13, pp. 35-42.

Putnam, R.D. (1995), "Bowling alone: America's declining social capital", *Journal of Democracy*, Vol. 6 No. 1, pp. 65-78.

Reichel, A. and Haber, S. (2005), "A three-sector comparison of the business performance of small tourism enterprises: an exploratory study", *Tourism Management*, Vol. 26 No. 5, pp. 681-690.

Rocha, H. (2004), "Entrepreneurship and development: the role of cluster", *Small Business Economics*, Vol. 23 No. 5, pp. 363-400.

Rosenfeld, S.A. (1997), "Bringing business clusters into the mainstream of economic development", *European Planning Studies*, Vol. 5 No. 1, pp. 3-23.

Shaw, G. and Williams, A. (2009), "Knowledge transfer and management in tourism organisations: an emerging research agenda", *Tourism Management*, Vol. 30 No. 3, pp. 325-335.

Sørensen, F. (2007), "The geographies of social networks and innovation in tourism", *Tourism Geographies*, Vol. 9 No. 1, pp. 22-48.

Swift, P.E. and Hwang, A. (2013), "The impact of affective and cognitive trust on knowledge sharing and organizational learning", *The Learning Organization*, Vol. 20 No. 1, pp. 20-37.

Thomas, R., Shaw, G. and Page, S.J. (2011), "Understanding small firms in tourism: a perspective on research trends and challenges", *Tourism Management*, Vol. 32 No. 5, pp. 963-976.

Thorburn, L. (2005), "Knowledge management and innovation in service companies: case studies from tourism, software and mining technologies", available at: www.oecd.org/sti/inno/34698722.pdf (accessed 10 May 2016).

Tinsley, R. and Lynch, P.A. (2007), "Small business networking and tourism destination development: a comparative perspective", *Entrepreneurship and Innovation*, Vol. 8 No. 1, pp. 15-27.

Tsai, A. (2016), "The effects of innovation by inter-organizational knowledge management", *Information Development*, Vol. 32 No. 5, pp. 1402-1416.

Tsai, W. and Ghoshal, S. (1998), "Social capital and value creation: the role of intrafirm networks", *The Academy of Management Journal*, Vol. 41 No. 4, pp. 464-476.

Uzzi, B. (1997), "Social structure and competition in interfirm networks: the paradox of embeddedness", *Administrative Science Quarterly*, Vol. 42 No. 1, pp. 35-67.

Uzzi, B. and Gillespie, J.J. (2002), "Knowledge spillover in corporate financing networks: embeddedness and the firm's debt performance", *Strategic Management Journal*, Vol. 23 No. 7, pp. 595-618.

Van Niekerk, M. (2014), "The role of the public sector in tourism destination management from a network relationship approach", *Tourism Analysis*, Vol. 19 No. 6, pp. 701-718.

Wang, Y., Wu, J. and Yang, Z. (2013), "Customer participation and project performance: the mediating role of knowledge sharing in the Chinese telecommunication service industry", *Journal of Business-to-Business Marketing*, Vol. 20 No. 4, pp. 227-244.

Wang, Z. and Wang, N. (2012), "Knowledge sharing, innovation and firm performance", *Expert Systems with Applications*, Vol. 39 No. 10, pp. 8899-8908.

Werner, K., Dickson, G. and Hyde, K.F. (2015), "Learning and knowledge transfer processes in a mega-events context: the case of the 2011 Rugby world cup", *Tourism Management*, Vol. 48, pp. 174-187.

Wiklund, J. and Shepherd, D. (2005), "Entrepreneurial orientation and small business performance: a configurational approach", *Journal of Business Venturing*, Vol. 20 No. 1, pp. 71-91.

Williams, C.E. and Tse, E.C.Y. (1995), "The relationship between strategy and entrepreneurship: the US restaurant sector", *International Journal of Contemporary Hospitality Management*, Vol. 7 No. 1, pp. 22-26.

Woodman, R.W., Sawyer, J.E. and Griffin, R.W. (1993), "Toward a theory of organizational creativity", *Academy of Management Review*, Vol. 18 No. 2, pp. 293-321.

Woolcock, M. and Narayan, D. (2000), "Social capital: implications for development theory, research, and policy", *The World Bank Observer*, Vol. 15 No. 2, pp. 225-249.

Yang, Y. (2010), "Agglomeration density and tourism development in China: an empirical research based on dynamic panel data model", *Tourism Management*, Vol. 33 No. 6, pp. 1347-1359.

Yoo, S.J., Sawyerr, O. and Tan, W.L. (2016), "The mediating effect of absorptive capacity and relational capital in alliance learning of SMEs", *Journal of Small Business Management*, Vol. 54 No. S1, pp. 234-255.

Zheng, W. (2010), "A social Capital perspective of innovation from individuals to nations: where is empirical literature directing us?", *International Journal of Management Reviews*, Vol. 12 No. 2, pp. 151-183.

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