

WINE TOURISM DEVELOPMENT

From the host community's perspective

Shuangyu Xu and Carla Barbieri

Introduction

The past three decades experienced a rapid growth of wine tourism throughout traditional wine regions (e.g., Spain, Italy) as well as emerging ones in the 'New World' (e.g., Australia, South Africa, the United States of America [USA]). Abundant research has examined different aspects of wine tourism, including tourists' motivations and preferences (Charters and Ali-Knight 2002; Quintal et al. 2017), contributions to regional development (Carmichael and Senese 2012; Job and Murphy 2006), wine festivals, and events (Mason and Paggiaro 2012; Taylor and Shanka 2002), synergies between wine culture and heritage (Mitchell, Charters, and Albrecht 2012), and marketing and promotion efforts (Barber, Donovan, and Dodd 2008), to name a few.

The literature documents that wine tourism delivers a mix of benefits, which include boosting economic growth, conserving rural lifestyle and landscape, and facilitating regional development and promotion (Mitchell and Hall 2006). However, this set of studies has predominantly adopted either the wine tourist perspective, to understand their consumer behavior, or a macro-regional economic perspective, to uncover issues associated with its development (Gomez, Pratt, and Molina 2019). Yet, the host community's perspective is an overlooked piece from the existing literature. Understanding and involving the host community is fundamental to gaining community residents' support for and, ultimately, the sustainability of tourism development (Eusebio, Vieira, and Lima 2018; Holladay et al. 2020; Latkova and Vogt 2012). It is especially important to assess the level of social capital, defined as the cornerstone of social relations, ties, and structure within a group, to foster the development and success of tourism (Adler and Kwon 2002; McGehee et al. 2010). Thus, a better understanding of residents' perspectives as well as their social capital in wine tourism destinations, especially emerging ones, is critical to fostering the development and success of tourism (Franken, Gomez, and Ross 2018; Xu, Barbieri, and Seekamp 2020).

Despite the importance of residents' attitudes and communities' social capital to support and sustain the success of tourism development, such a line of research focused on wine tourism is limited. The importance of understanding and involving the host community for tourism success, together with the still-limited knowledge pertaining to wine tourism, urges for a closer examination of wine tourism development from the host community's perspective with an integrated approach of residents' attitudes and communities' social capital. This chapter does so by summarizing a study

conducted to examine host communities of a wine tourism destination in terms of residents' attitudes toward wine tourism development and wine tourism-related social capital.

Literature review

Wine tourism

Wine tourism, defined as 'travel related to the appeal of wineries and wine country, a form of niche marketing and destination development, and an opportunity for direct sales and marketing on the part of the wine industry' (Getz 2000, p. 4), uniquely stands at the crossroads of the wine and tourism industry. Early wine tourism research predominantly focused on wine tourism products and their development, with most research being descriptive in nature and confined to Australia and New Zealand (Mitchell and Hall 2006). The continuous growth of wine tourists and cellar door sales and the significance of wine tourism to regional development led to a significant expansion of wine tourism research since the 2000s (Gomez et al. 2019). Thus far, the plethora of wine tourism research has examined wine tourism development (Carmichael and Senese 2012), winery and cellar door (Bruwer et al. 2013), wine tourist behavior (Quintal et al. 2017), wine events and festivals (Mason and Paggiaro 2012), marketing and promotion (Qiu et al. 2013), critical success factors for wine regions (Jones, Singh, and Hsiung 2013), wine tourism models (e.g., testing relationships of wine tourism behavior constructs; Shapiro and Gomez 2014), and wine-related education (Alonso et al. 2014).

Gomez, Pratt, and Molina (2019) further sorted previous wine tourism research into two areas. The first one focused on wine tourism regional development, either investigating the role and contribution of wine tourism to regional development in rural areas, or examining wine tourism networks, clusters, and development policies (Mitchell and Hall 2006; Telfer 2001). The second one centered on the experiential wine tourist, looking into their psychographic profiles (e.g., satisfaction, motivation) and as associated with marketing and promotion practice (Grybovych, Lankford, and Lankford 2013; Kolyesnikova and Dodd 2008). With the aforementioned foci on either the winery/vineyard owners and managers or wine tourists, little is known about the host community's perspective toward wine tourism development. This is especially problematic considering that developing sustainable wine tourism is closely related with local community and understanding the specific impacts caused by wine-related tourism (Montella 2017; Poitras and Getz 2006).

Resident attitudes toward tourism development

A robust research line has examined residents' attitudes toward general tourism development for decades, primarily to evaluate tourism impacts. Attitudes and perceptions are used interchangeably for using similar measurement items and scales (Andereck and Nyaupane 2011; Xu et al. 2016). Residents' attitudes toward tourism were found to be directly associated with their support for additional development and the revitalization of communities (Lankford and Howard 1994; Latkova and Vogt 2012). Different variables (e.g., demographics, job dependency on tourism, community satisfaction, community attachment) influence residents' attitudes toward tourism development (Deccio and Baloglu 2002; McGehee and Andereck 2004; Nunkoo and Ramkissoon 2011). Despite the ample research on residents' attitudes toward tourism developments, the recent quest for sustainability has triggered a renewed interest in residents' attitudes toward tourism especially associated with environmental and social impacts (Gursoy, Chi, and Dyer 2009; Xu et al. 2016).

The Social Exchange Theory (SET) has been predominantly employed to assess residents' attitudes toward tourism development (Eusebio, Vieira, and Lima 2018; Park, Nunkoo, and Yoon 2015; Vargas-Sanchez, Plaza-Mejia, and Porras-Bueno 2009). In brief, it suggests that people make decisions to engage in exchanges based on their evaluations of both costs and benefits that occurred during the process (Choi and Murray 2010; Wang and Chen 2015). Accordingly, local residents are more likely to engage in tourism development if the perceived benefits from tourism outweigh the costs (Chen and Chen 2010). Some commonly perceived benefits associated with tourism include increased job opportunities, enhanced quality of life, and cultural exchanges with tourists, while commonly perceived costs include increases in prices for goods and services, traffic congestion, and damages to the natural environment and landscape (Ko and Stewart 2002; Latkova and Vogt 2012; Rasoolimanesh et al. 2015). Based on SET, residents' attitudes toward tourism development have been measured in terms of perceived positive and negative impacts within the three dimensions – economic, social, and environmental – of sustainability (Chen and Chen 2010; Vargas-Sanchez, Plaza-Mejia, and Porras-Bueno 2009).

In addition to residents' perceptions about tourism impacts on host communities (Andereck and Nyaupane 2011), perceived tourism impacts at the individual level (i.e., personal benefits) have also been examined (McGehee and Andereck 2004; Wang and Pfister 2008). However, previous studies failed to validate the scale developed to measure personal benefits (Xu et al. 2016). That is, a measure of personal benefit to be incorporated in the examination of residents' attitudes toward tourism development is still needed (Andereck and Nyaupane 2011).

Social capital

Social capital is defined as features of social organization (e.g., networks, trust) that facilitate coordination and cooperation for mutual benefit (Putnam 1995). Social capital has long been recognized for its economic significance (Moscardo 2012), importance to community ties (Woolcock and Narayan 2000), emphasis on collective actions by gluing people together via social networks (Shucksmith 2000), and its incorporation of trust in economic development (Falk and Kilpatrick 2000; Moscardo 2012).

Social capital has been measured differently based on the theoretical frameworks and perspectives adopted. From the network perspective, measurements distinguishing between bonding (i.e., internal relationships that occur horizontally within a community) and bridging (i.e., ties and relations between individuals or communities across distinct social networks) social capital (Putnam 1993). Some considered trust, defined as the expectation community members have in other members' good intentions and actions (Dirks 2000), a critical component of social capital (Leahy and Anderson 2010) and the foundation for enabling community actions (Falk and Kilpatrick 2000). Others believed that information sharing between members in communities captures the reciprocity of information flow in networks (Adler and Kwon 2002), facilitates access to broader sources of information (Coleman 1988), and thus is an important component of social capital (Li and Barbieri 2020). Some researchers found that through collective action – actions taken by members within a group to further their common interest (Xu, Barbieri, and Seekamp 2020), small businesses are capable of mobilizing social relations, which results in improved economic performance and opportunities for growth (Brunori and Rossi 2000). Long-term collective action, especially related to tourism development, led to community collaboration (Hwang, Stewart, and Ko 2012). Based on various measurements, social capital was found to be closely associated with the success of tourism development and essential to the evaluation of a region's readiness to undertake tourism development (Macbeth,

Carson, and Northcote 2004). Several attributes, such as length of residence (McGehee et al. 2010), income (Kim and Won 2003), and socioeconomic status (Ryan et al. 2005) influence residents' perceptions of social capital.

Given its significance in community development (Flora 2004), social capital has been examined in both the general tourism and niche tourism settings, focusing on exploring either its synergistic relationship with tourism or association with tourism entrepreneurship (Gil Arroyo, Knollenberg, and Barbieri 2021; Zhou, Chan, and Song 2017). Previous research has investigated the synergistic relationships between tourism and social capital from two perspectives. The first perspective is social capital within a community as instrumental to developing community-based niche tourism, such as ecotourism (Jones 2005), rural tourism (Park et al. 2012), and craft-beverage tourism (Gil Arroyo, Knollenberg, and Barbieri 2021). A second perspective states that tourism positively impacts social capital through bridging with networks outside the community, creating public spaces for social interaction, and even establishing local tourism organizations (Moscardo 2012). More specifically, some studies have identified how components (e.g., trust and social network) of social capital positively impact the success of tourism businesses and entrepreneurs (KC et al. 2019; Franken, Gomez, and Ross 2018; Zhao, Ritchie, and Echtner 2011) while others studied how tourism creates and strengthens social ties between families, friends, and others (Moscardo 2012; Mura and Tavakoli 2014).

Compared to the broader tourism literature, research of social capital in wine tourism is limited. Among those, social capital has been mainly examined from winery businesses' perspective, emphasizing its significance to regional development in rural areas (Hall 2005), to support new wine-entrepreneurship in emerging regions (Franken, Gomez, and Ross 2018), or to improve competitive advantages of a destination (Jackson and Murphy 2006). There is a scarcity of research looking into the level of social capital in communities associated with wine tourism (Macbeth, Carson, and Northcote 2004; McGehee et al. 2010; Xu et al. 2016).

Case Study 19.1 Wine tourism in the Piedmont region of North Carolina: Community's Perspective

Wine trails, an emerging phenomenon of wine tourism, have been widely developed worldwide. The USA alone has at least one wine trail in 48 states, with a total number of 2,898 wine trails nationwide (Xu, Barbieri, and Seekamp 2020). Despite such rapid growth, wine trails are understudied in general wine tourism research, as most studies have focused on the entire wine region. As such, the scant research on wine tourism from the host community's perspective is even more acute related to wine trails. Yet, the intrinsic cooperation network among wine-related businesses and community services needed for the development of wine trails (Del Chiappa, Bregoli, and Kim 2019) deems wine trails the perfect setting to investigate the host community's perspective.

We chose wine trails in the Piedmont Triad, North Carolina (NC), in the USA as a case study to investigate the host community's attitudes toward wine tourism development. NC is the home of the first wine grape in the USA and the only place in the world where every major type of grape is grown (Visit NC 2020). NC hosts 200 wineries, 23 wine trails, and five American Viticultural Areas (Visit NC 2020). The Piedmont region is the heart of NC's wine country, covering 12 counties of 5,875.2 square miles, with 646,333 households (U.S.

Census Bureau 2013) whose average median income is \$41,873. Approximately 17% of its population falls below the poverty level, and only 17.9% have a bachelor's or advanced degree (U.S. Census Bureau 2010). In the past few decades, the region has been shifting away from the traditional textile, tobacco, and timber (furniture) industries to develop its wine industry, and it now accommodates 11 wine trails.

This study included two wine trails (Haw River, Surry County), as they are the most representative of the Piedmont region based on their spatial and tourism characteristics. Haw River has a superior characterization indicating easy accessibility and high tourism service comprehensiveness; Surry County has a marginal characterization with easy accessibility but moderate tourism service comprehensiveness (Xu et al. 2016). Both trails share similarities in the number of composing wineries ($n = 4$), length (Haw River = 43 miles, Surry County = 32 miles), and proximity to highway (Haw River = .08 miles, Surry County = .02 miles). Yet, they differ in tourism service offerings and trail spatial patterns. Haw River, which has a cluster of wineries in the middle of the trail, has a very comprehensive tourism offering (e.g., private events, food services, art-related components, outdoor recreation options). Surry County has an even greater distribution of wineries along the trail, but their offerings are less diverse.

Methods

A survey questionnaire designed for this study collected information on residents' sociodemographic characteristics, involvement with the wine industry and wine tourism, their attitudes and perceived personal benefits associated with local wineries, and the perceived relationship between Piedmont wineries and local communities. Residents' overall perceptions (attitudes, perceived personal benefits, social capital) associated with local wineries were assessed using three modified scales. The modified attitudes scale (Ko and Stewart 2002; Smith et al. 2013) comprised of 24 items equally representing three dimensions of perceived positive and negative *Economic*, *Sociocultural*, and *Environmental* impacts. The modified personal benefits scale (Andereck and Nyaupane 2011; McGehee and Andereck 2004; Wang and Pfister 2008) included seven items comprising two dimensions, *Personal Enhancement* and *Community Sentience*. The modified scale used to assess a community's level of social capital associated with local wineries (Grootaert et al. 2004; McGehee et al. 2010) included 18 items representing five dimensions of social capital: *Trust*, *Information Sharing*, *Collective Action*, *Bonding*, and *Bridging*.

Using a stratified random sampling approach, 663 households residing in communities within a 10-mile zone around each wine trail was selected. A drop-off/pick-up method was used to hand-deliver questionnaires to households; the field researcher explained study purposes, dropped off the surveys, and asked households to hang the completed surveys in a provided bag on the doorknob on scheduled date (two to three days after the drop-off) for pick-up, if they agreed to participate. If no surveys were hung on the doorknob on the scheduled day for pick-up, the researcher left a stamped envelope along with a brief note asking residents to mail back the surveys once completed. A total of 344 (Haw River: 164; Surry County: 155) surveys were collected representing an overall response rate of 51.9%. Altogether, 300 complete surveys were included for analysis.

The SPSS statistical package was used to analyze responses through a series of descriptive and multivariate statistics. Descriptive statistics were used to outline respondents' demographic characteristics and wine involvement, their attitudes and perceived personal benefits toward

local wineries, and communities' wine tourism-related social capital. Multivariate regressions ($p < 0.05$) were used to examine the influence of residents' demographics, their wine involvement, and wine trail types on residents' attitudes toward wine tourism development and on the communities' wine tourism-related social capital.

Findings

Most respondents were female (58.4%) and averaged 52 years old. About one half (52.0%) did not have a four-year college degree. Almost one-third of the respondents (31.5%) were retired. Nearly half of the residents reported a pre-tax annual household income of less than \$50,000 and were rooted in their neighborhood for more than 20 years (Table 19.1). Most residents

Table 19.1 Residents' overall characteristics, level of wine involvement, and perceived relationship with local wineries

<i>Sociodemographic Indicators</i>	<i>Percentage of Respondents (%)</i>
<i>Pre-tax household income (n = 237)</i>	
\$25,000 or less	20.3
\$25,000–\$49,999	28.3
\$50,000–\$74,999	22.8
\$75,000–\$99,999	16.4
\$100,000 or more	12.2
<i>Home ownership (n = 294)</i>	
Home owners	84.0
Home renters	16.0
<i>Number of years living in current neighborhood (n = 221)</i>	
Less than 3 years	9.2
3–5 years	13.4
6–10 years	15.5
11–20 years	18.4
21–34 years	17.7
35–50 years	18.0
51 years or more	7.8
<i>Household involvement with wine-related activities¹ (n = 295)</i>	
Subscriber to a wine-related magazine	2.0
Member or friend of a wine club	4.7
Member of a wine-related organization	0.7
Follower of online wine-related social media	4.7
Respondent of any informal wine social groups	3.7
No connection with any wine-related activity	89.8
<i>Wine involvement index² (n = 295)</i>	
None	89.8
One	6.4
Two	2.7
Three or more	1.1
<i>Perceived Piedmont wineries and community relationship (n = 294)</i>	
Excellent	8.6
Good	36.3
Average	16.5
Fair	7.3
Poor	3.6
I don't know	27.7

1 Percentages sum to more than 100%, as respondents were able to select multiple categories.

2 Index constructed by adding the five indicators of wine-related activities (1 = Yes; 0 = No).

Table 19.2 Residents' attitudes toward wine tourism development

<i>Dimensions (n = 284)</i>	<i>Mean¹</i>
<i>Economic dimensions</i>	3.22
Tourists' spending	3.69
Variety of local businesses	3.60
Number of local businesses	3.43
Number of jobs	3.40
Real estate and property tax	3.28
Prices of goods and services	3.20
Community economic stability	3.17
Economic inequality among	3.06
<i>Sociocultural dimensions</i>	3.24
Variety of cultural activities	3.54
Conservation of local heritage	3.31
Sense of community identity	3.26
Residents' quality of life	3.23
Number of recreational facilities	3.19
Communities' small-town feeling	3.16
Quality of public services	3.08
Crime in the community	2.99
<i>Environmental dimensions</i>	3.17
Beauty of local landscapes	3.54
Environmental consciousness	3.27
Health of local ecosystems	3.23
Tranquility of community	3.17
Quality of public infrastructure	3.13
Traffic congestion	3.08
Overcrowding in public areas	3.07
Littering	2.96
<i>Overall attitudes toward wine tourism development</i>	3.21

1 Measured using a 5-point scale from 1 = significantly decreased to 5 = significantly increased.

owned their current residence and neither got involved in wine-related activities nor visited the study wine trails in the past three years, but believed that an overall good to excellent relationship existed between wineries and local communities.

Overall, respondents had neutral attitudes toward local wineries (Table 19.2) and did not see any major negative impacts associated with the establishment of wineries in their communities. The *Sociocultural* dimension was most positively rated, closely followed by *Economic* and *Environmental* dimensions. Major benefits of wine tourism development include increases in tourists' spending, in the variety of cultural activities, and in the beautification of local landscapes. Residents' demographic characteristics and their level of wine involvement were significantly associated with their overall attitudes (Table 19.3) toward local wine tourism development and all three comprising dimensions. Respondents' visit frequency to the study wine trails were positively associated, but their length of residence in the neighborhood were negatively associated with their overall attitudes (and all three comprising dimensions) toward local wine tourism development. In addition, residents' age was positively associated with their overall attitudes and the *Sociocultural* and *Environmental* dimensions, while their residence ownership was negatively associated with the *Economic* dimension.

Similarly, respondents perceived moderate levels of personal benefits associated with local wine tourism development (Table 19.4). Respondents agreed that they cared more about the

Table 19.3 Residents' demographics and wine involvement as associated with their attitudes

Independent Variables	Residents' Attitudes			
	Overall	Economic	Sociocultural	Environmental
Age	.168*	.014	.179**	.220**
Education level	.106	.119	.103	.056
Residence ownership (Yes, otherwise)	-.095	-.213**	-.044	.004
Length of residence in current neighborhood	-.179**	-.215**	-.136*	-.166*
Visit frequency to study wine trails	.236**	.169**	.233**	.194**
Household wine involvement	.046	-.036	.078	.082
<i>Model statistics</i>				
R	.347	.347	.336	.317
R ²	.121	.120	.113	.101
p-value	< .001	< .001	< .001	< .001

* $p < .05$, ** $p < .001$

Table 19.4 Residents' perceived impacts of wine tourism development at the personal level

Personal Benefits ($n = 291$)	Mean ¹
<i>Personal enhancement</i>	
My understanding of other culture has increased	3.05
I have more opportunities to participate in recreational activities	3.18
The quality of my personal life has improved	3.16
My property value has increased	2.96
<i>Community sentience</i>	
I care more about my community's cultural resources	2.92
I care more about my community's natural resources	3.26
I feel my community is a better place to live	3.31
Overall perceived personal benefits (mean)	3.31

¹ Measured using a 5-point scale from (1) strongly disagree to (5) strongly agree.

community's cultural and natural resources because of local wineries but did not observe significant increases in their quality of life or property value. Respondents rated higher in their sentience toward the community than their personal enhancement. Residents' visit frequency to local wine trails as well as their level of wine involvement were significantly associated with their overall perceived personal benefits and its two comprising dimensions (Table 19.5).

Respondents also perceived a moderate level of social capital associated with local wineries (Table 19.6). *Collective Action* was the most highly rated dimension, closely followed by *Trust* and *Information Sharing*, while *Bonding* and *Bridging* were the least highly rated. Most respondents agreed that local wineries participated in community events and that they could easily find information of local winery-related events and knew where to find information of local winery-related events. Conversely, a third of respondents would neither hang out with friends at local wineries nor volunteer in local winery-related events if needed.

Residents' demographic characteristics and their relationship with local wineries were significantly associated with the overall social capital and all six comprising dimensions (Table 19.7). Residents' visit frequency to study wine trails was positively associated with the overall social

Table 19.5 Residents' demographics and wine involvement as associated with their personal benefits

Independent Variables	Personal Benefits		
	Overall	Personal enhancement	Community Sentience
Age	-.050	-.061	-.025
Education level	.066	.084	.036
Residence ownership (Yes, otherwise)	.004	.026	-.018
Length of residence in current neighborhood	-.068	-.058	-.071
Visit frequency to study wine trails	.280**	.264**	.264**
Wine involvement	.183**	.191**	.155*
<i>Model statistics</i>			
R	.399	.400	.354
R ²	.160	.160	.125
p-value	< .001	< .001	< .001

* $p < .05$, ** $p < .001$

Table 19.6 The association of community's social capital with local wineries

Items by Dimensions (n = 290)	Mean ¹
<i>Collective action</i>	3.18
Local winery supports community need	3.32
People in my community participate in local winery-related events	3.23
I will volunteer in local winery-related events if needed	2.71
Local winery participates in community events	3.52
<i>Trust</i>	3.07
I trust winery to make decisions that protect community interests	3.18
Local residents trust winery to make decisions that protect community interests	3.09
My community has a shared vision for local winery development	2.96
<i>Information sharing</i>	3.07
I can easily find information of local winery-related events	3.40
I know where to find information on local winery-related events	3.35
My community has a forum to discuss winery-related concerns	2.76
My community has a forum to discuss winery-related opportunities	2.75
<i>Bridging</i>	2.91
I have acquaintances who own or manage a local wine-related business	2.93
I attend events hosted by local wineries and other businesses	2.93
I have acquaintances who own or manage a local winery	2.88
I attend events co-hosted by several local wineries	2.86
<i>Bonding</i>	2.77
I attend private parties at local winery	2.83
I talk to my neighbors about visiting local winery	2.81
I hang out with friends at local winery	2.70
<i>Overall Community's Social Capital</i>	3.00

1 Measured on a 5-point Likert scale ranging from 'Strongly disagree' (1) to 'Strongly agree' (5).

Table 19.7 Residents' demographic characteristics and relationship with local wineries as associated with community's social capital

Independent Variables	Social Capital (standardized β and significance)					
	Overall	Bonding	Bridging	Trust	Collective Action	Information Sharing
Age	.074	-.015	.022	.093	.047	.168*
Education level	-.076	-.086	-.131*	-.057	-.048	.031
Annual household income	.082	.042	.133*	.046	.065	.062
Length of residence in current neighborhood	-.070	-.042	-.015	-.100	.001	-.132
Visit frequency to study wine trails	.463**	.482**	.518**	.268**	.335**	.312**
Relationship with Piedmont wineries	.078	.073	.044	.015	.098	.106
<i>Model statistics</i>						
R	.473	.489	.534	.281	.351	.372
R ²	.223	.239	.286	.079	.123	.139
p-value	< .001	< .001	< .001	.007	< .001	< .001

* $p < .05$, ** $p < .001$

capital and its six comprising dimensions. Residents' education level was negatively associated, but their annual household income was positively associated with the *Bridging* dimension. In addition, residents' age was positively associated with the *Information Sharing* dimension.

Discussion and implications

Contrary to previous studies in which local residents had an overall positive attitude toward tourism development and rated economic benefits the highest (McGehee and Andereck 2004; Vargas-Sanchez, Plaza-Mejia, and Porras-Bueno 2009), local communities in this study were relatively neutral toward wine tourism development and rated most favorably on *Social-cultural* benefits. These findings may be related to the inception stage of local wine tourism development, whereas previous research studied well-established tourism destinations with a mature tourism industry (Harrill and Potts 2003; Williams and Lawson 2001). Considering that most residents were rooted in the communities, with a good portion being retirees, they may have a higher appreciation for new sociocultural activities and opportunities created by local wineries, which help diversify their leisure time. The finding that residence ownership was negatively associated with the *Economic* dimension may be explained by the results from personal benefits – that residents did not experience significant increases in their property value or the quality of life and thus failed to rate favorably in the *Economic* dimension toward local wine tourism development.

Considering that visit frequency to wine trails was positively associated with residents' overall attitudes and perceived personal benefits, and that those who stayed longer in their current neighborhood tend to rate more negatively, wineries and tourism authorities may consider placing more efforts on communicating the benefits of wine tourism to local communities through activities and events or marketing campaigns (e.g., flyers, social media), especially targeting on those who have long been in the region and community. In such promotion efforts, wine tourism's role in increasing tourists' spending, diversifying local businesses and cultural activities, and beautifying local landscapes should be highlighted. To trigger residents' interests in wine tourism and increase their visit frequency to wine trails, a combination of both wine-related (e.g., wine tasting, wine social gatherings) and non-wine-related activities (e.g., private celebration parties, concerts, art exhibitions) should be promoted (Lockshin and Spawton 2001).

The overall moderate level of wine tourism-related social capital is likely also related to the inception stage of local wine tourism, and the resulted limited residential interests in wine-related activities. Similar to residents' attitudes, results on social capital also found that their visit frequency to the study wine trails was positively associated with the overall social capital associated with wineries, which suggest that encouraging visits among residents to wineries is key to forging relationships with local communities and to increasing positive attitudes toward their businesses (Adler and Kwon 2002). Given that higher levels of social capital are associated with more desired socioeconomic outcomes (Moscardo et al. 2017; Ellison, Steinfeld, and Lampe 2007), it is imperative to build wine-related social capital in local communities, especially the least favorably rated *Bonding* and *Bridging* dimensions. Possible strategies for bonding with host communities and increasing awareness include hosting local meetings and events and providing on-site recreation opportunities.

Considering that the *Bridging* dimension was positively associated with residents' household income and negatively associated with their education level, wineries and tourism authorities may consider paying special attention to involving and including households with a lower level of income or design activities and events that may cater to the interests of residents with a higher education background. This study also found that older residents were more resourceful in finding information and identifying opportunities for local winery-related events, making sense as they are more connected given their age and familiarity with the region.

Conclusion

This study examined residents' attitudes toward wine tourism development and local communities' wine tourism-related social capital. In doing so, this study enhances understanding of wine tourism development from the host community's perspective, which contributes to the sustainable development of the local community with regards to genuinely involving residents and maximizing their benefits. Study results also provide management and marketing implications of wine tourism development and illuminate future wine tourism development policies.

References

- Adler, P. S., and Kwon, S. W. (2002). Social capital: prospects for a new concept. *Academy of Management Review*, 27(1): 17–40. <https://doi.org/10.5465/amr.2002.5922314>
- Alonso, A. D., Bressan, A., O'Shea, M., and Vlad, K. (2014). Educating winery visitors and consumers: an international perspective. *Current Issues in Tourism*, 17(6): 539–556.
- Andereck, K. L., and Nyaupane, G. P. (2011). Exploring the nature of tourism and quality of life perceptions among residents. *Journal of Travel Research*, 50(3): 248–260. <https://doi.org/10.1177/0047287510362918>

- Barber, N. A., Donovan, J. R., and Dodd, T. H. (2008). Differences in tourism marketing strategies between wineries based on size or location. *Journal of Travel & Tourism Marketing*, 25(1): 43–57. <https://doi.org/10.1080/10548400802164889>
- Brunori, G., and Rossi, A. (2000). Synergy and coherence through collective action: some insights from wine routes in Tuscany. *Sociologia Ruralis*, 40(4): 409–423. <https://doi.org/10.1111/1467-9523.00157>
- Bruwer, J., Coode, M., Saliba, A., and Herbst, F. (2013). Wine tourism experience effects of the tasting room on consumer brand loyalty. *Tourism Analysis*, 18: 399–414. <https://doi.org/10.3727/108354213X13736372325957>
- Carmichael, B. A., and Senese, D. M. (2012). Competitiveness and sustainability in wine tourism regions: the application of a stage model of destination development to two Canadian wine regions. In Dougherty, P. H. (ed.), *The Geography of Wine: Regions, Terroir and Techniques* (pp. 159–178). New York: Springer.
- Charters, S., and Ali-Knight, J. (2002). Who is the wine tourist? *Tourism Management*, 23(3): 311–319. [https://doi.org/10.1016/S0261-5177\(01\)00079-6](https://doi.org/10.1016/S0261-5177(01)00079-6)
- Chen, C. F., and Chen, F. S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism Management*, 31(1): 29–35. <https://doi.org/10.1016/j.tourman.2009.02.008>
- Choi, H. C., and Murray, I. (2010). Resident attitudes toward sustainable community tourism. *Journal of Sustainable Tourism*, 18(4): 575–594. <https://doi.org/10.1080/09669580903524852>
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94: 95–120.
- Deccio, C., and Baloglu, S. (2002). Nonhost community resident reactions to the 2002 Winter Olympics: the spillover impacts. *Journal of Travel Research*, 41(1): 46–56. <https://doi.org/10.1177/0047287502041001006>
- Del Chiappa, G., Bregoli, I., and Kim, A. K. (2019). Inter-sectorial collaboration in networks: a boundary object approach to wine regions. *Tourism Planning & Development*, 16(6): 591–611. <https://doi.org/10.1080/21568316.2018.1543727>
- Dirks, K. T. (2000). Trust in leadership and team performance: evidence from NCAA basketball. *Journal of Applied Psychology*, 85(6): 1004–1012. <https://doi.org/10.1037/0021-9010.85.6.1004>
- Ellison, N. B., Steinfield, C., and Lampe, C. (2007). The benefits of Facebook ‘friends’: social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, 12 (4): 1143–1168. <https://doi.org/10.1111/j.1083-6101.2007.00367.x>
- Eusebio, C., Vieira, A. L., and Lima, A. (2018). Place attachment, host-tourist interactions, and residents’ attitudes towards tourism development: the case of Boa Vista Island in Cape Verde. *Journal of Sustainable Tourism*, 26(6): 890–909. <https://doi.org/10.1080/09669582.2018.1425695>
- Falk, I., and Kilpatrick, S. (2000). What is social capital? A study of interaction in a rural community. *Sociologia Ruralis*, 40(1): 87–110. <https://doi.org/10.1111/1467-9523.00133>
- Flora, C. B. (2004). Community dynamics and social capital. In Rickerl, D., and Francis, C. (eds.), *Agroecosystems Analysis* (pp. 93–107). Madison, WI: American Society of Agronomy.
- Franken, J., Gomez, M., and Ross, R. (2018). Social capital and entrepreneurship in emerging wine regions. *Journal of Wine Economics*, 13(4): 419–428. <https://doi.org/10.1017/jwe.2018.37>
- Getz, D. (eds.) (2000). *Explore Wine Tourism: Management, Development and Destinations*. New York: Cognizant Communication Corporation.
- Gil Arroyo, C., Knollenberg, W., and Barbieri, C. (2021). Inputs and outputs of craft-beverage tourism: the destination resource acceleration framework. *Annals of Tourism Research*, 86, 103102. <https://doi.org/10.1016/j.annals.2020.103102>
- Gomez, M., Pratt, M. A., and Molina, A. (2019). Wine tourism research: a systematic review of 20 vintages from 1995 to 2014. *Current Issues in Tourism*, 22(18): 2211–2249. <https://doi.org/10.1080/13683500.2018.1441267>
- Grootaert, C., Narayan, D., Jones, V. N., and Woolcock, M. (2004). Measuring social capital: an integrated questionnaire. <https://elibrary.worldbank.org/doi/abs/10.1596/0-8213-5661-5>
- Grybovy, O., Lankford, J., and Lankford, S. (2013). Motivations of wine travels in rural Northeast Iowa. *International Journal of Wine Business Research*, 25(4): 285–309. <https://doi.org/10.1108/IJWBR-07-2012-0023>
- Gursoy, D., Chi, C. G., and Dyer, P. (2009). Locals’ attitudes toward mass and alternative tourism: the case of Sunshine Coast, Australia. *Journal of Travel Research*, 49(3): 381–394. <https://doi.org/10.1177/0047287509346853>

- Hall, C. M. (2005). Rural wine and food tourism cluster and network development. In Hall, D., Kirkpatrick, I., and Mitchell, M. (eds.), *Rural Tourism and Sustainable Business* (pp. 149–164). Clevedon: Channelview Press.
- Harrill, R., and Potts, T. D. (2003). Tourism planning in historic districts: Attitudes toward tourism development in Charleston. *Journal of the American Planning Association*, 69(3): 233–244. <https://doi.org/10.1080/01944360308978017>
- Holladay, P. J., Dixon, A. W., Nguyen, M. C., Nguyen, B. L., Xu, S., and Price-Howard, K. (2020). Stakeholder perceptions of Da Nang, Vietnam as a tourism gateway city. *Journal of Tourism Insights*, 10(1): 8. <https://doi.org/10.9707/2328-0824.1089>
- Hwang, D., Stewart, W., and Ko, D. (2012). Community behavior and sustainable rural tourism development. *Journal of Travel Research*, 51(3): 328–341. <https://doi.org/10.1177/0047287511410350>
- Jackson, J., and Murphy, P. (2006). Clusters in regional tourism: an Australian case. *Annals of Tourism Research*, 33(4): 1018–1035. <https://doi.org/10.1016/j.annals.2006.04.005>
- Job, H., and Murphy, A. (2006). Germany's Mosel Valley: can tourism help preserve its cultural heritage? *Tourism Review International*, 9: 333–347. <https://doi.org/10.3727/154427206776330526>
- Jones, M. F., Singh, N., and Hsiung, Y. (2013). Determining the critical success factors of the wine tourism region of Napa from a supply perspective. *International Journal of Tourism Research*, 7: 261–271. <https://doi.org/10.1002/jtr.1984>
- Jones, S. (2005). Community-based ecotourism: the significance of social capital. *Annals of Tourism Research*, 32(2): 303–324. <https://doi.org/10.1016/j.annals.2004.06.007>
- Kc, B., Morais, D. B., Smith, J. W., Peterson, M. N., and Seekamp, E. (2019). Using social network analysis to understand trust, reciprocity, and togetherness in wildlife tourism microentrepreneurship. *Journal of Hospitality & Tourism Research*, 43(8): 1176–1198. <https://doi.org/10.1177/1096348019840794>
- Kim, N. S., and Won, Y. S. (2003). Relationship between social capital and the leadership of private organization. *The Journal of Rural Society*, 13(1): 171–207.
- Ko, D. W., and Stewart, W. P. (2002). A structural equation model of residents' attitudes for tourism development. *Tourism Management*, 23(5): 521–530. [https://doi.org/10.1016/S0261-5177\(02\)00006-7](https://doi.org/10.1016/S0261-5177(02)00006-7)
- Kolyesnikova, N., and Dodd, T. H. (2008). Effects of winery visitor group size on gratitude and obligation. *Journal of Travel Research*, 47: 104–112. <https://doi.org/10.1177/0047287507312411>
- Lankford, S., and Howard, D. (1994). Developing a tourism impact attitude scale. *Annals of Tourism Research*, 21(1): 121–139. [https://doi.org/10.1016/0160-7383\(94\)90008-6](https://doi.org/10.1016/0160-7383(94)90008-6)
- Latkova, P., and Vogt, C. A. (2012). Residents' attitudes toward existing and future tourism development in rural communities. *Journal of Travel Research*, 51(1): 50–67. <https://doi.org/10.1177/0047287510394193>
- Leahy, J. E., and Anderson, D. H. (2010). Cooperation gets it done: social capital in natural resources management along the Kaskaskia River. *Society and Natural Resources*, 23(3): 224–239. <https://doi.org/10.1080/08941920802378897>
- Li, J., and Barbieri, C. (2020). Demystifying members' social capital and networks within an agritourism association: a social network analysis. *Tourism and Hospitality*, 1(1): 41–58. <https://doi.org/10.3390/tourhosp1010004>
- Lockshin, L., and Spawton, T. (2001). Using involvement and brand equity to develop a wine tourism strategy. *International Journal of Wine Marketing*, 13(1): 72–81. <https://doi.org/10.1108/eb043371>
- Macbeth, J., Carson, D., and Northcote, J. (2004). Social capital, tourism and regional development: SPCC as a basis for innovation and sustainability. *Current Issues in Tourism*, 7(6): 502–522. <https://doi.org/10.1080/1368350050408668200>
- Mason, M. C., and Paggiaro, A. (2012). Investigating the role of festivalscape in culinary tourism: the case of food and wine events. *Tourism Management*, 33(6): 1329–1336. <https://doi.org/10.1016/j.tourman.2011.12.016>
- McGehee, N., and Andereck, K. (2004). Factors predicting rural residents' support of tourism. *Journal of Travel Research*, 43(2): 131–140. <https://doi.org/10.1177/0047287504268234>
- McGehee, N., Lee, S., O'Bannon, T. L., and Perdue, R. (2010). Tourism-related social capital and its relationship with other forms of capital: an exploratory study. *Journal of Travel Research*, 49(4): 486–500. <https://doi.org/10.1177/0047287509349271>
- Mitchell, R., Charters, S., and Albrecht, J. N. (2012). Cultural systems and the wine tourism product. *Annals of Tourism Research*, 39(1): 311–335. <https://doi.org/10.1016/j.annals.2011.05.002>
- Mitchell, R., and Hall, C. M. (2006). Wine tourism research: the state of play. *Tourism Review International*, 9(4): 307–332. <https://doi.org/10.3727/154427206776330535>

- Montella, M. M. (2017). Wine tourism and sustainability: a review. *Sustainability*, 9: 113. <https://doi.org/10.3390/su9010113>
- Moscardo, G. (2012). Building social capital to enhance the quality-of-life of destination residents. In Uysal, M., Perdue, R., and Sirgy, M. J. (eds.), *Handbook of Tourism and Quality-of-Life Research: Enhancing the Lives of Tourists and Residents of Host Communities* (pp. 403–421). Dordrecht: Springer Netherlands.
- Moscardo, G., Kononov, E., Murphy, L., McGehee, N., and Schurmann, A. (2017). Linking tourism to social capital in destination communities. *Journal of Destination Marketing & Management*, 6(4): 286–295. <https://doi.org/10.1016/j.jdmm.2017.10.001>
- Mura, P., and Tavakoli, R. (2014). Tourism and social capital in Malaysia. *Current Issues in Tourism*, 17(1): 28–45. <https://doi.org/10.1080/13683500.2012.718320>
- Nunkoo, R., and Ramkissoon, H. (2011). Developing a community support model for tourism. *Annals of Tourism Research*, 38(3): 964–988. <https://doi.org/10.1016/j.annals.2011.01.017>
- Park, D. B., Lee, K. W., Choi, H. S., and Yoon, Y. (2012). Factors influencing social capital in rural tourism communities in South Korea. *Tourism Management*, 33(6): 1511–1520. <https://doi.org/10.1016/j.tourman.2012.02.005>
- Park, D. B., Nunkoo, R., and Yoon, Y. S. (2015). Rural residents' attitudes to tourism and the moderating effects of social capital. *Tourism Geographies*, 17(1): 112–133. <https://doi.org/10.1080/14616688.2014.959993>
- Poitras, L., and Getz, D. (2006). Sustainable wine tourism: the host community perspective. *Journal of Sustainable Tourism*, 14(5): 425–448. <https://doi.org/10.2167/jost587.0>
- Putnam, R. (1993). The prosperous community: Social capital and public life. *The American Prospect*, 13(4): 35–42.
- Putnam, R. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1): 65–78.
- Qiu, H., Yuan, J., Ye, B., and Hung, K. (2013). Wine tourism phenomena in China: an emerging market. *International Journal of Contemporary Hospitality Management*, 25(7), 1115–1134. <https://doi.org/10.1108/IJCHM-06-2012-0087>
- Quintal, V., Thomas, B., Phau, I., and Soldat, Z. (2017). Using push-pull winescape attributes to model Australian wine tourist segmentation. *International Journal of Wine Business Research*, 29(4): 346–372. <https://doi.org/10.1108/IJWBR-01-2017-0007>
- Rasoolimanesh, S. M., Jaafar, M., Kock, N., and Ramayah, T. (2015). A revised framework of social exchange theory to investigate the factors influencing residents' perceptions. *Tourism Management Perspectives*, 16: 335–345. <https://doi.org/10.1016/j.tmp.2015.10.001>
- Ryan, V. D., Agnitsch, K. A., Zhao, L., and Mullick, R. (2005). Making sense of voluntary participation: a theoretical synthesis. *Rural Sociology*, 70(3): 287–313. <https://doi.org/10.1526/0036011054831198>
- Shapiro, M., and Gomez, M. I. (2014). Customer satisfaction and sales performance in wine tasting rooms. *International Journal of Tourism Research*, 11: 451–463. <https://doi.org/10.1108/IJWBR-09-2012-0026>
- Shucksmith, M. (2000). Endogenous development, social capital and social inclusion: perspectives from LEADER in the UK. *Sociologia Ruralis*, 40(2): 208–218. <https://doi.org/10.1111/1467-9523.00143>
- Smith, J., Anderson, D., Davenport, M., and Leahy, J. (2013). Community benefits from managed resource areas: an analysis of construct validity. *Journal of Leisure Research*, 45(2): 192–213. <https://doi.org/10.18666/jlr-2013-v45-i2-3011>
- Taylor, R., and Shanka, T. (2002). Attributes for staging successful wine festivals. *Event Management*, 7(3): 165–175. <https://doi.org/10.3727/152599502108751569>
- Telfer, D. J. (2001). Strategic alliances along the Niagara wine route. *Tourism Management*, 22(1): 21–30. [https://doi.org/10.1016/S0261-5177\(00\)00033-9](https://doi.org/10.1016/S0261-5177(00)00033-9)
- U.S. Census Bureau. (2010). *State and county quick facts*. <https://www.census.gov/quickfacts/qfd/index.html>
- Vargas-Sanchez, A., Plaza-Mejia, M. D. L. A., and Porras-Bueno, N. (2009). Understanding residents' attitudes toward the development of industrial tourism in a former mining community. *Journal of Travel Research*, 47(3): 373–387. <https://doi.org/10.1177/0047287508322783>
- Visit NC. (2020). *Wine: A wine history well aged*. <https://www.visitnc.com/wine>
- Wang, S., and Chen, J. (2015). The influence of place identity on perceived tourism impacts. *Annals of Tourism Research*, 52: 16–28. <https://doi.org/10.1016/j.annals.2015.02.016>
- Wang, Y., and Pfister, R. E. (2008). Residents' attitudes toward tourism and perceived personal benefits in a rural community. *Journal of Travel Research*, 47(1): 84–93. <https://doi.org/10.1177/0047287507312402>
- Williams, J., and Lawson, R. (2001). Community issues and resident opinions of tourism. *Annals of Tourism Research*, 28(2): 269–290. [https://doi.org/10.1016/S0160-7383\(00\)00030-X](https://doi.org/10.1016/S0160-7383(00)00030-X)

- Woolcock, M., and Narayan, D. (2000). Social capital: implications for development theory, research, and policy. *World Bank Research Observer*, 15: 225–249. <https://doi.org/10.1093/wbro/15.2.225>
- Xu, S., Barbieri, C., Anderson, D., Leung, Y. F., and Rozier-Rich, S. (2016). Residents' perceptions of wine tourism development. *Tourism Management*, 55: 276–286. <https://doi.org/10.1016/j.tourman.2016.02.016>
- Xu, S., Barbieri, C., and Seekamp, E. (2020). Social capital along wine trails: spilling the wine to residents. *Sustainability*, 12(4): 1592. <https://doi.org/10.3390/su12041592>
- Zhao, W., Ritchie, J. R. B., and Echtner, C. M. (2011). Social capital and tourism entrepreneurship. *Annals of Tourism Research*, 38(4): 1570–1593. <https://doi.org/10.1016/j.annals.2011.02.006>
- Zhou, L., Chan, E., and Song, H. (2017). Social capital and entrepreneurial mobility in early-stage tourism development: a case from rural China. *Tourism Management*, 63: 338–350. <https://doi.org/10.1016/j.tourman.2017.06.027>