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SOCIAL NETWORKS AND CULTURAL TOURISM: A MIXED-METHOD STUDY OF THE DOMESTIC ELEPHANT COMMUNITY MODEL IN NORTH-EASTERN THAILAND

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ABSTRACT

The purpose of this study is to explore the relationship between social networks and cultural tourism in the elephant-owning community model, north-eastern Thailand. The study employs a sequential mixed-method approach, comprising a qualitative phase (using an inductive approach) and a quantitative phase (a deductive approach). In the qualitative phase, data were collected from 20 key informants, and the second phase involved a sample of 118 members of the elephant-owning communities. Our qualitative study indicates that interpersonal relationships, family ancestors, mahout groups, social status and interdependence of groups contribute to creating the social networks of cultural tourism in elephant communities. The quantitative study shows that the strength of a social network ($\bar{x} = 3.51$, SD = .650, R-squared = .810) accounts for 81% of the model's predictive accuracy.

INTRODUCTION

Today, social networks are among the most visited and popular sites throughout the world, and many community tourism networks facilitate such tourism resources, destination and community activities (Casanueva et al., 2016). According to Comunian (2011), the concept of a "creative economy" relates to infrastructure, networks and agents engaging in the community's cultural development. Ying and Xiao (2012) state that social networks have become an essential tool for channelling an interaction between providers and demanders of tourism services in rural communities. Mover recently, there has

been increasing attention towards cultural tourism networks (Tribe & Xiao, 2011), social networks' participation in the tourism industry (Viren et al., 2015), and the network between tour operators and travel agencies (Tran et al., 2016).

The tourism industry in Thailand has popularised its rural and cultural identity, and is the cornerstone of communities' economy (Duffy & Moore, 2010; Kontogeorgopoulos et al., 2014). However, previous research on the tourism industry (Jongchaturapatra, 2017) reports that there are 29.88 million foreign visitors, which increases at 20.44% and estimates there will be 1.44 trillion in 2015. The tourism in Thailand has become more attractive due to various unique natural resources such as art, culture and traditions. The wider context of growing national tourism has led to the promotion of cultural tourism as a key policy agenda at community level. According to Ashton et al. (2008), cultural tourism in Thailand has become conditional on information, which influences tourists' satisfaction and intention to revisit the destination. The study found that cultural tourism can preserve its various aspects: sociocultural, economic values, environmental and sustainable development. This study suggests that cultural tourism includes six major components: attractions, services, promotion, transportation, information, and networks.

However, understanding social networks' role in cultural tourism in Thailand at community level may offer insights regarding landscape and cultural values. Additionally, a strong social network can lead to financial and social participation, community support and service providers (Ying & Xiao, 2012; Viren et al., 2015; Zee & Vanneste, 2015; Richards, 2018). Challenges that arise in networking are critical, given the huge shifts in the cultural tourism market induced by the spread of new technologies, tourism activities and natural-resource preservation (Martínez-Pérez & Beauchesne, 2018). One crucial problem in cultural tourism is the lack of social participation, interesting activities, a sense of natural resources, and community management. Huang et al. (2017) highlight that problems of cultural tourism at community level include closed networks and lack of public promotion.

Regarding tourism, the focus of most studies is on social network cooperation (Corte & Aria, 2016), the network approach (Farmaki, 2015), social capital (Martínez-Pérez et al., 2016), agency networks (Oborin & Sheresheva, 2017) and global tourism networks (Cornelissen, 2017). Numerous studies of cultural tourism in relation to social networks focus on clusters, landscape concentration and institutions. In the context of communities, only a few studies have discussed the relationship between social networks and cultural tourism (Casanueva et al., 2016; Tran et al., 2016; Richards, 2018), and empirical investigation of this phenomenon has been lacking (Ashton et al., 2020). In this article, we explore the relationship between different types of social networks (i.e., community bonding, occupational groups and leadership) and cultural tourism at the community level (e.g. natural resources, tourism-related income, conservation).

Existing studies (e.g. French et al. 2017) suggest that for a better visualisation and understanding of the issue of social networks, both methodological

approaches (qualitative and quantitative) should be used. Moreover, existing literature that conducts social network research recommends combining different methods at community level (e.g. Domínguez & Hollstein, 2014). The aim of this research is to explore the relationship between social networks and cultural tourism in the elephant community in Surin province, northeastern Thailand. The research is therefore guided by the following research questions:

RQ1. How is the relationship between social networks and cultural tourism created in the elephant communities?

RQ2. What factors influence social networks and cultural tourism in the elephant communities?

LITERATURE REVIEW

Social network

The social network concept considers individuals, communities and geographies as being embedded in a relational structure with other actors (Sørensen, 2007). While previous reviews focused on groups, community identities and landscape destinations, social network ideas focused on the relations between actors (Cenamor et al., 2017). Ladkin and Bertramini (2002) defined social networks according to "who was qualified to implement decisions and who was taking responsibility for decisions" in tourism networks. Originally, Mitchell (1974) developed a definition of social networks based on groups, task forces, project teams, communities and social activities. Brass et al. (2004) defined the term "social networks as a set of nodes and the set of ties representing some relationship, or lack of relationship, and between the nodes". This study provided three types of social networks in cultural tourism: (i) similarity ties (e.g. same location, same membership and same destination), (ii) social relations (e.g. kinship and friendship), and (iii) interaction (e.g. support, facility participation).

According to Coleman (1988), social networks are termed "the nature and extent of the impact of social relationship, social capital, partners, and facilitate cooperation" (Gittell & Vidal, 1998). This study examined social networks in two dimensions: network ties and bonding-bridging, which focused on stakeholders engaging and being engaged in community tourism. Previous studies on social networks in tourism (Tosun, 2006) defined social networks as including spontaneous participation (e.g. active, direct, authentic and self-participation). Some scholars suggested that "people who do better are better connected" through network closure, interactive communication, collaboration and coercion (Burt, 2000).

Our study focuses on the relationship between community networks and cultural tourism in north-east Thailand. It investigates how the centrality of social networks influences thee power relationship (Mitchell et al., 1997), the distribution of income (Tosun, 2006), community stakeholders (Clarke et al., 2009), and whether network relationships depend on other group relations (Lusher et al., 2010).

Cultural tourism

Cultural tourism at the community level is a form of industrial commerce that involves cultural resources and is community-made (Martínez-Pérez et al., 2016). First, it is based on a host community providing cultural tourism in terms of heritage, natural and traditional culture. Second, it has a communitymade basis, including festival activities, traditional community activities and attractions for cultural visitors. Timothy (1999) suggests that there are two dimensions of cultural tourism: the community decision process and tourism benefits-sharing. This study found that cultural tourism can promote community, and increases the income, employment and education of locals. MacDonald and Jolliffe (2003) highlighted a new concept of "cultural rural tourism", defined as the community's own traditions, heritage arts, lifestyles, places and values, which preserves the traditional culture for new generations. To date, most of the relevant research has mainly focused on community participants (Ying & Zhou, 2007), eco-cultural tourism (Tiberghien et al., 2017), community festival culture (Nguyen, 2019) and the community tourism landscape (Mordue et al., 2020). Our study focuses on a community-made project of traditional culture, to create a landscape of the elephant communities in north-east Thailand. Cultural tourism may require a high level of social networks at community level, as this is vital for the development of a more sustainable tourism destination.

METHODS

Research design

This study uses a mixed-method approach (Bryman, 2006; Harrison & Reilly, 2011), with both a qualitative and quantitative phase. Hewlett and Brown (2018) suggest that it is a challenge for community tourism research to apply methodologies that reflect its practices and insights. We therefore use mixed methods to improve the validity of the findings and enable a holistic approach to social networks and cultural tourism (Tribe & Xiao, 2011; Kontogeorgopoulos et al., 2014; French et al., 2017; Richards, 2018). In our mixed-method approach, we first conduct a qualitative study, followed by a quantitative approach, as the combination provides a better understanding of the research problem than either method alone (Creswell & Clark, 2007). We employ the mixed methods (e.g. in the research design, analyses, interpretation and presentation) in order to enable that qualitative data to inform quantitative outcomes (Fielding, 2012).

Phase one: qualitative approach

Following this approach to conducting mixed-method research (e.g. qualitative informs quantitative), our study conducted in-depth interviews to understand the social networks and cultural tourism (Meijering & Weitkamp, 2016; Hewlett & Brown, 2018). In north-eastern Thailand, where the study

data were collected, our research was located in two provinces: first, Krapo sub-district of Thea Tum district in Surin province; and second, Tha Muang sub-district of Satuk district in Buriram province. These groups are influenced by the interdependence of mahout elephant groups for community tourism in north-eastern Thailand. The networks were analysed using UCINET 6.0. Our study applied a purposive sampling technique; in-depth interviews were conducted between 2017 and 2018, with 20 key informants, who were chief mahouts in north-eastern Thailand. In-depth interviews lasted 60 minutes; they were conducted in Thai and then translated into English. Our data were analysed using three levels of content analysis technique, following Hsieh and Shannon (2005): evaluating the quality of the content, comparing preferences for various types, and reporting how their usage differed by variables. In data analysis, we used a triangulation technique for checking multiple sources and coders, in order to offset biases and validate data for interpretation.

 Table 1 Sample data

		n	%
Gender	Male	81	75.6
	Female	29	24.4
	Ban Tha muang	4	3.4
	Ban Tha lad	4	3.4
	Ban Muang ngam	4	3.4
	Ban taklang	65	55.5
	Ban Nong Bua	18	15
	Ban Sara	4	3.4
	Ban jinda	11	9.2
	Ban Krapo	8	6.7

Phase two: quantitative approach

Our sample was drawn from participants in social networks and cultural tourism in the elephant communities in north-eastern Thailand. Our study initially contacted 171 elephant owners: 79 in Buriram and 92 in Surin province (Department of Livestock Development, 2016), and was conducted between 2017 and 2018. This study followed Krejcie and Morgan (1970) in setting our sample group size; we thus recruited 118 participants from eight communities in the Thatum district, Surin, and the Satuk district, Buriram. For the quantitative sample, we used a stratified probability sample where the elephant owners in Kuy elephant community served as the only stratum. Eligible elephant owners were at least 18 years old and experienced in elephant-raising for more than five years.

The questionnaire copies were distributed to elephant owners in Surin and Buriram, north-eastern Thailand. Our questionnaire lasted an average of 30 minutes; all items were rated based on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The content validity of questionnaires was tested using the index of the item-objective congruence (IOC): all items ranged from .67 to 1. Additionally, we conducted a pre-test, for which we

selected 40 non-participants to test our questionnaire's index. The score from the first try-out was taken into consideration to calculate the Pearson correlation coefficient for all items. Items with results lower than .20 were deleted, and higher than .30 were selected. The instrument was then checked for reliability using Cronbach's alpha; only items with an alpha value of .70 were retained.

For these analyses, we focused on a univariate analysis (e.g., descriptive statistics, average and standard deviation) and multiple regression analysis (e.g., R-Squared, Adjusted R-Squared, standardised error (SE) and coefficient). To test the data analysis, we used the SPSS program. Data analysis involved two levels, namely, descriptive statistics and regression analysis. The model was analysed for errors in both the independent and dependent variables for each effect size. The data analysis shows that the model provided by the instrument is a valid regression model.

RESULTS

Qualitative results for RQ1

The participants answered the following research question: How is the relationship between social networks and cultural tourism created in the elephant communities? The interviews were conducted with 20 participants who were asked about the following themes: social network and cultural tourism in the elephant communities, north-eastern Thailand. We found that social networks of the domesticated elephant communities were based on families with ancestors in Kru Ba Yai and elephant owners in Taklang village. In the elephant communities, people connect with neighbours to help each other with family and member activities. For example, we found that the elephant study centres supported mahout groups, especially their career, income, and supported elephant-raising. These mahout groups consist of members at community levels, which are close to Ban Taklang, Nongbua and Krapo village. It can be said that these groups are involved in members' regulation, member relations and community activities.

Some groups mentioned that they were group members of the Ban Taklang elephant club, which was connected to Chumphonburi members. For instance, our interviews indicated that Surin province (Phiman Phonngern village) was connected with groups in Satuk district, Buriram province. They became members of the groups that promote "return of elephants to develop the homeland in Surin province". Moreover, the majority of elephant group members described that the equivalent of 20 villages and three villages participated in the elephant community groups. These narratives strongly emphasised two patterns of social networks based on the group relationship: a primary group (family members and ancestors in Kru Ba Yai), and main groups that are less related to the first and family groups. However, we found that all participants' networks were not only part of a relative network, but were also connected with different village members. The extended network groups were in the Ban Taklang elephant club, which was related to the main elephant groups.

Creating social networks is at the core of community-cultural tourism; we found that the primary groups were connected with ancestors in Kru Ba Yai. This group had inherited the elephants from their ancestors, who went into the forest and caught them in the wild. Some participants explained that career networks of elephant-raising provided support for groups, members, activities and participants. In terms of social networks, social status involved both interdependence and interpersonal relationships within social groups. The participants indicated that mahout groups were also influenced by other groups and different community areas. For instance, we found that a mahout group of five families had ancestors who served in the highest position in Kru Ba Yai groups. These groups had originally lived in Ban Taklang, but they moved to settle in Ban Taklang.

As evidence of the sociocultural conditions, there are two dimensions for creating a social network in elephant communities. First, the participants mentioned a kinship family group, whose ancestors were in the highest positions in the Kru Ba Yai group. This group was highly connected to community activity, membership, participation and cultural links. The memers of this group were in the Suksri, Submak, Salangam and Saendee communities. Some participants echoed that "these groups were originally named Mor Change (i.e. mahout), they were related to Kru Ba Yai groups". The leading-elephant group stated that "the way of life is rural, which is close to the house, it may have the same fence, we see other gates, can watch visitors easily".

Second, we found that the interdependence and social exchange in mahout groups included economic and social activity. An interviewee from Kuy indicated that elephant owners have a intertwined function in social support, and help each other in the manner of Thai society. For example, seniors must become leaders, and young people will help and support each other in social groups. This finding is in line with providing social ties and support when one needs help, such as harvesting in farming, building houses, and economic exchanges. One participant mentioned the economic exchange of elephant production products with the visitors and members. Some participants noted that elephant products were obtained from their club at the lowest cost, and then sold to visitors. This economic activity can help the community, by selling elephant products to the tourist. For instance, the "return of elephants to develop the homeland in Surin project" helps to earn an income and gain support from the public sector.

The findings above enable us to draw some tentative conclusions regarding the relationship between social networks and cultural tourism in elephant communities of north-eastern Thailand. We found evidence of three activities: interdependence of information and power, interdependence in occupations, and elephant raising. The social network of cultural tourism, in terms of the network relations between B (Kru Ba Yai group) and F (kinship groups), is mapped in Figure 1.

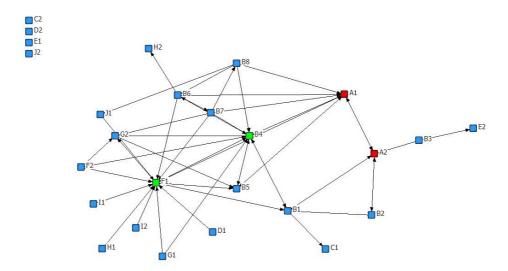


Figure 1. The social network relationships among elephant groups

Figure 1 indicates that the mahout group networks are interacting with each other based on the expectation of benefits and security for the elephant communities. The links of the cultural network among mahouts create a "one-stop service of cultural conservative tourism" in north-eastern Thailand. First, it shows the social network between Thais and foreigners, who are visitors to the elephant community. Second, it is formed of social network relations between visitors and member supports, which provide links to sell local food and products. Third, it shows the importance of public support (e.g. transportation, tour agencies and community information). Fourth, there is a social network of mahout group management between family and group members. Finally, there are social networks for cultural preservation of the mahout groups.

Quantitative results for RQ2

Our participants answered *RQ2*: How is the relationship between social networks and cultural tourism created in the elephant communities? All 118 elephant owners lived in Satuk, Buriram and Thatoom, Surin province. A total of 75.6% of all respondents were male, while females constituted 24.4%. In addition, 55.5% were living in Ban Taklang, 15% in Ban Nong Bua, 9.2% in Ban Jinda, and 6.7% in Ban Krapo. Furthermore, 52% had one elephant, 77.3% between one and two elephants, and 22.7% had three or four elephants.

The proposed descriptive analysis was estimated using SPSS, to evaluate the relationship between social networks and cultural tourism. Overall, we found that social networks are related to cultural tourism ($\bar{x} = 3.51$, SD = .650). To assess whether the relationship is significant, our study indicates that benefits arise from elephant conservation ($\bar{x} = 3.73$, SD = .634), and from earning tourism-related income and getting information from the network ($\bar{x} = 3.68$, SD = .610). Furthermore, they have an opportunity to manage and develop tourism with local agencies ($\bar{x} = 3.39$, SD = .653). They also have access to holistic elephant healthcare and treatment ($\bar{x} = 3.24$, SD = .705).

Table 2 Descriptive analysis of items

Items	$\bar{\mathbf{X}}$	SD
Earning a tourism-related income and getting	3.68	.610
information from the network		
Having an equal opportunity to manage and develop	3.39	.653
tourism with local agencies		
Gaining benefits from elephant conservation	3.73	.634
Having access to holistic elephant healthcare and	3.24	.705
treatment		
Total	3.51	.650

As shown in Table 2, the results indicate that all items are positively associated with social networks and cultural tourism. We found that social network indicators related to sustainable tourism are contributing to the strengths of the elephant community and as a cultural tourism destination. Our analysis shows that the correlation between variables is positively significant at the .01 level. In the first group, we determine that the mahouts' expectation of a stable income (X1) and the need to develop the community into a cultural tourism destination (X9) have a very low correlation with the strengths of the network. In the second group, the community bonding (X2), the bargaining power with other occupational groups (X3), and the respect for the leader (X5) have a moderate correlation with the strength of the network. In the third group, the appreciation of environmental and cultural tourism resources (X7) and the promotion of local people's participation in tourism management (X8) have a high correlation with the network's strength (see Table 3).

Therefore, we analyse the variables which have a positive association with the strength of the community, using stepwise multiple regression. When analysing the variables, we add them to the model one by one, and find they are related to the strengths of the elephant community network with significance at .01 level. To analyse independent variables, we determine the environmental and cultural tourism resources (X7), the respect for the leader (X5), the bargaining power with other occupational groups (X3), the expectation of a stable income (X1), and the community bonding (X2). All five variables were entered into the predictive equation; the value of the multiple correlation coefficient (R) was .905., while the regression coefficient or the adjusted R-squared value was .810 (81.0% predictive accuracy), as shown in Tables 4 and 5.

Table 3 Correlation matrix

	x1	x2	х3	x4	x5	х6	x7	x8	x 9	У
x 1	1.00	.534 **	.483 **	.580 **	.038	.434*	.404 **	.330	012	.241 **
x 2		1.000	.408 **	.331 **	.560 **	.526 **	.570 **	.550 **	.165	.610 **
X			1.000	.202	.133	.218*	.620	.589	.224*	.587

3		**			**	**		**
x 4		1.000	.351 **	.361 **	.289 **	.410 **	064	.154
x 5			1.000	.498 **	.568 **	.640 **	.182*	.639 **
х 6				1.000	.330*	.413 **	.135*	.214
x 7					1.000	.847 **	174	.856 **
x 8						1.000	.257 **	.808
х 9							1.000	.265 **
у								1.000

Table 4 Multiple regression analysis

Variable	R	R ²	Adjusted R ²	SE	f
x 7	.856	.733	.731	.347	321.058**
x 7 x5	.876	.767	.763	.137	17.179 **
x 7 x5 x3	.888	.788	.782	.008	11.115**
x 7 x5 x3 x1	.895	.800	.793	.932	7.075**
x 7 x5 x3 x1 x2	.905	.818	.810	.810	11.135**

Note: **p < .01

Table 5 Coefficient of regression results

Variable	В	SE	Beta
Appreciation for environmental and cultural tourism resources	.109	.234	.606
Respect for leaders	.564	.219	.158
Bargaining power with other occupational groups	.711	.188	.214
Expectation for a stable income	.634	.155	.225
Community bonding	.586	.175	.208
a (Constant(43.945	8.247	

R . =905, Adjusted R-Squared . =810

f = 11.135, R Squared . = 818

SE Square . = 810

Note: **p < .01

DISCUSSION

By employing two sets of research questions, with the qualitative informing the quantitative approach, we found that social networks have a positive and strong relationship to cultural tourism in elephant communities of northeastern Thailand. This finding is consistent with Burt (2000), MacDonald and Jolliffe (2003), Farmaki (2015), Kontogeorgopoulos et al. (2014), Huang et al. (2017), Martínez-Pérez and Beauchesne (2018), and Ashton et al. (2020), who found that social networks have a positive association with cultural tourism. We found that environmental and cultural tourism resources were 73.1% the strength network and community tourism. This result is understandable, given that the social network (e.g. occupational group, respect for leaders and community bonding) is related to the environment and natural resources, which leads to a stable income.

This study contributes to research on the social networks in cultural tourism. Oborin and Sheresheva (2017) found that community bonding was related to natural resources and activities. It could be said that the development of social collectives is strengthening the community network, and enhancing native land for cultural tourism. This is in line with the concept of cultural tourism, which refers to people's awareness of resource conservation and understanding in a tourism destination network (McLeod, 2020). Social networks play a vital role in the community's economic and social activities in the long-term future of cultural tourism. This finding is in line with Xie (2004), who found that cultural tourism in Hainan villages in China is based on showcasing of the traditions of the indigenous people who want to maintain their cultural freedom.

Our study indicates that respect for leaders and the strength of networks were 76.3% on cultural tourism at the community level. Viren et al. (2010) found that leaders in community management are an important component of social networks. Therefore, the results of this study provide a new theoretical model that builds upon the existing research on social networks (e.g. community bonding) to preserve the natural environment, which leads to high income. As cultural tourism at community level continues to develop, promote and support cultural links, this encourages visitors to participate in the groups. Extending the findings of Novak and Bocarnea (2008), we found that leaders of community members significantly influence awareness, trust and intentionality. Hence, tourists are motivated to use cultural tourism for gaining information on possible destinations, as well as to express their judgements, and to influence the creation of a destination image.

We found that bargaining power with other groups and the strength of networks predicted 78.2% of social network links to cultural tourism. Additionally, our model indicates that elephant owners have lower power to negotiate benefits at the individual level. This is in line with the theory of structural exchange of social networks and power relations. According to Shore et al. (2006), the power relation is linked to the others who are involved in the exchange of social and economic benefits. This study also suggests that pre-existing power relations, social structures, norms, values and cultures directly predicted the group outcomes between perceived and received

exchanges. This finding is consistent with Yaqub et al. (2009) and Nebus and Rufin (2010), indicating that equal and unequal power relations influence actor bargaining and social participation, interaction, and motivation to join the group.

We found that the mahouts' expectation of a stable income and the strength of networks predicted 79.3% of social networks and cultural tourism. In particular, the role of stable income (Minnaert et al., 2009) has received considerable and increasing attention in relation to community-culture tourism. This is consistent with the concept that economic benefits are fundamental to social networks and cultural-link values (Haddouche & Salomone, 2018). Similarly, Dickinson et al. (2017) found that when social ties are formed by the group, they expect to gain benefits that suit their needs. As communities shift from tourism benefits based on more group social networks, opportunities emerge to gain profits without the need to evolve codependence. For example, we found that elephant communities participate in the cultural tourism promotion because they expect to enhance their group's stable income linked to the tourism network.

The results of the regression analysis show an 81% predictive association between community bonding and strength of networks. Moreover, we found that community network "nodes" with the largest numbers of strong ties will benefit the cultural tourism chain. This study provides a theoretical foundation for explaining how community bonding improve the cultural tourism identity, attachment, products and service network (Kim et al., 2016). In terms of creating community bonding for cultural tourism, there is a distinction between the natural environment, traditional culture, landscape and community services (Birendra et al., 2018). Previous scholars have identified the importance of community bonding and traditional-culture tourism (Adler & Kwon, 2002; Chang & Zhu, 2012), community-based tourism (Burgos & Mertens, 2017) and tourism destinations (Guo et al., 2018). The findings offer insights for community bonding and tourism, indicating the importance of interpersonal group interaction, group involvement, group motivation and network ties. Musavengane and Kloppers (2020) suggests that community bonding is a form of cultural investment, leading to collaborative use of natural resources, improving community activities, and enhancing sustainable cultural tourism development.

The respondents' answers to the two sets of research questions (i.e. qualitative informs quantitative) enable us to discuss the conclusion of this study. We found that environmental and cultural tourism resources lead to respect for leaders, bargaining power with other occupational groups, and community bonding, which are highly correlated with a stable income. It is notable that social networks (e.g. power relations, bonding, interaction and benefit expectation) are associated with cultural tourism (e.g. income and cultural value). Figure 2 presents the relationship between social networks and cultural tourism in elephant communities of north-eastern Thailand.

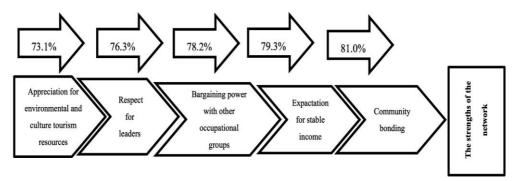


Figure 2. The model of social networks for cultural tourism

CONCLUSION

This study examines the relationships between social networks and cultural tourism in elephant-owning communities of north-eastern Thailand, in order to answer two research questions: "How is the relationship between social networks and cultural tourism created in elephant communities?", and "What factors influence social networks and cultural tourism in elephant communities?" Using a qualitative method, we interviewed 20 key informants, and then adopted a quantitative approach, employing a sample of 118 elephant owners in north-eastern Thailand. In response to the first question, the study concludes that the strength of cultural networks leads to high visitors and members' involvement, which increases cultural preservation and cultural tourism. Considering the respondents' answers to the second research question, we conclude that social networks were related to cultural tourism in elephant communities of north-eastern Thailand. Moreover, we found that environmental and cultural tourism resources, respect for leaders, bargaining power with other occupational groups, community bonding, and expectation of a stable income, had a positive association with community networks.

The findings of this study have various practical implications. The contribution of this study uses a qualitative-informing-quantitative approach to conceptualise the findings in practice (Bryman, 2006; Creswell & Clark, 2007; Fielding, 2012; Domínguez & Hollstein, 2014). Our study tries to bridge the gap between social network concepts (Adler & Kwon, 2002; Comunian, 2011; Casanueva et al., 2016; Huang et al., 2017; Martínez-Pérez & Beauchesne, 2018; McLeod, 2020) and cultural tourism (Zee & Vanneste, 2015; Tran et al., 2016; Mordue et al., 2020). By contrast, most of the reviewed literature has focused micro-entrepreneurship levels (Birendra et 2018), on levels and institutional organisational and government levels (Chongchaturapat, 2017; Cornelissen, 2017), social policy levels (Minnaert et al., 2009), and agency (tourist) levels (Ashton et al., 2020). In addition, by focusing on the community level, our study found that social networks encouraged supports, participation, member involvement, occupational groups and community bonding, while focusing on nature preservation, environment, income and cultural value related to cultural tourism in elephant communities.

Our study has some limitations. Firstly, the participants in this study were recruited as a single group; thus, generalizations should be considered with caution. Secondly, the study did not frame a complete picture of the population in north-eastern Thailand; only the two provinces of Surin and

Buriram. Hence, our findings could raise questions regarding the wide applicability of the results. Thirdly, the possibility of recall bias and underreporting affecting the multiple regression results cannot be ignored. Finally, our study draws attention to avenues for future research; this should focus on the long-term study of the social network effect on traditional-culture tourism, so that findings can be generalised with empirical evidence.

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