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The effect of resident-tourist value co-creation on residents' well-being

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The effect of resident-tourist value co-creation on residents' subjective wellbeing

Abstract

This study extends tourism research by examining whether residents' perceptions of tourism development drives their participation in value co-creation with tourists. Moreover, we investigate the subsequent impact of this value co-creation activity on residents' subjective wellbeing. Drawing upon self-determination and social exchange theories, we proposed an integrated theoretical model and tested it using data collected from residents in four major Chinese cities. The results indicate that residents' participation in value co-creation with tourists has a positive effect on their subjective wellbeing. Furthermore, their perceptions of tourism development benefits positively influence their value co-creation with tourists, whereas the perceived costs of tourism have a negative effect. Finally, we found that support for tourism development is positively related to participation in value co-creation with tourists.

Keywords: Resident-tourist value co-creation; resident perception; subjective wellbeing; tourism development; tourism impact.

1. Introduction

Tourist experiences and tourism value are entwined with tourists' interaction with the local community (Bimonte & Punzo, 2016; Sharpley, 2014). Through interaction, residents and tourists can engage in value co-creation, especially when the perceived economic and social-cultural benefits of tourism development are positive (Lin, Chen, & Filieri, 2017). However, does resident-tourist value co-creation influence residents' experience and their subjective wellbeing? This question is important, because residents' subjective wellbeing is a key contemporary issue, and improvements to residents' subjective wellbeing are a continual focus of public policy (Dolan & Metcalfe, 2012) and tourism research (Kim, Uysal, & Sirgy, 2013; Liang & Hui, 2016). Scholars have used various terms to describe the positive experience and subsequent feelings of both tourists and residents alike (Smith & Diekmann, 2017), such as subjective wellbeing, quality of life, life satisfaction, happiness and wellness (Pyke et al., 2016; Smith & Diekmann, 2017). Previous tourism studies have investigated the role tourism plays in residents' satisfaction with particular life domains (Uysal, Perdue, & Sirgy, 2012), quality of life (Dolnicar, Yanamandram, & Cliff, 2012) and happiness (Nawijn et al., 2010). As argued by Smith and Diekmann (2017), wellbeing can be analyzed from a variety of perspectives, including the psychological and philosophical foundations of wellbeing. However, few studies have used a value co-creation perspective to investigate how co-creation between tourist and resident impacts residents' subjective wellbeing (Mathis et al., 2016).

Helping others and pro-social activity can improve the wellbeing of the helpers (Pressman, Kraft, & Cross, 2015). In this study, we suggest that the "value" in the value co-creation for residents could be the enhanced wellbeing derived from helping tourists. Social interaction and enhanced relationships are key factors driving wellbeing (Chang, Wray, & Lin, 2014). Tourism facilitates social interactions and as such, it may contribute to residents'

subjective wellbeing. Yet tourism research has been criticized for a lack of collaboration-orientated research investigating destination stakeholder engagement, potentially key elements for stimulating resident subjective wellbeing (Hartwell et al., 2018).

Correspondingly, research on resident-tourist value co-creation is in its infancy (Lin et al., 2017). Furthermore, whilst academics and managers acknowledge the importance of tourist experiences, several scholars argue hosts' emotions have been largely disempowered and neglected in tourism scholarship (Cohen & Cohen, 2019; Hartwell et al., 2018). These theoretical shortcomings help explain why, to the best of our knowledge, no empirical study exists outlining the precise relationships between resident-tourist value co-creation and residents' subjective wellbeing.

This study contributes to the literature by examining the impact of residents' value co-creation with tourists on resident subjective wellbeing. Drawing upon self-determination and social exchange theories, we proposed an integrated theoretical model with hypotheses. The model outlines how the perceived costs, economic and socio-cultural benefits of tourism impact support for tourism development and co-creation with tourists, and consequently residents subjective wellbeing. Data were collected from a sample of 328 residents in four major tourist cities in China. The model was empirically tested via structural equation modeling.

2. Literature review

2.1. Subjective wellbeing

Two different macro perspectives of wellbeing exist; objective and subjective (Schueller & Seligman, 2010). Satisfying people's needs enhances objective wellbeing (Nussbaum, 2003). Elements like career success, beauty, education, and relationships all innately facilitate objective wellbeing. Here, lists of needs can be developed a priori without participants assigning subjective values to them. Conversely, subjective wellbeing, the focus of this study, is defined as 'a person's cognitive and affective evaluations of his or her life' (Diener & Suh, 1997, p. 191). Cognitive evaluations pertain to the degree that individuals perceive events to impact their subjective wellbeing, whilst affective evaluations comprise assessments of the moods and emotions produced by experiencing an event. Thus, a person's subjective wellbeing encompasses reactions and moods, combined with cognitive assessments of gratification or fulfillment.

Diener, Oishi, and Lucas (2003) assert that subjective wellbeing encompasses people's feelings such as fulfillment and happiness, in addition to cognitive and emotional assessments of their lives. Moreover, Diener, Sandvik, and Pavot (2009, p. 11) assert that "people have wellbeing only when they believe that their life is going well, regardless of whether that life has pleasure, material comforts, a sense of meaning, or any other objective feature that has been specified as essential for wellbeing". Following this stream of research, in this study, we focus on residents' self-reported judgment of wellbeing as opposed to using aggregate social indicators (Dolnicar et al., 2012). Overall, subjective wellbeing motivates and fuels the accomplishment of goals throughout life's challenges. In the work environment, research suggests that employees with high subjective wellbeing tend to be more creative, productive, and resilient (Zhang et al., 2020). In the context of tourism, resident subjective wellbeing is

believed to be an important factor for sustainable tourism development (Chi, Cai, & Li, 2017) and studies have suggested that residents who experience high subjective wellbeing are willing to support tourism development and engage in value co-creation with tourists (Lin et al., 2017).

2.2. Value co-creation

Value co-creation is rooted in the resource theory of social exchange (Prebensen et al., 2012). Value co-creation is often studied as a resource exchange process, as communication facilitates the exchange of resources between actors that permits joint value creation (Grönroos, 2008; Vargo & Lusch, 2004). In this regard, the resource theory of social exchange explains that people's needs are satisfied through the acquisition of objects or resources via interaction. Such objects, or resources, can be tangible or intangible, ranging from status to services. The prevailing norm governing these exchanges is reciprocity, a resource given for each received (Cropanzano & Mitchell, 2005; Wieseke, Alavi, & Habel, 2014). Value co-creation can be separated into two key activities: co-production and value-in-use (Ranjan & Read, 2016). During co-production, customers share knowledge to firms during the design stages of products/services. Engagement level can vary from facilitator roles, providing feedback on designs, to actively contributing major design ideas. Value-in-use encompasses the consumption phase: customers use a product or service and this usage experience informs their evaluation, or value assessment (Vargo & Lusch, 2004). Ritchie and Hudson (2009) note that tourists actively seek meaningful experiences, in other words, tourism value is likely a value-in-use that materializes as the tourist engages with a service through their own experience (Vargo & Lusch, 2004). Tourism value emerges and evolves through their experiences, therefore guests or customers receive 'experience value' or 'value-in-the-experience'.

As mentioned earlier, very few studies have investigated how tourist-resident co-creation activity impacts residents' subjective wellbeing. Previous studies focus on the importance of customer value co-creation for tourist satisfaction and experience (Buonincontri et al., 2017; Dekhili & Hallem, 2020; Mathis et al., 2016; Rihova et al., 2018; Sugathan & Ranjan, 2019; Tuan et al., 2019; Zhang, Fong, & Li, 2019). The only available study that focuses on tourists-residents' value co-creation is Lin et al.'s (2017) work. The authors found that subjective wellbeing affects value co-creation, yet they did not explore the potential consequence of such co-creation on resident subjective wellbeing. Recently, Wei et al. (2020) examined the effect of host-tourist interactions on tourist behavior, however, the potential impact of such interactions on residents remains unexplored.

2.3. Resident support for tourism, value co-creation and subjective wellbeing

Tourism involves a meeting of tourists and residents, with a variety of different interactions occurring between the two populations (Bimonte & Punzo, 2016). The exchanges between residents and tourists range from commercial exchange, personal interaction, unintentional, and serendipitous encounters. Interactions even extend to space sharing with no verbal contact or communication (Sharpley, 2014). In this study, we examine the unintentional, spontaneous encounters between residents and tourists. This is because commercial exchange encounters are best described as a service provider and customer relationship, whereas non-verbal or non-communication interactions offer limited opportunity for value co-creation.

Residents' hospitality is a pre-requisite for value creation within resident-tourist interactions (Bimonte & Punzo, 2016; Pérez & Nadal, 2005; Sharpley, 2014). Negative attitudes or hostility that prompt tourists to feel unwelcome can significantly erode any value co-created by tourists and the tourism industry. Additionally, the hospitality and goodwill of

host communities are vital for the development of tourists' meaningful experiences. Thus, engaging residents in value co-creation is essential for successful tourism development (Bimonte & Punzo, 2016). The tourism literature recognizes the importance of residents' attitudes in community participation (Tosun, 2006). Residents' spontaneous participation fosters trust and generates social capital amongst community members. Moreover, such participation helps achieve common goals that benefit the local community (Rasoolimanesh et al., 2017; Tosun, 2006).

Resident participation in tourism can be understood using the Motivation, Opportunity, and Ability (MOA) model (Hung, Sirakaya-Turk, & Ingram, 2011). Motivation concerns the residents' perceptions of the impacts of tourism development, both positive and negative (Andereck et al., 2005; Tosun, 2002). Perceived positive impacts may drive residents to actively and voluntarily participate in tourism development; conversely, perceived negative impacts may reduce residents' willingness to support tourism development (Gursoy, Jurowski, & Uysal, 2002; Jaafar, Noor, & Rasoolimanesh, 2015). Opportunity refers to the presence of suitable channels that facilitate community participation in tourism, whilst ability refers to the enabling factors of participation, which include necessary knowledge, skills, and financial resources (Hung et al., 2011). A lack of "ability" factors such as knowledge of other cultures or foreign language may pose a barrier to community participation in tourism (Marzuki, Hay, & James, 2012).

Scholars acknowledge that tourism has a largely positive impact on economies, though some negative economic implications have been reported (Kim et al., 2013). For instance, residents can benefit from increased job opportunities, income, and living standards due to tourism-induced business development and investment. Tourism can bring various economic benefits because it represents an injection of 'new money' into a destination. Its impacts can be – direct (e.g. benefiting firms providing tourism goods and services), indirect (e.g. when

tourism firms buy from other local organizations, distributing capital down the supply chain), and induced (i.e. arising from tourism industry professionals spending money).

Generally, it appears that perceived economic benefits and support for tourism development are positively related (Gursoy & Rutherford, 2004). Based on the tenets of social exchange theory (Cropanzano & Mitchell, 2005; Wieseke et al., 2014), and the prior research reviewed above, we suggest that the higher the perceived economic benefits of tourism activities, the higher the support for tourism development and the willingness to co-create value with tourists. Thus, we hypothesize the following:

H1a: Economic benefits are positively related to support for tourism development.

H1b: Economic benefits are positively related to value co-creation with tourists.

Local communities can draw several socio-cultural benefits from tourism (Besculides, Lee, & McCormick, 2002). The influx of investment provides an opportunity to regenerate atrophying infrastructure and to improve leisure facilities, e.g. roads, bridges, cinemas, parks, and sports stadia. Tourism can also help preserve traditional culture and folklore and inspire increased exhibitions, sports games, theatre productions, and other cultural events. Intriguingly, tourism development can also motivate communities to embrace and strengthen their local cultures and traditions as tourists increasingly crave authentic experiences (Wang et al., 2006). Therefore, when communities experience a revival of their tradition, customs, and language they develop a positive attitude towards tourism development. Stylidis et al. (2014) and Gursoy and Rutherford (2004) highlight that perceived socio-cultural benefits are positively related to residents' support for tourism development. We posit that residents who appreciate the socio-cultural benefits of tourism will be more willing to co-create value with tourists. This is consistent with the resource theory of social exchange, which argues the

reciprocal exchange of resources, i.e. travel advice and aforementioned socio-cultural benefits, motivates social interaction.

H2a: Socio-cultural benefits are positively related to support for tourism development.

H2b: Socio-cultural benefits are positively related to value co-creation with tourists.

However, tourism development can generate negative impacts. Despite the general positive effect of tourism development on economies, tourism activities can also cause inflation as prices of goods, services, and land typically rise as a result (Andereck et al., 2005). Intriguingly, Li et al. (2019) found that tourism development, in the form of investments, could have positive environmental impacts by stimulating more environmentally friendly technologies and strategies that increase energy efficiency. However, whilst the tourism industry is not a major polluter, activities have been associated with negative environmental costs, e.g. air pollution (Andereck et al., 2005). Moreover, host communities may be more mindful of these costs following the introduction of new environmental initiatives, such as Thailand's carbon tax scheme (Wattanakuljarus, 2019), in popular tourist destinations. Tourism also tends to generate problems such as crowding, traffic, and parking issues, increased crime, increased cost of living, and friction between tourists and residents (Nunkoo & So, 2016). A range of studies highlight support for tourism development is negatively affected by the perceived costs of tourism (Gursoy et al., 2002; Lee, 2013). Consequently, residents' negative perceptions of tourism impact will likely influence their willingness to support tourism development, participate in tourism, or interact and co-create value with tourists. Thus,

H3a: Perceived costs are negatively related to support for tourism development.

H3b: Perceived costs are negatively related to value co-creation with tourists.

Tourism is a social phenomenon that entails interaction between residents and tourists and the “exchange of valuable resources” (Bimonte and Punzo, 2016). Following the logic of value co-creation (Prebensen et al., 2012), the exchange of valuable resources creates value for both parties. In host-guest interaction, tourists usually exchange money for resource-space, i.e. the resources consumed by tourists’ during their visit (Bimonte & Punzo, 2016). These can include accommodation, food, transport, and infrastructure. Moreover, the interaction itself can enhance the tourist experience as social interaction can support wellbeing (Chang et al., 2014). As discussed earlier, residents’ willingness to support and participate in tourism development is a prerequisite for the value to be co-created (Rasoolimanesh et al., 2017; Tosun, 2002, 2006). In other words, residents who support the development of tourism are more likely to voluntarily interact with tourists to create value. Additionally, co-creating value with tourists can be seen as a way of showing support for tourism development. Thus,

H4: Support for tourism development is positively related to value co-creation with tourists.

Self-determination theory (Ryan & Deci, 2000) is a motivation theory that suggests that individuals initiate an activity for its own sake because it is interesting and satisfying in itself. According to this theory, people initiate an activity to satisfy three basic psychological needs including competence, relatedness, and autonomy/independence (Ryan & Frederick, 1997). Accordingly, autonomous motivation (i.e. without expecting a reward in exchange) for prosocial behavior (helping others) has a positive influence on the wellbeing of both the helper and recipient (Pressman et al., 2015; Stukas et al., 2016; Weinstein & Ryan, 2010). For example, Stukas et al. (2016) found volunteers can benefit from higher levels of wellbeing, including self-efficacy, self-esteem, trust, and social connectedness. Previous research shows that even small acts of kindness positively impact givers’ wellbeing (Pressman et al., 2015). The emotional rewards for such prosocial behavior have been

observed in diverse societies. Despite these arguments, some research suggests pro-social behavior is motivated by self-interest. A review of over five decades of social psychology literature indicates that the influences of altruism are complex and likely driven by both egoistic and altruistic factors. This infers altruistic motivations will unlikely be the sole driver of residents' helping behavior.

Moreover, previous studies suggest that subjective wellbeing can be enhanced by engaging in activities that facilitate the development of relationships and social interaction (Chang et al., 2014; Torres, 2015). Cohen (2004)) argues involvement in such relationships can also lessen depression. Given tourism activity has been demonstrated as an effective platform for facilitating relationship enhancement and social interaction, it likely also impacts residents' subjective wellbeing. A growing body of research suggests that engaging in tourism activity and tourism development can increase the quality of life and community wellbeing (Morgan, Pritchard, & Sedgley, 2015; Naidoo & Sharpley, 2016). However, Okulicz-Kozaryn and Strzelecka (2017) show that whilst domestic tourism can increase happiness, increased tourism development often has a negligible or negative impact on resident happiness in popular destinations. These contradictory findings may be explained by the effect residents' specific attitudes and engagement with tourism have on their emotions. Following this discussion, we propose that support for the development of tourism can enhance residents' subjective wellbeing. Additionally, we propose participation in value co-creation activities, such as helping tourists and providing information about the destination, is also positively related to residents' subjective wellbeing. Thus,

H5a: Support for tourism development is positively related to resident subjective wellbeing.

H5b: Participation in value co-creation with tourists is positively related to resident subjective wellbeing.

Figure 1 depicts the conceptual model with hypotheses.

[Insert Figure 1 about here]

3. Method

3.1. Sample and data collection

This study used an online survey to test the relationships in our model. A screening question was set to ensure that all participants had experience interacting with tourists: In the past twelve months, have you met and talked to a tourist who visited your city? We used several popular social media platforms in China (WeChat, Sina Weibo, Tencent Weibo) to recruit participants. No reward was offered by the researchers. The survey was live for 4 weeks and generated 328 complete questionnaires. Online surveys help reduce data entry errors and the researchers' involvement in data collection. Moreover, they are cost-effective, and facilitate access to large populations and widely distributed participants. It should be noted that this method can suffer from sampling, response rate, and generalizability issues, but with the widespread use of the internet, particularly the popularity of mobile internet, those issues have become less of a problem. The sample consists of slightly more males (55%) than females. Participant age ranges were primarily 23-39 (41%) and 40-49 (31%). Most of the participants had a senior high school, professional college, or above level of education (88%).

3.2. Construct measures

All the construct measures in this study were adapted from existing literature. The three items measuring resident subjective wellbeing were adapted from Yolal et al. (2016). Residents' value co-creation was measured using three items from Lin et al. (2017). Residents' support for tourism development and their perceptions of economic, socio-cultural benefits and costs were measured using items from Gursoy and Rutherford (2004), and Nunkoo and So (2016). The measurement items were anchored on a 5-point Likert scale, where 1=strongly disagree, 5=strongly agree. The questionnaire was developed in English and translated into Chinese, and then back-translated into English to ensure consistency with the measures in the previous studies. The questionnaire was pilot-tested with a group of 30 postgraduate students of tourism studies to confirm the readability, clarity, and content validity of the measures.

3.3. Data analysis

We ran partial least squares structural equation modeling (PLS-SEM) using the statistical software, SmartPLS to test our hypotheses. PLS-SEM was chosen for our data analysis because it is particularly suitable for causal-predictive analysis and it requires minimal demand on sample sizes and residual distributions (Henseler, Ringle, & Sinkovics, 2009). Additionally, PLS-SEM is particularly suitable for prediction oriented research and complex models (Henseler et al., 2009). We followed the two-step procedure as suggested by Hair, Ringle, and Sarstedt (2011): first testing the measurement model, followed by testing the structural model.

4. Results

4.1. Measurement model

Measurement model evaluation included testing for reliability, convergent, and discriminant validity (Hair et al., 2011). To establish measurement reliability, all

measurement items should load at their respective construct with a value greater than 0.7, and the construct's composite reliability (CR) must be greater than 0.7. To establish convergent validity, the average variance extracted (AVE) were examined. According to Bagozzi and Yi (1988), the AVE value must be higher than 0.5. Table 1 presents the results of the relevant tests, which meet all the above criteria.

[Insert Table 1 about here]

To establish discriminant validity, we examined the cross-loadings of each item and conducted Fornell and Larcker testing (Fornell & Larcker, 1981). In cross-loadings, each item loads higher on their respective constructs than on any others. In Fornell and Larcker testing, the square roots of the AVE values for each construct must be greater than the corresponding inter-construct correlations. Cross-loadings are presented in Table 1, and the results indicate the criterion was met. The Fornell and Larcker test results are presented in Table 2, which also indicates that the criterion was met.

[Insert Table 2 about here]

4.2. Structural model

We used R-square and the significance of path coefficients to examine the structural model, as recommended by Hair et al. (2011). The results were presented in Figure 2, which indicates that R^2 values for resident subjective wellbeing, support for tourism development, and value co-creation with tourists were 56%, 29%, and 28% respectively. Thus the model's explanatory power is considered adequate (Hair et al., 2011).

The results show that economic benefits are positively related to both support for tourism development ($\beta=0.246$, $p<0.001$) and value co-creation with tourists ($\beta=0.22$, $p<0.05$), thus H1a and H1b were both supported. Similarly, socio-cultural benefits are

positively related to both support for tourism development ($\beta=0.307$, $p<0.001$) and value co-creation with tourists ($\beta=-0.291$, $p<0.01$), indicating H2a and H2b were supported.

Regarding the relationship between costs and support for tourism development, the results show that whilst the sign of the path co-efficient was in the correct direction, which is negative, its value did not reach a significant level ($\beta=-0.103$, $p>0.05$). Thus, H3a was not supported.

Nevertheless, the path co-efficient from costs to value co-creation with tourists was negative and significant ($\beta=-0.159$, $p<0.05$), indicating that H3b was supported.

As expected, residents' support for tourism development is positively related to value co-creation with tourists ($\beta=0.235$, $p<0.001$), thus H4 can be confirmed.

Support for tourism development and co-creation with tourists are both positively related to resident subjective wellbeing ($\beta=0.431$ and 0.46 , $p<0.001$), supporting H5a and H5b.

[Insert Figure 2 about here]

To assess the linkages from perceived tourism impacts, support from tourism, co-creation with tourists to resident subjective wellbeing, we assessed the indirect effects for each path, by running the bias-corrected and accelerated 95% confidence intervals bootstrapping procedure in SmartPLS based on 1000 re-samples. The results are presented in Table 3.

[Insert Table 3 about here]

This further assessment revealed several interesting findings. First, though all the indirect effects of the costs of tourism development were negative, only one path, i.e. "costs - > co-creation -> resident subjective wellbeing", was significant ($p<0.05$). This suggests that

tourism development costs inhibit residents' participation in value co-creation with tourists and subsequently results in less resident subjective wellbeing. Second, all the other indirect effects were positive and significant. This suggests that the perceived benefits of tourism development positively influence residents' support for tourism, participation in value co-creation with tourists, and consequently their subjective wellbeing.

5. Discussion and conclusions

To the best of our knowledge, this is one of the first studies to examine how residents' participation in value co-creation with tourists contributes to their subjective wellbeing. Drawing upon self-determination theory (Ryan & Deci, 2000; Ryan & Frederick, 1997), we integrate the literature of value co-creation with that of residents' support for tourism development. The resulting model conceptualizes resident cost-and-benefit perceptions, as the antecedents, and residents' subjective wellbeing as the outcome of their support for tourism development and participation in value co-creation with tourists. Our results indicate all the hypotheses were supported, except for the insignificant relationship between costs and support for tourism development. The findings provide important implications for both theory and practice.

5.1. Theoretical implications

This study contributes to the theoretical development of resident-tourist value co-creation by proposing and testing a model of the effects of tourism value co-creation on residents' subjective wellbeing. Subjective wellbeing represents part of the 'value' for residents and is derived from their interaction and value co-creation with tourists. Conversely, tourists gain insider information and advice on how to improve their vacation. Furthermore, the perceived

benefits of tourism, explained by social exchange theory, and support for tourism development are positively related to residents' value co-creation with tourists.

We found that residents' support for tourism development positively influences their co-creation with tourists; and both value co-creation and support for tourism development influence residents' subjective wellbeing. Thus, if residents become aware of the benefits of tourism and actively participate in the development of the tourism industry, they are more likely to co-create value with tourists. This evidence suggests that resident support for tourism development and value co-creation with tourists may be volitional (Weinstein & Ryan, 2010). Small acts of kindness may increase the helper's wellbeing, as does engagement with activities that support tourism development and tourists (Morgan et al., 2015; Naidoo & Sharpley, 2016). Moreover, the activities that facilitate social interaction and relationship development, like resident-tourist value co-creation, can increase subjective wellbeing (Chang et al., 2014; Torres, 2015).

Our study further highlights economic benefits are positively associated with support for tourism development and value co-creation with tourists. These results correspond with the findings of Gursoy and Rutherford (2004) and can be explained using social exchange theory (Cropanzano & Mitchell, 2005). Further findings reveal support for tourism development and value co-creation with tourists can garner socio-cultural benefits. This complements Wang et al.'s (2006) suggestions that tourism encourages communities to embrace and build upon their local cultures.

Finally, the associated costs of tourism were negatively related to value co-creation with tourists. However, a similar negative link was not found between these costs and support for tourism development. This latter finding differentiates the current study from prior work by Gursoy et al. (2002) and Lee (2013) and has important implications. It suggests that the

positive effect generated from the benefits of tourist development could outweigh the negative impact of the perceived costs. Findings in our mediation analyses confirm that tourism development positively influences residents' support for tourism, their participation in value co-creation with tourists, and consequently their subjective wellbeing. Nevertheless, tourism development costs do impede resident-tourist value co-creation, and subsequently residents' subjective wellbeing.

5.2. Practical implications

Enhancing resident wellbeing is a regular focus of government policy (Dolan & Metcalfe, 2012). Our results highlight that value co-creation with tourists and support for tourism development can increase residents' subjective wellbeing. This is important because it reveals tourism contributes more to local communities than merely economic benefits. These newly identified psychological benefits can help strengthen the value of such activities to residents, destination marketing and management organizations, and government agenda.

The findings of the present study are useful to tourism industry operators and local authorities who often have to justify the decision to invest in tourism development. Sometimes politicians and local authorities prefer the development of industries (e.g. petrochemical industry) that promise higher employment and economic wealth but have negative effects on resident's health and ultimately on their subjective wellbeing.

Moreover, governments could feasibly incorporate tourism development into resident wellbeing-oriented policies. For example, creating apprenticeship schemes, or offering subsidies or small business loans could encourage locals to invest and work in the tourism industry and enhance community participation in the sector. However, to ensure effective community integration tourism development needs to involve residents in policymaking. This is particularly helpful for investigating residents' views and attitudes towards tourism and

ensuring policy uptake. Such inclusive policy development is powerful because it helps reveal and target the particular costs and benefits communities link to tourism, e.g. crime, litter, job creation, etc.

Furthermore, destination marketers can collaborate with local authorities to educate their stakeholders, e.g. employees and customers, and the wider population on the significant social and wellbeing benefits of resident-tourist interaction and value co-creation. These benefits transcend economic benefits and include socio-cultural rewards, e.g. strengthening local heritage. Internal marketing would particularly benefit from, and ideally help address, the aforementioned research identifying residents' knowledge gaps or misconceptions about the costs and benefits of tourism in their area. This information can be communicated through traditional/modern marketing channels like leaflets, posters, webpages, and social media. People who engage in pro-social behavior do so for many reasons. Marketing messages could emphasize how fun engaging with tourists can be. Research shows volunteers who have fun in their positions have lower turnover rates. Moreover, these communications could emphasize the social contact and confidence gained through helping tourists. Marketing could also stress the sense of pride residents would feel being part of a welcoming and friendly community. Finally, messages could also ask residents to encourage friends and family to support tourists in their travels.

Additionally, education curricula could extend to the foreign languages and cultures of the major tourist markets. Such education can facilitate welcoming and helpful interactions by providing the motivation, opportunity and ability to do so (Hung et al., 2011). In the long-term, central policymakers can extend this initiative by encouraging local authorities to add bespoke content to school curricula. In the private sector, it is essential to develop a corporate culture that facilitates tourist-resident interaction (Tosun, 2006).

Finally, as revealed in our study, the development of tourism is likely to result in helpful and respectful tourist/resident interactions and value co-creation that enhance the tourist experience and resident subjective wellbeing. Destination marketers could also collaborate with residents to facilitate these activities supporting co-creation, such as organizing, marketing and facilitating language exchange centers and events, carpooling, home rentals and lodging (e.g. through sites like Airbnb.com), resident-led city/food tours and vehicle/equipment loans (e.g. via zipcar.com). Overall, the results of this study highlight there is a much richer and mutually beneficial relationship between tourists, residents, and government policy than first acknowledged, and this link can be strengthened if marketed effectively.

5.3. Limitations and further research

This study focuses on the impact of residents' value co-creation on their subjective wellbeing; however, future research could examine this in combination with the impact of tourist activity on residents' needs, e.g. belonging or esteem. This study does not consider possible moderating factors, such as individual moral values, altruistic orientation, and external factors such as the stage of tourism development and the degree of local economy's reliance on the tourism sector. These variables could be investigated in future research to provide greater theoretical contributions and practical implications. Additionally, whilst most of the hypotheses were supported, this study could not demonstrate that perceived costs are negatively related to support for tourism development. Scholars could build on this issue and develop a more sophisticated model examining the relationship between different types of tourism costs and their impact on alternate forms of tourism support. Our data were collected using a relatively small sample size of Chinese residents using convenience sampling, which limits the generalizability of the results. Therefore, a follow-up study could examine whether these findings can be replicated in other contexts using a more rigorous sampling approach.

Finally, our study does not distinguish between helping behavior motivated by goodwill or self-interest. Future work could explore this and conduct a multi-group analysis that assesses the model and related paths using residents from communities with varying degrees of economic reliance on tourism.

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Tables and Figures

Table 1. Construct measure, cross-loadings and convergent validity.

Construct measure	Co-creation	Cultural benefits	Economic benefits	Costs	Resident subjective wellbeing	Support
Value co-creation with tourists	<i>CR= 0.939; AVE=0.838</i>					
I treat tourists with high esteem.	0.921	0.430	0.391	-0.190	0.602	0.413
I am happy to provide local information to tourists.	0.909	0.331	0.331	-0.139	0.589	0.364
I am happy to offer help to tourists when needed.	0.916	0.401	0.380	-0.070	0.566	0.369
Socio-cultural benefits	<i>CR= 0.891 ; AVE= 0.673</i>					
Tourism development is likely to provide more recreational facilities.	0.342	0.805	0.621	0.032	0.332	0.370
Tourism development is likely to provide more cultural activities.	0.337	0.850	0.547	0.047	0.359	0.361
Tourism development is likely to provide more opportunities to meet people from other cultures.	0.350	0.814	0.460	-0.008	0.302	0.336
Tourism development is likely to provide better preservation of the local culture.	0.361	0.811	0.451	0.034	0.343	0.431
Economic benefits	<i>CR= 0.878 ; AVE= 0.645</i>					
Tourism development is likely to provide better standard of living.	0.368	0.512	0.863	-0.070	0.377	0.426
Tourism development is likely to provide more employment opportunity.	0.356	0.613	0.869	-0.011	0.357	0.372
Tourism development is likely to provide improved infrastructure.	0.297	0.499	0.754	0.045	0.305	0.348
Tourism development is likely to provide increased investment.	0.251	0.379	0.716	0.129	0.223	0.227
Costs	<i>CR= 0.918; AVE= 0.738</i>					
Tourism is likely to result in crowding.	-0.096	0.100	0.076	0.800	-0.085	0.044
Tourism is likely to result in traffic congestion.	-0.091	0.090	0.083	0.841	-0.094	-0.046
Tourism is likely to result in more noise.	-0.147	-0.017	-0.035	0.906	-0.135	-0.107
Tourism is likely to result in environmental pollution.	-0.142	0.016	-0.006	0.886	-0.133	-0.108
Resident subjective wellbeing	<i>CR= 0.916 ; AVE= 0.784</i>					
Supporting tourists enriched my life.	0.527	0.410	0.412	-0.147	0.889	0.585
I am really glad that I support	0.521	0.312	0.295	-0.099	0.864	0.542

tourists.						
I feel good about myself by helping tourists.	0.647	0.360	0.357	-0.119	0.902	0.530
Support for tourism development	<i>CR= 0.867 ; AVE= 0.686</i>					
I support the development of tourism in general.	0.320	0.440	0.390	-0.086	0.545	0.839
I support nature based tourism.	0.344	0.370	0.370	-0.075	0.493	0.865
I support cultural and historic based tourism.	0.377	0.326	0.329	-0.060	0.508	0.778

Notes: CR = composite reliability; AVE = average variance extracted.

Table 2. Fornell and Larcker test

	1	2	3	4	5	6
1 Costs	0.859					
2 Socio-cultural benefits	0.033	0.820				
3 Economic benefits	0.012	0.632	0.803			
4 Co-creation	-0.147	0.425	0.402	0.915		
5 Support for tourism development	-0.089	0.459	0.439	0.419	0.828	
6 Resident subjective wellbeing	-0.138	0.408	0.402	0.64	0.623	0.885

Note: Values of the square root of AVE in bold type on the diagonal.

Table 3. Indirect effects

	Indirect effect	t-values	95%CI	
			LL	UL
Costs -> support -> co-creation	-0.024	1.537	-0.052	0.017
Social-cultural benefits -> support -> co-creation	0.072	2.881**	0.031	0.130
Economic benefits -> support -> co-creation	0.058	3.066**	0.026	0.100
Costs -> co-creation -> resident subjective wellbeing	-0.062	2.389*	-0.114	-0.009
Social-cultural benefits -> co-creation -> resident subjective wellbeing	0.101	3.094**	0.036	0.164
Economic benefits -> co-creation -> resident subjective wellbeing	0.075	2.319*	0.015	0.141
Costs -> support -> co-creation -> resident subjective wellbeing	-0.011	1.499	-0.025	0.008
Social-cultural benefits -> support -> co-creation -> resident subjective wellbeing	0.033	2.737**	0.014	0.061
Support -> co-creation -> resident subjective wellbeing	0.108	3.991***	0.059	0.167
Economic benefits -> support -> co-creation -> resident subjective wellbeing	0.027	2.872**	0.011	0.047
Costs -> support -> resident subjective wellbeing	-0.044	1.616	-0.088	0.025
Social-cultural benefits -> support -> resident subjective wellbeing	0.132	4.179***	0.072	0.197
Economic benefits -> support -> resident subjective wellbeing	0.106	3.761***	0.051	0.165

Notes: **p<0.01; ***p<0.001. CI= confidence interval; LL=low limit; UL=upper limit.

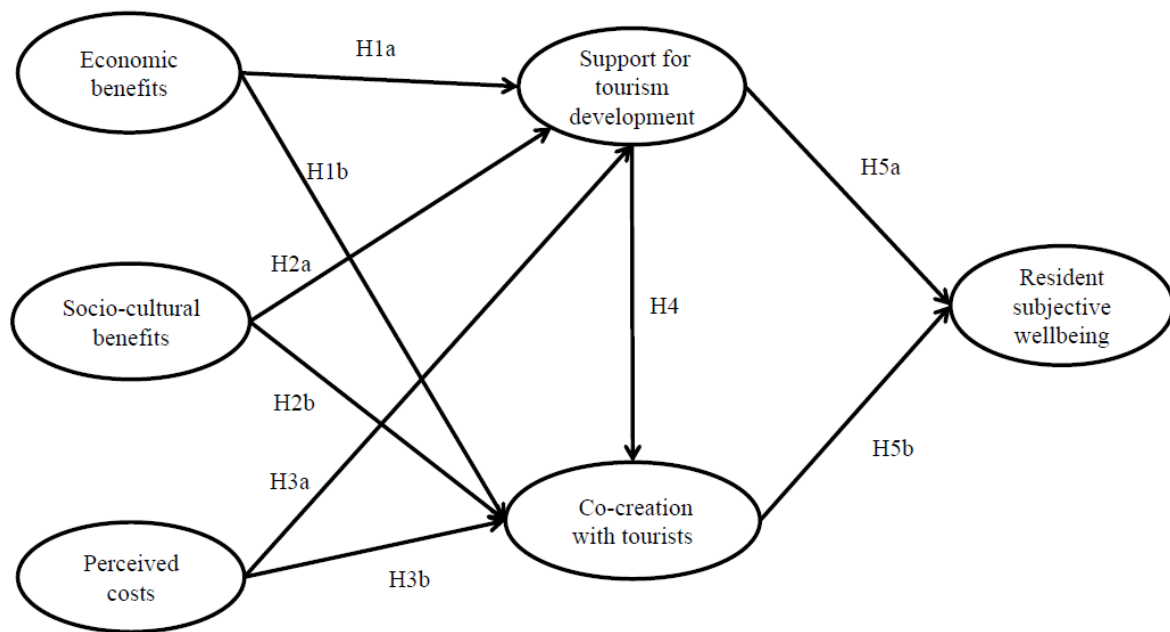


Figure 1. Conceptual model.

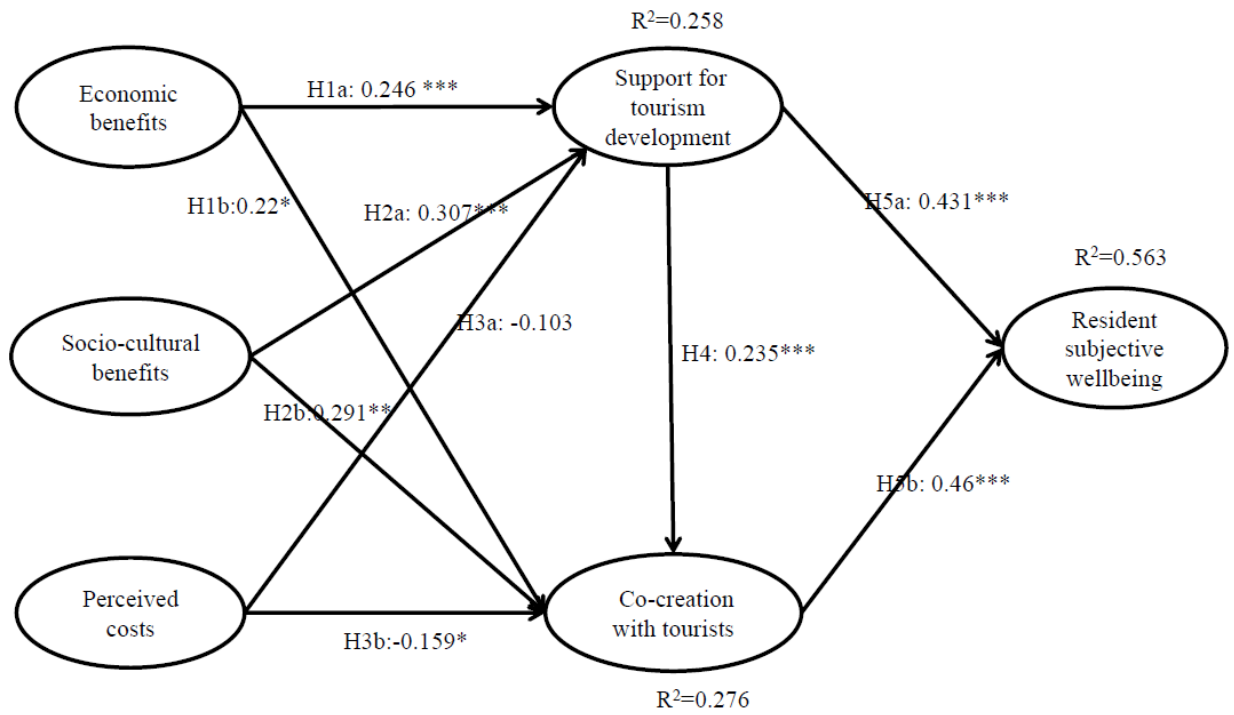


Figure 2. Results of the structural model (* $p<0.05$; ** $p<0.01$; *** $p<0.001$)